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Automated Report

Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, PR

SM04.00.06

SGS Accutest Job Number: JC18649

Sampling Dates: 04/18/16 - 04/19/16

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: **1421**

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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Test results relate only to samples analyzed.

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June 28, 2016

Mr. Terry Taylor
Anderson, Mulholland & Associates
2700 Westchester Avenue
Suite 417
Purchase, NY 10577

RE: SGS Accutest –Dayton, Jobs # JC18649, JC18972, and JC20386 – Reissues

Dear Mr. Taylor,

The final report for SGS Accutest jobs number JC18649, JC18972, and JC20386 have been edited to reflect corrections to the data package. These edits have been incorporated into the revised report attached.

Specifically, the result of 1-methylnaphthalene has been reported for samples JC18649-4, JC18972-3, and JC20386-3 as client's original requested; the Naphthalene aslo reported for sample JC20386-3 as per Addison Rice's request on 6/23/2016. The attached revised report incorporates these revisions.

SGS Accutest apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact client services at (732) 355-4562 if I can be of further assistance in this matter.

Sincerely,

Tammy McCloskey

SGS Accutest

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SGS Accutest

Sample Summary

Anderson, Mulholland & Associates

Job No: JC18649

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC18649-1	04/18/16	12:00	TT	04/20/16	AQ	Ground Water	RA14-GWD
JC18649-1A	04/18/16	12:00	TT	04/20/16	AQ	Ground Water	RA14-GWD
JC18649-2	04/18/16	12:00	TT	04/20/16	AQ	Ground Water	RA14D-GWD
JC18649-2A	04/18/16	12:00	TT	04/20/16	AQ	Ground Water	RA14D-GWD
JC18649-3	04/18/16	14:00	NR	04/20/16	SO	Soil	RA13(5-6)
JC18649-4	04/18/16	17:15	TT	04/20/16	AQ	Ground Water	RA13-GWS
JC18649-4A	04/18/16	17:15	TT	04/20/16	AQ	Ground Water	RA13-GWS
JC18649-5	04/19/16	12:30	TT	04/20/16	AQ	Ground Water	RA13-GWD
JC18649-5A	04/19/16	12:30	TT	04/20/16	AQ	Ground Water	RA13-GWD

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Anderson, Mulholland & Associates	**Job No**	JC18649
Site:	BMSMC, Building 5 Area, PR	**Report Date**	5/4/2016 4:34:37 PM

On 04/20/2016, 5 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a maximum corrected temperature of 5.7 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JC18649 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:** OP93236

- All samples were extracted within the recommended method holding time.
- Sample(s) JC18649-1MS, JC18649-1MSD were used as the QC samples indicated.
- Sample(s) JC18649-1, JC18649-2, JC18649-5 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank.
- Matrix Spike Recovery(s) for 1,4-Dioxane are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- JC18649-2 for Phenol-d5: Outside control limits due to dilution.
- JC18649-1 for 2,4,6-Tribromophenol: Outside control limits due to dilution.
- JC18649-1 for 2-Fluorobiphenyl: Outside control limits due to dilution.
- JC18649-1 for 2-Fluorophenol: Outside control limits due to dilution.
- JC18649-1 for Nitrobenzene-d5: Outside control limits due to dilution.
- JC18649-1 for Phenol-d5: Outside control limits due to dilution.
- JC18649-1 for Terphenyl-d14: Outside control limits due to dilution.
- JC18649-2 for 2,4,6-Tribromophenol: Outside control limits due to dilution.
- JC18649-2 for 2-Fluorobiphenyl: Outside control limits due to dilution.
- JC18649-2 for Nitrobenzene-d5: Outside control limits due to dilution.
- JC18649-2 for Terphenyl-d14: Outside control limits due to dilution.
- JC18649-2 for 2-Fluorophenol: Outside control limits due to dilution.

Matrix: AQ **Batch ID:** OP93271

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- RPD for OP93271-BS/BSD for 4-Chloroaniline: Outside of in house control limits.

Matrix: SO **Batch ID:** OP93364

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC18791-18MS, JC18791-18MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for Hexachlorobutadiene are outside control limits. High percent recoveries and no associated positive found in the QC batch.
- Matrix Spike Duplicate Recovery(s) for Hexachlorobutadiene are outside of in house control limits.
- OP93364-BS1 for 2-Fluorophenol: The Internal standard was added at 80 ppm. All recoveries re-calculated based on the spike amount.
- OP93364-BS1 for Terphenyl-d14: The Internal standard was added at 80 ppm. All recoveries re-calculated based on the spike amount.

Extractables by GCMS By Method SW846 8270D

Matrix: SO **Batch ID:** OP93364

- OP93364-BS1 for Phenol-d5: The Internal standard was added at 80 ppm. All recoveries re-calculated based on the spike amount.
- OP93364-BS1 for Nitrobenzene-d5: The Internal standard was added at 80 ppm. All recoveries re-calculated based on the spike amount.
- OP93364-BS1 for 2-Fluorobiphenyl: The Internal standard was added at 80 ppm. All recoveries re-calculated based on the spike amount.
- OP93364-BS1 for 2,4,6-Tribromophenol: The Internal standard was added at 80 ppm. All recoveries re-calculated based on the spike amount.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP93236A

- All samples were extracted within the recommended method holding time.
- Sample(s) JC18649-2MS, JC18649-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** OP93271A

- All samples were extracted within the recommended method holding time.
- Sample(s) JC18447-2MS, JC18447-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC18649-4 for 2-Fluorobiphenyl: High percent recoveries and no positive found in the sample.

Matrix: SO **Batch ID:** OP93364A

- All samples were extracted within the recommended method holding time.
- Sample(s) JC18649-3MS, JC18649-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC18649-3 for 1,4-Dioxane: Not accredited for this compound at the time of analysis, but all method requirements were followed.

Volatiles by GC By Method SW846 8015C

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

- The data for SW846 8015C meets quality control requirements.
- JC18649-1A: Analysis performed at Accutest Laboratories, Orlando FL.
- JC18649-5A: Analysis performed at Accutest Laboratories, Orlando FL.
- JC18649-4A: Analysis performed at Accutest Laboratories, Orlando FL.
- JC18649-2A: Analysis performed at Accutest Laboratories, Orlando FL.

Volatiles by GC By Method SW846 8015C MOD

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

- The data for SW846 8015C MOD meets quality control requirements.

Extractables by GC By Method SW846 8081B

Matrix: AQ	**Batch ID:** OP93237

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC18649-1MS, JC18649-1MSD were used as the QC samples indicated.
- Matrix Spike Recovery(s) for alpha-Chlordane are outside the QC limits.
- Matrix Spike Duplicate Recovery(s) for alpha-Chlordane are outside the QC limits.

Matrix: SO	**Batch ID:** OP93322

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

Wet Chemistry By Method SM2540 G-97

Matrix: SO	**Batch ID:** GN44665

- 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:** JC18649

Site: AMANYWP: BMSMC, Building 5 Area, PR **Report Date:** 4/28/2016 1:40:46 PM

5 Sample(s) were collected on/ between 04/18/2016 and 04/19/2016 and were received at SGS Accutest Southeast (SASE) on 04/26/2016 properly preserved, at 4.6 Deg. C and intact. These Samples received an SASE job number of JC18649. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

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

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GXY2768

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

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

Matrix: AQ **Batch ID:** GXY2770

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

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

Sample(s) JC18649-3 has surrogates outside control limits. Probable cause is due to matrix interference.

JC18649-3: Sample was received in a bulk container but was not preserved within 48 hours of sampling.

JC18649-3 for Hexanol: Outside control limits; however, sample is ND.

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

Narrative prepared by:

_____ Date: April 28, 2016

Kim Benham, Client Services (signature on file)

Manual Integration Summary

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

4 Manual Integrations were found for JC18649

Summary of Hits

Job Number: JC18649
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Collected: 04/18/16 thru 04/19/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC18649-1	**RA14-GWD**					
1,4-Dioxane		7880 B	250	160	ug/l	SW846 8270D
JC18649-1A	**RA14-GWD**					
No hits reported in this sample.						
JC18649-2	**RA14D-GWD**					
1,4-Dioxane		8280 B	250	160	ug/l	SW846 8270D
JC18649-2A	**RA14D-GWD**					
No hits reported in this sample.						
JC18649-3	**RA13(5-6)**					
Benzaldehyde		20.2 J	190	9.7	ug/kg	SW846 8270D
JC18649-4	**RA13-GWS**					
1,4-Dioxane		18.0	1.1	0.72	ug/l	SW846 8270D
JC18649-4A	**RA13-GWS**					
No hits reported in this sample.						
JC18649-5	**RA13-GWD**					
1,4-Dioxane		193 B	2.5	1.6	ug/l	SW846 8270D
bis(2-Ethylhexyl)phthalate		3.7	2.5	2.1	ug/l	SW846 8270D
JC18649-5A	**RA13-GWD**					
No hits reported in this sample.						

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	RA14-GWD		
Lab Sample ID:	JC18649-1	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	5P27667A.D	1	04/21/16	JJ	04/20/16	OP93236	E5P1400
Run #2	2M83247.D	200	04/21/16	AN	04/20/16	OP93236	E2M3657

	Initial Volume	Final Volume
Run #1	810 ml	1.0 ml
Run #2	810 ml	1.0 ml

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	6.2	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	6.2	1.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.5	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	6.2	3.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	12	1.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	6.2	1.6	ug/l	
95-48-7	2-Methylphenol	ND	2.5	1.1	ug/l	
	3&4-Methylphenol	ND	2.5	1.1	ug/l	
88-75-5	2-Nitrophenol	ND	6.2	1.2	ug/l	
100-02-7	4-Nitrophenol	ND	12	1.4	ug/l	
87-86-5	Pentachlorophenol	ND	6.2	1.7	ug/l	
108-95-2	Phenol	ND	2.5	0.48	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	6.2	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	6.2	1.6	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	6.2	1.1	ug/l	
83-32-9	Acenaphthene	ND	1.2	0.24	ug/l	
208-96-8	Acenaphthylene	ND	1.2	0.17	ug/l	
98-86-2	Acetophenone	ND	2.5	0.26	ug/l	
120-12-7	Anthracene	ND	1.2	0.26	ug/l	
1912-24-9	Atrazine	ND	2.5	0.55	ug/l	
100-52-7	Benzaldehyde	ND	6.2	0.36	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.2	0.25	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.2	0.26	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.2	0.25	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.2	0.42	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.2	0.25	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.5	0.50	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.5	0.56	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.2	0.26	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.5	0.29	ug/l	
106-47-8	4-Chloroaniline	ND	6.2	0.42	ug/l	
86-74-8	Carbazole	ND	1.2	0.28	ug/l	

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

Report of Analysis

Client Sample ID:	RA14-GWD		
Lab Sample ID:	JC18649-1	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	2.5	0.80	ug/l	
218-01-9	Chrysene	ND	1.2	0.22	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.5	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.5	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.5	0.50	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.5	0.45	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.2	0.68	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.2	0.59	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.5	0.63	ug/l	
123-91-1	1,4-Dioxane	7880 [a]	250	160	ug/l	B
53-70-3	Dibenzo(a,h)anthracene	ND	1.2	0.41	ug/l	
132-64-9	Dibenzofuran	ND	6.2	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.5	0.61	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.5	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	2.5	0.32	ug/l	
131-11-3	Dimethyl phthalate	ND	2.5	0.27	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.5	2.0	ug/l	
206-44-0	Fluoranthene	ND	1.2	0.21	ug/l	
86-73-7	Fluorene	ND	1.2	0.21	ug/l	
118-74-1	Hexachlorobenzene	ND	1.2	0.40	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.2	0.61	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	12	3.4	ug/l	
67-72-1	Hexachloroethane	ND	2.5	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.2	0.41	ug/l	
78-59-1	Isophorone	ND	2.5	0.34	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.2	0.32	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.2	0.26	ug/l	
88-74-4	2-Nitroaniline	ND	6.2	0.34	ug/l	
99-09-2	3-Nitroaniline	ND	6.2	0.48	ug/l	
100-01-6	4-Nitroaniline	ND	6.2	0.54	ug/l	
98-95-3	Nitrobenzene	ND	2.5	0.79	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.5	0.59	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	6.2	0.27	ug/l	
85-01-8	Phenanthrene	ND	1.2	0.22	ug/l	
129-00-0	Pyrene	ND	1.2	0.27	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.5	0.46	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	51%	0% [b]	14-88%

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

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

Report of Analysis

Client Sample ID:	RA14-GWD		
Lab Sample ID:	JC18649-1	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	32%	0% [b]	10-110%
118-79-6	2,4,6-Tribromophenol	86%	0% [b]	39-149%
4165-60-0	Nitrobenzene-d5	72%	0% [b]	32-128%
321-60-8	2-Fluorobiphenyl	77%	0% [b]	35-119%
1718-51-0	Terphenyl-d14	81%	0% [b]	10-126%

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

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA14-GWD		
Lab Sample ID:	JC18649-1	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	4M64882.D	1	04/21/16	LK	04/20/16	OP93236A	E4M2889
Run #2							

	Initial Volume	Final Volume
Run #1	810 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.12	0.036	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	83%		24-125%
321-60-8	2-Fluorobiphenyl	98%		19-127%
1718-51-0	Terphenyl-d14	64%		10-119%

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA14-GWD		
Lab Sample ID:	JC18649-1	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	1G122360.D	1	04/21/16	BP	04/20/16	OP93237	G1G3968
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	92%		26-132%
877-09-8	Tetrachloro-m-xylene	96%		26-132%
2051-24-3	Decachlorobiphenyl	73%		10-118%
2051-24-3	Decachlorobiphenyl	53%		10-118%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA14-GWD		
Lab Sample ID:	JC18649-1A	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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]	XY064038.D	1	04/26/16	AFL	n/a	n/a	F:GXY2768
Run #2							

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

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

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

ND = Not detected MDL = Method Detection Limit 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:	RA14D-GWD		
Lab Sample ID:	JC18649-2	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	5P27668.D	1	04/21/16	JJ	04/20/16	OP93236	E5P1400
Run #2	2M83248.D	200	04/21/16	AN	04/20/16	OP93236	E2M3657

	Initial Volume	Final Volume
Run #1	810 ml	1.0 ml
Run #2	810 ml	1.0 ml

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	6.2	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	6.2	1.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.5	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	6.2	3.0	ug/l	
51-28-5	2,4-Dinitrophenol	ND	12	1.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	6.2	1.6	ug/l	
95-48-7	2-Methylphenol	ND	2.5	1.1	ug/l	
	3&4-Methylphenol	ND	2.5	1.1	ug/l	
88-75-5	2-Nitrophenol	ND	6.2	1.2	ug/l	
100-02-7	4-Nitrophenol	ND	12	1.4	ug/l	
87-86-5	Pentachlorophenol	ND	6.2	1.7	ug/l	
108-95-2	Phenol	ND	2.5	0.48	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	6.2	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	6.2	1.6	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	6.2	1.1	ug/l	
83-32-9	Acenaphthene	ND	1.2	0.24	ug/l	
208-96-8	Acenaphthylene	ND	1.2	0.17	ug/l	
98-86-2	Acetophenone	ND	2.5	0.26	ug/l	
120-12-7	Anthracene	ND	1.2	0.26	ug/l	
1912-24-9	Atrazine	ND	2.5	0.55	ug/l	
100-52-7	Benzaldehyde	ND	6.2	0.36	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.2	0.25	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.2	0.26	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.2	0.25	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.2	0.42	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.2	0.25	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.5	0.50	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.5	0.56	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.2	0.26	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.5	0.29	ug/l	
106-47-8	4-Chloroaniline	ND	6.2	0.42	ug/l	
86-74-8	Carbazole	ND	1.2	0.28	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:	RA14D-GWD		
Lab Sample ID:	JC18649-2	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	2.5	0.80	ug/l	
218-01-9	Chrysene	ND	1.2	0.22	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.5	0.34	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.5	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.5	0.50	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.5	0.45	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.2	0.68	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.2	0.59	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.5	0.63	ug/l	
123-91-1	1,4-Dioxane	8280 [a]	250	160	ug/l	B
53-70-3	Dibenzo(a,h)anthracene	ND	1.2	0.41	ug/l	
132-64-9	Dibenzofuran	ND	6.2	0.27	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.5	0.61	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.5	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	2.5	0.32	ug/l	
131-11-3	Dimethyl phthalate	ND	2.5	0.27	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.5	2.0	ug/l	
206-44-0	Fluoranthene	ND	1.2	0.21	ug/l	
86-73-7	Fluorene	ND	1.2	0.21	ug/l	
118-74-1	Hexachlorobenzene	ND	1.2	0.40	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.2	0.61	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	12	3.4	ug/l	
67-72-1	Hexachloroethane	ND	2.5	0.48	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.2	0.41	ug/l	
78-59-1	Isophorone	ND	2.5	0.34	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.2	0.32	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.2	0.26	ug/l	
88-74-4	2-Nitroaniline	ND	6.2	0.34	ug/l	
99-09-2	3-Nitroaniline	ND	6.2	0.48	ug/l	
100-01-6	4-Nitroaniline	ND	6.2	0.54	ug/l	
98-95-3	Nitrobenzene	ND	2.5	0.79	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.5	0.59	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	6.2	0.27	ug/l	
85-01-8	Phenanthrene	ND	1.2	0.22	ug/l	
129-00-0	Pyrene	ND	1.2	0.27	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.5	0.46	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	48%	0% [b]	14-88%

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

Report of Analysis

Client Sample ID:	RA14D-GWD		
Lab Sample ID:	JC18649-2	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	32%	0% [b]	10-110%
118-79-6	2,4,6-Tribromophenol	95%	0% [b]	39-149%
4165-60-0	Nitrobenzene-d5	68%	0% [b]	32-128%
321-60-8	2-Fluorobiphenyl	77%	0% [b]	35-119%
1718-51-0	Terphenyl-d14	89%	0% [b]	10-126%

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

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA14D-GWD		
Lab Sample ID:	JC18649-2	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	4M64883.D	1	04/21/16	LK	04/20/16	OP93236A	E4M2889
Run #2							

	Initial Volume	Final Volume
Run #1	810 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.12	0.036	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	80%		24-125%
321-60-8	2-Fluorobiphenyl	95%		19-127%
1718-51-0	Terphenyl-d14	71%		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:	RA14D-GWD		
Lab Sample ID:	JC18649-2	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	1G122361.D	1	04/21/16	BP	04/20/16	OP93237	G1G3968
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	87%		26-132%
877-09-8	Tetrachloro-m-xylene	88%		26-132%
2051-24-3	Decachlorobiphenyl	67%		10-118%
2051-24-3	Decachlorobiphenyl	46%		10-118%

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA14D-GWD		
Lab Sample ID:	JC18649-2A	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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]	XY064039.D	1	04/26/16	AFL	n/a	n/a	F:GXY2768
Run #2							

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	82%		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:	RA13(5-6)		
Lab Sample ID:	JC18649-3	**Date Sampled:**	04/18/16
Matrix:	SO - Soil	**Date Received:**	04/20/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	81.0
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2M83450.D	1	04/28/16	AN	04/26/16	OP93364	E2M3668
Run #2							

	Initial Weight	Final Volume
Run #1	31.7 g	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	78	29	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	35	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	31	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	71	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	74	ug/kg	
95-48-7	2-Methylphenol	ND	78	56	ug/kg	
	3&4-Methylphenol	ND	78	37	ug/kg	
88-75-5	2-Nitrophenol	ND	190	36	ug/kg	
100-02-7	4-Nitrophenol	ND	390	66	ug/kg	
87-86-5	Pentachlorophenol	ND	190	95	ug/kg	
108-95-2	Phenol	ND	78	29	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	37	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	35	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	31	ug/kg	
83-32-9	Acenaphthene	ND	39	37	ug/kg	
208-96-8	Acenaphthylene	ND	39	4.1	ug/kg	
98-86-2	Acetophenone	ND	190	6.6	ug/kg	
120-12-7	Anthracene	ND	39	3.4	ug/kg	
1912-24-9	Atrazine	ND	78	16	ug/kg	
56-55-3	Benzo(a)anthracene	ND	39	7.5	ug/kg	
50-32-8	Benzo(a)pyrene	ND	39	8.3	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	39	8.0	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	39	12	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	39	8.7	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	78	8.9	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	78	21	ug/kg	
92-52-4	1,1'-Biphenyl	ND	78	7.2	ug/kg	
100-52-7	Benzaldehyde	20.2	190	9.7	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	78	5.6	ug/kg	
106-47-8	4-Chloroaniline	ND	190	10	ug/kg	
86-74-8	Carbazole	ND	78	4.3	ug/kg	

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

Report of Analysis

Client Sample ID:	RA13(5-6)		
Lab Sample ID:	JC18649-3	**Date Sampled:**	04/18/16
Matrix:	SO - Soil	**Date Received:**	04/20/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	81.0
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	78	25	ug/kg	
218-01-9	Chrysene	ND	39	6.3	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	78	8.8	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	78	16	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	78	8.9	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	78	7.3	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	39	7.3	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	39	10	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	78	25	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	39	14	ug/kg	
132-64-9	Dibenzofuran	ND	78	5.4	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	78	4.6	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	78	5.3	ug/kg	
84-66-2	Diethyl phthalate	ND	78	4.9	ug/kg	
131-11-3	Dimethyl phthalate	ND	78	5.6	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	78	14	ug/kg	
206-44-0	Fluoranthene	ND	39	4.8	ug/kg	
86-73-7	Fluorene	ND	39	4.6	ug/kg	
118-74-1	Hexachlorobenzene	ND	78	7.7	ug/kg	
87-68-3	Hexachlorobutadiene	ND	39	10	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	390	62	ug/kg	
67-72-1	Hexachloroethane	ND	190	13	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	39	20	ug/kg	
78-59-1	Isophorone	ND	78	7.3	ug/kg	
90-12-0	1-Methylnaphthalene	ND	78	6.3	ug/kg	
91-57-6	2-Methylnaphthalene	ND	78	7.3	ug/kg	
88-74-4	2-Nitroaniline	ND	190	8.8	ug/kg	
99-09-2	3-Nitroaniline	ND	190	11	ug/kg	
100-01-6	4-Nitroaniline	ND	190	13	ug/kg	
98-95-3	Nitrobenzene	ND	78	12	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	78	12	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	20	ug/kg	
85-01-8	Phenanthrene	ND	39	4.3	ug/kg	
129-00-0	Pyrene	ND	39	4.9	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	9.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	69%		30-106%
4165-62-2	Phenol-d5	71%		30-106%

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

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

Report of Analysis

Client Sample ID:	RA13(5-6)		
Lab Sample ID:	JC18649-3	**Date Sampled:**	04/18/16
Matrix:	SO - Soil	**Date Received:**	04/20/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	81.0
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	87%		24-140%
4165-60-0	Nitrobenzene-d5	84%		26-122%
321-60-8	2-Fluorobiphenyl	76%		36-112%
1718-51-0	Terphenyl-d14	83%		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:	RA13(5-6)		
Lab Sample ID:	JC18649-3	**Date Sampled:**	04/18/16
Matrix:	SO - Soil	**Date Received:**	04/20/16
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	81.0
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3M60903.D	1	04/27/16	JJ	04/26/16	OP93364A	E3M2863
Run #2							

	Initial Weight	Final Volume
Run #1	31.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane [a]	ND	3.9	0.78	ug/kg	
91-20-3	Naphthalene	ND	3.9	0.48	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		15-138%
321-60-8	2-Fluorobiphenyl	78%		12-148%
1718-51-0	Terphenyl-d14	91%		10-157%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA13(5-6)		
Lab Sample ID:	JC18649-3	**Date Sampled:**	04/18/16
Matrix:	SO - Soil	**Date Received:**	04/20/16
Method:	SW846 8015C MOD	**Percent Solids:**	81.0
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	XY064058.D	1	04/27/16	AFL	n/a	n/a	F:GXY2770
Run #2							

	Initial Weight	Final Volume
Run #1	5.01 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	12	2.5	mg/kg	
78-83-1	Isobutyl Alcohol	ND	12	2.5	mg/kg	
67-63-0	Isopropyl Alcohol	ND	12	2.5	mg/kg	
71-23-8	n-Propyl Alcohol	ND	12	2.5	mg/kg	
71-36-3	n-Butyl Alcohol	ND	12	2.5	mg/kg	
67-56-1	Methanol	ND	12	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	134% [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:	RA13(5-6)		
Lab Sample ID:	JC18649-3	**Date Sampled:**	04/18/16
Matrix:	SO - Soil	**Date Received:**	04/20/16
Method:	SW846 8081B SW846 3546	**Percent Solids:**	81.0
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G34408.D	1	04/25/16	BP	04/23/16	OP93322	G6G995
Run #2							

	Initial Weight	Final Volume
Run #1	15.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.81	0.72	ug/kg	
319-84-6	alpha-BHC	ND	0.81	0.54	ug/kg	
319-85-7	beta-BHC	ND	0.81	0.50	ug/kg	
319-86-8	delta-BHC	ND	0.81	0.32	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.81	0.37	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.81	0.43	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.81	0.61	ug/kg	
60-57-1	Dieldrin	ND	0.81	0.63	ug/kg	
72-54-8	4,4'-DDD	ND	0.81	0.30	ug/kg	
72-55-9	4,4'-DDE	ND	0.81	0.27	ug/kg	
50-29-3	4,4'-DDT	ND	0.81	0.31	ug/kg	
72-20-8	Endrin	ND	0.81	0.28	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.81	0.46	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.81	0.60	ug/kg	
959-98-8	Endosulfan-I	ND	0.81	0.27	ug/kg	
33213-65-9	Endosulfan-II	ND	0.81	0.76	ug/kg	
76-44-8	Heptachlor	ND	0.81	0.66	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.81	0.33	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.45	ug/kg	
53494-70-5	Endrin ketone	ND	0.81	0.42	ug/kg	
8001-35-2	Toxaphene	ND	20	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		24-136%
877-09-8	Tetrachloro-m-xylene	94%		24-136%
2051-24-3	Decachlorobiphenyl	86%		10-153%
2051-24-3	Decachlorobiphenyl	85%		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:	RA13-GWS		
Lab Sample ID:	JC18649-4	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	2P58449.D	1	04/21/16	RL	04/21/16	OP93271	E2P2552
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.5	0.90	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.5	0.98	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.2	1.4	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.5	2.7	ug/l	
51-28-5	2,4-Dinitrophenol	ND	11	1.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.5	1.4	ug/l	
95-48-7	2-Methylphenol	ND	2.2	0.98	ug/l	
	3&4-Methylphenol	ND	2.2	0.97	ug/l	
88-75-5	2-Nitrophenol	ND	5.5	1.1	ug/l	
100-02-7	4-Nitrophenol	ND	11	1.3	ug/l	
87-86-5	Pentachlorophenol	ND	5.5	1.5	ug/l	
108-95-2	Phenol	ND	2.2	0.43	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.5	1.6	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.5	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.5	1.0	ug/l	
83-32-9	Acenaphthene	ND	1.1	0.21	ug/l	
208-96-8	Acenaphthylene	ND	1.1	0.15	ug/l	
98-86-2	Acetophenone	ND	2.2	0.23	ug/l	
120-12-7	Anthracene	ND	1.1	0.23	ug/l	
1912-24-9	Atrazine	ND	2.2	0.49	ug/l	
100-52-7	Benzaldehyde	ND	5.5	0.32	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.1	0.22	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.1	0.23	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.1	0.23	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.1	0.37	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.1	0.23	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.44	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.50	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.1	0.23	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.2	0.26	ug/l	
106-47-8	4-Chloroaniline	ND	5.5	0.37	ug/l	
86-74-8	Carbazole	ND	1.1	0.25	ug/l	

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

Report of Analysis

Client Sample ID:	RA13-GWS		
Lab Sample ID:	JC18649-4	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.2	0.71	ug/l	
218-01-9	Chrysene	ND	1.1	0.19	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.27	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.40	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.1	0.61	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.1	0.52	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.2	0.56	ug/l	
123-91-1	1,4-Dioxane	18.0	1.1	0.72	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.36	ug/l	
132-64-9	Dibenzofuran	ND	5.5	0.24	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.55	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.26	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.29	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.24	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	1.8	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.19	ug/l	
86-73-7	Fluorene	ND	1.1	0.19	ug/l	
118-74-1	Hexachlorobenzene	ND	1.1	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.54	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	3.1	ug/l	
67-72-1	Hexachloroethane	ND	2.2	0.43	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.36	ug/l	
78-59-1	Isophorone	ND	2.2	0.30	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.1	0.29	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.23	ug/l	
88-74-4	2-Nitroaniline	ND	5.5	0.30	ug/l	
99-09-2	3-Nitroaniline	ND	5.5	0.43	ug/l	
100-01-6	4-Nitroaniline	ND	5.5	0.48	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.71	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.53	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.5	0.24	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.19	ug/l	
129-00-0	Pyrene	ND	1.1	0.24	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.2	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	54%		14-88%

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

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

Report of Analysis

Client Sample ID:	RA13-GWS		
Lab Sample ID:	JC18649-4	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	37%		10-110%
118-79-6	2,4,6-Tribromophenol	107%		39-149%
4165-60-0	Nitrobenzene-d5	90%		32-128%
321-60-8	2-Fluorobiphenyl	97%		35-119%
1718-51-0	Terphenyl-d14	88%		10-126%

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA13-GWS		
Lab Sample ID:	JC18649-4	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	4M64891.D	1	04/21/16	LK	04/21/16	OP93271A	E4M2890
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.11	0.032	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	120%		24-125%
321-60-8	2-Fluorobiphenyl	145% [a]		19-127%
1718-51-0	Terphenyl-d14	89%		10-119%

(a) High percent recoveries and no positive found in the sample.

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:	RA13-GWS		
Lab Sample ID:	JC18649-4	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	1G122362.D	1	04/21/16	BP	04/20/16	OP93237	G1G3968
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	92%		26-132%
877-09-8	Tetrachloro-m-xylene	100%		26-132%
2051-24-3	Decachlorobiphenyl	83%		10-118%
2051-24-3	Decachlorobiphenyl	58%		10-118%

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA13-GWS		
Lab Sample ID:	JC18649-4A	**Date Sampled:**	04/18/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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]	XY064040.D	1	04/26/16	AFL	n/a	n/a	F:GXY2768
Run #2							

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	99%		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:	RA13-GWD		
Lab Sample ID:	JC18649-5	**Date Sampled:**	04/19/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	5P27670.D	1	04/21/16	JJ	04/20/16	OP93236	E5P1400
Run #2	2M83249.D	2	04/21/16	AN	04/20/16	OP93236	E2M3657

	Initial Volume	Final Volume
Run #1	800 ml	1.0 ml
Run #2	800 ml	1.0 ml

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	6.3	1.0	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	6.3	1.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.5	1.6	ug/l	
105-67-9	2,4-Dimethylphenol	ND	6.3	3.1	ug/l	
51-28-5	2,4-Dinitrophenol	ND	13	1.9	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	6.3	1.6	ug/l	
95-48-7	2-Methylphenol	ND	2.5	1.1	ug/l	
	3&4-Methylphenol	ND	2.5	1.1	ug/l	
88-75-5	2-Nitrophenol	ND	6.3	1.2	ug/l	
100-02-7	4-Nitrophenol	ND	13	1.4	ug/l	
87-86-5	Pentachlorophenol	ND	6.3	1.7	ug/l	
108-95-2	Phenol	ND	2.5	0.49	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	6.3	1.8	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	6.3	1.7	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	6.3	1.2	ug/l	
83-32-9	Acenaphthene	ND	1.3	0.24	ug/l	
208-96-8	Acenaphthylene	ND	1.3	0.17	ug/l	
98-86-2	Acetophenone	ND	2.5	0.26	ug/l	
120-12-7	Anthracene	ND	1.3	0.26	ug/l	
1912-24-9	Atrazine	ND	2.5	0.56	ug/l	
100-52-7	Benzaldehyde	ND	6.3	0.36	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.3	0.25	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.3	0.27	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.3	0.26	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.3	0.43	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.3	0.26	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.5	0.51	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.5	0.57	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.3	0.27	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.5	0.30	ug/l	
106-47-8	4-Chloroaniline	ND	6.3	0.43	ug/l	
86-74-8	Carbazole	ND	1.3	0.29	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:	RA13-GWD		
Lab Sample ID:	JC18649-5	**Date Sampled:**	04/19/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	2.5	0.81	ug/l	
218-01-9	Chrysene	ND	1.3	0.22	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.5	0.35	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.5	0.31	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.5	0.50	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.5	0.46	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.3	0.69	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.3	0.60	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.5	0.63	ug/l	
123-91-1	1,4-Dioxane	193 [a]	2.5	1.6	ug/l	B
53-70-3	Dibenzo(a,h)anthracene	ND	1.3	0.41	ug/l	
132-64-9	Dibenzofuran	ND	6.3	0.28	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.5	0.62	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.5	0.29	ug/l	
84-66-2	Diethyl phthalate	ND	2.5	0.33	ug/l	
131-11-3	Dimethyl phthalate	ND	2.5	0.27	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	3.7	2.5	2.1	ug/l	
206-44-0	Fluoranthene	ND	1.3	0.21	ug/l	
86-73-7	Fluorene	ND	1.3	0.21	ug/l	
118-74-1	Hexachlorobenzene	ND	1.3	0.41	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.3	0.62	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	13	3.5	ug/l	
67-72-1	Hexachloroethane	ND	2.5	0.49	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.3	0.42	ug/l	
78-59-1	Isophorone	ND	2.5	0.35	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.3	0.33	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.3	0.26	ug/l	
88-74-4	2-Nitroaniline	ND	6.3	0.35	ug/l	
99-09-2	3-Nitroaniline	ND	6.3	0.48	ug/l	
100-01-6	4-Nitroaniline	ND	6.3	0.55	ug/l	
98-95-3	Nitrobenzene	ND	2.5	0.80	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.5	0.60	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	6.3	0.28	ug/l	
85-01-8	Phenanthrene	ND	1.3	0.22	ug/l	
129-00-0	Pyrene	ND	1.3	0.27	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.5	0.46	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%	43%	14-88%

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

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

Report of Analysis

Client Sample ID:	RA13-GWD		
Lab Sample ID:	JC18649-5	**Date Sampled:**	04/19/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	27%	30%	10-110%
118-79-6	2,4,6-Tribromophenol	78%	78%	39-149%
4165-60-0	Nitrobenzene-d5	61%	70%	32-128%
321-60-8	2-Fluorobiphenyl	67%	67%	35-119%
1718-51-0	Terphenyl-d14	76%	70%	10-126%

(a) Result is from Run# 2

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA13-GWD		
Lab Sample ID:	JC18649-5	**Date Sampled:**	04/19/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	4M64884.D	1	04/21/16	LK	04/20/16	OP93236A	E4M2889
Run #2							

	Initial Volume	Final Volume
Run #1	800 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.13	0.037	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		24-125%
321-60-8	2-Fluorobiphenyl	86%		19-127%
1718-51-0	Terphenyl-d14	61%		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:	RA13-GWD		
Lab Sample ID:	JC18649-5	**Date Sampled:**	04/19/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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	1G122363.D	1	04/21/16	BP	04/20/16	OP93237	G1G3968
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	66%		26-132%
877-09-8	Tetrachloro-m-xylene	81%		26-132%
2051-24-3	Decachlorobiphenyl	33%		10-118%
2051-24-3	Decachlorobiphenyl	26%		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:	RA13-GWD		
Lab Sample ID:	JC18649-5A	**Date Sampled:**	04/19/16
Matrix:	AQ - Ground Water	**Date Received:**	04/20/16
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]	XY064041.D	1	04/26/16	AFL	n/a	n/a	F:GXY2768
Run #2							

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	96%		73-123%

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

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

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

GW
SO-Foreign

SGS ACCUTEST NJ

CHAIN OF CUSTODY

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

PAGE 1 OF 1

SGS Accutest Quote # 801219536029
Bottle Order Control #
SGS Accutest Job # JC18649

Client / Reporting Information

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

Project Information

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

Billing Information (if different from Report to)

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

Requested Analysis (see TEST CODE sheet)

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	LMW - Method 8015B	Pesticides - Method 8081B	1,4 Dioxane + Naphthalene by Method 8270D SIM	LAB USE ONLY
1	RA14-GWD	•	4/18/16	1200	TT	GW	7	3				4				X	X	X	X	E34
2	RA14D-GWD	↓	4/18/16	1200	TT	GW	7	3				4				X	X	X	X	V1099
3	RA13 (5-6)		4/18/16	1400	NR	SO	2					2				X	X	X	X	FS3
4	RA13-GWS	•	4/18/16	1715	TT	GW	7	3				4				X	X	X	X	
5	RA13-GWD	↓	4/19/16	1230	TT	GW	7	3				4				X	X	X	X	

INITIAL ASSESSMENT ZAO
LABEL VERIFICATION O

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

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

Approved By (SGS Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

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

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

Comments / Special Instructions

Add to Report: 1-Methyl naphthalene. With SVOC by Method 8270D
• Rec'd 2x 300ml NP for PEST on 4/20/16

Sample inventory is verified upon receipt in the Laboratory

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	4/19/16 1500	1 FedEx	2 FedEx	4/20/16 0945	2 DM
3		3	4		4
5		5			

Custody Seal # 460, 771 [x] Intact [ ] Not intact
Preserved where applicable [ ]
On Ice [ ]
Cooler Temp. 4.6, 5.3°C IP

5.1 5

JC18649: Chain of Custody
Page 1 of 4

SGS Accutest Sample Receipt Summary

Job Number: JC18649 **Client:** **Project:**

Date / Time Received: 4/20/2016 9:45:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (4.6); Cooler 2: (5.3);

Cooler Temps (Corrected) °C: Cooler 1: (5.0); Cooler 2: (5.7);

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

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

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

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

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

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

Comments

Job Change Order: JC18649

Requested Date:	5/19/2016	**Received Date:**	4/20/2016
Account Name:	Anderson, Mulholland & Associate	**Due Date:**	4/21/2016
Project Description:	BMSMC, Building 5 Area, PR	**Deliverable:**	FULT1
CSR:	tammym	**TAT (Days):**	7

==========

Sample #: JC18649-3

Dept:

TAT: 7

RA13(5-6)

Change:
relog for D8015SBA, DGC+IPA. Ok out of hold time

==========

Above Changes Per: Terry Taylor

Date/Time: 5/19/2016 1:16:11 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

Job Change Order: JC18649

Requested Date:	6/9/2016	**Received Date:**	4/20/2016
Account Name:	Anderson, Mulholland & Associate	**Due Date:**	4/21/2016
Project Description:	BMSMC, Building 5 Area, PR	**Deliverable:**	FULT1
CSR:	tammym	**TAT (Days):**	3

==========

Sample #: JC18649-1, 2, 4, 5

Dept:

TAT: 3

Change:
relog for D8015SBA, DGC+IPA, ok out of hold and ok from previously opened vials (no remaining unopened vials)

==========

Above Changes Per: Addison Rice / Terry Taylor

Date/Time: 6/9/2016 11:19:18 AM

To Client: This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC18649

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC18649-1 Collected: 18-APR-16 12:00 By: TT Received: 20-APR-16 By: DDH RA14-GWD						
JC18649-1	SW846 8270D	21-APR-16 00:14	JJ	20-APR-16	AC	AB8270SL
JC18649-1	SW846 8270D	21-APR-16 11:46	AN	20-APR-16	AC	AB8270SL
JC18649-1	SW846 8270D BY SIM	21-APR-16 11:56	LK	20-APR-16	AC	BSIM + NAP
JC18649-1	SW846 8081B	21-APR-16 12:37	BP	20-APR-16	RF	P8081PESTTCL
JC18649-2 Collected: 18-APR-16 12:00 By: TT Received: 20-APR-16 By: DDH RA14D-GWD						
JC18649-2	SW846 8270D	21-APR-16 00:40	JJ	20-APR-16	AC	AB8270SL
JC18649-2	SW846 8270D	21-APR-16 12:12	AN	20-APR-16	AC	AB8270SL
JC18649-2	SW846 8270D BY SIM	21-APR-16 12:26	LK	20-APR-16	AC	BSIM + NAP
JC18649-2	SW846 8081B	21-APR-16 12:54	BP	20-APR-16	RF	P8081PESTTCL
JC18649-3 Collected: 18-APR-16 14:00 By: NR Received: 20-APR-16 By: DDH RA13(5-6)						
JC18649-3	SM2540 G-97	23-APR-16 11:00	KP			SOL104
JC18649-3	SW846 8081B	25-APR-16 21:22	BP	23-APR-16	SG	P8081PESTTCL
JC18649-3	SW846 8270D BY SIM	27-APR-16 02:45	JJ	26-APR-16	FN	B8270SIM14DIOX,BSIM + NAP
JC18649-3	SW846 8015C MOD	27-APR-16 09:46	AFL			D8015LMA
JC18649-3	SW846 8270D	28-APR-16 16:48	AN	26-APR-16	AQ	AB8270SL
JC18649-4 Collected: 18-APR-16 17:15 By: TT Received: 20-APR-16 By: DDH RA13-GWS						
JC18649-4	SW846 8081B	21-APR-16 13:12	BP	20-APR-16	RF	P8081PESTTCL
JC18649-4	SW846 8270D	21-APR-16 16:28	RL	21-APR-16	YB	AB8270SL
JC18649-4	SW846 8270D BY SIM	21-APR-16 16:50	LK	21-APR-16	YB	BSIM + NAP
JC18649-5 Collected: 19-APR-16 12:30 By: TT Received: 20-APR-16 By: DDH RA13-GWD						
JC18649-5	SW846 8270D	21-APR-16 01:32	JJ	20-APR-16	AC	AB8270SL
JC18649-5	SW846 8270D	21-APR-16 12:38	AN	20-APR-16	AC	AB8270SL
JC18649-5	SW846 8270D BY SIM	21-APR-16 12:58	LK	20-APR-16	AC	BSIM + NAP
JC18649-5	SW846 8081B	21-APR-16 13:30	BP	20-APR-16	RF	P8081PESTTCL

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC18649

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC18649-1A	Collected: 18-APR-16 12:00 By: TT		Received: 20-APR-16 By: DDH			
RA14-GWD						
JC18649-1A	SW846 8015C	26-APR-16 17:21	AFL			D8015LMA
JC18649-2A	Collected: 18-APR-16 12:00 By: TT		Received: 20-APR-16 By: DDH			
RA14D-GWD						
JC18649-2A	SW846 8015C	26-APR-16 17:40	AFL			D8015LMA
JC18649-4A	Collected: 18-APR-16 17:15 By: TT		Received: 20-APR-16 By: DDH			
RA13-GWS						
JC18649-4A	SW846 8015C	26-APR-16 17:59	AFL			D8015LMA
JC18649-5A	Collected: 19-APR-16 12:30 By: TT		Received: 20-APR-16 By: DDH			
RA13-GWD						
JC18649-5A	SW846 8015C	26-APR-16 18:18	AFL			D8015LMA

SGS Accutest Internal Chain of Custody

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 04/20/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18649-1.1	Secured Storage	Luis Villanueva	04/20/16 12:37	Retrieve from Storage
JC18649-1.1	Luis Villanueva	Secured Staging Area	04/20/16 12:37	Return to Storage
JC18649-1.1	Secured Staging Area	Allan Chung-yew	04/20/16 15:16	Retrieve from Storage
JC18649-1.1	Allan Chung-yew		04/20/16 19:57	Depleted
JC18649-1.1.1	Allan Chung-yew	Organics Prep	04/20/16 15:22	Extract from JC18649-1.1
JC18649-1.1.1	Organics Prep	Ryan Fantasia	04/20/16 22:51	Extract from JC18649-1.1
JC18649-1.1.1	Ryan Fantasia	Extract Storage	04/20/16 22:51	Return to Storage
JC18649-1.1.1	Extract Storage	Brittany Piercy	04/21/16 10:15	Retrieve from Storage
JC18649-1.1.1	Brittany Piercy	GC1G	04/21/16 10:15	Load on Instrument
JC18649-1.1.1	GC1G	Brittany Piercy	04/27/16 07:48	Unload from Instrument
JC18649-1.1.1	Brittany Piercy	Extract Freezer	04/27/16 07:48	Return to Storage
JC18649-1.1.1	Extract Freezer		05/31/16 09:00	Disposed
JC18649-1.2	Secured Storage	Luis Villanueva	04/20/16 12:37	Retrieve from Storage
JC18649-1.2	Luis Villanueva	Secured Staging Area	04/20/16 12:37	Return to Storage
JC18649-1.2	Secured Staging Area	Allan Chung-yew	04/20/16 15:16	Retrieve from Storage
JC18649-1.2	Allan Chung-yew		04/20/16 19:57	Depleted
JC18649-1.3	Secured Storage	Luis Villanueva	04/20/16 12:37	Retrieve from Storage
JC18649-1.3	Luis Villanueva	Secured Staging Area	04/20/16 12:37	Return to Storage
JC18649-1.3	Secured Staging Area	Allan Chung-yew	04/20/16 15:16	Retrieve from Storage
JC18649-1.3	Allan Chung-yew		04/20/16 19:57	Depleted
JC18649-1.4	Secured Storage	Luis Villanueva	04/20/16 12:37	Retrieve from Storage
JC18649-1.4	Luis Villanueva	Secured Staging Area	04/20/16 12:37	Return to Storage
JC18649-1.4	Secured Staging Area	Allan Chung-yew	04/20/16 15:16	Retrieve from Storage
JC18649-1.4	Allan Chung-yew		04/20/16 19:57	Depleted
JC18649-1.4.1	Allan Chung-yew	Organics Prep	04/20/16 15:18	Extract from JC18649-1.4
JC18649-1.4.1	Organics Prep	Allan Chung-yew	04/20/16 21:34	Extract from JC18649-1.4
JC18649-1.4.1	Allan Chung-yew	Extract Storage	04/20/16 21:34	Return to Storage
JC18649-1.4.1	Extract Storage	Sean Block	04/20/16 22:50	Retrieve from Storage
JC18649-1.4.1	Sean Block	GCMS5P	04/20/16 22:50	Load on Instrument
JC18649-1.4.1	GCMS5P	Ashley Noble	04/21/16 10:29	Unload from Instrument
JC18649-1.4.1	Ashley Noble	Extract Freezer	04/21/16 10:29	Return to Storage
JC18649-1.4.1	Extract Freezer		05/31/16 09:00	Disposed
JC18649-1.5	Secured Storage	Oleg Berenzon	04/25/16 16:44	Retrieve from Storage
JC18649-1.5	Oleg Berenzon		04/25/16 16:44	Subcontract
JC18649-1.6	Secured Storage	Xu Liu	04/21/16 10:27	Retrieve from Storage
JC18649-1.6	Xu Liu	Secured Storage	04/21/16 10:40	Return to Storage
JC18649-1.6	Secured Storage	Xu Liu	04/22/16 10:01	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 04/20/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18649-1.6	Xu Liu	Secured Storage	04/22/16 14:40	Return to Storage
JC18649-1.6	Tim Hudson		06/03/16 15:13	Disposed
JC18649-1.8	Secured Storage	Xu Liu	06/10/16 07:07	Retrieve from Storage
JC18649-1.8	Xu Liu	Secured Storage	06/10/16 14:02	Return to Storage
JC18649-1.8	Secured Storage	Xu Liu	06/13/16 08:12	Retrieve from Storage
JC18649-1.8	Xu Liu	Secured Storage	06/13/16 14:37	Return to Storage
JC18649-2.1	Secured Storage	Luis Villanueva	04/20/16 12:37	Retrieve from Storage
JC18649-2.1	Luis Villanueva	Secured Staging Area	04/20/16 12:37	Return to Storage
JC18649-2.1	Secured Staging Area	Allan Chung-yew	04/20/16 15:16	Retrieve from Storage
JC18649-2.1	Allan Chung-yew		04/20/16 19:57	Depleted
JC18649-2.1.1	Allan Chung-yew	Organics Prep	04/20/16 15:18	Extract from JC18649-2.1
JC18649-2.1.1	Organics Prep	Allan Chung-yew	04/20/16 21:34	Extract from JC18649-2.1
JC18649-2.1.1	Allan Chung-yew	Extract Storage	04/20/16 21:34	Return to Storage
JC18649-2.1.1	Extract Storage	Sean Block	04/20/16 22:50	Retrieve from Storage
JC18649-2.1.1	Sean Block	GCMS5P	04/20/16 22:50	Load on Instrument
JC18649-2.1.1	GCMS5P	Ashley Noble	04/21/16 10:29	Unload from Instrument
JC18649-2.1.1	Ashley Noble	Extract Freezer	04/21/16 10:29	Return to Storage
JC18649-2.1.1	Extract Freezer		05/31/16 09:00	Disposed
JC18649-2.1.2	Allan Chung-yew	Organics Prep	04/20/16 15:22	Extract from JC18649-2.1
JC18649-2.1.2	Organics Prep	Ryan Fantasia	04/20/16 22:51	Extract from JC18649-2.1
JC18649-2.1.2	Ryan Fantasia	Extract Storage	04/20/16 22:51	Return to Storage
JC18649-2.1.2	Extract Storage	Brittany Piercy	04/21/16 10:15	Retrieve from Storage
JC18649-2.1.2	Brittany Piercy	GC1G	04/21/16 10:15	Load on Instrument
JC18649-2.1.2	GC1G	Brittany Piercy	04/27/16 07:48	Unload from Instrument
JC18649-2.1.2	Brittany Piercy	Extract Freezer	04/27/16 07:48	Return to Storage
JC18649-2.1.2	Extract Freezer		05/31/16 09:00	Disposed
JC18649-2.2	Secured Storage	Luis Villanueva	04/20/16 12:37	Retrieve from Storage
JC18649-2.2	Luis Villanueva	Secured Staging Area	04/20/16 12:37	Return to Storage
JC18649-2.2	Secured Staging Area	Allan Chung-yew	04/20/16 15:16	Retrieve from Storage
JC18649-2.2	Allan Chung-yew		04/20/16 19:57	Depleted
JC18649-2.4	Secured Storage	Luis Villanueva	04/20/16 12:37	Retrieve from Storage
JC18649-2.4	Luis Villanueva	Secured Staging Area	04/20/16 12:37	Return to Storage
JC18649-2.4	Secured Staging Area	Allan Chung-yew	04/20/16 15:16	Retrieve from Storage
JC18649-2.4	Allan Chung-yew		04/20/16 19:57	Depleted
JC18649-2.5	Secured Storage	Oleg Berenzon	04/25/16 16:44	Retrieve from Storage
JC18649-2.5	Oleg Berenzon		04/25/16 16:44	Subcontract

SGS Accutest Internal Chain of Custody

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 04/20/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18649-2.6	Secured Storage	Xu Liu	04/21/16 10:27	Retrieve from Storage
JC18649-2.6	Xu Liu	Secured Storage	04/21/16 10:40	Return to Storage
JC18649-2.6	Secured Storage	Xu Liu	04/22/16 10:01	Retrieve from Storage
JC18649-2.6	Xu Liu	Secured Storage	04/22/16 14:40	Return to Storage
JC18649-2.6	Tim Hudson		06/03/16 15:13	Disposed
JC18649-2.8	Secured Storage	Xu Liu	06/10/16 07:07	Retrieve from Storage
JC18649-2.8	Xu Liu	Secured Storage	06/10/16 14:02	Return to Storage
JC18649-2.8	Secured Storage	Xu Liu	06/13/16 08:12	Retrieve from Storage
JC18649-2.8	Xu Liu	Secured Storage	06/13/16 14:37	Return to Storage
JC18649-3.1	Secured Storage	Meilly Arbelo	04/23/16 07:44	Retrieve from Storage
JC18649-3.1	Meilly Arbelo	Secured Storage	04/23/16 13:39	Return to Storage
JC18649-3.1	Secured Storage	Finley Nyaata	04/26/16 07:20	Retrieve from Storage
JC18649-3.1	Finley Nyaata	Shanice Grant	04/26/16 08:07	Custody Transfer
JC18649-3.1	Shanice Grant	Secured Storage	04/26/16 10:27	Return to Storage
JC18649-3.1	Secured Storage	Xu Liu	05/19/16 14:30	Retrieve from Storage
JC18649-3.1	Xu Liu	Secured Storage	05/19/16 15:33	Return to Storage
JC18649-3.1	Shirley Grzybowski		06/27/16 09:40	Disposed
JC18649-3.1.1	Meilly Arbelo	Organics Prep	04/23/16 08:01	Extract from JC18649-3.1
JC18649-3.1.1	Organics Prep	Shanice Grant	04/23/16 16:46	Extract from JC18649-3.1
JC18649-3.1.1	Shanice Grant	Extract Storage	04/23/16 16:46	Return to Storage
JC18649-3.1.1	Extract Storage	Dhara Saparia	04/25/16 16:47	Retrieve from Storage
JC18649-3.1.1	Dhara Saparia	GC6G	04/25/16 16:47	Load on Instrument
JC18649-3.1.1	GC6G	Brittany Piercy	04/26/16 06:56	Unload from Instrument
JC18649-3.1.1	Brittany Piercy	Extract Freezer	04/26/16 06:56	Return to Storage
JC18649-3.1.1	Extract Freezer		06/03/16 09:00	Disposed
JC18649-3.1.2	Finley Nyaata	Organics Prep	04/26/16 07:26	Extract from JC18649-3.1
JC18649-3.1.2	Organics Prep	Albert Quayson	04/26/16 17:33	Extract from JC18649-3.1
JC18649-3.1.2	Albert Quayson	Extract Storage	04/26/16 17:33	Return to Storage
JC18649-3.1.2	Extract Storage	Julius Johnson	04/27/16 00:36	Retrieve from Storage
JC18649-3.1.2	Julius Johnson	GCMS3M	04/27/16 00:36	Load on Instrument
JC18649-3.1.2	GCMS3M	Linsey Kirschmann	04/27/16 10:25	Unload from Instrument
JC18649-3.1.2	Linsey Kirschmann	Extract Freezer	04/27/16 10:25	Return to Storage
JC18649-3.1.2	Extract Freezer	Julius Johnson	04/27/16 21:10	Retrieve from Storage
JC18649-3.1.2	Julius Johnson	GCMS2M	04/27/16 21:10	Load on Instrument
JC18649-3.1.2	GCMS2M	Ashley Noble	04/29/16 11:12	Unload from Instrument
JC18649-3.1.2	Ashley Noble	Extract Freezer	04/29/16 11:12	Return to Storage
JC18649-3.1.2	Extract Freezer		06/06/16 09:00	Disposed
JC18649-3.2	Secured Storage	Xu Liu	04/21/16 10:23	Retrieve from Storage
JC18649-3.2	Xu Liu	Secured Storage	04/21/16 10:46	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 04/20/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18649-3.2	Secured Storage	Sahara Feliciano	04/22/16 10:28	Retrieve from Storage
JC18649-3.2	Sahara Feliciano	Secured Staging Area	04/22/16 10:28	Return to Storage
JC18649-3.2	Secured Staging Area	Shirley Grzybowski	04/23/16 09:59	Retrieve from Storage
JC18649-3.2	Shirley Grzybowski	Secured Storage	04/23/16 09:59	Return to Storage
JC18649-3.2	Secured Storage	Oleg Berenzon	04/25/16 16:44	Retrieve from Storage
JC18649-3.2	Oleg Berenzon		04/25/16 16:44	Subcontract
JC18649-4.1	Secured Storage	Luis Villanueva	04/20/16 12:37	Retrieve from Storage
JC18649-4.1	Luis Villanueva	Secured Staging Area	04/20/16 12:37	Return to Storage
JC18649-4.1	Secured Staging Area	Allan Chung-yew	04/20/16 15:16	Retrieve from Storage
JC18649-4.1	Allan Chung-yew		04/20/16 19:57	Depleted
JC18649-4.1.1	Allan Chung-yew	Organics Prep	04/20/16 15:18	Extract from JC18649-4.1
JC18649-4.1.1	Organics Prep	Allan Chung-yew	04/20/16 21:34	Extract from JC18649-4.1
JC18649-4.1.1	Allan Chung-yew	Extract Storage	04/20/16 21:34	Return to Storage
JC18649-4.1.1	Extract Storage	Sean Block	04/20/16 22:50	Retrieve from Storage
JC18649-4.1.1	Sean Block	GCMS5P	04/20/16 22:50	Load on Instrument
JC18649-4.1.1	GCMS5P	Kristi Schollenberger	04/21/16 10:53	Unload from Instrument
JC18649-4.1.1	Kristi Schollenberger	GCMS2M	04/21/16 10:53	Load on Instrument
JC18649-4.1.1	GCMS2M	Ashley Noble	04/22/16 09:51	Unload from Instrument
JC18649-4.1.1	Ashley Noble	Extract Freezer	04/22/16 09:51	Return to Storage
JC18649-4.1.1	Extract Freezer		05/31/16 09:00	Disposed
JC18649-4.2	Secured Storage	Nicholas Goydish	04/21/16 11:38	Retrieve from Storage
JC18649-4.2	Nicholas Goydish		04/21/16 13:59	Depleted
JC18649-4.2.1	Nicholas Goydish	Organics Prep	04/21/16 11:38	Extract from JC18649-4.2
JC18649-4.2.1	Organics Prep	Yaw Britwum	04/21/16 14:16	Extract from JC18649-4.2
JC18649-4.2.1	Yaw Britwum	Extract Storage	04/21/16 14:16	Return to Storage
JC18649-4.2.1	Extract Storage	Robert LaPosta	04/21/16 16:40	Retrieve from Storage
JC18649-4.2.1	Robert LaPosta	GCMS2P	04/21/16 16:40	Load on Instrument
JC18649-4.2.1	GCMS2P	Ashley Noble	04/22/16 11:02	Unload from Instrument
JC18649-4.2.1	Ashley Noble	Extract Freezer	04/22/16 11:02	Return to Storage
JC18649-4.2.1	Extract Freezer		06/01/16 09:00	Disposed
JC18649-4.2.2	Nicholas Goydish	Organics Prep	04/21/16 11:39	Extract from JC18649-4.2
JC18649-4.2.2	Organics Prep	Yaw Britwum	04/21/16 14:15	Extract from JC18649-4.2
JC18649-4.2.2	Yaw Britwum	Extract Storage	04/21/16 14:15	Return to Storage
JC18649-4.2.2	Extract Storage	Kevin Moyle	04/21/16 16:07	Retrieve from Storage
JC18649-4.2.2	Kevin Moyle	GC2G	04/21/16 16:07	Load on Instrument
JC18649-4.2.2	GC2G	William Gonzalez	04/22/16 13:25	Unload from Instrument
JC18649-4.2.2	William Gonzalez	Extract Freezer	04/22/16 13:25	Return to Storage
JC18649-4.2.2	Extract Freezer		06/01/16 09:00	Disposed

SGS Accutest Internal Chain of Custody

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 04/20/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18649-4.3	Secured Storage	Luis Villanueva	04/20/16 12:37	Retrieve from Storage
JC18649-4.3	Luis Villanueva	Secured Staging Area	04/20/16 12:37	Return to Storage
JC18649-4.3	Secured Staging Area	Allan Chung-yew	04/20/16 15:16	Retrieve from Storage
JC18649-4.3	Allan Chung-yew		04/20/16 19:57	Depleted
JC18649-4.3.1	Allan Chung-yew	Organics Prep	04/20/16 15:22	Extract from JC18649-4.3
JC18649-4.3.1	Organics Prep	Ryan Fantasia	04/20/16 22:51	Extract from JC18649-4.3
JC18649-4.3.1	Ryan Fantasia	Extract Storage	04/20/16 22:51	Return to Storage
JC18649-4.3.1	Extract Storage	Brittany Piercy	04/21/16 10:15	Retrieve from Storage
JC18649-4.3.1	Brittany Piercy	GC1G	04/21/16 10:15	Load on Instrument
JC18649-4.3.1	GC1G	Brittany Piercy	04/27/16 07:48	Unload from Instrument
JC18649-4.3.1	Brittany Piercy	Extract Freezer	04/27/16 07:48	Return to Storage
JC18649-4.3.1	Extract Freezer		05/31/16 09:00	Disposed
JC18649-4.5	Secured Storage	Oleg Berenzon	04/25/16 16:44	Retrieve from Storage
JC18649-4.5	Oleg Berenzon		04/25/16 16:44	Subcontract
JC18649-4.6	Secured Storage	Xu Liu	04/21/16 10:27	Retrieve from Storage
JC18649-4.6	Xu Liu	Secured Storage	04/21/16 10:40	Return to Storage
JC18649-4.6	Secured Storage	Xu Liu	04/22/16 10:01	Retrieve from Storage
JC18649-4.6	Xu Liu	Secured Storage	04/22/16 14:40	Return to Storage
JC18649-4.6	Tim Hudson		06/03/16 15:13	Disposed
JC18649-4.8	Secured Storage	Xu Liu	06/10/16 07:07	Retrieve from Storage
JC18649-4.8	Xu Liu	Secured Storage	06/10/16 14:02	Return to Storage
JC18649-4.8	Secured Storage	Xu Liu	06/13/16 08:12	Retrieve from Storage
JC18649-4.8	Xu Liu	Secured Storage	06/13/16 14:37	Return to Storage
JC18649-5.2	Secured Storage	Luis Villanueva	04/20/16 12:37	Retrieve from Storage
JC18649-5.2	Luis Villanueva	Secured Staging Area	04/20/16 12:37	Return to Storage
JC18649-5.2	Secured Staging Area	Allan Chung-yew	04/20/16 15:16	Retrieve from Storage
JC18649-5.2	Allan Chung-yew		04/20/16 19:57	Depleted
JC18649-5.2.1	Allan Chung-yew	Organics Prep	04/20/16 15:18	Extract from JC18649-5.2
JC18649-5.2.1	Organics Prep	Allan Chung-yew	04/20/16 21:34	Extract from JC18649-5.2
JC18649-5.2.1	Allan Chung-yew	Extract Storage	04/20/16 21:34	Return to Storage
JC18649-5.2.1	Extract Storage	Sean Block	04/20/16 22:50	Retrieve from Storage
JC18649-5.2.1	Sean Block	GCMS5P	04/20/16 22:50	Load on Instrument
JC18649-5.2.1	GCMS5P	Ashley Noble	04/21/16 10:29	Unload from Instrument
JC18649-5.2.1	Ashley Noble	Extract Freezer	04/21/16 10:29	Return to Storage
JC18649-5.2.1	Extract Freezer		05/31/16 09:00	Disposed
JC18649-5.4	Secured Storage	Luis Villanueva	04/20/16 12:37	Retrieve from Storage
JC18649-5.4	Luis Villanueva	Secured Staging Area	04/20/16 12:37	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 04/20/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18649-5.4	Secured Staging Area	Allan Chung-yew	04/20/16 15:16	Retrieve from Storage
JC18649-5.4	Allan Chung-yew		04/20/16 19:57	Depleted
JC18649-5.4.1	Allan Chung-yew	Organics Prep	04/20/16 15:22	Extract from JC18649-5.4
JC18649-5.4.1	Organics Prep	Ryan Fantasia	04/20/16 22:51	Extract from JC18649-5.4
JC18649-5.4.1	Ryan Fantasia	Extract Storage	04/20/16 22:51	Return to Storage
JC18649-5.4.1	Extract Storage	Brittany Piercy	04/21/16 10:15	Retrieve from Storage
JC18649-5.4.1	Brittany Piercy	GC1G	04/21/16 10:15	Load on Instrument
JC18649-5.4.1	GC1G	Brittany Piercy	04/27/16 07:48	Unload from Instrument
JC18649-5.4.1	Brittany Piercy	Extract Freezer	04/27/16 07:48	Return to Storage
JC18649-5.4.1	Extract Freezer		05/31/16 09:00	Disposed
JC18649-5.5	Secured Storage	Oleg Berenzon	04/25/16 16:44	Retrieve from Storage
JC18649-5.5	Oleg Berenzon		04/25/16 16:44	Subcontract
JC18649-5.6	Secured Storage	Xu Liu	04/21/16 10:27	Retrieve from Storage
JC18649-5.6	Xu Liu	Secured Storage	04/21/16 10:40	Return to Storage
JC18649-5.6	Secured Storage	Xu Liu	04/22/16 10:01	Retrieve from Storage
JC18649-5.6	Xu Liu	Secured Storage	04/22/16 14:40	Return to Storage
JC18649-5.6	Tim Hudson		06/03/16 15:13	Disposed
JC18649-5.8	Secured Storage	Xu Liu	06/10/16 07:07	Retrieve from Storage
JC18649-5.8	Xu Liu	Secured Storage	06/10/16 14:02	Return to Storage
JC18649-5.8	Secured Storage	Xu Liu	06/13/16 08:12	Retrieve from Storage
JC18649-5.8	Xu Liu	Secured Storage	06/13/16 14:37	Return to Storage

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236-MB1	5P27665.D	1	04/20/16	JJ	04/20/16	OP93236	E5P1400

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

JC18649-1, JC18649-2, JC18649-5

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

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236-MB1	5P27665.D	1	04/20/16	JJ	04/20/16	OP93236	E5P1400

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

JC18649-1, JC18649-2, JC18649-5

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
123-91-1	1,4-Dioxane	0.74	1.0	0.66	ug/l	J
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	ug/l	

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236-MB1	5P27665.D	1	04/20/16	JJ	04/20/16	OP93236	E5P1400

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

JC18649-1, JC18649-2, JC18649-5

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	44%	14-88%
4165-62-2	Phenol-d5	27%	10-110%
118-79-6	2,4,6-Tribromophenol	84%	39-149%
4165-60-0	Nitrobenzene-d5	66%	32-128%
321-60-8	2-Fluorobiphenyl	72%	35-119%
1718-51-0	Terphenyl-d14	93%	10-126%

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236-MB1	2M83246.D	1	04/21/16	AN	04/20/16	OP93236	E2M3657

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

JC18649-1, JC18649-2, JC18649-5

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

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236-MB1	2M83246.D	1	04/21/16	AN	04/20/16	OP93236	E2M3657

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

JC18649-1, JC18649-2, JC18649-5

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

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236-MB1	2M83246.D	1	04/21/16	AN	04/20/16	OP93236	E2M3657

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

JC18649-1, JC18649-2, JC18649-5

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	44%	14-88%
4165-62-2	Phenol-d5	30%	10-110%
118-79-6	2,4,6-Tribromophenol	84%	39-149%
4165-60-0	Nitrobenzene-d5	71%	32-128%
321-60-8	2-Fluorobiphenyl	68%	35-119%
1718-51-0	Terphenyl-d14	78%	10-126%

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93271-MB1	2P58446.D	1	04/21/16	RL	04/21/16	OP93271	E2P2552

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

JC18649-4

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

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93271-MB1	2P58446.D	1	04/21/16	RL	04/21/16	OP93271	E2P2552

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

JC18649-4

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

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93271-MB1	2P58446.D	1	04/21/16	RL	04/21/16	OP93271	E2P2552

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

JC18649-4

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	48%	14-88%
4165-62-2	Phenol-d5	31%	10-110%
118-79-6	2,4,6-Tribromophenol	97%	39-149%
4165-60-0	Nitrobenzene-d5	89%	32-128%
321-60-8	2-Fluorobiphenyl	91%	35-119%
1718-51-0	Terphenyl-d14	88%	10-126%

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-MB1	Z110076.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500

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

JC18649-3

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

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-MB1	Z110076.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500

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

JC18649-3

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	77%	30-106%

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-MB1	Z110076.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500

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

JC18649-3

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	78%	30-106%
118-79-6	2,4,6-Tribromophenol	78%	24-140%
4165-60-0	Nitrobenzene-d5	103%	26-122%
321-60-8	2-Fluorobiphenyl	96%	36-112%
1718-51-0	Terphenyl-d14	93%	36-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.51	420	ug/kg	J
	system artifact	2.68	130	ug/kg	J
	system artifact	2.81	340	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-MB1	2M83441.D	1	04/28/16	AN	04/26/16	OP93364	E2M3668

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

JC18649-3

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

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-MB1	2M83441.D	1	04/28/16	AN	04/26/16	OP93364	E2M3668

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

JC18649-3

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	83%	30-106%

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-MB1	2M83441.D	1	04/28/16	AN	04/26/16	OP93364	E2M3668

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

JC18649-3

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	86%	30-106%
118-79-6	2,4,6-Tribromophenol	99%	24-140%
4165-60-0	Nitrobenzene-d5	99%	26-122%
321-60-8	2-Fluorobiphenyl	90%	36-112%
1718-51-0	Terphenyl-d14	98%	36-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.14	500	ug/kg	J
	system artifact	3.46	390	ug/kg	J
	system artifact	6.44	350	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236A-MB1	4M64880.D	1	04/21/16	LK	04/20/16	OP93236A	E4M2889

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

JC18649-1, JC18649-2, JC18649-5

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

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	83%	24-125%
321-60-8	2-Fluorobiphenyl	99%	19-127%
1718-51-0	Terphenyl-d14	79%	10-119%

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93271A-MB1	4M64889.D	1	04/21/16	LK	04/21/16	OP93271A	E4M2890

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

JC18649-4

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	49%	14-81%
4165-62-2	Phenol-d5	32%	11-54%
118-79-6	2,4,6-Tribromophenol	98%	35-145%
4165-60-0	Nitrobenzene-d5	89%	24-125%
321-60-8	2-Fluorobiphenyl	102%	19-127%
1718-51-0	Terphenyl-d14	72%	10-119%

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93271A-MB1	3M60789.D	1	04/22/16	LK	04/21/16	OP93271A	E3M2856

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

JC18649-4

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	41%	14-81%
4165-62-2	Phenol-d5	27%	11-54%
118-79-6	2,4,6-Tribromophenol	69%	35-145%
4165-60-0	Nitrobenzene-d5	76%	24-125%
321-60-8	2-Fluorobiphenyl	70%	19-127%
1718-51-0	Terphenyl-d14	72%	10-119%

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364A-MB1	3M60899.D	1	04/27/16	JJ	04/26/16	OP93364A	E3M2863

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

JC18649-3

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

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	88%	15-138%
321-60-8	2-Fluorobiphenyl	83%	12-148%
1718-51-0	Terphenyl-d14	94%	10-157%

Blank Spike Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236-BS1	5P27666.D	1	04/20/16	JJ	04/20/16	OP93236	E5P1400

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

JC18649-1, JC18649-2, JC18649-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	29.1	58	48-106
59-50-7	4-Chloro-3-methyl phenol	50	37.5	75	49-113
120-83-2	2,4-Dichlorophenol	50	36.0	72	49-111
105-67-9	2,4-Dimethylphenol	50	39.1	78	42-117
51-28-5	2,4-Dinitrophenol	100	71.4	71	37-132
534-52-1	4,6-Dinitro-o-cresol	50	43.9	88	49-119
95-48-7	2-Methylphenol	50	29.2	58	42-103
	3&4-Methylphenol	50	28.5	57	39-110
88-75-5	2-Nitrophenol	50	35.5	71	49-114
100-02-7	4-Nitrophenol	50	26.3	53	16-95
87-86-5	Pentachlorophenol	50	38.8	78	30-136
108-95-2	Phenol	50	14.8	30	10-110
58-90-2	2,3,4,6-Tetrachlorophenol	50	37.9	76	47-118
95-95-4	2,4,5-Trichlorophenol	50	38.0	76	55-116
88-06-2	2,4,6-Trichlorophenol	50	40.3	81	56-115
83-32-9	Acenaphthene	50	37.5	75	54-112
208-96-8	Acenaphthylene	50	37.1	74	49-99
98-86-2	Acetophenone	50	33.5	67	52-111
120-12-7	Anthracene	50	38.5	77	58-112
1912-24-9	Atrazine	50	40.1	80	62-134
100-52-7	Benzaldehyde	50	28.0	56	40-129
56-55-3	Benzo(a)anthracene	50	40.5	81	44-120
50-32-8	Benzo(a)pyrene	50	41.4	83	41-127
205-99-2	Benzo(b)fluoranthene	50	43.0	86	41-129
191-24-2	Benzo(g,h,i)perylene	50	40.6	81	34-128
207-08-9	Benzo(k)fluoranthene	50	41.6	83	42-122
101-55-3	4-Bromophenyl phenyl ether	50	36.6	73	54-121
85-68-7	Butyl benzyl phthalate	50	43.1	86	20-143
92-52-4	1,1'-Biphenyl	50	36.8	74	51-106
91-58-7	2-Chloronaphthalene	50	33.8	68	48-104
106-47-8	4-Chloroaniline	50	11.5	23	10-110
86-74-8	Carbazole	50	40.5	81	56-110
105-60-2	Caprolactam	50	14.0	28	10-110
218-01-9	Chrysene	50	38.6	77	45-125
111-91-1	bis(2-Chloroethoxy)methane	50	28.9	58	47-117
111-44-4	bis(2-Chloroethyl)ether	50	28.7	57	48-115

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236-BS1	5P27666.D	1	04/20/16	JJ	04/20/16	OP93236	E5P1400

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

JC18649-1, JC18649-2, JC18649-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	50	35.4	71	44-112
7005-72-3	4-Chlorophenyl phenyl ether	50	35.4	71	50-117
121-14-2	2,4-Dinitrotoluene	50	44.6	89	57-122
606-20-2	2,6-Dinitrotoluene	50	42.6	85	58-122
91-94-1	3,3'-Dichlorobenzidine	100	44.5	45	10-110
123-91-1	1,4-Dioxane	50	15.1	30	10-110
53-70-3	Dibenzo(a,h)anthracene	50	42.3	85	36-130
132-64-9	Dibenzofuran	50	39.8	80	55-108
84-74-2	Di-n-butyl phthalate	50	41.8	84	45-123
117-84-0	Di-n-octyl phthalate	50	47.9	96	37-144
84-66-2	Diethyl phthalate	50	40.4	81	23-130
131-11-3	Dimethyl phthalate	50	38.9	78	10-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	43.4	87	36-138
206-44-0	Fluoranthene	50	38.6	77	58-116
86-73-7	Fluorene	50	39.2	78	57-113
118-74-1	Hexachlorobenzene	50	38.4	77	49-122
87-68-3	Hexachlorobutadiene	50	25.5	51	24-112
77-47-4	Hexachlorocyclopentadiene	100	61.0	61	14-119
67-72-1	Hexachloroethane	50	23.6	47	31-107
193-39-5	Indeno(1,2,3-cd)pyrene	50	43.3	87	34-128
78-59-1	Isophorone	50	33.2	66	52-119
90-12-0	1-Methylnaphthalene	50	36.2	72	46-103
91-57-6	2-Methylnaphthalene	50	35.8	72	45-107
88-74-4	2-Nitroaniline	50	44.5	89	51-127
99-09-2	3-Nitroaniline	50	15.7	31	10-110
100-01-6	4-Nitroaniline	50	38.8	78	50-112
98-95-3	Nitrobenzene	50	29.6	59	44-116
621-64-7	N-Nitroso-di-n-propylamine	50	29.7	59	49-117
86-30-6	N-Nitrosodiphenylamine	50	39.5	79	51-113
85-01-8	Phenanthrene	50	38.4	77	56-111
129-00-0	Pyrene	50	40.5	81	47-120
95-94-3	1,2,4,5-Tetrachlorobenzene	50	30.5	61	36-114

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236-BS1	5P27666.D	1	04/20/16	JJ	04/20/16	OP93236	E5P1400

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

JC18649-1, JC18649-2, JC18649-5

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	42%	14-88%
4165-62-2	Phenol-d5	30%	10-110%
118-79-6	2,4,6-Tribromophenol	97%	39-149%
4165-60-0	Nitrobenzene-d5	66%	32-128%
321-60-8	2-Fluorobiphenyl	78%	35-119%
1718-51-0	Terphenyl-d14	94%	10-126%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-BS1	Z110077.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500

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

JC18649-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-57-8	2-Chlorophenol	1670	1130	68	54-98
59-50-7	4-Chloro-3-methyl phenol	1670	1490	89	52-107
120-83-2	2,4-Dichlorophenol	1670	1630	98	53-105
105-67-9	2,4-Dimethylphenol	1670	1330	80	49-115
51-28-5	2,4-Dinitrophenol	3330	1950	59	30-127
534-52-1	4,6-Dinitro-o-cresol	1670	1370	82	41-114
95-48-7	2-Methylphenol	1670	1190	71	53-103
	3&4-Methylphenol	1670	1150	69	53-102
88-75-5	2-Nitrophenol	1670	1430	86	52-104
100-02-7	4-Nitrophenol	1670	1350	81	36-143
87-86-5	Pentachlorophenol	1670	1480	89	29-128
108-95-2	Phenol	1670	1220	73	45-106
58-90-2	2,3,4,6-Tetrachlorophenol	1670	1690	101	47-113
95-95-4	2,4,5-Trichlorophenol	1670	1490	89	55-112
88-06-2	2,4,6-Trichlorophenol	1670	1720	103	57-108
83-32-9	Acenaphthene	1670	1290	77	60-108
208-96-8	Acenaphthylene	1670	1180	71	54-94
98-86-2	Acetophenone	1670	1330	80	53-110
120-12-7	Anthracene	1670	1250	75	59-109
1912-24-9	Atrazine	1670	1690	101	59-126
56-55-3	Benzo(a)anthracene	1670	1340	80	52-113
50-32-8	Benzo(a)pyrene	1670	1430	86	56-122
205-99-2	Benzo(b)fluoranthene	1670	1400	84	53-119
191-24-2	Benzo(g,h,i)perylene	1670	1310	79	48-117
207-08-9	Benzo(k)fluoranthene	1670	1490	89	52-115
101-55-3	4-Bromophenyl phenyl ether	1670	1620	97	58-114
85-68-7	Butyl benzyl phthalate	1670	1130	68	44-132
92-52-4	1,1'-Biphenyl	1670	1210	73	54-101
100-52-7	Benzaldehyde	1670	1330	80	39-117
91-58-7	2-Chloronaphthalene	1670	1290	77	54-103
106-47-8	4-Chloroaniline	1670	593	36	10-110
86-74-8	Carbazole	1670	1240	74	55-105
105-60-2	Caprolactam	1670	1180	71	42-111
218-01-9	Chrysene	1670	1280	77	51-119
111-91-1	bis(2-Chloroethoxy)methane	1670	1350	81	51-106
111-44-4	bis(2-Chloroethyl)ether	1670	1380	83	48-107

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-BS1	Z110077.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500

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

JC18649-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	1670	851	51	46-103
7005-72-3	4-Chlorophenyl phenyl ether	1670	1640	98	54-112
121-14-2	2,4-Dinitrotoluene	1670	1380	83	56-116
606-20-2	2,6-Dinitrotoluene	1670	1410	85	56-115
91-94-1	3,3'-Dichlorobenzidine	3330	1650	50	22-103
53-70-3	Dibenzo(a,h)anthracene	1670	1310	79	49-118
132-64-9	Dibenzofuran	1670	1330	80	55-103
84-74-2	Di-n-butyl phthalate	1670	1270	76	56-117
117-84-0	Di-n-octyl phthalate	1670	1260	76	47-137
84-66-2	Diethyl phthalate	1670	1290	77	54-112
131-11-3	Dimethyl phthalate	1670	1390	83	56-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1080	65	45-130
206-44-0	Fluoranthene	1670	1430	86	58-110
86-73-7	Fluorene	1670	1310	79	59-108
118-74-1	Hexachlorobenzene	1670	1480	89	55-114
87-68-3	Hexachlorobutadiene	1670	2240	134* [a]	44-118
77-47-4	Hexachlorocyclopentadiene	3330	3750	113	41-137
67-72-1	Hexachloroethane	1670	1740	104	50-107
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1360	82	48-120
78-59-1	Isophorone	1670	1590	95	54-109
90-12-0	1-Methylnaphthalene	1670	1290	77	50-110
91-57-6	2-Methylnaphthalene	1670	1270	76	48-104
88-74-4	2-Nitroaniline	1670	1310	79	49-124
99-09-2	3-Nitroaniline	1670	736	44	22-110
100-01-6	4-Nitroaniline	1670	1020	61	50-107
98-95-3	Nitrobenzene	1670	1390	83	47-108
621-64-7	N-Nitroso-di-n-propylamine	1670	1280	77	49-106
86-30-6	N-Nitrosodiphenylamine	1670	1260	76	53-112
85-01-8	Phenanthrene	1670	1270	76	57-105
129-00-0	Pyrene	1670	1300	78	50-117
95-94-3	1,2,4,5-Tetrachlorobenzene	1670	1640	98	52-109

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	76%	30-106%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-BS1	Z110077.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500

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

JC18649-3

CAS No.	Surrogate Recoveries	BSP	Limits
4165-62-2	Phenol-d5	77%	30-106%
118-79-6	2,4,6-Tribromophenol	83%	24-140%
4165-60-0	Nitrobenzene-d5	100%	26-122%
321-60-8	2-Fluorobiphenyl	91%	36-112%
1718-51-0	Terphenyl-d14	94%	36-132%

(a) High percent recoveries and no associated positive found in the QC batch.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-BS1	2M83440.D	1	04/28/16	AN	04/26/16	OP93364	E2M3668

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

JC18649-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-57-8	2-Chlorophenol	1670	1360	82	54-98
59-50-7	4-Chloro-3-methyl phenol	1670	1450	87	52-107
120-83-2	2,4-Dichlorophenol	1670	1390	83	53-105
105-67-9	2,4-Dimethylphenol	1670	1210	73	49-115
51-28-5	2,4-Dinitrophenol	3330	2570	77	30-127
534-52-1	4,6-Dinitro-o-cresol	1670	1550	93	41-114
95-48-7	2-Methylphenol	1670	1390	83	53-103
	3&4-Methylphenol	1670	1440	86	53-102
88-75-5	2-Nitrophenol	1670	1380	83	52-104
100-02-7	4-Nitrophenol	1670	1740	104	36-143
87-86-5	Pentachlorophenol	1670	1270	76	29-128
108-95-2	Phenol	1670	1270	76	45-106
58-90-2	2,3,4,6-Tetrachlorophenol	1670	1450	87	47-113
95-95-4	2,4,5-Trichlorophenol	1670	1410	85	55-112
88-06-2	2,4,6-Trichlorophenol	1670	1500	90	57-108
83-32-9	Acenaphthene	1670	1340	80	60-108
208-96-8	Acenaphthylene	1670	1330	80	54-94
98-86-2	Acetophenone	1670	1430	86	53-110
120-12-7	Anthracene	1670	1390	83	59-109
1912-24-9	Atrazine	1670	1890	113	59-126
56-55-3	Benzo(a)anthracene	1670	1390	83	52-113
50-32-8	Benzo(a)pyrene	1670	1450	87	56-122
205-99-2	Benzo(b)fluoranthene	1670	1460	88	53-119
191-24-2	Benzo(g,h,i)perylene	1670	1180	71	48-117
207-08-9	Benzo(k)fluoranthene	1670	1430	86	52-115
101-55-3	4-Bromophenyl phenyl ether	1670	1540	92	58-114
85-68-7	Butyl benzyl phthalate	1670	1470	88	44-132
92-52-4	1,1'-Biphenyl	1670	1340	80	54-101
100-52-7	Benzaldehyde	1670	1430	86	39-117
91-58-7	2-Chloronaphthalene	1670	1320	79	54-103
106-47-8	4-Chloroaniline	1670	697	42	10-110
86-74-8	Carbazole	1670	1440	86	55-105
105-60-2	Caprolactam	1670	1600	96	42-111
218-01-9	Chrysene	1670	1280	77	51-119
111-91-1	bis(2-Chloroethoxy)methane	1670	1250	75	51-106
111-44-4	bis(2-Chloroethyl)ether	1670	1320	79	48-107

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-BS1	2M83440.D	1	04/28/16	AN	04/26/16	OP93364	E2M3668

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

JC18649-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	1670	1340	80	46-103
7005-72-3	4-Chlorophenyl phenyl ether	1670	1450	87	54-112
121-14-2	2,4-Dinitrotoluene	1670	1530	92	56-116
606-20-2	2,6-Dinitrotoluene	1670	1530	92	56-115
91-94-1	3,3'-Dichlorobenzidine	3330	1710	51	22-103
53-70-3	Dibenzo(a,h)anthracene	1670	1220	73	49-118
132-64-9	Dibenzofuran	1670	1370	82	55-103
84-74-2	Di-n-butyl phthalate	1670	1520	91	56-117
117-84-0	Di-n-octyl phthalate	1670	1660	100	47-137
84-66-2	Diethyl phthalate	1670	1490	89	54-112
131-11-3	Dimethyl phthalate	1670	1430	86	56-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1450	87	45-130
206-44-0	Fluoranthene	1670	1440	86	58-110
86-73-7	Fluorene	1670	1410	85	59-108
118-74-1	Hexachlorobenzene	1670	1500	90	55-114
87-68-3	Hexachlorobutadiene	1670	1440	86	44-118
77-47-4	Hexachlorocyclopentadiene	3330	2740	82	41-137
67-72-1	Hexachloroethane	1670	1410	85	50-107
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1410	85	48-120
78-59-1	Isophorone	1670	1460	88	54-109
90-12-0	1-Methylnaphthalene	1670	1300	78	50-110
91-57-6	2-Methylnaphthalene	1670	1290	77	48-104
88-74-4	2-Nitroaniline	1670	1640	98	49-124
99-09-2	3-Nitroaniline	1670	952	57	22-110
100-01-6	4-Nitroaniline	1670	1420	85	50-107
98-95-3	Nitrobenzene	1670	1340	80	47-108
621-64-7	N-Nitroso-di-n-propylamine	1670	1490	89	49-106
86-30-6	N-Nitrosodiphenylamine	1670	1480	89	53-112
85-01-8	Phenanthrene	1670	1350	81	57-105
129-00-0	Pyrene	1670	1430	86	50-117
95-94-3	1,2,4,5-Tetrachlorobenzene	1670	1350	81	52-109

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-BS1	2M83440.D	1	04/28/16	AN	04/26/16	OP93364	E2M3668

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

JC18649-3

CAS No.	Surrogate Recoveries	BSP	Limits
4165-62-2	Phenol-d5	85% [a]	30-106%
118-79-6	2,4,6-Tribromophenol	105% [a]	24-140%
4165-60-0	Nitrobenzene-d5	93% [a]	26-122%
321-60-8	2-Fluorobiphenyl	89% [a]	36-112%
1718-51-0	Terphenyl-d14	99% [a]	36-132%

(a) The Internal standard was added at 80 ppm. All recoveries re-calculated based on the spike amount.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236A-BS12	4M64881.D	1	04/21/16	LK	04/20/16	OP93236A	E4M2889

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

JC18649-1, JC18649-2, JC18649-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	1	0.811	81	40-119

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	85%	24-125%
321-60-8	2-Fluorobiphenyl	101%	19-127%
1718-51-0	Terphenyl-d14	74%	10-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93271A-BS12	4M64890.D	1	04/21/16	LK	04/21/16	OP93271A	E4M2890

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

JC18649-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	1	0.693	69	40-119

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	47%	14-81%
4165-62-2	Phenol-d5	32%	11-54%
118-79-6	2,4,6-Tribromophenol	76%	35-145%
4165-60-0	Nitrobenzene-d5	72%	24-125%
321-60-8	2-Fluorobiphenyl	82%	19-127%
1718-51-0	Terphenyl-d14	59%	10-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364A-BS12	3M60900.D	1	04/27/16	JJ	04/26/16	OP93364A	E3M2863

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

JC18649-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
123-91-1	1,4-Dioxane	33.3	14.3	43	10-100
91-20-3	Naphthalene	33.3	28.0	84	35-142

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	81%	15-138%
321-60-8	2-Fluorobiphenyl	89%	12-148%
1718-51-0	Terphenyl-d14	108%	10-157%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93271-BS1	2P58447.D	1	04/21/16	RL	04/21/16	OP93271	E2P2552
OP93271-BSD	2P58448.D	1	04/21/16	RL	04/21/16	OP93271	E2P2552

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

JC18649-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	50	40.9	82	43.6	87	6	48-106/30
59-50-7	4-Chloro-3-methyl phenol	50	41.8	84	44.3	89	6	49-113/30
120-83-2	2,4-Dichlorophenol	50	45.8	92	47.6	95	4	49-111/30
105-67-9	2,4-Dimethylphenol	50	41.5	83	43.8	88	5	42-117/30
51-28-5	2,4-Dinitrophenol	100	96.6	97	103	103	6	37-132/30
534-52-1	4,6-Dinitro-o-cresol	50	49.6	99	53.6	107	8	49-119/30
95-48-7	2-Methylphenol	50	34.4	69	36.3	73	5	42-103/30
	3&4-Methylphenol	50	31.7	63	33.8	68	6	39-110/30
88-75-5	2-Nitrophenol	50	46.2	92	47.7	95	3	49-114/30
100-02-7	4-Nitrophenol	50	29.2	58	31.0	62	6	16-95/30
87-86-5	Pentachlorophenol	50	44.2	88	47.0	94	6	30-136/30
108-95-2	Phenol	50	22.5	45	23.2	46	3	10-110/30
58-90-2	2,3,4,6-Tetrachlorophenol	50	45.1	90	47.8	96	6	47-118/30
95-95-4	2,4,5-Trichlorophenol	50	41.6	83	43.6	87	5	55-116/30
88-06-2	2,4,6-Trichlorophenol	50	42.3	85	45.4	91	7	56-115/30
83-32-9	Acenaphthene	50	40.0	80	42.1	84	5	54-112/30
208-96-8	Acenaphthylene	50	39.3	79	40.9	82	4	49-99/30
98-86-2	Acetophenone	50	37.6	75	39.9	80	6	52-111/30
120-12-7	Anthracene	50	40.1	80	42.0	84	5	58-112/30
1912-24-9	Atrazine	50	47.1	94	48.3	97	3	62-134/30
100-52-7	Benzaldehyde	50	46.6	93	49.5	99	6	40-129/30
56-55-3	Benzo(a)anthracene	50	41.1	82	42.6	85	4	44-120/30
50-32-8	Benzo(a)pyrene	50	41.9	84	43.8	88	4	41-127/30
205-99-2	Benzo(b)fluoranthene	50	40.7	81	43.4	87	6	41-129/30
191-24-2	Benzo(g,h,i)perylene	50	38.3	77	41.5	83	8	34-128/30
207-08-9	Benzo(k)fluoranthene	50	42.2	84	44.1	88	4	42-122/30
101-55-3	4-Bromophenyl phenyl ether	50	45.6	91	47.7	95	5	54-121/30
85-68-7	Butyl benzyl phthalate	50	44.1	88	44.7	89	1	20-143/30
92-52-4	1,1'-Biphenyl	50	41.5	83	43.5	87	5	51-106/30
91-58-7	2-Chloronaphthalene	50	39.1	78	40.7	81	4	48-104/30
106-47-8	4-Chloroaniline	50	27.8	56	18.8	38	39* [a]	10-110/30
86-74-8	Carbazole	50	42.5	85	44.8	90	5	56-110/30
105-60-2	Caprolactam	50	12.4	25	13.5	27	8	10-110/30
218-01-9	Chrysene	50	40.9	82	41.9	84	2	45-125/30
111-91-1	bis(2-Chloroethoxy)methane	50	39.0	78	40.7	81	4	47-117/30
111-44-4	bis(2-Chloroethyl)ether	50	40.0	80	42.0	84	5	48-115/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93271-BS1	2P58447.D	1	04/21/16	RL	04/21/16	OP93271	E2P2552
OP93271-BSD	2P58448.D	1	04/21/16	RL	04/21/16	OP93271	E2P2552

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

JC18649-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
108-60-1	bis(2-Chloroisopropyl)ether	50	35.6	71	37.5	75	5	44-112/30
7005-72-3	4-Chlorophenyl phenyl ether	50	40.3	81	42.7	85	6	50-117/30
121-14-2	2,4-Dinitrotoluene	50	44.3	89	46.3	93	4	57-122/30
606-20-2	2,6-Dinitrotoluene	50	46.0	92	48.4	97	5	58-122/30
91-94-1	3,3'-Dichlorobenzidine	100	63.9	64	50.4	50	24	10-110/30
123-91-1	1,4-Dioxane	50	23.7	47	24.7	49	4	10-110/30
53-70-3	Dibenzo(a,h)anthracene	50	39.8	80	43.3	87	8	36-130/30
132-64-9	Dibenzofuran	50	41.3	83	43.2	86	4	55-108/30
84-74-2	Di-n-butyl phthalate	50	42.9	86	45.4	91	6	45-123/30
117-84-0	Di-n-octyl phthalate	50	44.8	90	46.2	92	3	37-144/30
84-66-2	Diethyl phthalate	50	41.0	82	43.8	88	7	23-130/30
131-11-3	Dimethyl phthalate	50	41.1	82	43.4	87	5	10-140/30
117-81-7	bis(2-Ethylhexyl)phthalate	50	43.9	88	45.0	90	2	36-138/30
206-44-0	Fluoranthene	50	44.4	89	46.8	94	5	58-116/30
86-73-7	Fluorene	50	39.5	79	42.3	85	7	57-113/30
118-74-1	Hexachlorobenzene	50	42.5	85	45.7	91	7	49-122/30
87-68-3	Hexachlorobutadiene	50	40.2	80	42.3	85	5	24-112/30
77-47-4	Hexachlorocyclopentadiene	100	76.6	77	80.3	80	5	14-119/30
67-72-1	Hexachloroethane	50	38.1	76	39.3	79	3	31-107/30
193-39-5	Indeno(1,2,3-cd)pyrene	50	40.1	80	43.6	87	8	34-128/30
78-59-1	Isophorone	50	41.0	82	43.2	86	5	52-119/30
90-12-0	1-Methylnaphthalene	50	41.7	83	43.5	87	4	46-103/30
91-57-6	2-Methylnaphthalene	50	41.3	83	42.9	86	4	45-107/30
88-74-4	2-Nitroaniline	50	38.2	76	40.2	80	5	51-127/30
99-09-2	3-Nitroaniline	50	30.7	61	23.5	47	27	10-110/30
100-01-6	4-Nitroaniline	50	42.3	85	43.6	87	3	50-112/30
98-95-3	Nitrobenzene	50	38.5	77	40.4	81	5	44-116/30
621-64-7	N-Nitroso-di-n-propylamine	50	32.7	65	34.7	69	6	49-117/30
86-30-6	N-Nitrosodiphenylamine	50	42.0	84	44.4	89	6	51-113/30
85-01-8	Phenanthrene	50	39.8	80	42.1	84	6	56-111/30
129-00-0	Pyrene	50	43.2	86	44.5	89	3	47-120/30
95-94-3	1,2,4,5-Tetrachlorobenzene	50	40.4	81	42.2	84	4	36-114/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93271-BS1	2P58447.D	1	04/21/16	RL	04/21/16	OP93271	E2P2552
OP93271-BSD	2P58448.D	1	04/21/16	RL	04/21/16	OP93271	E2P2552

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

JC18649-4

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	65%	68%	14-88%
4165-62-2	Phenol-d5	43%	46%	10-110%
118-79-6	2,4,6-Tribromophenol	101%	107%	39-149%
4165-60-0	Nitrobenzene-d5	87%	91%	32-128%
321-60-8	2-Fluorobiphenyl	91%	94%	35-119%
1718-51-0	Terphenyl-d14	100%	102%	10-126%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236-MS	5P27671.D	1	04/21/16	JJ	04/20/16	OP93236	E5P1400
OP93236-MSD	5P27672.D	1	04/21/16	JJ	04/20/16	OP93236	E5P1400
JC18649-1	5P27667A.D	1	04/21/16	JJ	04/20/16	OP93236	E5P1400
JC18649-1	2M83247.D	200	04/21/16	AN	04/20/16	OP93236	E2M3657

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

JC18649-1, JC18649-2, JC18649-5

CAS No.	Compound	JC18649-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		125	83.5	67	125	88.6	71	6	49-110/20
59-50-7	4-Chloro-3-methyl phenol	ND		125	85.4	68	125	94.2	75	10	44-121/18
120-83-2	2,4-Dichlorophenol	ND		125	86.8	69	125	94.5	76	8	42-120/19
105-67-9	2,4-Dimethylphenol	ND		125	98.7	79	125	104	83	5	33-132/23
51-28-5	2,4-Dinitrophenol	ND		250	164	66	250	174	70	6	21-145/26
534-52-1	4,6-Dinitro-o-cresol	ND		125	91.4	73	125	100	80	9	25-134/27
95-48-7	2-Methylphenol	ND		125	88.5	71	125	88.8	71	0	47-112/18
	3&4-Methylphenol	ND		125	88.6	71	125	88.0	70	1	44-113/19
88-75-5	2-Nitrophenol	ND		125	93.8	75	125	98.3	79	5	45-118/20
100-02-7	4-Nitrophenol	ND		125	89.5	72	125	89.8	72	0	23-144/28
87-86-5	Pentachlorophenol	ND		125	85.1	68	125	92.0	74	8	25-151/25
108-95-2	Phenol	ND		125	68.9	55	125	68.6	55	0	22-100/22
58-90-2	2,3,4,6-Tetrachlorophenol	ND		125	81.0	65	125	82.6	66	2	44-122/21
95-95-4	2,4,5-Trichlorophenol	ND		125	83.5	67	125	84.8	68	2	51-124/20
88-06-2	2,4,6-Trichlorophenol	ND		125	89.0	71	125	94.0	75	5	53-120/21
83-32-9	Acenaphthene	ND		125	92.2	74	125	93.1	74	1	52-120/23
208-96-8	Acenaphthylene	ND		125	89.9	72	125	91.3	73	2	50-101/22
98-86-2	Acetophenone	ND		125	86.2	69	125	90.9	73	5	31-141/23
120-12-7	Anthracene	ND		125	89.0	71	125	92.8	74	4	54-117/22
1912-24-9	Atrazine	ND		125	94.4	76	125	99.2	79	5	42-152/23
100-52-7	Benzaldehyde	ND		125	85.5	68	125	96.2	77	12	10-164/30
56-55-3	Benzo(a)anthracene	ND		125	90.1	72	125	95.0	76	5	40-123/24
50-32-8	Benzo(a)pyrene	ND		125	91.8	73	125	98.1	78	7	41-127/25
205-99-2	Benzo(b)fluoranthene	ND		125	93.4	75	125	99.0	79	6	39-127/27
191-24-2	Benzo(g,h,i)perylene	ND		125	89.0	71	125	98.1	78	10	34-128/28
207-08-9	Benzo(k)fluoranthene	ND		125	94.4	76	125	100	80	6	39-122/26
101-55-3	4-Bromophenyl phenyl ether	ND		125	85.9	69	125	90.4	72	5	51-124/23
85-68-7	Butyl benzyl phthalate	ND		125	96.4	77	125	99.4	80	3	21-146/28
92-52-4	1,1'-Biphenyl	ND		125	92.4	74	125	93.8	75	2	27-142/23
91-58-7	2-Chloronaphthalene	ND		125	85.8	69	125	87.5	70	2	51-109/23
106-47-8	4-Chloroaniline	ND		125	68.0	54	125	54.6	44	22	10-110/55
86-74-8	Carbazole	ND		125	90.9	73	125	95.2	76	5	52-116/22
105-60-2	Caprolactam	ND		125	65.9	53	125	69.7	56	6	10-106/34
218-01-9	Chrysene	ND		125	85.8	69	125	87.5	70	2	41-128/24
111-91-1	bis(2-Chloroethoxy)methane	ND		125	74.2	59	125	80.9	65	9	46-120/24
111-44-4	bis(2-Chloroethyl)ether	ND		125	73.9	59	125	79.2	63	7	42-123/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236-MS	5P27671.D	1	04/21/16	JJ	04/20/16	OP93236	E5P1400
OP93236-MSD	5P27672.D	1	04/21/16	JJ	04/20/16	OP93236	E5P1400
JC18649-1	5P27667A.D	1	04/21/16	JJ	04/20/16	OP93236	E5P1400
JC18649-1	2M83247.D	200	04/21/16	AN	04/20/16	OP93236	E2M3657

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

JC18649-1, JC18649-2, JC18649-5

CAS No.	Compound	JC18649-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-60-1	bis(2-Chloroisopropyl)ether	ND		125	78.4	63	125	84.5	68	7	41-117/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		125	81.5	65	125	84.4	68	3	48-121/21
121-14-2	2,4-Dinitrotoluene	ND		125	98.0	78	125	101	81	3	54-123/27
606-20-2	2,6-Dinitrotoluene	ND		125	94.8	76	125	99.3	79	5	55-125/26
91-94-1	3,3'-Dichlorobenzidine	ND		250	146	58	250	143	57	2	10-107/47
123-91-1	1,4-Dioxane	7880 [b]	B	125	6940	920* [a]	125	8340	2040* [a]	18	10-119/31
53-70-3	Dibenzo(a,h)anthracene	ND		125	92.3	74	125	101	81	9	35-130/27
132-64-9	Dibenzofuran	ND		125	93.3	75	125	95.7	77	3	53-112/22
84-74-2	Di-n-butyl phthalate	ND		125	92.6	74	125	99.2	79	7	38-129/23
117-84-0	Di-n-octyl phthalate	ND		125	102	82	125	109	87	7	35-145/26
84-66-2	Diethyl phthalate	ND		125	88.5	71	125	89.0	71	1	16-136/30
131-11-3	Dimethyl phthalate	ND		125	86.6	69	125	88.5	71	2	10-143/39
117-81-7	bis(2-Ethylhexyl)phthalate	ND		125	96.3	77	125	98.3	79	2	34-141/28
206-44-0	Fluoranthene	ND		125	85.6	68	125	90.6	72	6	47-123/24
86-73-7	Fluorene	ND		125	90.9	73	125	93.0	74	2	56-117/22
118-74-1	Hexachlorobenzene	ND		125	88.1	70	125	94.4	76	7	46-125/24
87-68-3	Hexachlorobutadiene	ND		125	65.3	52	125	71.1	57	9	26-121/24
77-47-4	Hexachlorocyclopentadiene	ND		250	176	70	250	196	78	11	10-133/31
67-72-1	Hexachloroethane	ND		125	59.7	48	125	63.0	50	5	35-111/26
193-39-5	Indeno(1,2,3-cd)pyrene	ND		125	99.6	80	125	109	87	9	32-130/30
78-59-1	Isophorone	ND		125	85.0	68	125	91.2	73	7	47-126/23
90-12-0	1-Methylnaphthalene	ND		125	93.2	75	125	98.2	79	5	34-124/25
91-57-6	2-Methylnaphthalene	ND		125	91.7	73	125	99.2	79	8	34-123/24
88-74-4	2-Nitroaniline	ND		125	102	82	125	103	82	1	46-137/23
99-09-2	3-Nitroaniline	ND		125	77.9	62	125	67.6	54	14	10-110/50
100-01-6	4-Nitroaniline	ND		125	89.4	72	125	89.2	71	0	38-118/25
98-95-3	Nitrobenzene	ND		125	77.4	62	125	80.8	65	4	35-130/25
621-64-7	N-Nitroso-di-n-propylamine	ND		125	78.0	62	125	80.6	64	3	45-123/22
86-30-6	N-Nitrosodiphenylamine	ND		125	90.4	72	125	94.5	76	4	46-123/24
85-01-8	Phenanthrene	ND		125	88.9	71	125	91.9	74	3	48-121/23
129-00-0	Pyrene	ND		125	93.1	74	125	96.7	77	4	43-124/26
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		125	78.5	63	125	81.5	65	4	25-142/24

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236-MS	5P27671.D	1	04/21/16	JJ	04/20/16	OP93236	E5P1400
OP93236-MSD	5P27672.D	1	04/21/16	JJ	04/20/16	OP93236	E5P1400
JC18649-1	5P27667A.D	1	04/21/16	JJ	04/20/16	OP93236	E5P1400
JC18649-1	2M83247.D	200	04/21/16	AN	04/20/16	OP93236	E2M3657

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

JC18649-1, JC18649-2, JC18649-5

CAS No.	Surrogate Recoveries	MS	MSD	JC18649-1	JC18649-1	Limits
367-12-4	2-Fluorophenol	63%	67%	51%	0%* c	14-88%
4165-62-2	Phenol-d5	54%	56%	32%	0%* c	10-110%
118-79-6	2,4,6-Tribromophenol	86%	95%	86%	0%* c	39-149%
4165-60-0	Nitrobenzene-d5	69%	75%	72%	0%* c	32-128%
321-60-8	2-Fluorobiphenyl	77%	80%	77%	0%* c	35-119%
1718-51-0	Terphenyl-d14	82%	84%	81%	0%* c	10-126%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-MS	Z110084.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500
OP93364-MSD	Z110085.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500
JC18791-18	Z110078A.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500

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

JC18649-3

CAS No.	Compound	JC18791-18 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		1900	1050	55	1970	1090	55	4	33-106/35
59-50-7	4-Chloro-3-methyl phenol	ND		1900	1380	73	1970	1430	73	4	27-124/34
120-83-2	2,4-Dichlorophenol	ND		1900	1550	82	1970	1600	81	3	25-122/34
105-67-9	2,4-Dimethylphenol	ND		1900	891	47	1970	1220	62	31	23-133/34
51-28-5	2,4-Dinitrophenol	ND		3800	1640	43	3930	1920	49	16	10-110/51
534-52-1	4,6-Dinitro-o-cresol	ND		1900	1280	67	1970	1400	71	9	10-113/49
95-48-7	2-Methylphenol	ND		1900	973	51	1970	1100	56	12	32-111/34
	3&4-Methylphenol	ND		1900	823	43	1970	1050	53	24	32-113/34
88-75-5	2-Nitrophenol	ND		1900	1350	71	1970	1370	70	1	17-118/37
100-02-7	4-Nitrophenol	ND		1900	1320	70	1970	1560	79	17	14-154/39
87-86-5	Pentachlorophenol	ND		1900	1400	74	1970	1490	76	6	10-131/43
108-95-2	Phenol	ND		1900	1090	57	1970	1150	58	5	25-112/33
58-90-2	2,3,4,6-Tetrachlorophenol	ND		1900	1520	80	1970	1650	84	8	19-125/37
95-95-4	2,4,5-Trichlorophenol	ND		1900	1370	72	1970	1460	74	6	30-125/35
88-06-2	2,4,6-Trichlorophenol	ND		1900	1590	84	1970	1740	88	9	26-126/35
83-32-9	Acenaphthene	ND		1900	1230	65	1970	1320	67	7	34-125/36
208-96-8	Acenaphthylene	ND		1900	1140	60	1970	1230	63	8	28-113/34
98-86-2	Acetophenone	ND		1900	1280	67	1970	1310	67	2	26-120/34
120-12-7	Anthracene	ND		1900	1280	67	1970	1360	69	6	31-131/41
1912-24-9	Atrazine	ND		1900	1630	86	1970	1760	89	8	34-138/36
56-55-3	Benzo(a)anthracene	88.2		1900	1460	72	1970	1500	72	3	23-136/43
50-32-8	Benzo(a)pyrene	101		1900	1540	76	1970	1580	75	3	22-144/42
205-99-2	Benzo(b)fluoranthene	147		1900	1430	68	1970	1550	71	8	18-145/43
191-24-2	Benzo(g,h,i)perylene	64.4		1900	1340	67	1970	1410	68	5	20-138/43
207-08-9	Benzo(k)fluoranthene	51.1		1900	1500	76	1970	1500	74	0	27-129/43
101-55-3	4-Bromophenyl phenyl ether	ND		1900	1640	86	1970	1720	87	5	39-124/33
85-68-7	Butyl benzyl phthalate	ND		1900	1190	63	1970	1230	63	3	27-143/35
92-52-4	1,1'-Biphenyl	ND		1900	1140	60	1970	1300	66	13	33-116/32
100-52-7	Benzaldehyde	ND		1900	1310	69	1970	1340	68	2	20-129/34
91-58-7	2-Chloronaphthalene	ND		1900	1240	65	1970	1340	68	8	38-110/32
106-47-8	4-Chloroaniline	ND		1900	938	49	1970	757	38	21	10-110/49
86-74-8	Carbazole	ND		1900	1240	65	1970	1290	66	4	27-129/38
105-60-2	Caprolactam	ND		1900	1110	58	1970	1150	58	4	18-127/35
218-01-9	Chrysene	115		1900	1400	68	1970	1420	66	1	21-142/43
111-91-1	bis(2-Chloroethoxy)methane	ND		1900	1390	73	1970	1410	72	1	32-116/33
111-44-4	bis(2-Chloroethyl)ether	ND		1900	1360	72	1970	1340	68	1	30-113/37

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-MS	Z110084.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500
OP93364-MSD	Z110085.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500
JC18791-18	Z110078A.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500

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

JC18649-3

CAS No.	Compound	JC18791-18 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		1900	1020	54	1970	1080	55	6	28-110/33
7005-72-3	4-Chlorophenyl phenyl ether	ND		1900	1600	84	1970	1680	85	5	38-119/33
121-14-2	2,4-Dinitrotoluene	ND		1900	1370	72	1970	1450	74	6	28-126/36
606-20-2	2,6-Dinitrotoluene	ND		1900	1360	72	1970	1460	74	7	31-126/34
91-94-1	3,3'-Dichlorobenzidine	ND		3800	2300	61	3930	1820	46	23	10-115/44
53-70-3	Dibenzo(a,h)anthracene	21.4	J	1900	1320	68	1970	1400	70	6	25-135/41
132-64-9	Dibenzofuran	ND		1900	1290	68	1970	1420	72	10	30-125/35
84-74-2	Di-n-butyl phthalate	ND		1900	1290	68	1970	1320	67	2	32-131/34
117-84-0	Di-n-octyl phthalate	ND		1900	1190	63	1970	1230	63	3	28-144/35
84-66-2	Diethyl phthalate	ND		1900	1300	68	1970	1340	68	3	35-124/32
131-11-3	Dimethyl phthalate	ND		1900	1380	73	1970	1450	74	5	36-121/33
117-81-7	bis(2-Ethylhexyl)phthalate	ND		1900	1160	61	1970	1150	58	1	25-146/35
206-44-0	Fluoranthene	184		1900	1580	74	1970	1610	73	2	15-143/46
86-73-7	Fluorene	ND		1900	1240	65	1970	1350	69	8	30-129/37
118-74-1	Hexachlorobenzene	ND		1900	1510	80	1970	1580	80	5	34-125/34
87-68-3	Hexachlorobutadiene	ND		1900	2230	117	1970	2390	122* [a]	7	29-120/34
77-47-4	Hexachlorocyclopentadiene	ND		3800	2540	67	3930	2630	67	3	10-127/46
67-72-1	Hexachloroethane	ND		1900	1660	87	1970	1680	85	1	21-109/38
193-39-5	Indeno(1,2,3-cd)pyrene	64.8		1900	1450	73	1970	1510	73	4	23-141/44
78-59-1	Isophorone	ND		1900	1570	83	1970	1670	85	6	31-124/32
90-12-0	1-Methylnaphthalene	ND		1900	1230	65	1970	1320	67	7	24-122/33
91-57-6	2-Methylnaphthalene	ND		1900	1270	67	1970	1350	69	6	21-125/33
88-74-4	2-Nitroaniline	ND		1900	1350	71	1970	1480	75	9	29-138/33
99-09-2	3-Nitroaniline	ND		1900	903	48	1970	853	43	6	12-112/38
100-01-6	4-Nitroaniline	ND		1900	1110	58	1970	1080	55	3	21-117/38
98-95-3	Nitrobenzene	ND		1900	1470	77	1970	1530	78	4	28-118/32
621-64-7	N-Nitroso-di-n-propylamine	ND		1900	1240	65	1970	1280	65	3	26-121/34
86-30-6	N-Nitrosodiphenylamine	ND		1900	1330	70	1970	1380	70	4	24-142/35
85-01-8	Phenanthrene	82.1		1900	1390	69	1970	1420	68	2	14-144/44
129-00-0	Pyrene	140		1900	1500	72	1970	1510	70	1	16-147/46
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		1900	1630	86	1970	1770	90	8	37-115/32

CAS No.	Surrogate Recoveries	MS	MSD	JC18791-18	Limits
367-12-4	2-Fluorophenol	67%	64%		30-106%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364-MS	Z110084.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500
OP93364-MSD	Z110085.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500
JC18791-18	Z110078A.D	1	04/26/16	AC	04/26/16	OP93364	EZ5500

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

JC18649-3

CAS No.	Surrogate Recoveries	MS	MSD	JC18791-18	Limits
4165-62-2	Phenol-d5	63%	62%		30-106%
118-79-6	2,4,6-Tribromophenol	74%	76%		24-140%
4165-60-0	Nitrobenzene-d5	86%	86%	92%	26-122%
321-60-8	2-Fluorobiphenyl	76%	80%	84%	36-112%
1718-51-0	Terphenyl-d14	85%	84%	80%	36-132%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93236A-MS	4M64885.D	1	04/21/16	LK	04/20/16	OP93236A	E4M2889
OP93236A-MSD	4M64886.D	1	04/21/16	LK	04/20/16	OP93236A	E4M2889
JC18649-2	4M64883.D	1	04/21/16	LK	04/20/16	OP93236A	E4M2889

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

JC18649-1, JC18649-2, JC18649-5

CAS No.	Compound	JC18649-2 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	ND		2.47	2.10	85	2.47	2.04	83	3	23-140/36

CAS No.	Surrogate Recoveries	MS	MSD	JC18649-2	Limits
4165-60-0	Nitrobenzene-d5	88%	85%	80%	24-125%
321-60-8	2-Fluorobiphenyl	106%	101%	95%	19-127%
1718-51-0	Terphenyl-d14	74%	68%	71%	10-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93271A-MS	3M60923.D	1	04/27/16	LK	04/21/16	OP93271A	E3M2864
OP93271A-MSD	3M60924.D	1	04/27/16	LK	04/21/16	OP93271A	E3M2864
JC18447-2 [a]	3M60792.D	1	04/22/16	LK	04/21/16	OP93271A	E3M2856

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

JC18649-4

CAS No.	Compound	JC18447-2 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	ND		1.05	0.611	58	1.05	0.818	78	29	23-140/36

CAS No.	Surrogate Recoveries	MS	MSD	JC18447-2	Limits
367-12-4	2-Fluorophenol	35%	47%		14-81%
4165-62-2	Phenol-d5	23%	31%		11-54%
118-79-6	2,4,6-Tribromophenol	58%	79%		35-145%
4165-60-0	Nitrobenzene-d5	55%	82%		24-125%
321-60-8	2-Fluorobiphenyl	64%	86%		19-127%
1718-51-0	Terphenyl-d14	50%	72%		10-119%

(a) Sample used for QC purposes only.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93364A-MS	3M60901.D	1	04/27/16	JJ	04/26/16	OP93364A	E3M2863
OP93364A-MSD	3M60902.D	1	04/27/16	JJ	04/26/16	OP93364A	E3M2863
JC18649-3	3M60903.D	1	04/27/16	JJ	04/26/16	OP93364A	E3M2863

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

JC18649-3

CAS No.	Compound	JC18649-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
123-91-1	1,4-Dioxane	ND		40.2	22.9	57	38.9	22.5	58	2	50-150/30
91-20-3	Naphthalene	ND		40.2	32.5	81	38.9	32.6	84	0	10-190/36

CAS No.	Surrogate Recoveries	MS	MSD	JC18649-3	Limits
4165-60-0	Nitrobenzene-d5	82%	79%	75%	15-138%
321-60-8	2-Fluorobiphenyl	92%	88%	78%	12-148%
1718-51-0	Terphenyl-d14	104%	102%	91%	10-157%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	37940	31.9		Pass
68	Less than 2.0% of mass 69	639	0.54	(1.37) [a]	Pass
69	Mass 69 relative abundance	46753	39.3		Pass
70	Less than 2.0% of mass 69	130	0.11	(0.28) [a]	Pass
127	40.0 - 60.0% of mass 198	66973	56.4		Pass
197	Less than 1.0% of mass 198	632	0.53		Pass
198	Base peak, 100% relative abundance	118837	100.0		Pass
199	5.0 - 9.0% of mass 198	7926	6.67		Pass
275	10.0 - 30.0% of mass 198	29432	24.8		Pass
365	1.0 - 100.0% of mass 198	4151	3.49		Pass
441	Present, but less than mass 443	13293	11.2	(70.6) [b]	Pass
442	40.0 - 100.0% of mass 198	96506	81.2		Pass
443	17.0 - 23.0% of mass 442	18829	15.8	(19.5) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2M3649-IC3649	2M83066.D	04/15/16	09:12	00:18	Initial cal 2
E2M3649-IC3649	2M83067.D	04/15/16	09:42	00:48	Initial cal 1
E2M3649-IC3649	2M83068.D	04/15/16	10:08	01:14	Initial cal 100
E2M3649-IC3649	2M83069.D	04/15/16	10:34	01:40	Initial cal 80
E2M3649-IC3649	2M83070.D	04/15/16	11:00	02:06	Initial cal 25
E2M3649-IC3649	2M83071.D	04/15/16	11:27	02:33	Initial cal 10
E2M3649-IC3649	2M83072.D	04/15/16	11:53	02:59	Initial cal 5
E2M3649-ICC3649	2M83073.D	04/15/16	12:19	03:25	Initial cal 50

Instrument Performance Check (DFTPP)

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

Instrument Performance Check (DFTPP)

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2M3657-DFTPP
Lab File ID: 2M83242.D
Instrument ID: GCMS2M
Injection Date: 04/21/16
Injection Time: 09:05

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	35393	30.0		Pass
68	Less than 2.0% of mass 69	731	0.62	(1.73) [a]	Pass
69	Mass 69 relative abundance	42359	35.9		Pass
70	Less than 2.0% of mass 69	344	0.29	(0.81) [a]	Pass
127	40.0 - 60.0% of mass 198	64401	54.6		Pass
197	Less than 1.0% of mass 198	102	0.09		Pass
198	Base peak, 100% relative abundance	117952	100.0		Pass
199	5.0 - 9.0% of mass 198	8004	6.79		Pass
275	10.0 - 30.0% of mass 198	32409	27.5		Pass
365	1.0 - 100.0% of mass 198	4818	4.08		Pass
441	Present, but less than mass 443	15617	13.2	(74.6) [b]	Pass
442	40.0 - 100.0% of mass 198	106938	90.7		Pass
443	17.0 - 23.0% of mass 442	20928	17.7	(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
E2M3657-CC3649	2M83243.D	04/21/16	09:18	00:13	Continuing cal 25
E2M3657-CC3651	2M83244.D	04/21/16	09:44	00:39	Continuing cal 25
OP93236-MB1	2M83246.D	04/21/16	11:20	02:15	Method Blank
JC18649-1	2M83247.D	04/21/16	11:46	02:41	RA14-GWD
JC18649-2	2M83248.D	04/21/16	12:12	03:07	RA14D-GWD
JC18649-5	2M83249.D	04/21/16	12:38	03:33	RA13-GWD
OP93249-MB1	2M83250.D	04/21/16	13:04	03:59	Method Blank
ZZZZZZ	2M83251.D	04/21/16	13:30	04:25	(unrelated sample)
ZZZZZZ	2M83252.D	04/21/16	13:55	04:50	(unrelated sample)
ZZZZZZ	2M83253.D	04/21/16	14:21	05:16	(unrelated sample)
ZZZZZZ	2M83254.D	04/21/16	14:47	05:42	(unrelated sample)
ZZZZZZ	2M83255.D	04/21/16	15:13	06:08	(unrelated sample)
ZZZZZZ	2M83257.D	04/21/16	16:06	07:01	(unrelated sample)
ZZZZZZ	2M83258.D	04/21/16	16:32	07:27	(unrelated sample)
ZZZZZZ	2M83261.D	04/21/16	17:27	08:22	(unrelated sample)
ZZZZZZ	2M83259.D	04/21/16	17:53	08:48	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2M3668-DFTPP
Lab File ID: 2M83436.D
Instrument ID: GCMS2M
Injection Date: 04/28/16
Injection Time: 10:46

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	24071	34.1		Pass
68	Less than 2.0% of mass 69	316	0.45	(1.15) [a]	Pass
69	Mass 69 relative abundance	27490	38.9		Pass
70	Less than 2.0% of mass 69	109	0.15	(0.40) [a]	Pass
127	40.0 - 60.0% of mass 198	42135	59.6		Pass
197	Less than 1.0% of mass 198	554	0.78		Pass
198	Base peak, 100% relative abundance	70653	100.0		Pass
199	5.0 - 9.0% of mass 198	5023	7.11		Pass
275	10.0 - 30.0% of mass 198	18393	26.0		Pass
365	1.0 - 100.0% of mass 198	3027	4.28		Pass
441	Present, but less than mass 443	7292	10.3	(76.1) [b]	Pass
442	40.0 - 100.0% of mass 198	49911	70.6		Pass
443	17.0 - 23.0% of mass 442	9578	13.6	(19.2) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2M3668-CC3649	2M83437.D	04/28/16	11:04	00:18	Continuing cal 50
E2M3668-CC3651	2M83438.D	04/28/16	11:37	00:51	Continuing cal 50
OP93364-BS1	2M83440.D	04/28/16	12:28	01:42	Blank Spike
OP93364-MB1	2M83441.D	04/28/16	12:54	02:08	Method Blank
OP93387-MB3	2M83444.D	04/28/16	13:20	02:34	Method Blank
OP93419-MB1	2M83444.D	04/28/16	13:20	02:34	Method Blank
OP93419-LB6	2M83445.D	04/28/16	13:46	03:00	Leachate Blank
OP93419-BS1	2M83446.D	04/28/16	14:12	03:26	Blank Spike
OP93387-BS3	2M83446.D	04/28/16	14:12	03:26	Blank Spike
ZZZZZZ	2M83442.D	04/28/16	14:38	03:52	(unrelated sample)
ZZZZZZ	2M83443.D	04/28/16	15:04	04:18	(unrelated sample)
OP93419-MS	2M83447.D	04/28/16	15:30	04:44	Matrix Spike
OP93419-LS6	2M83447.D	04/28/16	15:30	04:44	Leachate Spike
OP93419-MSD	2M83448.D	04/28/16	15:56	05:10	Matrix Spike Duplicate
JC18437-12A	2M83449.D	04/28/16	16:22	05:36	(used for QC only; not part of job JC18649)
JC18649-3	2M83450.D	04/28/16	16:48	06:02	RA13(5-6)
ZZZZZZ	2M83451.D	04/28/16	17:14	06:28	(unrelated sample)
ZZZZZZ	2M83452.D	04/28/16	17:40	06:54	(unrelated sample)
ZZZZZZ	2M83453.D	04/28/16	18:05	07:19	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2M3668-DFTPP
Lab File ID: 2M83436.D
Instrument ID: GCMS2M
Injection Date: 04/28/16
Injection Time: 10:46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	2M83454.D	04/28/16	18:31	07:45	(unrelated sample)
ZZZZZZ	2M83455.D	04/28/16	18:57	08:11	(unrelated sample)
ZZZZZZ	2M83456.D	04/28/16	19:22	08:36	(unrelated sample)
ZZZZZZ	2M83457.D	04/28/16	19:48	09:02	(unrelated sample)
ZZZZZZ	2M83458.D	04/28/16	20:14	09:28	(unrelated sample)
ZZZZZZ	2M83459.D	04/28/16	20:39	09:53	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC18649
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: JC18649
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: JC18649
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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2P2552-DFTPP
Lab File ID: 2P58441.D
Instrument ID: GCMS2P
Injection Date: 04/21/16
Injection Time: 09:59

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	36397	45.7		Pass
68	Less than 2.0% of mass 69	331	0.42	(0.93) [a]	Pass
69	Mass 69 relative abundance	35703	44.8		Pass
70	Less than 2.0% of mass 69	306	0.38	(0.86) [a]	Pass
127	40.0 - 60.0% of mass 198	39469	49.6		Pass
197	Less than 1.0% of mass 198	286	0.36		Pass
198	Base peak, 100% relative abundance	79640	100.0		Pass
199	5.0 - 9.0% of mass 198	5253	6.60		Pass
275	10.0 - 30.0% of mass 198	17460	21.9		Pass
365	1.0 - 100.0% of mass 198	1768	2.22		Pass
441	Present, but less than mass 443	7661	9.62	(84.2) [b]	Pass
442	40.0 - 100.0% of mass 198	47054	59.1		Pass
443	17.0 - 23.0% of mass 442	9096	11.4	(19.3) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P2552-CC2547	2P58442.D	04/21/16	10:13	00:14	Continuing cal 50
E2P2552-CC2548	2P58443.D	04/21/16	10:48	00:49	Continuing cal 50
OP93271-MB1	2P58446.D	04/21/16	15:17	05:18	Method Blank
OP93271-BS1	2P58447.D	04/21/16	15:40	05:41	Blank Spike
OP93271-BSD	2P58448.D	04/21/16	16:04	06:05	Blank Spike Duplicate
JC18649-4	2P58449.D	04/21/16	16:28	06:29	RA13-GWS

Instrument Performance Check (DFTPP)

Job Number: JC18649
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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	183729	36.2		Pass
68	Less than 2.0% of mass 69	2249	0.44	(0.96) [a]	Pass
69	Mass 69 relative abundance	233456	46.0		Pass
70	Less than 2.0% of mass 69	1335	0.26	(0.57) [a]	Pass
127	40.0 - 60.0% of mass 198	249659	49.2		Pass
197	Less than 1.0% of mass 198	997	0.20		Pass
198	Base peak, 100% relative abundance	507554	100.0		Pass
199	5.0 - 9.0% of mass 198	34440	6.79		Pass
275	10.0 - 30.0% of mass 198	111976	22.1		Pass
365	1.0 - 100.0% of mass 198	12643	2.49		Pass
441	Present, but less than mass 443	59008	11.6	(81.7) [b]	Pass
442	40.0 - 100.0% of mass 198	381120	75.1		Pass
443	17.0 - 23.0% of mass 442	72259	14.2	(19.0) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3M2856-CC2855	3M60776.D	04/22/16	09:20	00:12	Continuing cal 1
OP93234A-MB1	3M60777.D	04/22/16	09:52	00:44	Method Blank
OP93234A-BS12	3M60778.D	04/22/16	10:24	01:16	Blank Spike
OP93234A-BSD12	3M60779.D	04/22/16	10:57	01:49	Blank Spike Duplicate
ZZZZZZ	3M60780.D	04/22/16	11:29	02:21	(unrelated sample)
ZZZZZZ	3M60781.D	04/22/16	12:01	02:53	(unrelated sample)
ZZZZZZ	3M60782.D	04/22/16	12:33	03:25	(unrelated sample)
OP93089A-MB1	3M60783.D	04/22/16	13:06	03:58	Method Blank
ZZZZZZ	3M60784.D	04/22/16	13:38	04:30	(unrelated sample)
ZZZZZZ	3M60785.D	04/22/16	14:11	05:03	(unrelated sample)
OP93128A-MB1	3M60786.D	04/22/16	14:43	05:35	Method Blank
ZZZZZZ	3M60787.D	04/22/16	15:15	06:07	(unrelated sample)
ZZZZZZ	3M60788.D	04/22/16	15:48	06:40	(unrelated sample)
OP93271A-MB1	3M60789.D	04/22/16	16:20	07:12	Method Blank
JC18447-2	3M60792.D	04/22/16	17:57	08:49	(used for QC only; not part of job JC18649)
ZZZZZZ	3M60798.D	04/22/16	20:39	11:31	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2863-DFTPP
Lab File ID: 3M60897.D
Instrument ID: GCMS3M
Injection Date: 04/26/16
Injection Time: 21:52

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	255556	37.2		Pass
68	Less than 2.0% of mass 69	4515	0.66	(1.34) [a]	Pass
69	Mass 69 relative abundance	336455	49.0		Pass
70	Less than 2.0% of mass 69	841	0.12	(0.25) [a]	Pass
127	40.0 - 60.0% of mass 198	346570	50.5		Pass
197	Less than 1.0% of mass 198	1092	0.16		Pass
198	Base peak, 100% relative abundance	686187	100.0		Pass
199	5.0 - 9.0% of mass 198	44940	6.55		Pass
275	10.0 - 30.0% of mass 198	153112	22.3		Pass
365	1.0 - 100.0% of mass 198	17802	2.59		Pass
441	Present, but less than mass 443	76119	11.1	(84.6) [b]	Pass
442	40.0 - 100.0% of mass 198	463787	67.6		Pass
443	17.0 - 23.0% of mass 442	90002	13.1	(19.4) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3M2863-CC2855	3M60898.D	04/26/16	22:09	00:17	Continuing cal .5
OP93364A-MB1	3M60899.D	04/27/16	00:37	02:45	Method Blank
OP93364A-BS12	3M60900.D	04/27/16	01:09	03:17	Blank Spike
OP93364A-MS	3M60901.D	04/27/16	01:41	03:49	Matrix Spike
OP93364A-MSD	3M60902.D	04/27/16	02:13	04:21	Matrix Spike Duplicate
JC18649-3	3M60903.D	04/27/16	02:45	04:53	RA13(5-6)

Instrument Performance Check (DFTPP)

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2864-DFTPP
Lab File ID: 3M60904.D
Instrument ID: GCMS3M
Injection Date: 04/27/16
Injection Time: 09:07

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	180377	37.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	235883	48.7		Pass
70	Less than 2.0% of mass 69	1217	0.25	(0.52) [a]	Pass
127	40.0 - 60.0% of mass 198	248472	51.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	484139	100.0		Pass
199	5.0 - 9.0% of mass 198	33045	6.83		Pass
275	10.0 - 30.0% of mass 198	108315	22.4		Pass
365	1.0 - 100.0% of mass 198	10343	2.14		Pass
441	Present, but less than mass 443	50802	10.5	(80.5) [b]	Pass
442	40.0 - 100.0% of mass 198	334496	69.1		Pass
443	17.0 - 23.0% of mass 442	63117	13.0	(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
E3M2864-CC2855	3M60905.D	04/27/16	09:19	00:12	Continuing cal 1
OP93382A-MB1	3M60906.D	04/27/16	10:24	01:17	Method Blank
ZZZZZZ	3M60908.D	04/27/16	11:27	02:20	(unrelated sample)
JC18862-1	3M60909.D	04/27/16	11:59	02:52	(used for QC only; not part of job JC18649)
ZZZZZZ	3M60910.D	04/27/16	12:31	03:24	(unrelated sample)
ZZZZZZ	3M60911.D	04/27/16	13:02	03:55	(unrelated sample)
ZZZZZZ	3M60912.D	04/27/16	13:34	04:27	(unrelated sample)
ZZZZZZ	3M60913.D	04/27/16	14:06	04:59	(unrelated sample)
ZZZZZZ	3M60914.D	04/27/16	14:38	05:31	(unrelated sample)
ZZZZZZ	3M60915.D	04/27/16	15:10	06:03	(unrelated sample)
ZZZZZZ	3M60916.D	04/27/16	15:42	06:35	(unrelated sample)
OP93382A-MS	3M60917.D	04/27/16	16:14	07:07	Matrix Spike
OP93382A-MSD	3M60918.D	04/27/16	16:46	07:39	Matrix Spike Duplicate
OP93382A-BS12	3M60907A.D	04/27/16	17:18	08:11	Blank Spike
OP93398A-MB1	3M60919.D	04/27/16	17:50	08:43	Method Blank
OP93398A-BS12	3M60920.D	04/27/16	18:22	09:15	Blank Spike
OP93398A-BSD12	3M60921.D	04/27/16	18:54	09:47	Blank Spike Duplicate
OP93271A-MS	3M60923.D	04/27/16	19:58	10:51	Matrix Spike
OP93271A-MSD	3M60924.D	04/27/16	20:30	11:23	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JC18649
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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2889-DFTPP
Lab File ID: 4M64878.D
Instrument ID: GCMS4M
Injection Date: 04/21/16
Injection Time: 10:09

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	353340	41.8		Pass
68	Less than 2.0% of mass 69	5062	0.60	(1.43) [a]	Pass
69	Mass 69 relative abundance	355113	42.0		Pass
70	Less than 2.0% of mass 69	1418	0.17	(0.40) [a]	Pass
127	40.0 - 60.0% of mass 198	385033	45.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	845803	100.0		Pass
199	5.0 - 9.0% of mass 198	60293	7.13		Pass
275	10.0 - 30.0% of mass 198	196203	23.2		Pass
365	1.0 - 100.0% of mass 198	24203	2.86		Pass
441	Present, but less than mass 443	98229	11.6	(74.4) [b]	Pass
442	40.0 - 100.0% of mass 198	681152	80.5		Pass
443	17.0 - 23.0% of mass 442	131976	15.6	(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
E4M2889-CC2881	4M64879.D	04/21/16	10:20	00:11	Continuing cal .5
OP93236A-MB1	4M64880.D	04/21/16	10:53	00:44	Method Blank
OP93236A-BS12	4M64881.D	04/21/16	11:23	01:14	Blank Spike
JC18649-1	4M64882.D	04/21/16	11:56	01:47	RA14-GWD
JC18649-2	4M64883.D	04/21/16	12:26	02:17	RA14D-GWD
JC18649-5	4M64884.D	04/21/16	12:58	02:49	RA13-GWD
OP93236A-MS	4M64885.D	04/21/16	13:31	03:22	Matrix Spike
OP93236A-MSD	4M64886.D	04/21/16	14:02	03:53	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2890-DFTPP
Lab File ID: 4M64887.D
Instrument ID: GCMS4M
Injection Date: 04/21/16
Injection Time: 14:58

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	256155	40.3		Pass
68	Less than 2.0% of mass 69	3415	0.54	(1.27) [a]	Pass
69	Mass 69 relative abundance	268089	42.2		Pass
70	Less than 2.0% of mass 69	1867	0.29	(0.70) [a]	Pass
127	40.0 - 60.0% of mass 198	276603	43.5		Pass
197	Less than 1.0% of mass 198	2935	0.46		Pass
198	Base peak, 100% relative abundance	636011	100.0		Pass
199	5.0 - 9.0% of mass 198	42144	6.63		Pass
275	10.0 - 30.0% of mass 198	151512	23.8		Pass
365	1.0 - 100.0% of mass 198	19928	3.13		Pass
441	Present, but less than mass 443	83555	13.1	(81.7) [b]	Pass
442	40.0 - 100.0% of mass 198	548544	86.2		Pass
443	17.0 - 23.0% of mass 442	102213	16.1	(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
E4M2890-CC2881	4M64888.D	04/21/16	15:11	00:13	Continuing cal 1
OP93271A-MB1	4M64889.D	04/21/16	15:44	00:46	Method Blank
OP93271A-BS12	4M64890.D	04/21/16	16:17	01:19	Blank Spike
JC18649-4	4M64891.D	04/21/16	16:50	01:52	RA13-GWS
OP93234A-MB1	4M64892.D	04/21/16	17:22	02:24	Method Blank
OP93234A-LB22	4M64893.D	04/21/16	17:54	02:56	Leachate Blank
ZZZZZZ	4M64896.D	04/21/16	19:33	04:35	(unrelated sample)
ZZZZZZ	4M64900.D	04/21/16	21:42	06:44	(unrelated sample)
ZZZZZZ	4M64901.D	04/21/16	22:13	07:15	(unrelated sample)
ZZZZZZ	4M64908.D	04/22/16	01:50	10:52	(unrelated sample)
OP93089A-MSD	4M64909.D	04/22/16	02:21	11:23	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JC18649
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: JC18649
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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E5P1400-DFTPP
Lab File ID: 5P27662.D
Instrument ID: GCMS5P
Injection Date: 04/20/16
Injection Time: 20:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	145759	45.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	109129	33.9		Pass
70	Less than 2.0% of mass 69	113	0.04	(0.10) [a]	Pass
127	40.0 - 60.0% of mass 198	163920	51.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	321556	100.0		Pass
199	5.0 - 9.0% of mass 198	22351	6.95		Pass
275	10.0 - 30.0% of mass 198	88103	27.4		Pass
365	1.0 - 100.0% of mass 198	8563	2.66		Pass
441	Present, but less than mass 443	44117	13.7	(83.0) [b]	Pass
442	40.0 - 100.0% of mass 198	280298	87.2		Pass
443	17.0 - 23.0% of mass 442	53122	16.5	(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
E5P1400-CC1382	5P27663.D	04/20/16	21:04	00:11	Continuing cal 25
E5P1400-CC1383	5P27664.D	04/20/16	21:32	00:39	Continuing cal 25
OP93236-MB1	5P27665.D	04/20/16	22:04	01:11	Method Blank
OP93236-BS1	5P27666.D	04/20/16	22:30	01:37	Blank Spike
OP93233-MB1	5P27674.D	04/20/16	23:23	02:30	Method Blank
OP93233-BS1	5P27675.D	04/20/16	23:49	02:56	Blank Spike
JC18649-1	5P27667A.D	04/21/16	00:14	03:21	RA14-GWD
JC18649-2	5P27668.D	04/21/16	00:40	03:47	RA14D-GWD
JC18649-5	5P27670.D	04/21/16	01:32	04:39	RA13-GWD
OP93236-MS	5P27671.D	04/21/16	01:58	05:05	Matrix Spike
OP93236-MSD	5P27672.D	04/21/16	02:24	05:31	Matrix Spike Duplicate
JC18555-8	5P27676.D	04/21/16	02:49	05:56	(used for QC only; not part of job JC18649)
ZZZZZZ	5P27677.D	04/21/16	03:15	06:22	(unrelated sample)
ZZZZZZ	5P27678.D	04/21/16	03:41	06:48	(unrelated sample)
ZZZZZZ	5P27679.D	04/21/16	04:06	07:13	(unrelated sample)
ZZZZZZ	5P27680.D	04/21/16	04:32	07:39	(unrelated sample)
ZZZZZZ	5P27681.D	04/21/16	04:58	08:05	(unrelated sample)
ZZZZZZ	5P27682.D	04/21/16	05:23	08:30	(unrelated sample)
ZZZZZZ	5P27683.D	04/21/16	05:49	08:56	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E5P1400-DFTPP
Lab File ID: 5P27662.D
Instrument ID: GCMS5P
Injection Date: 04/20/16
Injection Time: 20:53

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	5P27684.D	04/21/16	06:14	09:21	(unrelated sample)
OP93233-MS	5P27685.D	04/21/16	06:40	09:47	Matrix Spike
OP93233-MSD	5P27686.D	04/21/16	07:06	10:13	Matrix Spike Duplicate
ZZZZZZ	5P27687.D	04/21/16	07:31	10:38	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

Instrument Performance Check (DFTPP)

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

Instrument Performance Check (DFTPP)

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EZ5500-DFTPP
Lab File ID: Z110073.D
Instrument ID: GCMSZ
Injection Date: 04/26/16
Injection Time: 12:03

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	62512	32.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	75380	38.9		Pass
70	Less than 2.0% of mass 69	413	0.21	(0.55) [a]	Pass
127	40.0 - 60.0% of mass 198	90792	46.8		Pass
197	Less than 1.0% of mass 198	431	0.22		Pass
198	Base peak, 100% relative abundance	193858	100.0		Pass
199	5.0 - 9.0% of mass 198	13047	6.73		Pass
275	10.0 - 30.0% of mass 198	55578	28.7		Pass
365	1.0 - 100.0% of mass 198	7937	4.09		Pass
441	Present, but less than mass 443	12250	6.32	(46.6) [b]	Pass
442	40.0 - 100.0% of mass 198	133061	68.6		Pass
443	17.0 - 23.0% of mass 442	26285	13.6	(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
EZ5500-CC5485	Z110074.D	04/26/16	12:24	00:21	Continuing cal 50
EZ5500-CC5486	Z110075A.D	04/26/16	13:45	01:42	Continuing cal 50
OP93364-MB1	Z110076.D	04/26/16	14:14	02:11	Method Blank
OP93364-BS1	Z110077.D	04/26/16	14:44	02:41	Blank Spike
JC18791-18	Z110078A.D	04/26/16	15:13	03:10	(used for QC only; not part of job JC18649)
ZZZZZZ	Z110079.D	04/26/16	15:42	03:39	(unrelated sample)
ZZZZZZ	Z110080.D	04/26/16	16:12	04:09	(unrelated sample)
ZZZZZZ	Z110081.D	04/26/16	16:41	04:38	(unrelated sample)
OP93364-MS	Z110084.D	04/26/16	18:19	06:16	Matrix Spike
OP93364-MSD	Z110085.D	04/26/16	18:48	06:45	Matrix Spike Duplicate
ZZZZZZ	Z110086.D	04/26/16	19:17	07:14	(unrelated sample)
ZZZZZZ	Z110087.D	04/26/16	19:47	07:44	(unrelated sample)
ZZZZZZ	Z110088.D	04/26/16	20:16	08:13	(unrelated sample)
ZZZZZZ	Z110089.D	04/26/16	20:45	08:42	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E2M3657-CC3649	**Injection Date:**	04/21/16
Lab File ID:	2M83243.D	**Injection Time:**	09:18
Instrument ID:	GCMS2M	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	161786	4.86	645154	5.99	382846	8.10	598851	10.30	536633	14.50	555970	16.62
Upper Limit [a]	323572	5.36	1290308	6.49	765692	8.60	1197702	10.80	1073266	15.00	1111940	17.12
Lower Limit [b]	80893	4.36	322577	5.49	191423	7.60	299426	9.80	268317	14.00	277985	16.12

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP93236-MB1	203398	4.86	809036	5.99	481262	8.10	756485	10.30	691845	14.50	699094	16.62
JC18649-1	171202	4.86	685986	5.99	412761	8.10	642812	10.29	590126	14.50	594117	16.62
JC18649-2	174774	4.86	695101	5.99	415692	8.10	648299	10.29	603812	14.50	601209	16.62
JC18649-5	182907	4.86	726895	5.99	435444	8.10	679013	10.29	625718	14.50	620904	16.62
OP93249-MB1	213141	4.86	836890	5.99	471036	8.10	689197	10.29	581349	14.50	571294	16.62
ZZZZZZ	180990	4.86	701784	5.99	393987	8.10	581238	10.29	497493	14.49	503368	16.62
ZZZZZZ	220720	4.86	873096	5.99	497990	8.10	750529	10.29	644719	14.50	642654	16.62
ZZZZZZ	190995	4.86	739438	5.99	417835	8.10	611029	10.29	510672	14.50	521795	16.62
ZZZZZZ	208331	4.86	798893	5.99	453083	8.10	661399	10.29	545442	14.50	534377	16.62
ZZZZZZ	179181	4.86	694105	5.99	385565	8.10	578329	10.30	477869	14.50	479851	16.62
ZZZZZZ	202085	4.86	783924	5.99	311603	8.12	361873	10.36	298285	14.62	410414	16.73
ZZZZZZ	196973	4.87	767480	5.99	293243	8.13	326805	10.38	269956	14.67	329955	16.76
ZZZZZZ	143071	4.87	573965	5.99	312102	8.11	400469	10.33	351465	14.55	389957	16.67
ZZZZZZ	172994	4.87	676587	5.99	401169	8.11	627290	10.31	513010	14.52	501750	16.65

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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E2M3668-CC3649	**Injection Date:**	04/28/16
Lab File ID:	2M83437.D	**Injection Time:**	11:04
Instrument ID:	GCMS2M	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	175945	4.76	727094	5.87	460368	7.96	738569	10.15	647048	14.36	561918	16.48
Upper Limit [a]	351890	5.26	1454188	6.37	920736	8.46	1477138	10.65	1294096	14.86	1123836	16.98
Lower Limit [b]	87973	4.26	363547	5.37	230184	7.46	369285	9.65	323524	13.86	280959	15.98

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP93364-BS1	428819*	4.76	1832134*	5.87	1054770*	7.97	1616307*	10.15	1349428*	14.36	1179649*	16.48
OP93364-MB1	460430[c]	4.76	1873288[c]	5.87	1128084[c]	7.96	1707722[c]	10.15	1426529[c]	14.35	1228823[c]	16.48
OP93387-MB3	204621	4.76	840940	5.87	524310	7.95	836707	10.15	775927	14.35	724819	16.47
OP93419-MB1	204621	4.76	840940	5.87	524310	7.95	836707	10.15	775927	14.35	724819	16.47
OP93419-LB6	206618	4.76	845744	5.86	523390	7.95	834423	10.15	756563	14.35	705867	16.47
OP93419-BS1	215008	4.76	877188	5.87	534109	7.96	844854	10.15	728359	14.35	640861	16.47
OP93387-BS3	215008	4.76	877188	5.87	534109	7.96	844854	10.15	728359	14.35	640861	16.47
ZZZZZZ	196915	4.76	806372	5.87	503153	7.95	806580	10.15	736408	14.35	681681	16.47
ZZZZZZ	185773	4.77	837077	5.87	538016	7.96	847283	10.15	790465	14.35	722781	16.47
OP93419-MS	232479	4.76	950079	5.87	570339	7.96	897836	10.15	789959	14.35	716179	16.47
OP93419-LS6	232479	4.76	950079	5.87	570339	7.96	897836	10.15	789959	14.35	716179	16.47
OP93419-MSD	220157	4.76	890358	5.87	538400	7.96	842963	10.15	744868	14.35	670886	16.47
JC18437-12A	202980	4.76	822150	5.86	511982	7.95	826440	10.15	778290	14.34	742059	16.47
JC18649-3	257545	4.76	1031353	5.86	622445	7.95	939577	10.14	778723	14.35	673728	16.47
ZZZZZZ	273440	4.76	976657	5.87	493705	7.96	648679	10.16	540821	14.35	503438	16.47
ZZZZZZ	246539	4.76	977588	5.86	589560	7.95	863843	10.14	662725	14.34	507151	16.47
ZZZZZZ	256090	4.76	1023051	5.86	604949	7.95	893656	10.14	668572	14.35	513738	16.47
ZZZZZZ	246723	4.76	979180	5.86	566605	7.95	810273	10.15	587526	14.35	470256	16.47
ZZZZZZ	249980	4.76	1001538	5.86	590827	7.95	881612	10.14	718501	14.34	610843	16.47
ZZZZZZ	262431	4.76	1049928	5.86	622465	7.95	938483	10.15	788569	14.34	673356	16.47
ZZZZZZ	257838	4.76	1028887	5.86	603024	7.95	900237	10.14	744287	14.34	645402	16.47
ZZZZZZ	242806	4.76	982043	5.86	585146	7.95	876579	10.14	735520	14.34	653926	16.47
ZZZZZZ	243297	4.76	908377	5.87	495691	7.96	612181	10.15	402095	14.37	413985	16.52

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

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) The Internal standard was added at 80 ppm. All recoveries re-calculated based on the spike amount.

Semivolatile Internal Standard Area Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E2P2552-CC2547	**Injection Date:**	04/21/16
Lab File ID:	2P58442.D	**Injection Time:**	10:13
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	223584	4.86	763906	5.92	430728	7.37	690074	8.70	713290	12.07	605997	14.07
Upper Limit [a]	447168	5.36	1527812	6.42	861456	7.87	1380148	9.20	1426580	12.57	1211994	14.57
Lower Limit [b]	111792	4.36	381953	5.42	215364	6.87	345037	8.20	356645	11.57	302999	13.57

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
OP93271-MB1	335521	4.86	1168166	5.92	628539	7.36	970624	8.70	901817	12.06	737346	14.07
OP93271-BS1	280246	4.86	940977	5.92	513831	7.37	825808	8.70	794692	12.06	682012	14.07
OP93271-BSD	251860	4.86	849299	5.92	462661	7.37	740943	8.70	737125	12.06	617752	14.07
JC18649-4	343932	4.86	1207179	5.92	661051	7.36	1035315	8.70	989811	12.06	849196	14.07

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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3M2856-CC2855	**Injection Date:**	04/22/16
Lab File ID:	3M60776.D	**Injection Time:**	09:20
Instrument ID:	GCMS3M	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	477972	10.64	728628	13.64	1228462	17.84	974953	22.45
Upper Limit [a]	955944	11.14	1457256	14.14	2456924	18.34	1949906	22.95
Lower Limit [b]	238986	10.14	364314	13.14	614231	17.34	487477	21.95

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

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

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

Semivolatile Internal Standard Area Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3M2863-CC2855	**Injection Date:**	04/26/16
Lab File ID:	3M60898.D	**Injection Time:**	22:09
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	288205	10.55	458343	13.56	785052	17.76	651890	22.37
Upper Limit [a]	576410	11.05	916686	14.06	1570104	18.26	1303780	22.87
Lower Limit [b]	144103	10.05	229172	13.06	392526	17.26	325945	21.87

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93364A-MB1	365261	10.55	567539	13.56	841380	17.76	685215	22.37
OP93364A-BS12	410266	10.55	534966	13.56	849256	17.76	703819	22.37
OP93364A-MS	369683	10.55	464095	13.56	776256	17.76	646775	22.37
OP93364A-MSD	407478	10.55	523019	13.56	820573	17.76	668737	22.37
JC18649-3	406344	10.55	531157	13.56	864031	17.76	687369	22.37

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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3M2864-CC2855	**Injection Date:**	04/27/16
Lab File ID:	3M60905.D	**Injection Time:**	09:19
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	353655	10.55	561361	13.54	878134	17.76	704479	22.35
Upper Limit [a]	707310	11.05	1122722	14.04	1756268	18.26	1408958	22.85
Lower Limit [b]	176828	10.05	280681	13.04	439067	17.26	352240	21.85

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93382A-MB1	364355	10.55	499991	13.54	761633	17.76	594713	22.37
ZZZZZZ	401656	10.55	577943	13.54	907979	17.76	698431	22.37
JC18862-1	357410	10.55	493777	13.54	763123	17.76	581614	22.37
ZZZZZZ	328222	10.55	479409	13.54	714749	17.76	539063	22.37
ZZZZZZ	453904	10.55	605183	13.54	926829	17.76	707209	22.37
ZZZZZZ	381943	10.55	526291	13.54	812795	17.76	616222	22.37
ZZZZZZ	424815	10.55	563434	13.54	896287	17.76	676880	22.37
ZZZZZZ	462056	10.55	645078	13.54	934498	17.76	706873	22.37
ZZZZZZ	405973	10.55	533979	13.54	913821	17.76	711979	22.37
ZZZZZZ	413098	10.55	519038	13.54	881787	17.76	684321	22.37
OP93382A-MS	379463	10.55	491649	13.54	789825	17.76	606585	22.37
OP93382A-MSD	360673	10.55	476773	13.54	726881	17.76	544979	22.37
OP93382A-BS12	431448	10.55	540544	13.54	851443	17.76	639214	22.37
OP93398A-MB1	416233	10.55	543389	13.54	835589	17.76	662884	22.37
OP93398A-BS12	385973	10.55	487101	13.54	766342	17.76	596220	22.37
OP93398A-BSD12	418496	10.55	536272	13.54	839310	17.76	647845	22.37
OP93271A-MS	444325	10.55	633274	13.54	1045642	17.76	729597	22.37
OP93271A-MSD	465160	10.55	651408	13.54	1060798	17.76	766448	22.37

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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4M2889-CC2881	**Injection Date:**	04/21/16
Lab File ID:	4M64879.D	**Injection Time:**	10:20
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	360426	10.75	590004	13.75	1224264	17.92	917249	22.52
Upper Limit [a]	720852	11.25	1180008	14.25	2448528	18.42	1834498	23.02
Lower Limit [b]	180213	10.25	295002	13.25	612132	17.42	458625	22.02

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93236A-MB1	243602	10.75	445321	13.75	911610	17.92	654660	22.52
OP93236A-BS12	241673	10.75	397589	13.75	859105	17.92	604271	22.52
JC18649-1	238644	10.75	413273	13.75	888468	17.92	631675	22.52
JC18649-2	235248	10.75	398401	13.75	854683	17.92	614128	22.52
JC18649-5	220355	10.75	387261	13.75	813281	17.92	595243	22.52
OP93236A-MS	206052	10.75	364933	13.75	758266	17.92	547077	22.52
OP93236A-MSD	209482	10.75	374455	13.75	760657	17.92	548891	22.52

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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4M2890-CC2881	**Injection Date:**	04/21/16
Lab File ID:	4M64888.D	**Injection Time:**	15:11
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	231636	10.75	338668	13.72	714801	17.92	526465	22.51
Upper Limit [a]	463272	11.25	677336	14.22	1429602	18.42	1052930	23.01
Lower Limit [b]	115818	10.25	169334	13.22	357401	17.42	263233	22.01

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93271A-MB1	248250	10.75	385231	13.72	829648	17.92	595100	22.52
OP93271A-BS12	235232	10.75	378673	13.72	824232	17.92	574777	22.51
JC18649-4	162348	10.75	294085	13.75	595727	17.92	444700	22.52
OP93234A-MB1	195903	10.75	347958	13.75	746943	17.92	547858	22.52
OP93234A-LB22	138126	10.75	223061	13.75	514286	17.92	377972	22.52
ZZZZZZ	154109	10.75	217574	13.75	503673	17.92	371864	22.51
ZZZZZZ	147104	10.75	268463	13.75	560721	17.92	433436	22.52
ZZZZZZ	164630	10.75	264156	13.75	553157	17.92	448114	22.52
ZZZZZZ	243725	10.77	413139	13.75	703253	17.92	571414	22.52
OP93089A-MSD	152311	10.75	275781	13.75	523125	17.92	399309	22.52

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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E5P1400-CC1382	**Injection Date:**	04/20/16
Lab File ID:	5P27663.D	**Injection Time:**	21:04
Instrument ID:	GCMS5P	**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	464420	5.30	1766090	6.77	1010334	8.88	1589454	10.72	1459728	14.52	1385312	16.59
Upper Limit [a]	928840	5.80	3532180	7.27	2020668	9.38	3178908	11.22	2919456	15.02	2770624	17.09
Lower Limit [b]	232210	4.80	883045	6.27	505167	8.38	794727	10.22	729864	14.02	692656	16.09

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP93236-MB1	469350	5.30	1805609	6.77	1023184	8.88	1624993	10.72	1449062	14.51	1384248	16.59
OP93236-BS1	468914	5.30	1795619	6.77	1023289	8.88	1655127	10.72	1533536	14.52	1433069	16.59
OP93233-MB1	508054	5.30	1936373	6.77	1039946	8.88	1573004	10.72	1297950	14.51	1158403	16.58
OP93233-BS1	522921	5.30	1924361	6.77	1046288	8.88	1569261	10.72	1342917	14.52	1220486	16.58
JC18649-1	431954	5.30	1693599	6.77	981646	8.88	1587628	10.71	1493944	14.51	1420700	16.58
JC18649-2	444307	5.30	1743143	6.77	999749	8.88	1643685	10.72	1530488	14.51	1455159	16.58
JC18649-5	426726	5.30	1661928	6.77	941949	8.88	1474042	10.72	1334772	14.51	1262455	16.58
OP93236-MS	428444	5.30	1649480	6.77	932180	8.88	1454142	10.72	1321851	14.52	1271799	16.59
OP93236-MSD	457109	5.30	1697429	6.77	998084	8.88	1512905	10.72	1386396	14.52	1315224	16.59
JC18555-8	455889	5.30	1734487	6.77	911137	8.88	1439219	10.72	1159276	14.51	978474	16.58
ZZZZZZ	498694	5.30	1869965	6.77	1005867	8.88	1547398	10.72	1306539	14.51	1096850	16.58
ZZZZZZ	476073	5.30	1767799	6.77	942801	8.88	1443299	10.72	1216522	14.51	1066572	16.58
ZZZZZZ	466107	5.30	1800487	6.77	996829	8.88	1500482	10.72	1218405	14.51	1144956	16.58
ZZZZZZ	464833	5.30	1751036	6.77	947725	8.88	1393439	10.72	1141097	14.51	1088269	16.59
ZZZZZZ	461393	5.30	1678681	6.77	915843	8.88	1353975	10.72	1098645	14.51	1111529	16.59
ZZZZZZ	515664	5.30	1942360	6.77	1067719	8.88	1573714	10.72	1275791	14.51	1317305	16.59
ZZZZZZ	505604	5.30	1877590	6.77	986983	8.88	1471456	10.72	1238797	14.51	1274375	16.59
ZZZZZZ	515917	5.30	1900714	6.77	1019871	8.88	1536341	10.72	1327053	14.52	1394175	16.59
OP93233-MS	481089	5.30	1820635	6.78	1009122	8.89	1508877	10.72	1224533	14.52	1238300	16.59
OP93233-MSD	434819	5.30	1635503	6.78	896628	8.89	1341619	10.72	1119565	14.52	1130173	16.59
ZZZZZZ	451649	5.30	1642752	6.78	948474	8.89	1416549	10.79	1480726	14.64	1776023	16.72

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

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

Semivolatile Internal Standard Area Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EZ5500-CC5485	**Injection Date:**	04/26/16
Lab File ID:	Z110074.D	**Injection Time:**	12:24
Instrument ID:	GCMSZ	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	293213	4.19	1072753	5.11	689209	6.38	1183335	7.98	1239926	12.87	1106324	15.85
Upper Limit [a]	586426	4.69	2145506	5.61	1378418	6.88	2366670	8.48	2479852	13.37	2212648	16.35
Lower Limit [b]	146607	3.69	536377	4.61	344605	5.88	591668	7.48	619963	12.37	553162	15.35

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP93364-MB1	345904	4.19	1252173	5.11	735373	6.38	1252206	7.97	1190393	12.86	991458	15.84
OP93364-BS1	326824	4.19	1157192	5.11	714727	6.38	1200908	7.98	1186711	12.87	992221	15.84
JC18791-18	329621	4.19	1148651	5.11	681804	6.38	1104880	7.97	1080562	12.86	1005250	15.84
ZZZZZZ	335611	4.19	1166238	5.11	704215	6.38	1155068	7.97	1091789	12.86	1029491	15.84
ZZZZZZ	329521	4.19	1181117	5.11	671812	6.38	1099732	7.98	1079664	12.89	1061576	15.86
ZZZZZZ	343853	4.19	1225544	5.11	718699	6.38	1134522	7.98	1098742	12.88	1019952	15.86
OP93364-MS	340980	4.19	1197517	5.11	745050	6.38	1196889	7.98	1128579	12.88	1085649	15.85
OP93364-MSD	341481	4.19	1161264	5.11	711897	6.38	1165801	7.98	1112406	12.88	1066392	15.85
ZZZZZZ	333085	4.19	1209547	5.12	673237	6.39	1148545	8.00	1201430	12.92	1181848	15.90
ZZZZZZ	161684	4.19	604237	5.11	372887	6.38	628247	7.98	663510	12.88	612346	15.86
ZZZZZZ	311251	4.19	1151958	5.13	648029	6.39	710257	8.04	1213278	12.99	1014288	15.98
ZZZZZZ	271584	4.19	986716	5.12	588326	6.40	1032510	8.02	1217575	13.06	1054563	16.03

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: JC18649
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
JC18649-1	2M83247.D	0* [a]	0* [a]	0* [a]	0* [a]	0* [a]	0* [a]
JC18649-1	5P27667A.D	51	32	86	72	77	81
JC18649-2	2M83248.D	0* [a]	0* [a]	0* [a]	0* [a]	0* [a]	0* [a]
JC18649-2	5P27668.D	48	32	95	68	77	89
JC18649-4	2P58449.D	54	37	107	90	97	88
JC18649-5	2M83249.D	43	30	78	70	67	70
JC18649-5	5P27670.D	40	27	78	61	67	76
OP93236-BS1	5P27666.D	42	30	97	66	78	94
OP93236-MB1	5P27665.D	44	27	84	66	72	93
OP93236-MB1	2M83246.D	44	30	84	71	68	78
OP93236-MS	5P27671.D	63	54	86	69	77	82
OP93236-MSD	5P27672.D	67	56	95	75	80	84
OP93271-BS1	2P58447.D	65	43	101	87	91	100
OP93271-BSD	2P58448.D	68	46	107	91	94	102
OP93271-MB1	2P58446.D	48	31	97	89	91	88

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

(a) Outside control limits due to dilution.

Semivolatile Surrogate Recovery Summary

Job Number: JC18649
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
JC18649-3	2M83450.D	69	71	87	84	76	83
OP93364-BS1	Z110077.D	76	77	83	100	91	94
OP93364-BS1	2M83440.D	82 [a]	85 [a]	105 [a]	93 [a]	89 [a]	99 [a]
OP93364-MB1	Z110076.D	77	78	78	103	96	93
OP93364-MB1	2M83441.D	83	86	99	99	90	98
OP93364-MS	Z110084.D	67	63	74	86	76	85
OP93364-MSD	Z110085.D	64	62	76	86	80	84

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

(a) The Internal standard was added at 80 ppm. All recoveries re-calculated based on the spike amount.

Semivolatile Surrogate Recovery Summary

Job Number: JC18649
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
JC18649-1	4M64882.D	83	98	64
JC18649-2	4M64883.D	80	95	71
JC18649-4	4M64891.D	120	145* [a]	89
JC18649-5	4M64884.D	75	86	61
OP93236A-BS12	4M64881.D	85	101	74
OP93236A-MB1	4M64880.D	83	99	79
OP93236A-MS	4M64885.D	88	106	74
OP93236A-MSD	4M64886.D	85	101	68
OP93271A-BS12	4M64890.D	72	82	59
OP93271A-MB1	4M64889.D	89	102	72
OP93271A-MB1	3M60789.D	76	70	72
OP93271A-MS	3M60923.D	55	64	50
OP93271A-MSD	3M60924.D	82	86	72

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

(a) High percent recoveries and no positive found in the sample.

Semivolatile Surrogate Recovery Summary

Job Number: JC18649
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
JC18649-3	3M60903.D	75	78	91
OP93364A-BS12	3M60900.D	81	89	108
OP93364A-MB1	3M60899.D	88	83	94
OP93364A-MS	3M60901.D	82	92	104
OP93364A-MSD	3M60902.D	79	88	102

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

Initial Calibration Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3649-ICC3649
Lab FileID: 2M83073.D

Response Factor Report MS

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

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

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

Initial Calibration Summary

Job Number: JC18649 **Sample:** E2M3649-ICC3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83073.D
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

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

Initial Calibration Summary

Job Number: JC18649 **Sample:** E2M3649-ICC3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83073.D
Project: BMSMC, Building 5 Area, PR

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

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

Initial Calibration Summary

Job Number: JC18649 **Sample:** E2M3651-ICC3651
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83093.D
Project: BMSMC, Building 5 Area, PR

```
                          Response Factor Report  MS

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

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

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

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

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

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

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

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

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

6.8.2

6

Initial Calibration Verification

Job Number: JC18649 **Sample:** E2M3651-ICV3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83099.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	114	0.00	4.89
9	t	Phenol	2.092	1.671	20.1	97	0.00	4.63
12	t	2-Chlorophenol	1.576	1.405	10.9	109	0.00	4.73
19	t	2-Methylphenol	1.333	1.231	7.7	118	0.00	5.10
21	t	3&4-Methylphenol	1.404	1.298	7.5	119	0.00	5.22
24	I	Naphthalene-d8	1.000	1.000	0.0	109	0.00	6.02
29	t	2-Nitrophenol	0.199	0.187	6.0	103	0.00	5.65
30	t	2,4-Dimethylphenol	0.358	0.337	5.9	109	0.00	5.69
31	t	Benzoic acid	0.269	0.238	11.5	87	-0.01	5.79
33	t	2,4-Dichlorophenol	0.295	0.275	6.8	106	0.00	5.88
34	t	2,6-Dichlorophenol	0.288	0.267	7.3	108	0.00	6.11
43	t	4-Chloro-3-methylphenol	0.311	0.277	10.9	99	-0.01	6.62
47	I	Acenaphthene-d10	1.000	1.000	0.0	102	0.00	8.14
49	t	2,4,6-Trichlorophenol	0.315	0.310	1.6	107	0.00	7.15
50	t	2,4,5-Trichlorophenol	0.342	0.309	9.6	94	-0.01	7.19
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	78.254	21.7	76	0.00	8.24
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.155	0.142	8.4	91	0.00	8.36
64		2,3,4,6-Tetrachlorophenol	0.245	0.226	7.8	94	0.00	8.62
69	I	Phenanthrene-d10	1.000	1.000	0.0	97	0.00	10.34
70	t	4,6-Dinitro-2-methylpheno	0.129	0.128	0.8	84	0.00	9.01
76	t	Pentachlorophenol	0.130	0.126	3.1	90	0.00	10.07

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

Initial Calibration Verification

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3651-ICV3649
Lab FileID: 2M83100.D

Evaluate Continuing Calibration Report

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

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	113	0.00	4.90
3	t	Pyridine	1.648	1.508	8.5	107	0.08	2.88
10		Aniline	2.188	2.092	4.4	124	0.00	4.65
16	t	Benzyl alcohol	0.975	0.926	5.0	111	0.00	5.01
24	I	Naphthalene-d8	1.000	1.000	0.0	114	0.00	6.02
39	t	4-Chloroaniline	0.440	0.389	11.6	113	0.00	6.10
44	t	2-Methylnaphthalene	0.616	0.547	11.2	109	0.00	6.80
47	I	Acenaphthene-d10	1.000	1.000	0.0	113	0.00	8.14
54	t	2-Nitroaniline	0.311	0.277	10.9	101	0.00	7.54
58	t	3-Nitroaniline	0.336	0.301	10.4	99	0.00	8.09
62	t	Dibenzofuran	1.562	1.436	8.1	114	0.00	8.43
68	t	4-Nitroaniline	0.336	0.302	10.1	97	-0.01	8.97
69	I	Phenanthrene-d10	1.000	1.000	0.0	108	0.00	10.34
79	t	Carbazole	1.105	1.016	8.1	104	0.00	10.73

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

Initial Calibration Verification

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3651-ICV3649
Lab FileID: 2M83101.D

Evaluate Continuing Calibration Report

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

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	118	0.00	4.89
5	S	2-Fluorophenol	1.501	1.411	6.0	114	0.00	3.91
8	S	Phenol-d5	1.884	1.709	9.3	112	0.00	4.62
24	I	Naphthalene-d8	1.000	1.000	0.0	111	0.00	6.02
25	S	Nitrobenzene-d5	0.375	0.377	-0.5	118	0.00	5.35
47	I	Acenaphthene-d10	1.000	1.000	0.0	102	0.00	8.14
51	S	2-Fluorobiphenyl	1.269	1.290	-1.7	114	0.00	7.25
69	I	Phenanthrene-d10	1.000	1.000	0.0	95	0.00	10.34
73	S	2,4,6-Tribromophenol	0.103	0.101	1.9	91	0.00	9.29
83	I	Chrysene-d12	1.000	1.000	0.0	92	0.00	14.54
85	S	Terphenyl-d14	0.859	0.883	-2.8	97	0.00	12.91

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

Initial Calibration Verification

Job Number: JC18649 **Sample:** E2M3651-ICV3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83102.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	104	0.00	4.89
4	t	N-Nitrosodimethylamine	0.989	0.947	4.2	102	0.00	2.76
11	t	bis(2-Chloroethyl)ether	1.502	1.498	0.3	108	0.00	4.68
14	t	1,3-Dichlorobenzene	1.721	1.704	1.0	110	0.00	4.85
15	t	1,4-Dichlorobenzene	1.732	1.707	1.4	110	0.00	4.91
17	t	1,2-Dichlorobenzene	1.608	1.623	-0.9	115	0.00	5.03
20	t	2,2'-oxybis(1-Chloropropa	1.606	1.423	11.4	112	0.00	5.11
22	t	n-Nitroso-di-n-propylamin	0.955	0.964	-0.9	116	0.00	5.22
23	t	Hexachloroethane	0.478	0.496	-3.8	114	0.00	5.32
24	I	Naphthalene-d8	1.000	1.000	0.0	99	0.00	6.02
26	t	Nitrobenzene	0.380	0.378	0.5	104	0.00	5.37
28	t	Isophorone	0.665	0.712	-7.1	111	0.00	5.57
32	t	bis(2-Chloroethoxy)methan	0.422	0.411	2.6	104	0.00	5.77
36	t	1,2,4-Trichlorobenzene	0.311	0.321	-3.2	109	0.00	5.96
38	t	Naphthalene	1.170	1.164	0.5	107	0.00	6.04
42	t	Hexachlorobutadiene	0.142	0.151	-6.3	112	0.00	6.17
47	I	Acenaphthene-d10	1.000	1.000	0.0	93	0.00	8.14
48	t	Hexachlorocyclopentadiene	0.258	0.244	5.5	88	0.00	7.00
52	t	2-Chloronaphthalene	1.150	1.182	-2.8	104	0.00	7.40
55	t	Dimethylphthalate	1.277	1.286	-0.7	99	0.00	7.78
56	t	Acenaphthylene	1.868	1.871	-0.2	98	0.00	7.94
57	t	2,6-Dinitrotoluene	0.274	0.284	-3.6	93	0.00	7.86
59	t	Acenaphthene	1.180	1.176	0.3	101	0.00	8.19
63	t	2,4-Dinitrotoluene	0.369	0.360	2.4	88	0.00	8.42
65	t	Diethylphthalate	1.229	1.204	2.0	94	0.00	8.79
66	t	Fluorene	1.282	1.245	2.9	98	0.00	8.93
67	t	4-Chlorophenyl-phenylethe	0.527	0.521	1.1	99	0.00	8.94
69	I	Phenanthrene-d10	1.000	1.000	0.0	88	0.00	10.34
71	t	n-Nitrosodiphenylamine	0.567	0.599	-5.6	96	0.00	9.12
72	t	1,2-Diphenylhydrazine	0.815	0.871	-6.9	96	0.00	9.17
74	t	4-Bromophenyl-phenylether	0.196	0.212	-8.2	98	0.00	9.68
75	t	Hexachlorobenzene	0.225	0.232	-3.1	96	0.00	9.76
77	t	Phenanthrene	1.219	1.215	0.3	95	0.00	10.38
78	t	Anthracene	1.198	1.198	0.0	92	0.00	10.45
80	t	Di-n-butylphthalate	1.331	1.356	-1.9	90	0.00	11.35
81	t	Fluoranthene	1.106	1.111	-0.5	92	0.00	12.25
83	I	Chrysene-d12	1.000	1.000	0.0	82	0.00	14.55
84	t	Pyrene	1.399	1.515	-8.3	93	0.00	12.60

Initial Calibration Verification

Job Number: JC18649 **Sample:** E2M3651-ICV3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83102.D
Project: BMSMC, Building 5 Area, PR

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

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

Initial Calibration Verification

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3651-ICV3651
Lab FileID: 2M83102A.D

Evaluate Continuing Calibration Report

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

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
104	Acenaphthene-d10a	1.000	1.000	0.0	96	0.00	8.14
105	1,2,4,5-Tetrachlorobenzen	0.487	0.496	-1.8	106	0.00	7.00
106	Chrysene-d12a	1.000	1.000	0.0	70	0.00	14.55
107	Benzidine	0.504	0.448	11.1	54	0.00	12.51

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

Initial Calibration Verification

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3651-ICV3651
Lab FileID: 2M83103A.D

Evaluate Continuing Calibration Report

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

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	107	0.00	4.89
103	Benzaldehyde	1.082	1.144	-5.7	116	0.00	4.56
109	Phenanthrene-d10a	1.000	1.000	0.0	91	0.00	10.34
110	Atrazine	0.087	0.102	-17.2	97	0.00	9.97

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

Initial Calibration Verification

Job Number: JC18649 **Sample:** E2M3651-ICV3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83103.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	118	0.00	4.89
2	t	1,4-Dioxane	0.669	0.621	7.2	117	0.01	2.48
6	t	Indene	2.468	2.489	-0.9	136	0.00	5.10
7	t	Cumene	3.637	3.349	7.9	116	0.00	4.29
13	t	Decane	1.205	1.069	11.3	117	0.00	4.76
18	t	Acetophenone	1.937	1.842	4.9	126	0.00	5.22
24	I	Naphthalene-d8	1.000	1.000	0.0	129	0.00	6.02
27	t	Quinoline	0.768	0.607	21.0	107	-0.01	6.39
40	t	2,3-Dichloroaniline	0.352	0.247	29.8	98	0.00	7.14
41	t	Caprolactam	0.138	0.105	23.9	98	-0.03	6.45
45	t	1-Methylnaphthalene	0.641	0.503	21.5	109	0.00	6.92
46	t	Dimethylnaphthalene	0.644	0.503	21.9	109	0.00	7.58
47	I	Acenaphthene-d10	1.000	1.000	0.0	103	0.00	8.14
53	t	Biphenyl	1.520	1.469	3.4	109	0.00	7.37
69	I	Phenanthrene-d10	1.000	1.000	0.0	98	0.00	10.34
82	t	Octadecane	0.483	0.493	-2.1	103	0.00	10.27
92	I	Perylene-d12	1.000	1.000	0.0	85	0.00	16.67
100	t	7,12-Dimethylbenz(a)anthr	0.550	0.545	0.9	88	-0.01	16.14

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

Initial Calibration Verification

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3651-ICV3651
Lab FileID: 2M83104.D

Evaluate Continuing Calibration Report

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

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
112	Naphthalene-d8a	1.000	1.000	0.0	93	0.00	6.02
113	Hydroquinone	0.304	0.353	-16.1	98	0.00	6.45

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

Initial Calibration Verification

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3651-ICV3649
Lab FileID: 2M83105.D

Evaluate Continuing Calibration Report

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

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I	Chrysene-d12	1.000	1.000	0.0	108	0.00	14.54
89 t	3,3'-Dichlorobenzidine	0.429	0.392	8.6	99	0.00	14.53

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

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E2M3657-CC3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83243.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3657\2m83243.D          Vial: 2
Acq On    : 21 Apr 2016   9:18 am                    Operator: ashleyn
Sample    : cc3649-25                                Inst    : MS
Misc      : op92330,e2m3657                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 20:20:49 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	-0.03	4.86
2	t	1,4-Dioxane	0.669	0.589	12.0	86	-0.03	2.44
3	t	Pyridine	1.648	1.527	7.3	88	-0.04	2.76
4	t	N-Nitrosodimethylamine	0.989	0.954	3.5	92	-0.03	2.73
5	S	2-Fluorophenol	1.501	1.485	1.1	93	-0.12	3.89
6	t	Indene	2.468	2.464	0.2	93	-0.03	5.07
7	t	Cumene	3.637	3.612	0.7	94	-0.03	4.26
8	S	Phenol-d5	1.884	1.883	0.1	93	-0.02	4.60
9	t	Phenol	2.092	2.032	2.9	91	-0.02	4.61
10		Aniline	2.188	1.868	14.6	79	-0.03	4.61
11	t	bis(2-Chloroethyl)ether	1.502	1.460	2.8	94	-0.03	4.65
12	t	2-Chlorophenol	1.576	1.590	-0.9	94	-0.03	4.71
13	t	Decane	1.205	1.226	-1.7	96	-0.03	4.73
14	t	1,3-Dichlorobenzene	1.721	1.729	-0.5	95	-0.03	4.82
15	t	1,4-Dichlorobenzene	1.732	1.710	1.3	93	-0.03	4.88
16	t	Benzyl alcohol	0.975	0.999	-2.5	95	-0.03	4.98
17	t	1,2-Dichlorobenzene	1.608	1.608	0.0	95	-0.03	5.00
18	t	Acetophenone	1.937	1.992	-2.8	96	-0.03	5.19
19	t	2-Methylphenol	1.333	1.300	2.5	90	-0.03	5.07
20	t	2,2'-oxybis(1-Chloropropa	1.606	1.556	3.1	95	-0.03	5.08
21	t	3&4-Methylphenol	1.404	1.437	-2.4	94	-0.03	5.20
22	t	n-Nitroso-di-n-propylamin	0.955	1.040	-8.9	101	-0.04	5.18
23	t	Hexachloroethane	0.478	0.505	-5.6	99	-0.04	5.28
24	I	Naphthalene-d8	1.000	1.000	0.0	92	-0.04	5.99
25	S	Nitrobenzene-d5	0.375	0.389	-3.7	96	-0.04	5.32
26	t	Nitrobenzene	0.380	0.393	-3.4	98	-0.04	5.33
27	t	Quinoline	0.768	0.764	0.5	95	-0.05	6.36
28	t	Isophorone	0.665	0.689	-3.6	96	-0.04	5.54
29	t	2-Nitrophenol	0.199	0.218	-9.5	99	-0.03	5.62
30	t	2,4-Dimethylphenol	0.358	0.333	7.0	88	-0.03	5.66
31	t	Benzoic acid	0.269	0.290	-7.8	94	-0.05	5.75
32	t	bis(2-Chloroethoxy)methan	0.422	0.422	0.0	97	-0.04	5.73
33	t	2,4-Dichlorophenol	0.295	0.308	-4.4	98	-0.03	5.86
34	t	2,6-Dichlorophenol	0.288	0.298	-3.5	96	-0.04	6.08
35		1,3,5-Trichlorobenzene	0.322	0.327	-1.6	96	-0.04	5.63
36	t	1,2,4-Trichlorobenzene	0.311	0.320	-2.9	97	-0.04	5.93
37		1,2,3-Trichlorobenzene	0.301	0.313	-4.0	99	-0.04	6.16
38	t	Naphthalene	1.170	1.154	1.4	94	-0.04	6.01
39	t	4-Chloroaniline	0.440	0.431	2.0	91	-0.04	6.06
40	t	2,3-Dichloroaniline	0.352	0.367	-4.3	98	-0.04	7.10
41	t	Caprolactam	0.138	0.152	-10.1	102	-0.05	6.43

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E2M3657-CC3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83243.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.142	0.154	-8.5	104	-0.04	6.14
43	t	4-Chloro-3-methylphenol	0.311	0.343	-10.3	102	-0.04	6.60
44	t	2-Methylnaphthalene	0.616	0.626	-1.6	96	-0.04	6.76
45	t	1-Methylnaphthalene	0.641	0.647	-0.9	95	-0.04	6.87
46	t	Dimethylnaphthalene	0.644	0.661	-2.6	96	-0.04	7.54
47	I	Acenaphthene-d10	1.000	1.000	0.0	94	-0.04	8.10
48	t	Hexachlorocyclopentadiene	0.258	0.234	9.3	81	-0.04	6.95
49	t	2,4,6-Trichlorophenol	0.315	0.346	-9.8	102	-0.04	7.11
50	t	2,4,5-Trichlorophenol	0.342	0.368	-7.6	101	-0.04	7.16
51	S	2-Fluorobiphenyl	1.269	1.270	-0.1	97	-0.04	7.21
52	t	2-Chloronaphthalene	1.150	1.163	-1.1	98	-0.04	7.36
53	t	Biphenyl	1.520	1.503	1.1	95	-0.04	7.33
54	t	2-Nitroaniline	0.311	0.349	-12.2	104	-0.04	7.49
55	t	Dimethylphthalate	1.277	1.364	-6.8	102	-0.05	7.74
56	t	Acenaphthylene	1.868	1.927	-3.2	97	-0.05	7.90
57	t	2,6-Dinitrotoluene	0.274	0.319	-16.4	106	-0.04	7.82
58	t	3-Nitroaniline	0.336	0.363	-8.0	97	-0.05	8.05
59	t	Acenaphthene	1.180	1.149	2.6	94	-0.05	8.14
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	49.258	1.5	93	-0.04	8.20
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.155	0.191	-23.2#	113	-0.03	8.34
62	t	Dibenzofuran	1.562	1.585	-1.5	98	-0.05	8.39
63	t	2,4-Dinitrotoluene	0.369	0.422	-14.4	101	-0.04	8.38
64		2,3,4,6-Tetrachlorophenol	0.245	0.284	-15.9	108	-0.04	8.58
65	t	Diethylphthalate	1.229	1.350	-9.8	105	-0.05	8.75
66	t	Fluorene	1.282	1.320	-3.0	98	-0.04	8.88
67	t	4-Chlorophenyl-phenylethe	0.527	0.574	-8.9	104	-0.05	8.90
68	t	4-Nitroaniline	0.336	0.334	0.6	89	-0.05	8.93
69	I	Phenanthrene-d10	1.000	1.000	0.0	97	-0.04	10.30
70	t	4,6-Dinitro-2-methylpheno	0.129	0.142	-10.1	98	-0.04	8.98
71	t	n-Nitrosodiphenylamine	0.567	0.615	-8.5	105	-0.05	9.08
72	t	1,2-Diphenylhydrazine	0.815	0.838	-2.8	100	-0.05	9.13
73	S	2,4,6-Tribromophenol	0.103	0.122	-18.4	111	-0.04	9.24
74	t	4-Bromophenyl-phenylether	0.196	0.223	-13.8	112	-0.05	9.63
75	t	Hexachlorobenzene	0.225	0.243	-8.0	106	-0.05	9.71
76	t	Pentachlorophenol	0.130	0.149	-14.6	105	-0.04	10.03
77	t	Phenanthrene	1.219	1.182	3.0	98	-0.05	10.33
78	t	Anthracene	1.198	1.209	-0.9	98	-0.05	10.41
79	t	Carbazole	1.105	1.126	-1.9	99	-0.05	10.68
80	t	Di-n-butylphthalate	1.331	1.501	-12.8	108	-0.05	11.30
81	t	Fluoranthene	1.106	1.167	-5.5	104	-0.05	12.20
82	t	Octadecane	0.483	0.519	-7.5	102	-0.05	10.22
83	I	Chrysene-d12	1.000	1.000	0.0	103	-0.05	14.50
84	t	Pyrene	1.399	1.361	2.7	101	-0.05	12.55
85	S	Terphenyl-d14	0.859	0.881	-2.6	107	-0.05	12.85
86	t	Butylbenzylphthalate	0.697	0.752	-7.9	110	-0.05	13.68
87		Butyl stearate	0.388	0.417	-7.5	106	-0.05	13.84
88	t	Benzo[a]anthracene	1.200	1.199	0.1	105	-0.05	14.48
89	t	3,3'-Dichlorobenzidine	0.429	0.473	-10.3	107	-0.05	14.48
90	t	Chrysene	1.239	1.200	3.1	103	-0.05	14.54
91	t	bis(2-Ethylhexyl)phthalat	0.943	1.024	-8.6	109	-0.05	14.65
92	I	Perylene-d12	1.000	1.000	0.0	105	-0.05	16.62
93	t	Di-n-octylphthalate	1.543	1.735	-12.4	114	-0.05	15.63

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E2M3657-CC3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83243.D
Project: BMSMC, Building 5 Area, PR

94	t	Benzo[b]fluoranthene	1.258	1.318	-4.8	111	-0.05	16.09
95	t	Benzo[k]fluoranthene	1.242	1.212	2.4	104	-0.06	16.13
96	t	Benzo[a]pyrene	1.117	1.162	-4.0	109	-0.05	16.54
97	t	Indeno[1,2,3-cd]pyrene	1.075	1.266	-17.8	123	-0.08	18.27
98	t	Dibenz(a,h)acridine	0.993	1.120	-12.8	113	-0.07	17.89
99	t	Dibenz[a,h]anthracene	1.216	1.272	-4.6	109	-0.08	18.31
100	t	7,12-Dimethylbenz(a)anthr	0.550	0.543	1.3	102	-0.06	16.09
101	t	Benzo[g,h,i]perylene	1.216	1.259	-3.5	110	-0.09	18.74

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m83098a.D M2M3649.M Thu Apr 21 13:15:34 2016

6.8.12

6

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E2M3657-CC3651
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83244.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3657\2m83244.D          Vial: 3
Acq On    : 21 Apr 2016   9:44 am                     Operator: ashleyn
Sample    : cc3651-25                                 Inst    : MS
Misc      : op92330,e2m3657                           Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 20:20:49 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	86	-0.03	4.86
103	Benzaldehyde	1.082	1.195	-10.4	92	-0.03	4.53
104	Acenaphthene-d10a	1.000	1.000	0.0	98	-0.04	8.10
105	1,2,4,5-Tetrachlorobenzen	0.487	0.462	5.1	95	-0.04	6.96
106	Chrysene-d12a	1.000	1.000	0.0	94	-0.05	14.50
107	Benzidine	0.504	0.526	-4.4	89	-0.05	12.46
108	Phenanthrene-d10a	1.000	1.000	0.0	93	-0.05	10.29
109	Atrazine	0.087	0.113	-29.9#	113	-0.05	9.92
110	Naphthalene-d8a	1.000	1.000	0.0	85	-0.04	5.99
111	Hydroquinone	0.304	0.397	-30.6#	106	-0.03	6.42

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m83098a.D M2M3649.M Thu Apr 21 13:15:35 2016

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E2M3668-CC3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83437.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3668\2m83437.D          Vial: 2
Acq On    : 28 Apr 2016  11:04 am                    Operator: ashleyn
Sample    : cc3649-50                                Inst    : MS
Misc      : op93387,e2m3668                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Thu Apr 28 14:55:04 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	103	0.00	4.76
2	t	1,4-Dioxane	0.669	0.437	34.7#	72	-0.09	2.31
3	t	Pyridine	1.648	1.395	15.4	91	-0.09	2.64
4	t	N-Nitrosodimethylamine	0.989	0.815	17.6	88	-0.07	2.61
5	S	2-Fluorophenol	1.501	1.248	16.9	88	-0.01	3.79
6	t	Indene	2.468	2.450	0.7	117	0.00	4.96
7	t	Cumene	3.637	3.467	4.7	105	-0.02	4.16
8	S	Phenol-d5	1.884	1.782	5.4	102	0.00	4.51
9	t	Phenol	2.092	1.937	7.4	101	0.01	4.52
10		Aniline	2.188	2.189	-0.0	119	0.00	4.52
11	t	bis(2-Chloroethyl)ether	1.502	1.365	9.1	98	0.00	4.56
12	t	2-Chlorophenol	1.576	1.508	4.3	106	0.00	4.61
13	t	Decane	1.205	1.354	-12.4	130	0.00	4.63
14	t	1,3-Dichlorobenzene	1.721	1.617	6.0	104	0.00	4.72
15	t	1,4-Dichlorobenzene	1.732	1.635	5.6	105	0.00	4.77
16	t	Benzyl alcohol	0.975	0.958	1.7	106	0.00	4.87
17	t	1,2-Dichlorobenzene	1.608	1.515	5.8	107	0.00	4.89
18	t	Acetophenone	1.937	2.018	-4.2	121	0.00	5.08
19	t	2-Methylphenol	1.333	1.347	-1.1	116	0.01	4.98
20	t	2,2'-oxybis(1-Chloropropa	1.606	1.706	-6.2	134	0.00	4.97
21	t	3&4-Methylphenol	1.404	1.486	-5.8	123	0.01	5.10
22	t	n-Nitroso-di-n-propylamin	0.955	1.076	-12.7	129	0.00	5.08
23	t	Hexachloroethane	0.478	0.493	-3.1	113	0.00	5.17
24	I	Naphthalene-d8	1.000	1.000	0.0	107	0.00	5.87
25	S	Nitrobenzene-d5	0.375	0.396	-5.6	119	0.00	5.21
26	t	Nitrobenzene	0.380	0.396	-4.2	118	0.00	5.23
27	t	Quinoline	0.768	0.763	0.7	112	0.00	6.24
28	t	Isophorone	0.665	0.704	-5.9	118	0.00	5.43
29	t	2-Nitrophenol	0.199	0.203	-2.0	111	0.00	5.51
30	t	2,4-Dimethylphenol	0.358	0.373	-4.2	119	0.00	5.55
31	t	Benzoic acid	0.269	0.291	-8.2	105	0.03	5.68
32	t	bis(2-Chloroethoxy)methan	0.422	0.401	5.0	110	0.00	5.62
33	t	2,4-Dichlorophenol	0.295	0.297	-0.7	112	0.00	5.75
34	t	2,6-Dichlorophenol	0.288	0.289	-0.3	115	0.00	5.96
35		1,3,5-Trichlorobenzene	0.322	0.309	4.0	112	0.00	5.52
36	t	1,2,4-Trichlorobenzene	0.311	0.301	3.2	111	0.00	5.81
37		1,2,3-Trichlorobenzene	0.301	0.295	2.0	113	0.00	6.04
38	t	Naphthalene	1.170	1.101	5.9	110	0.00	5.89
39	t	4-Chloroaniline	0.440	0.458	-4.1	124	0.00	5.95
40	t	2,3-Dichloroaniline	0.352	0.370	-5.1	122	0.02	6.98
41	t	Caprolactam	0.138	0.172	-24.6#	134	0.00	6.32

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E2M3668-CC3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83437.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.142	0.152	-7.0	122	0.00	6.01
43	t	4-Chloro-3-methylphenol	0.311	0.343	-10.3	121	0.03	6.49
44	t	2-Methylnaphthalene	0.616	0.609	1.1	113	0.00	6.63
45	t	1-Methylnaphthalene	0.641	0.635	0.9	115	0.01	6.75
46	t	Dimethylnaphthalene	0.644	0.664	-3.1	119	0.02	7.40
47	I	Acenaphthene-d10	1.000	1.000	0.0	116	0.00	7.96
48	t	Hexachlorocyclopentadiene	0.258	0.258	0.0	115	-0.02	6.82
49	t	2,4,6-Trichlorophenol	0.315	0.322	-2.2	126	0.00	6.99
50	t	2,4,5-Trichlorophenol	0.342	0.346	-1.2	120	0.00	7.04
51	S	2-Fluorobiphenyl	1.269	1.176	7.3	118	0.00	7.08
52	t	2-Chloronaphthalene	1.150	1.069	7.0	117	0.00	7.23
53	t	Biphenyl	1.520	1.397	8.1	117	-0.01	7.20
54	t	2-Nitroaniline	0.311	0.368	-18.3	138	0.00	7.37
55	t	Dimethylphthalate	1.277	1.279	-0.2	123	0.00	7.61
56	t	Acenaphthylene	1.868	1.827	2.2	119	0.00	7.77
57	t	2,6-Dinitrotoluene	0.274	0.299	-9.1	122	0.00	7.69
58	t	3-Nitroaniline	0.336	0.352	-4.8	119	0.00	7.92
59	t	Acenaphthene	1.180	1.107	6.2	119	0.00	8.01
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	96.385	3.6	113	0.02	8.08
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.155	0.204	-31.6#	147	0.05	8.23
62	t	Dibenzofuran	1.562	1.492	4.5	122	0.00	8.25
63	t	2,4-Dinitrotoluene	0.369	0.425	-15.2	130	0.02	8.26
64		2,3,4,6-Tetrachlorophenol	0.245	0.259	-5.7	123	0.02	8.45
65	t	Diethylphthalate	1.229	1.309	-6.5	128	0.01	8.62
66	t	Fluorene	1.282	1.293	-0.9	126	0.02	8.75
67	t	4-Chlorophenyl-phenylethe	0.527	0.535	-1.5	127	0.01	8.76
68	t	4-Nitroaniline	0.336	0.362	-7.7	120	0.02	8.80
69	I	Phenanthrene-d10	1.000	1.000	0.0	123	0.00	10.15
70	t	4,6-Dinitro-2-methylpheno	0.129	0.147	-14.0	123	0.00	8.86
71	t	n-Nitrosodiphenylamine	0.567	0.556	1.9	126	-0.02	8.94
72	t	1,2-Diphenylhydrazine	0.815	0.855	-4.9	132	-0.02	8.99
73	S	2,4,6-Tribromophenol	0.103	0.117	-13.6	137	0.00	9.10
74	t	4-Bromophenyl-phenylether	0.196	0.205	-4.6	133	-0.01	9.48
75	t	Hexachlorobenzene	0.225	0.236	-4.9	137	0.00	9.57
76	t	Pentachlorophenol	0.130	0.130	0.0	119	0.01	9.90
77	t	Phenanthrene	1.219	1.162	4.7	127	0.00	10.19
78	t	Anthracene	1.198	1.196	0.2	129	0.00	10.27
79	t	Carbazole	1.105	1.089	1.4	127	0.01	10.54
80	t	Di-n-butylphthalate	1.331	1.413	-6.2	131	0.02	11.15
81	t	Fluoranthene	1.106	1.144	-3.4	133	0.04	12.06
82	t	Octadecane	0.483	0.535	-10.8	139	0.00	10.08
83	I	Chrysene-d12	1.000	1.000	0.0	130	0.01	14.36
84	t	Pyrene	1.399	1.340	4.2	129	-0.02	12.41
85	S	Terphenyl-d14	0.859	0.852	0.8	132	-0.01	12.71
86	t	Butylbenzylphthalate	0.697	0.727	-4.3	133	0.00	13.54
87		Butyl stearate	0.388	0.449	-15.7	145	0.00	13.70
88	t	Benzo[a]anthracene	1.200	1.176	2.0	135	0.01	14.34
89	t	3,3'-Dichlorobenzidine	0.429	0.468	-9.1	142	0.01	14.34
90	t	Chrysene	1.239	1.152	7.0	127	0.00	14.39
91	t	bis(2-Ethylhexyl)phthalat	0.943	0.952	-1.0	127	0.01	14.50
92	I	Perylene-d12	1.000	1.000	0.0	108	0.00	16.48
93	t	Di-n-octylphthalate	1.543	1.849	-19.8	123	0.00	15.49

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E2M3668-CC3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83437.D
Project: BMSMC, Building 5 Area, PR

94	t	Benzo[b]fluoranthene	1.258	1.348	-7.2	123	0.00	15.96
95	t	Benzo[k]fluoranthene	1.242	1.245	-0.2	113	0.00	16.00
96	t	Benzo[a]pyrene	1.117	1.148	-2.8	113	0.00	16.40
97	t	Indeno[1,2,3-cd]pyrene	1.075	1.070	0.5	103	-0.05	18.08
98	t	Dibenz(a,h)acridine	0.993	0.951	4.2	100	-0.04	17.71
99	t	Dibenz[a,h]anthracene	1.216	1.051	13.6	94	0.11	18.12
100	t	7,12-Dimethylbenz(a)anthr	0.550	0.630	-14.5	130	0.00	15.96
101	t	Benzo[g,h,i]perylene	1.216	1.019	16.2	92	-0.07	18.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m83073.D M2M3649.M Thu Apr 28 15:11:14 2016

6.8.14

6

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E2M3668-CC3651
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83438.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3668\2m83438.D          Vial: 3
Acq On    : 28 Apr 2016  11:37 am                     Operator: ashleyn
Sample    : cc3651-50                                 Inst    : MS
Misc      : op93387,e2m3668                           Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Thu Apr 28 14:55:04 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	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	99	0.00	4.76
103	Benzaldehyde	1.082	1.045	3.4	98	0.02	4.43
104	Acenaphthene-d10a	1.000	1.000	0.0	124	0.00	7.96
105	1,2,4,5-Tetrachlorobenzen	0.487	0.431	11.5	118	0.02	6.84
106	Chrysene-d12a	1.000	1.000	0.0	124	0.00	14.35
107	Benzidine	0.504	0.556	-10.3	118	0.01	12.31
108	Phenanthrene-d10a	1.000	1.000	0.0	121	0.00	10.15
109	Atrazine	0.087	0.108	-24.1#	136	0.03	9.78
110	Naphthalene-d8a	1.000	1.000	0.0	105	0.00	5.87
111	Hydroquinone	0.304	0.363	-19.4	113	0.07	6.32

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m83073.D M2M3649.M Thu Apr 28 15:11:15 2016

Initial Calibration Summary

Job Number: JC18649 **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: JC18649 **Sample:** E2P2547-ICC2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58365.D
Project: BMSMC, Building 5 Area, PR

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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: JC18649 **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 Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2P2548-ICC2548
Lab FileID: 2P58376.D

Response Factor Report MS2P

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

Calibration Files
2   =2p58380.D  5   =2p58379.D  25  =2p58377.D  80  =2p58375.D
100 =2p58374.D  50  =2p58376.D  1   =2p58381.D  10  =2p58378.D

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

102) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
103) Benzaldehyde 1.216 1.286 1.122 0.858       1.045 1.281 1.174 1.140  13.26

104) I   Naphthalene-d8       ----------------ISTD---------------------
105) Hydroquinone       0.263 0.348 0.351 0.344 0.352       0.298 0.326  11.37

106) I   Acenaphthene-d10     ----------------ISTD---------------------
107) Atrazine     0.157 0.179 0.169 0.166 0.159 0.167 0.157 0.165 0.165   4.39
108) 1,2,4,5-Tetr 0.621 0.648 0.578 0.549 0.529 0.567 0.672 0.581 0.593   8.32

109) I   Chrysene-d12         ----------------ISTD---------------------
110) Benzidine    0.485 0.600 0.547 0.339       0.462       0.580 0.502  19.16

111) I   Phenanthrene-d10     ----------------ISTD---------------------
112) 1-chloroocta 0.473 0.528 0.474 0.418 0.405 0.450 0.463 0.488 0.462   8.41
113) O-terphenyl  0.536 0.560 0.500 0.483 0.478 0.497 0.573 0.514 0.518   6.81

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

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

Initial Calibration Verification

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2P2548-ICV2547
Lab FileID: 2P58384.D

Evaluate Continuing Calibration Report

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

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

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

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

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

Initial Calibration Verification

Job Number: JC18649 **Sample:** E2P2548-ICV2548
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58385A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2548\2p58385a.D          Vial: 13
Acq On    : 20 Apr 2016  12:14 am                     Operator: sarad
Sample    : icv2548-50                                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.
106 I	Acenaphthene-d10a	1.000	1.000	0.0	64	0.00	7.41
108	1,2,4,5-Tetrachlorobenzen	0.593	0.647	-9.1	73	0.00	6.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58365aa.D M2P2547.M Wed Apr 20 16:36:25 2016 RPT1

Initial Calibration Verification

Job Number: JC18649 **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: JC18649 **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

6.8.20

6

Initial Calibration Verification

Job Number: JC18649 **Sample:** E2P2548-ICV2548
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58386A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2548\2p58386a.D          Vial: 14
Acq On    : 20 Apr 2016  12:36 am                     Operator: sarad
Sample    : icv2548-50                                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.
102 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	72	0.00	4.91
103	Benzaldehyde	1.140	1.170	-2.6	80	0.00	4.55
104 I	Naphthalene-d8a	1.000	1.000	0.0	70	0.00	5.97
106 I	Acenaphthene-d10a	1.000	1.000	0.0	73	0.00	7.41
107	Atrazine	0.165	0.161	2.4	70	-0.01	8.48

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58365aa.D M2P2547.M Wed Apr 20 16:36:29 2016 RPT1

Initial Calibration Verification

Job Number: JC18649 **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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2P2548-ICV2548
Lab FileID: 2P58387.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2548\2p58387.D          Vial: 15
Acq On    : 20 Apr 2016  12:59 am                   Operator: sarad
Sample    : icv2548-50                              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.
104 I	Naphthalene-d8a	1.000	1.000	0.0	74	0.00	5.97
105	Hydroquinone	0.326	0.360	-10.4	76	-0.02	6.30

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58365aa.D M2P2547.M Wed Apr 20 16:36:31 2016 RPT1

Initial Calibration Verification

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2P2548-ICV2547
Lab FileID: 2P58388.D

Evaluate Continuing Calibration Report

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

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

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

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

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

Initial Calibration Verification

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2P2548-ICV2548
Lab FileID: 2P58388A.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\2P2548\2p58388a.D          Vial: 16
  Acq On    : 20 Apr 2016   1:21 am                    Operator: sarad
  Sample    : icv2548-50                               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.
109 I	Chrysene-d12a	1.000	1.000	0.0	87	0.00	12.13
110	Benzidine	0.502	0.788	-57.0#	149	0.00	10.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58365aa.D M2P2547.M Wed Apr 20 16:36:35 2016 RPT1

Initial Calibration Verification

Job Number: JC18649 **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: JC18649 **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

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E2P2552-CC2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58442.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2552\2p58442.D          Vial: 2
Acq On    : 21 Apr 2016  10:13 am                   Operator: robertl1
Sample    : CC2547-50                               Inst    : MS2P
Misc      : op92038,e2p2552                         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 :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	-0.05	4.86
2	t	1,4-Dioxane	0.735	0.703	4.4	83	-0.08	2.19
3	t	Pyridine	1.818	1.689	7.1	79	-0.10	2.52
4	t	N-Nitrosodimethylamine	1.075	1.015	5.6	80	-0.08	2.49
5	S	2-Fluorophenol	1.620	1.535	5.2	83	-0.05	3.74
6	t	Indene	2.246	1.976	12.0	87	-0.05	5.07
7	t	Cumene	3.547	3.394	4.3	86	-0.05	4.19
8	S	Phenol-d5	1.899	1.751	7.8	82	-0.03	4.56
9	t	Phenol	2.012	1.872	7.0	81	-0.03	4.57
10		Aniline	2.311	1.958	15.3	81	-0.05	4.58
11	t	bis(2-Chloroethyl)ether	1.418	1.236	12.8	81	-0.05	4.65
12	t	2-Chlorophenol	1.468	1.327	9.6	85	-0.04	4.69
13	t	Decane	2.186	1.886	13.7	83	-0.05	4.73
14	t	1,3-Dichlorobenzene	1.613	1.496	7.3	88	-0.05	4.81
15	t	1,4-Dichlorobenzene	1.588	1.476	7.1	90	-0.05	4.87
16	t	Benzyl alcohol	0.919	0.813	11.5	83	-0.04	4.98
17	t	1,2-Dichlorobenzene	1.467	1.358	7.4	90	-0.05	5.00
18	t	Acetophenone	1.802	1.527	15.3	88	-0.05	5.20
19	t	2-Methylphenol	1.259	1.069	15.1	84	-0.04	5.08
20	t	2,2'-oxybis(1-Chloropropa	0.413	0.365	11.6	88	-0.05	5.10
21	t	3&4-Methylphenol	1.314	1.097	16.5	85	-0.04	5.21
22	t	n-Nitroso-di-n-propylamin	0.957	0.765	20.1#	85	-0.04	5.21
23	t	Hexachloroethane	0.482	0.471	2.3	94	-0.05	5.28
24	I	Naphthalene-d8	1.000	1.000	0.0	88	-0.05	5.92
25	S	Nitrobenzene-d5	0.394	0.374	5.1	88	-0.05	5.32
26	t	Nitrobenzene	0.398	0.359	9.8	85	-0.05	5.34
27	t	Quinoline	0.709	0.669	5.6	89	-0.04	6.22
28	t	Isophorone	0.713	0.654	8.3	86	-0.04	5.54
29	t	2-Nitrophenol	0.197	0.199	-1.0	90	-0.04	5.61
30	t	2,4-Dimethylphenol	0.350	0.320	8.6	88	-0.04	5.64
31	t	Benzoic acid	0.274	0.306	-11.7	91	0.05	5.76
32	t	bis(2-Chloroethoxy)methan	0.443	0.390	12.0	85	-0.05	5.72
33	t	2,4-Dichlorophenol	0.301	0.300	0.3	91	-0.04	5.80
34	t	2,6-Dichlorophenol	0.284	0.271	4.6	91	-0.04	5.99
35		1,3,5-Trichlorobenzene	0.346	0.334	3.5	91	-0.05	5.61
36	t	1,2,4-Trichlorobenzene	0.332	0.323	2.7	91	-0.05	5.87
37		1,2,3-Trichlorobenzene	0.309	0.295	4.5	92	-0.05	6.06
38	t	Naphthalene	1.030	0.958	7.0	90	-0.05	5.94
39	t	4-Chloroaniline	0.445	0.393	11.7	85	-0.04	5.99
40	t	2,3-Dichloroaniline	0.369	0.343	7.0	90	-0.05	6.73
41	t	Caprolactam	0.115	0.115	0.0	90	0.00	6.30

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E2P2552-CC2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58442.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.164	0.170	-3.7	96	-0.05	6.03
43	t	4-Chloro-3-methylphenol	0.309	0.301	2.6	89	-0.03	6.39
44	t	2-Methylnaphthalene	0.576	0.561	2.6	91	-0.05	6.50
45	t	1-Methylnaphthalene	0.590	0.566	4.1	89	-0.05	6.58
46	t	Dimethylnaphthalene	0.581	0.552	5.0	93	-0.05	7.02
47	I	Acenaphthene-d10	1.000	1.000	0.0	94	-0.05	7.37
48	t	Hexachlorocyclopentadiene	0.322	0.339	-5.3	91	-0.05	6.63
49	t	2,4,6-Trichlorophenol	0.370	0.359	3.0	92	-0.04	6.74
50	t	2,4,5-Trichlorophenol	0.398	0.394	1.0	95	-0.04	6.77
51	S	2-Fluorobiphenyl	1.245	1.173	5.8	93	-0.05	6.81
52	t	2-Chloronaphthalene	1.174	1.049	10.6	90	-0.05	6.91
53	t	Biphenyl	1.473	1.352	8.2	91	-0.05	6.89
54	t	2-Nitroaniline	0.408	0.376	7.8	89	-0.05	6.99
55	t	Dimethylphthalate	1.275	1.166	8.5	90	-0.04	7.15
56	t	Acenaphthylene	1.911	1.822	4.7	93	-0.05	7.25
57	t	2,6-Dinitrotoluene	0.270	0.277	-2.6	92	-0.04	7.19
58	t	3-Nitroaniline	0.357	0.299	16.2	79	-0.04	7.33
59	t	Acenaphthene	1.171	1.078	7.9	91	-0.05	7.39
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	105.498	-5.5	98	-0.04	7.42
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.162	0.167	-3.1	90	-0.03	7.47
62	t	Dibenzofuran	1.547	1.409	8.9	92	-0.05	7.53
63	t	2,4-Dinitrotoluene	0.354	0.367	-3.7	94	-0.04	7.53
64		2,3,4,6-Tetrachlorophenol	0.303	0.321	-5.9	99	-0.05	7.63
65	t	Diethylphthalate	1.293	1.218	5.8	92	-0.05	7.73
66	t	Fluorene	1.285	1.188	7.5	92	-0.05	7.83
67	t	4-Chlorophenyl-phenylethe	0.562	0.523	6.9	93	-0.06	7.82
68	t	4-Nitroaniline	0.353	0.289	18.1	79	-0.04	7.85
69	I	Phenanthrene-d10	1.000	1.000	0.0	94	-0.06	8.70
70	t	4,6-Dinitro-2-methylpheno	0.117	0.131	-12.0	98	-0.04	7.87
71	t	n-Nitrosodiphenylamine	0.542	0.511	5.7	95	-0.05	7.93
72	t	1,2-Diphenylhydrazine	0.871	0.738	15.3	86	-0.05	7.96
73	S	2,4,6-Tribromophenol	0.089	0.100	-12.4	106	-0.05	8.03
74	t	4-Bromophenyl-phenylether	0.204	0.211	-3.4	101	-0.06	8.26
75	t	Hexachlorobenzene	0.218	0.225	-3.2	101	-0.05	8.32
76	t	Pentachlorophenol	0.147	0.159	-8.2	96	-0.05	8.51
77	t	Phenanthrene	1.175	1.094	6.9	94	-0.06	8.72
78	t	Anthracene	1.165	1.109	4.8	95	-0.06	8.78
79	t	Carbazole	1.096	1.001	8.7	90	-0.06	8.95
80	t	Di-n-butylphthalate	1.458	1.417	2.8	92	-0.06	9.36
81	t	Fluoranthene	1.276	1.305	-2.3	95	-0.07	10.08
82	t	Octadecane	0.514	0.481	6.4	91	-0.06	8.60
83	I	Chrysene-d12	1.000	1.000	0.0	99	-0.07	12.07
84	t	Pyrene	1.381	1.293	6.4	96	-0.07	10.37
85	S	Terphenyl-d14	0.805	0.783	2.7	98	-0.07	10.61
86	t	Butylbenzylphthalate	0.677	0.661	2.4	94	-0.07	11.32
87		Butyl stearate	0.579	0.524	9.5	86	-0.07	11.46
88	t	Benzo[a]anthracene	1.276	1.187	7.0	95	-0.07	12.05
89	t	3,3'-Dichlorobenzidine	0.432	0.339	21.5#	77	-0.07	12.05
90	t	Chrysene	1.154	1.079	6.5	97	-0.06	12.10
91	t	bis(2-Ethylhexyl)phthalat	0.847	0.808	4.6	93	-0.07	12.21
92	I	Perylene-d12	1.000	1.000	0.0	99	-0.07	14.07
93	t	Di-n-octylphthalate	1.819	1.805	0.8	92	-0.08	13.16

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E2P2552-CC2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58442.D
Project: BMSMC, Building 5 Area, PR

94	t	Benzo[b]fluoranthene	1.390	1.329	4.4	94	-0.06	13.57
95	t	Benzo[k]fluoranthene	1.214	1.141	6.0	97	-0.06	13.61
96	t	Benzo[a]pyrene	1.179	1.134	3.8	96	-0.06	14.00
97	t	Indeno[1,2,3-cd]pyrene	1.020	0.994	2.5	95	-0.09	15.59
98	t	Dibenz(a,h)acridine	0.930	0.871	6.3	93	-0.09	15.24
99	t	Dibenz[a,h]anthracene	1.021	0.978	4.2	93	-0.10	15.63
100	t	7,12-Dimethylbenz(a)anthr	0.566	0.557	1.6	94	-0.06	13.58
101	t	Benzo[g,h,i]perylene	1.078	1.014	5.9	92	-0.09	16.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58365aa.D M2P2547.M Thu Apr 21 15:36:28 2016 RPT1

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E2P2552-CC2548
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58443.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2552\2p58443.D          Vial: 3
Acq On    : 21 Apr 2016  10:48 am                   Operator: robertl1
Sample    : CC2548-50                               Inst    : MS2P
Misc      : op92038,e2p2552                         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 :  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	85	-0.05	4.86
103		Benzaldehyde	1.140	1.134	0.5	92	-0.05	4.49
104	I	Naphthalene-d8a	1.000	1.000	0.0	80	-0.05	5.92
105		Hydroquinone	0.326	0.402	-23.3#	91	-0.06	6.25
106	I	Acenaphthene-d10a	1.000	1.000	0.0	91	-0.05	7.36
107		Atrazine	0.165	0.176	-6.7	96	-0.06	8.43
108		1,2,4,5-Tetrachlorobenzen	0.593	0.581	2.0	94	-0.05	6.64
109	I	Chrysene-d12a	1.000	1.000	0.0	83	-0.08	12.06
110		Benzidine	0.502	0.270	46.2#	49#	-0.07	10.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58365aa.D M2P2547.M Thu Apr 21 15:36:30 2016 RPT1

Initial Calibration Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3M2855-ICC2855
Lab FileID: 3M60763A.D

```
                        Response Factor Report  MS3M

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

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

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

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

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

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

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

Initial Calibration Summary

Job Number: JC18649 **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
```

6.8.30

6

Initial Calibration Verification

Job Number: JC18649 **Sample:** E3M2855-ICV2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60772.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

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

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

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

Initial Calibration Verification

Job Number: JC18649 **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: JC18649
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: JC18649 **Sample:** E3M2856-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60776.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2856\3m60776.D          Vial: 2
Acq On    : 22 Apr 2016   9:20 am                    Operator: linseyk
Sample    : cc2855-1                                 Inst    : MS3M
Misc      : op93052a,e3m2856                         Multiplr: 1.00
MS Integration Params: lscint.p

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

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

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

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E3M2856-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60776.D
Project: BMSMC, Building 5 Area, PR

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

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

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E3M2863-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60898.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2863\3m60898.D          Vial: 2
Acq On    : 26 Apr 2016  10:09 pm                    Operator: juliusj
Sample    : cc2855-.5                                Inst    : MS3M
Misc      : op93292a,e3m2863                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2855SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 27 13:02:22 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	80	-0.07	10.55
2	t	1,4-dioxane	0.207	0.215	-3.9	81	-0.02	2.25
3	S	2-Fluorophenol	0.500	0.546	-9.2	85	-0.05	4.46
4	S	Phenol-d5	0.828	0.861	-4.0	79	-0.03	6.06
5		Phenol	0.893	0.903	-1.1	78	-0.02	6.08
6	t	bis(2-Chloroethyl)ether	0.675	0.659	2.4	74	-0.02	6.22
7	S	Nitrobenzene-d5	0.770	0.762	1.0	74	-0.05	7.66
8	t	Nitrobenzene	0.836	0.777	7.1	75	-0.05	7.70
9	t	Naphthalene	2.223	2.266	-1.9	83	-0.07	9.06
10	t	Hexachlorobutadiene	0.387	0.397	-2.6	79	-0.05	9.36
11	t	2-Methylnaphthalene	1.158	1.173	-1.3	83	-0.07	10.43
12	t	1-Methylnaphthalene	1.559	1.224	21.5#	70	-0.05	10.63
13		Hexachlorocyclopentadiene	0.308	0.363	-17.9	90	-0.05	10.77
14	I	Fluorene-d10	1.000	1.000	0.0	80	-0.08	13.56
15	S	2-Fluorobiphenyl	1.099	1.096	0.3	79	-0.08	11.22
16	t	Acenaphthylene	1.385	1.466	-5.8	79	-0.08	12.21
17	t	Acenaphthene	0.925	0.952	-2.9	80	-0.08	12.57
		----------	True	Calc.	% Drift	----------		
18	t	4,6-dinitro-2-methylpheno	2.500	1.887	24.5#	69	-0.08	13.77
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	1.110	1.087	2.1	76	-0.06	13.62
20	S	2,4,6-Tribromophenol	0.125	0.122	2.4	73	-0.06	14.11
21	I	Fluoranthene-d10	1.000	1.000	0.0	81	-0.10	17.76
22	t	Hexachlorobenzene	0.189	0.187	1.1	79	-0.09	14.70
		----------	True	Calc.	% Drift	----------		
23	t	Pentachlorophenol	2.500	2.263	9.5	75	-0.08	15.13
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	0.980	0.957	2.3	78	-0.10	15.52
25	t	Anthracene	0.865	0.883	-2.1	78	-0.10	15.63
26	t	Fluoranthene	1.231	1.082	12.1	80	-0.10	17.79
27	t	Pyrene	1.144	1.121	2.0	78	-0.08	18.19
28	S	Terphenyl-d14	0.580	0.596	-2.8	82	-0.08	18.58
29	t	Benzo[a]anthracene	1.097	1.027	6.4	81	-0.08	20.28
30	t	Chrysene	1.051	1.017	3.2	81	-0.10	20.33
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	81	-0.08	22.37

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E3M2863-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60898.D
Project: BMSMC, Building 5 Area, PR

32	t	Benzo[b]fluoranthene	1.331	1.291	3.0	82	-0.07	21.95
33	t	Benzo[k]fluoranthene	1.232	1.139	7.5	81	-0.08	21.98
34	t	Benzo[a]pyrene	1.240	1.212	2.3	85	-0.07	22.40
35	t	Indeno[1,2,3-cd]pyrene	1.260	1.315	-4.4	84	-0.08	23.88
36	t	Dibenz[a,h]anthracene	1.039	1.039	0.0	86	-0.08	23.94
37	t	Benzo[g,h,i]perylene	1.095	1.120	-2.3	84	-0.10	24.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m60764a.D M3M2855SIM.M Wed Apr 27 14:00:35 2016 RPT1

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E3M2864-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60905.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2864\3m60905.D          Vial: 2
Acq On    : 27 Apr 2016   9:19 am                    Operator: linseyk
Sample    : cc2855-1                                 Inst    : MS3M
Misc      : op93292a,e3m2864                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2855SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 27 14:02:45 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	88	-0.07	10.55
2	t	1,4-dioxane	0.207	0.203	1.9	86	-0.03	2.24
3	S	2-Fluorophenol	0.500	0.510	-2.0	88	-0.06	4.45
4	S	Phenol-d5	0.828	0.819	1.1	85	-0.04	6.05
5		Phenol	0.893	0.864	3.2	82	-0.04	6.06
6	t	bis(2-Chloroethyl)ether	0.675	0.599	11.3	75	-0.04	6.21
7	S	Nitrobenzene-d5	0.770	0.719	6.6	79	-0.07	7.64
8	t	Nitrobenzene	0.836	0.807	3.5	83	-0.07	7.68
9	t	Naphthalene	2.223	1.970	11.4	79	-0.07	9.06
10	t	Hexachlorobutadiene	0.387	0.416	-7.5	91	-0.06	9.34
11	t	2-Methylnaphthalene	1.158	1.258	-8.6	92	-0.07	10.43
12	t	1-Methylnaphthalene	1.559	1.433	8.1	90	-0.07	10.61
13		Hexachlorocyclopentadiene	0.308	0.324	-5.2	81	-0.07	10.75
14	I	Fluorene-d10	1.000	1.000	0.0	90	-0.10	13.54
15	S	2-Fluorobiphenyl	1.099	1.033	6.0	84	-0.08	11.22
16	t	Acenaphthylene	1.385	1.330	4.0	78	-0.10	12.20
17	t	Acenaphthene	0.925	0.878	5.1	80	-0.10	12.55
		----------	True	Calc.	% Drift		----------	
18	t	4,6-dinitro-2-methylpheno	5.000	4.190	16.2	72	-0.08	13.77
		----------	AvgRF	CCRF	% Dev		----------	
19	t	Fluorene	1.110	1.101	0.8	83	-0.08	13.60
20	S	2,4,6-Tribromophenol	0.125	0.124	0.8	84	-0.08	14.09
21	I	Fluoranthene-d10	1.000	1.000	0.0	82	-0.10	17.76
22	t	Hexachlorobenzene	0.189	0.195	-3.2	84	-0.11	14.69
		----------	True	Calc.	% Drift		----------	
23	t	Pentachlorophenol	5.000	4.337	13.3	68	-0.09	15.12
		----------	AvgRF	CCRF	% Dev		----------	
24	t	Phenanthrene	0.980	0.974	0.6	80	-0.11	15.51
25	t	Anthracene	0.865	0.889	-2.8	77	-0.11	15.61
26	t	Fluoranthene	1.231	1.098	10.8	78	-0.11	17.78
27	t	Pyrene	1.144	1.090	4.7	75	-0.10	18.18
28	S	Terphenyl-d14	0.580	0.596	-2.8	86	-0.10	18.57
29	t	Benzo[a]anthracene	1.097	0.901	17.9	69	-0.10	20.27
30	t	Chrysene	1.051	0.964	8.3	73	-0.10	20.33
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	81	-0.10	22.35

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E3M2864-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60905.D
Project: BMSMC, Building 5 Area, PR

32	t	Benzo[b]fluoranthene	1.331	1.235	7.2	74	-0.08	21.93
33	t	Benzo[k]fluoranthene	1.232	1.127	8.5	74	-0.08	21.98
34	t	Benzo[a]pyrene	1.240	1.096	11.6	73	-0.08	22.38
35	t	Indeno[1,2,3-cd]pyrene	1.260	1.227	2.6	74	-0.08	23.88
36	t	Dibenz[a,h]anthracene	1.039	1.059	-1.9	80	-0.10	23.92
37	t	Benzo[g,h,i]perylene	1.095	1.078	1.6	76	-0.12	24.24

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m60763a.D M3M2855SIM.M Thu Apr 28 10:31:37 2016 RPT1

Initial Calibration Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4M2881-ICC2881
Lab FileID: 4M64724.D

```
                    Response Factor Report  GCMS4M

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

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

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

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

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

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

Initial Calibration Summary

Job Number: JC18649 **Sample:** E4M2881-ICC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64724.D
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

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

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

Initial Calibration Verification

Job Number: JC18649
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: JC18649 **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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4M2881-ICV2881
Lab FileID: 4M64733.D

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

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

Initial Calibration Verification

Job Number: JC18649
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: JC18649 **Sample:** E4M2889-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64879.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2889\4m64879.D          Vial: 2
Acq On    : 21 Apr 2016  10:20 am                     Operator: linseyk
Sample    : cc2881-.5                                 Inst    : GCMS4M
Misc      : op90303a,e4m2889                          Multiplr: 1.00
MS Integration Params: lscint.p

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	118	0.05	10.75
2	S	2-Fluorophenol	0.524	0.648	-23.7#	154	0.05	4.77
3	S	Phenol-d5	0.881	1.098	-24.6#	153	0.04	6.35
4	t	Phenol	0.902	1.111	-23.2#	149	0.06	6.38
5	t	bis(2-Chloroethyl)ether	0.680	0.776	-14.1	142	0.06	6.46
6	S	Nitrobenzene-d5	0.790	1.018	-28.9#	155	0.04	7.88
7	t	Naphthalene	2.251	2.790	-23.9#	153	0.06	9.27
8	t	Hexachlorobutadiene	0.556	0.716	-28.8#	159	0.04	9.57
9	t	2-Methylnaphthalene	0.979	1.461	-49.2#	184	0.05	10.63
		----------	True	Calc.	% Drift	----------		
10	t	Hexachlorocyclopentadiene	1.000	1.434	-43.4#	182	0.05	10.98
		----------	AvgRF	CCRF	% Dev	----------		
11	S	2-Fluorobiphenyl	1.155	1.724	-49.3#	208#	0.05	11.41
12	I	Fluorene-d10	1.000	1.000	0.0	117	0.07	13.75
13	t	Acenaphthylene	0.917	1.304	-42.2#	152	0.04	12.39
14	t	Acenaphthene	0.590	0.764	-29.5#	143	0.04	12.74
15	t	Dibenzofuran	0.879	1.094	-24.5#	141	0.07	13.12
16	t	Fluorene	1.067	1.149	-7.7	122	0.07	13.80
17	S	2,4,6-Tribromophenol	0.213	0.295	-38.5#	151	0.07	14.30
18	t	Hexachlorobenzene	0.418	0.580	-38.8#	159	0.07	14.90
19	t	Pentachlorophenol	0.171	0.312	-82.5#	186	0.07	15.33
20	t	Phenanthrene	1.438	1.985	-38.0#	159	0.05	15.69
21	t	Anthracene	1.362	1.996	-46.5#	162	0.07	15.80
22	I	Fluoranthene-d10	1.000	1.000	0.0	160	0.06	17.92
23	t	Fluoranthene	1.080	1.020	5.6	144	0.06	17.96
24	t	Pyrene	1.065	1.172	-10.0	174	0.04	18.34
25	S	Terphenyl-d14	0.540	0.531	1.7	149	0.04	18.71
26	t	Benzo[a]anthracene	0.987	1.047	-6.1	170	0.06	20.43
27	t	Chrysene	0.966	0.993	-2.8	166	0.04	20.48
28	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	158	0.05	22.52
29	t	Benzo[b]fluoranthene	1.439	1.411	1.9	152	0.05	22.10
30	t	Benzo[k]fluoranthene	1.205	1.292	-7.2	166	0.05	22.14
31	t	Benzo[a]pyrene	1.193	1.248	-4.6	161	0.04	22.55
32	t	Indeno[1,2,3-cd]pyrene	1.492	1.528	-2.4	159	0.06	24.09
33	t	Dibenz[a,h]anthracene	1.201	1.156	3.7	146	0.04	24.12
34	t	Benzo[g,h,i]perylene	1.260	1.303	-3.4	160	0.06	24.48

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E4M2889-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64879.D
Project: BMSMC, Building 5 Area, PR

```
35 I   1-Methylnaphthalene-d10a    1.000   1.000      0.0  118   0.05   10.75

           ----------------------- True    Calc.   % Drift  ------------
36 t   1,4-Dioxane                          ----------NA----------

           ----------------------- AvgRF   CCRF     % Dev   -------------
37 t   1-Methylnaphthalene         0.935   1.582    -69.2# 226#  0.05   10.82

38 I   Fluorene-d10a               1.000   1.000      0.0  117   0.07   13.75

           ----------------------- True    Calc.   % Drift  ------------
39 t   4,6-dinitro-2-methylpheno   2.500   3.858    -54.3# 223   0.05   13.96

           ----------------------- AvgRF   CCRF     % Dev   -------------
40 t   1,2-Diphenylhydrazine       0.947   1.300    -37.3# 157   0.07   14.15
41 t   n-nitrosodiphenylamine      0.702   0.854    -21.7# 137   0.07   14.11
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range               SPCC's out = 0  CCC's out = 0
    4m64723a.D M4M2881SIM.M       Thu Apr 21 13:29:12 2016   MANAGER
```

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E4M2890-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64888.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2890\4m64888.D          Vial: 2
Acq On    : 21 Apr 2016   3:11 pm                    Operator: linseyk
Sample    : cc2881-1                                 Inst    : GCMS4M
Misc      : op93236a,e4m2890                         Multiplr: 1.00
MS Integration Params: lscint.p

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	74	0.05	10.75
2	S	2-Fluorophenol	0.524	0.538	-2.7	72	0.03	4.75
3	S	Phenol-d5	0.881	0.918	-4.2	72	0.04	6.35
4	t	Phenol	0.902	0.959	-6.3	73	0.04	6.37
5	t	bis(2-Chloroethyl)ether	0.680	0.692	-1.8	70	0.04	6.45
6	S	Nitrobenzene-d5	0.790	0.872	-10.4	77	0.04	7.88
7	t	Naphthalene	2.251	2.347	-4.3	74	0.06	9.27
8	t	Hexachlorobutadiene	0.556	0.596	-7.2	75	0.04	9.57
9	t	2-Methylnaphthalene	0.979	1.336	-36.5#	102	0.05	10.63
		----------	True	Calc.	% Drift	----------		
10	t	Hexachlorocyclopentadiene	2.000	2.814	-40.7#	114	0.05	10.98
		----------	AvgRF	CCRF	% Dev	----------		
11	S	2-Fluorobiphenyl	1.155	1.298	-12.4	88	0.05	11.41
12	I	Fluorene-d10	1.000	1.000	0.0	59	0.05	13.72
13	t	Acenaphthylene	0.917	1.332	-45.3#	86	0.04	12.39
14	t	Acenaphthene	0.590	0.763	-29.3#	77	0.04	12.74
15	t	Dibenzofuran	0.879	1.019	-15.9	63	0.07	13.12
16	t	Fluorene	1.067	1.077	-0.9	56	0.07	13.80
17	S	2,4,6-Tribromophenol	0.213	0.263	-23.5#	65	0.07	14.30
18	t	Hexachlorobenzene	0.418	0.564	-34.9#	78	0.07	14.90
19	t	Pentachlorophenol	0.171	0.299	-74.9#	90	0.07	15.33
20	t	Phenanthrene	1.438	1.943	-35.1#	78	0.05	15.69
21	t	Anthracene	1.362	1.923	-41.2#	78	0.07	15.80
22	I	Fluoranthene-d10	1.000	1.000	0.0	80	0.06	17.92
23	t	Fluoranthene	1.080	1.032	4.4	81	0.04	17.94
24	t	Pyrene	1.065	1.153	-8.3	85	0.04	18.34
25	S	Terphenyl-d14	0.540	0.518	4.1	76	0.04	18.71
26	t	Benzo[a]anthracene	0.987	1.091	-10.5	87	0.08	20.43
27	t	Chrysene	0.966	1.032	-6.8	86	0.04	20.48
28	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	79	0.04	22.51
29	t	Benzo[b]fluoranthene	1.439	1.451	-0.8	77	0.06	22.10
30	t	Benzo[k]fluoranthene	1.205	1.268	-5.2	86	0.04	22.13
31	t	Benzo[a]pyrene	1.193	1.249	-4.7	81	0.04	22.55
32	t	Indeno[1,2,3-cd]pyrene	1.492	1.545	-3.6	81	0.04	24.08
33	t	Dibenz[a,h]anthracene	1.201	1.266	-5.4	89	0.04	24.12
34	t	Benzo[g,h,i]perylene	1.260	1.311	-4.0	82	0.06	24.48

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E4M2890-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64888.D
Project: BMSMC, Building 5 Area, PR

35 I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	74	0.05	10.75
	----------	True	Calc.	% Drift	----------		
36 t	1,4-Dioxane	1.000	0.936	6.4	60	0.01	2.47
	----------	AvgRF	CCRF	% Dev	----------		
37 t	1-Methylnaphthalene	0.935	1.295	-38.5#	106	0.05	10.82
38 I	Fluorene-d10a	1.000	1.000	0.0	59	0.05	13.72
	----------	True	Calc.	% Drift	----------		
39 t	4,6-dinitro-2-methylpheno	5.000	9.137	-82.7#	124	0.05	13.96
	----------	AvgRF	CCRF	% Dev	----------		
40 t	1,2-Diphenylhydrazine	0.947	1.173	-23.9#	63	0.07	14.15
41 t	n-nitrosodiphenylamine	0.702	0.771	-9.8	57	0.07	14.11

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m64724.D M4M2881SIM.M Fri Apr 22 15:22:43 2016 MANAGER

Initial Calibration Summary

Job Number: JC18649 **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: JC18649 **Sample:** E5P1382-ICC1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27321.D
Project: BMSMC, Building 5 Area, PR

```
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: JC18649 **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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E5P1383-ICC1383
Lab FileID: 5P27330.D

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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E5P1383-ICV1382
Lab FileID: 5P27336.D

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: JC18649 **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: JC18649 **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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E5P1383-ICV1383
Lab FileID: 5P27337A.D

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: JC18649 **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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E5P1383-ICV1383
Lab FileID: 5P27338A.D

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: JC18649 **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: JC18649
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: JC18649
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: JC18649
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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E5P1383-ICV1383
Lab FileID: 5P27342.D

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: JC18649 **Sample:** E5P1400-CC1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27663.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E5P1400\5p27663.D          Vial: 2
Acq On    : 20 Apr 2016   9:04 pm                    Operator: juliusj
Sample    : cc1382-25                                Inst    : MS5P
Misc      : op92466,e5p1400                          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  : Thu Apr 21 07:46:07 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	73	0.00	5.30
2	t	1,4-Dioxane	0.469	0.413	11.9	66	0.00	2.36
3	t	Pyridine	1.033	0.820	20.6#	57	0.00	2.68
4	t	N-Nitrosodimethylamine	0.579	0.505	12.8	61	0.00	2.64
5	S	2-Fluorophenol	1.226	1.206	1.6	72	0.00	3.95
6	t	Indene	2.189	2.293	-4.8	77	0.00	5.59
7	t	Cumene	2.952	2.982	-1.0	73	0.00	4.43
8	S	Phenol-d5	1.393	1.315	5.6	68	0.00	4.95
9	t	Phenol	1.440	1.428	0.8	73	0.00	4.96
10		Aniline	1.561	1.149	26.4#	58	0.00	4.96
11	t	bis(2-Chloroethyl)ether	1.069	0.977	8.6	68	0.00	5.03
12	t	2-Chlorophenol	1.386	1.415	-2.1	74	0.00	5.08
13	t	Decane	0.918	1.319	-43.7#	106	0.00	5.11
14	t	1,3-Dichlorobenzene	1.538	1.591	-3.4	76	0.00	5.23
15	t	1,4-Dichlorobenzene	1.551	1.597	-3.0	76	0.00	5.32
16	t	Benzyl alcohol	0.794	0.706	11.1	64	0.00	5.48
17	t	1,2-Dichlorobenzene	1.474	1.489	-1.0	76	0.00	5.49
18	t	Acetophenone	1.719	1.724	-0.3	76	0.00	5.77
19	t	2-Methylphenol	1.056	1.077	-2.0	73	0.00	5.63
20	t	2,2'-oxybis(1-Chloropropa	1.228	1.682	-37.0#	104	0.00	5.62
21	t	3&4-Methylphenol	1.123	1.112	1.0	71	0.00	5.81
22	t	n-Nitroso-di-n-propylamin	0.765	0.733	4.2	74	0.00	5.77
23	t	Hexachloroethane	0.500	0.484	3.2	70	0.00	5.87
24	I	Naphthalene-d8	1.000	1.000	0.0	74	0.00	6.77
25	S	Nitrobenzene-d5	0.304	0.285	6.3	68	0.00	5.94
26	t	Nitrobenzene	0.299	0.282	5.7	69	0.00	5.97
27	t	Quinoline	0.701	0.691	1.4	72	0.00	7.21
28	t	Isophorone	0.523	0.489	6.5	67	0.00	6.24
29	t	2-Nitrophenol	0.188	0.206	-9.6	76	0.00	6.33
30	t	2,4-Dimethylphenol	0.294	0.305	-3.7	75	0.00	6.41
31	t	Benzoic acid	0.241	0.195	19.1	58	0.00	6.56
32	t	bis(2-Chloroethoxy)methan	0.342	0.315	7.9	68	0.00	6.51
33	t	2,4-Dichlorophenol	0.285	0.298	-4.6	75	0.00	6.63
34	t	2,6-Dichlorophenol	0.280	0.286	-2.1	74	0.00	6.89
35		1,3,5-Trichlorobenzene	0.328	0.336	-2.4	75	0.00	6.33
36	t	1,2,4-Trichlorobenzene	0.321	0.321	0.0	72	0.00	6.70
37		1,2,3-Trichlorobenzene	0.316	0.307	2.8	73	0.00	6.97
38	t	Naphthalene	1.014	1.064	-4.9	77	0.00	6.80
39	t	4-Chloroaniline	0.424	0.372	12.3	64	0.00	6.89
40	t	2,3-Dichloroaniline	0.355	0.360	-1.4	74	0.00	7.99
41	t	Caprolactam	0.114	0.135	-18.4	82	0.00	7.32

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E5P1400-CC1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27663.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.165	0.167	-1.2	75	0.00	6.94
43	t	4-Chloro-3-methylphenol	0.304	0.307	-1.0	72	0.00	7.51
44	t	2-Methylnaphthalene	0.585	0.633	-8.2	79	0.00	7.63
45	t	1-Methylnaphthalene	0.607	0.660	-8.7	79	0.00	7.74
46	t	Dimethylnaphthalene	0.637	0.647	-1.6	74	0.00	8.38
47	I	Acenaphthene-d10	1.000	1.000	0.0	73	0.00	8.88
48	t	Hexachlorocyclopentadiene	0.251	0.267	-6.4	70	0.00	7.81
49	t	2,4,6-Trichlorophenol	0.341	0.359	-5.3	73	0.00	7.99
50	t	2,4,5-Trichlorophenol	0.368	0.370	-0.5	71	0.00	8.04
51	S	2-Fluorobiphenyl	1.274	1.300	-2.0	73	0.00	8.08
52	t	2-Chloronaphthalene	1.127	1.145	-1.6	73	0.00	8.21
53	t	Biphenyl	1.460	1.539	-5.4	76	0.00	8.19
54	t	2-Nitroaniline	0.283	0.325	-14.8	79	0.00	8.38
55	t	Dimethylphthalate	1.336	1.361	-1.9	73	0.00	8.59
56	t	Acenaphthylene	1.791	1.916	-7.0	75	0.00	8.71
57	t	2,6-Dinitrotoluene	0.275	0.292	-6.2	73	0.00	8.66
58	t	3-Nitroaniline	0.320	0.314	1.9	66	0.00	8.88
59	t	Acenaphthene	1.145	1.187	-3.7	74	0.00	8.92
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	40.096	19.8	61	0.00	8.99
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.162	0.177	-9.3	74	0.00	9.14
62	t	Dibenzofuran	1.559	1.633	-4.7	75	0.00	9.13
63	t	2,4-Dinitrotoluene	0.368	0.422	-14.7	74	0.00	9.15
64		2,3,4,6-Tetrachlorophenol	0.290	0.275	5.2	65	0.00	9.30
65	t	Diethylphthalate	1.365	1.446	-5.9	76	0.00	9.44
66	t	Fluorene	1.285	1.329	-3.4	73	0.00	9.55
67	t	4-Chlorophenyl-phenylethe	0.605	0.581	4.0	70	0.00	9.56
68	t	4-Nitroaniline	0.323	0.297	8.0	61	0.00	9.63
69	I	Phenanthrene-d10	1.000	1.000	0.0	69	0.00	10.72
70	t	4,6-Dinitro-2-methylpheno	0.128	0.123	3.9	65	0.00	9.64
71	t	n-Nitrosodiphenylamine	0.577	0.621	-7.6	73	0.00	9.72
72	t	1,2-Diphenylhydrazine	0.598	0.587	1.8	66	0.00	9.75
73	S	2,4,6-Tribromophenol	0.097	0.105	-8.2	71	0.00	9.85
74	t	4-Bromophenyl-phenylether	0.222	0.218	1.8	68	0.00	10.16
75	t	Hexachlorobenzene	0.225	0.233	-3.6	70	0.00	10.21
76	t	Pentachlorophenol	0.137	0.141	-2.9	63	0.00	10.49
77	t	Phenanthrene	1.123	1.132	-0.8	69	0.00	10.75
78	t	Anthracene	1.129	1.149	-1.8	69	0.00	10.82
79	t	Carbazole	1.063	1.104	-3.9	71	0.00	11.06
80	t	Di-n-butylphthalate	1.347	1.504	-11.7	73	0.00	11.54
81	t	Fluoranthene	1.161	1.164	-0.3	67	0.00	12.37
82	t	Octadecane	0.370	0.543	-46.8#	98	0.00	10.59
83	I	Chrysene-d12	1.000	1.000	0.0	64	0.00	14.52
84	t	Pyrene	1.231	1.305	-6.0	66	0.00	12.70
85	S	Terphenyl-d14	0.804	0.887	-10.3	69	0.00	12.96
86	t	Butylbenzylphthalate	0.604	0.695	-15.1	69	0.00	13.73
87		Butyl stearate	0.246	0.384	-56.1#	93	0.00	13.83
88	t	Benzo[a]anthracene	1.106	1.170	-5.8	67	0.00	14.50
89	t	3,3'-Dichlorobenzidine	0.405	0.444	-9.6	64	0.00	14.51
90	t	Chrysene	1.130	1.155	-2.2	64	0.00	14.56
91	t	bis(2-Ethylhexyl)phthalat	0.856	0.973	-13.7	67	0.00	14.61
92	I	Perylene-d12	1.000	1.000	0.0	59	0.00	16.59
93	t	Di-n-octylphthalate	1.387	1.799	-29.7#	70	0.00	15.58

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E5P1400-CC1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27663.D
Project: BMSMC, Building 5 Area, PR

94	t	Benzo[b]fluoranthene	1.167	1.329	-13.9	66	0.00	16.06
95	t	Benzo[k]fluoranthene	1.115	1.237	-10.9	63	0.00	16.11
96	t	Benzo[a]pyrene	1.046	1.138	-8.8	62	0.00	16.51
97	t	Indeno[1,2,3-cd]pyrene	1.026	1.184	-15.4	66	0.00	18.21
98	t	Dibenz(a,h)acridine	0.908	1.067	-17.5	67	0.00	17.84
99	t	Dibenz[a,h]anthracene	1.073	1.236	-15.2	65	0.00	18.25
100	t	7,12-Dimethylbenz(a)anthr	0.449	0.545	-21.4#	64	0.00	16.06
101	t	Benzo[g,h,i]perylene	1.090	1.211	-11.1	64	0.00	18.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p27663.D M5P1382.M Thu Apr 21 09:02:16 2016 RPT1

Continuing Calibration Summary

Job Number: JC18649 **Sample:** E5P1400-CC1383
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27664.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E5P1400\5p27664.D Vial: 3
Acq On : 20 Apr 2016 9:32 pm Operator: juliusj
Sample : cc1383-25 Inst : MS5P
Misc : op92466,e5p1400 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 : Thu Apr 21 07:46:07 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	82	0.00	5.30
103	Benzaldehyde	0.971	0.939	3.3	79	0.00	4.83
104	Acenaphthene-d10a	1.000	1.000	0.0	82	0.00	8.88
105	1,2,4,5-Tetrachlorobenzen	0.553	0.515	6.9	78	-0.05	7.82
106	Chrysene-d12a	1.000	1.000	0.0	69	0.00	14.51
107	Benzidine	0.532	0.395	25.8#	49#	0.02	12.62
108 s	1-chlorooctadecane	0.228	0.359	-57.5#	107	-0.06	12.24
109	Phenanthrene-d10a	1.000	1.000	0.0	76	0.00	10.72
110 s	o-terphenyl	0.549	0.567	-3.3	80	-0.02	11.24
111	Atrazine	0.103	0.109	-5.8	79	-0.01	10.39
112 I	Naphthalene-d8a	1.000	1.000	0.0	80	0.00	6.77
113	Hydroquinone	0.284	0.273	3.9	75	0.06	7.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p27663.D M5P1382.M Thu Apr 21 09:02:18 2016 RPT1

Initial Calibration Summary

Job Number: JC18649 **Sample:** EZ5485-ICC5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109748.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MSZ

Method : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Calibration Files
100 =z109750A.D 80 =z109751A.D 50 =z109757.D 25 =z109752a.D
10 =z109753a.D 5 =z109754a.D 2 =z109755a.D 1 =z109756a.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d					ISTD					
2) 1,4-Dioxane	0.548	0.562	0.575	0.547	0.610	0.627	0.743	0.538	0.594	11.50
3) Pyridine	1.184	1.145	0.899	1.025	0.845	0.506			0.934	26.56
4) N-Nitrosodim	0.717	0.691	0.831	0.798	0.699	0.807	1.046	0.633	0.778	16.45
5) 2-Fluorophen	1.335	1.373	1.366	1.301	1.279	1.529	1.481	1.385	1.381	6.19
6) Indene	2.223	2.348	2.354	2.413	2.397	2.803	2.933	2.869	2.542	10.93
7) Cumene	2.932	3.070	3.148	3.110	3.075	3.640	3.421	3.549	3.243	7.94
8) Phenol-d5	1.486	1.561	1.602	1.560	1.553	1.784	1.691	1.712	1.619	6.20
9) Phenol	1.479	1.535	1.599	1.578	1.518	1.851	1.797	1.786	1.643	8.85
10) Aniline	1.669	1.750	1.782	1.875	1.878	2.004	2.161	2.004	1.890	8.49
11) bis(2-Chloro	1.013	1.043	1.051	1.005	1.074	1.306	1.227	1.280	1.125	11.09
12) 2-Chlorophen	1.293	1.330	1.387	1.365	1.465	1.677	1.781	1.824	1.515	14.05
13) Decane	1.153	1.209	1.251	1.318	1.301	1.559	1.568	1.811	1.396	16.22
14) 1,3-Dichloro	1.441	1.510	1.564	1.571	1.552	1.885	1.891	1.773	1.648	10.61
15) 1,4-Dichloro	1.401	1.487	1.504	1.487	1.508	1.797	1.568	1.756	1.564	8.92
16) Benzyl alcoh	0.683	0.743	0.735	0.685	0.624	0.635	0.714	0.727	0.693	6.52
17) 1,2-Dichloro	1.297	1.377	1.417	1.414	1.400	1.664	1.735	1.814	1.515	12.72
18) Acetophenone	1.603	1.685	1.736	1.675	1.682	1.946	2.034	1.745	1.763	8.41
19) 2-Methylphen	1.193	1.235	1.235	1.149	1.209	1.473	1.351	1.429	1.284	9.22
20) 2,2'-oxybis(	0.341	0.355	0.377	0.348	0.369	0.422	0.504	0.432	0.393	14.14
21) 3&4-Methylph	1.153	1.237	1.323	1.242	1.274	1.540	1.451	1.497	1.340	10.43
22) n-Nitroso-di	0.783	0.802	0.828	0.867	0.842	1.047	1.075	1.054	0.912	13.58
23) Hexachloroet	0.399	0.426	0.441	0.451	0.456	0.551	0.475	0.447	0.456	9.76
24) I Naphthalene-d8					ISTD					
25) Nitrobenzene	0.298	0.300	0.305	0.310	0.299	0.342	0.353	0.375	0.323	9.26
26) Nitrobenzene	0.284	0.288	0.294	0.315	0.302	0.353	0.385	0.382	0.325	12.87
27) Quinoline	0.707	0.710	0.725	0.727	0.705	0.799	0.823	0.860	0.757	8.07
28) Isophorone	0.541	0.542	0.543	0.551	0.531	0.621	0.607	0.595	0.566	6.23
29) 2-Nitropheno	0.190	0.190	0.195	0.201	0.187	0.210	0.219	0.225	0.202	7.09
30) 2,4-Dimethyl	0.305	0.305	0.303	0.314	0.317	0.325	0.350	0.325	0.318	4.92
31) Benzoic Acid	0.251	0.256	0.240	0.234	0.190	0.202	0.234		0.229	10.61
32) bis(2-Chloro	0.316	0.322	0.326	0.331	0.332	0.382	0.368	0.435	0.351	11.70
33) 2,4-Dichloro	0.269	0.275	0.271	0.279	0.284	0.304	0.286	0.274	0.280	4.04
34) 2,6-Dichloro	0.258	0.262	0.259	0.272	0.270	0.305	0.281	0.285	0.274	5.86
35) 1,3,5-Trichl	0.283	0.285	0.292	0.306	0.321	0.368	0.338	0.310	0.313	9.26
36) 1,2,4-Trichl	0.260	0.262	0.269	0.278	0.299	0.323	0.324	0.320	0.292	9.59
37) 1,2,3-Trichl	0.249	0.252	0.264	0.276	0.271	0.335	0.300	0.322	0.284	11.25
38) Naphthalene	0.976	1.012	1.003	1.056	1.030	1.181	1.204	1.322	1.098	11.21
39) 4-Chloroanil	0.365	0.374	0.387	0.412	0.411	0.514	0.494	0.541	0.437	15.67
40) 2,3-Dichloro	0.312	0.313	0.322	0.338	0.330	0.383	0.399	0.415	0.352	11.68
41) Caprolactam	0.140	0.134	0.137	0.135	0.133	0.149	0.169	0.141	0.142	8.42
42) Hexachlorobu	0.123	0.124	0.123	0.133	0.141	0.132	0.147	0.114	0.130	8.27
43) 4-Chloro-3-m	0.279	0.292	0.285	0.297	0.275	0.329	0.305	0.314	0.297	6.23
44) 2-Methylnaph	0.547	0.557	0.586	0.606	0.615	0.713	0.634	0.634	0.611	8.55
45) 1-Methylnaph	0.565	0.574	0.611	0.635	0.629	0.724	0.658	0.839	0.654	13.71

Initial Calibration Summary

Job Number: JC18649 **Sample:** EZ5485-ICC5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109748.D
Project: BMSMC, Building 5 Area, PR

```
46) Dimethylnaph 0.582 0.593 0.587 0.611 0.600 0.705 0.693 0.688 0.632   8.37

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.251 0.274 0.268 0.282 0.275 0.311 0.248 0.225 0.267   9.67
49) 2,4,6-Trichl 0.290 0.313 0.319 0.324 0.350 0.376 0.344 0.326 0.330   7.90
50) 2,4,5-Trichl 0.307 0.319 0.316 0.354 0.345 0.408 0.424 0.390 0.358  12.52
51) 2-Fluorobiph 1.067 1.143 1.161 1.254 1.258 1.490 1.373 1.509 1.282  12.66
52) 2-Chloronaph 0.931 0.997 1.021 1.063 1.109 1.258 1.350 1.340 1.133  14.27
53) Biphenyl     1.329 1.416 1.445 1.495 1.550 1.806 1.772 1.891 1.588  13.04
54) 2-Nitroanili 0.279 0.300 0.296 0.309 0.322 0.303 0.368 0.268 0.306   9.89
55) Dimethylphth 1.136 1.184 1.202 1.245 1.230 1.422 1.411 1.351 1.273   8.49
56) Acenaphthyle 1.727 1.858 1.864 1.929 1.958 2.279 2.116 2.199 1.991   9.49
57) 2,6-Dinitrot 0.263 0.270 0.274 0.271 0.288 0.307 0.249 0.309 0.279   7.59
58) 3-Nitroanili 0.310 0.323 0.328 0.336 0.334 0.348 0.357 0.360 0.337   5.07
59) Acenaphthene 1.033 1.086 1.122 1.143 1.176 1.333 1.302 1.333 1.191   9.83
60) 2,4-Dinitrop 0.156 0.160 0.150 0.139 0.104 0.095 0.097       0.129  22.59
            ---- Quadratic regression ----  Coefficient =  0.9991
              Response Ratio = -0.01641 + 0.15554 *A + 0.00109 *A^2

61) 4-Nitropheno 0.137 0.148 0.143 0.142 0.156 0.164 0.177 0.175 0.155   9.88
62) Dibenzofuran 1.421 1.496 1.537 1.573 1.604 1.843 1.795 1.890 1.645  10.59
63) 2,4-Dinitrot 0.343 0.354 0.364 0.362 0.378 0.353 0.438 0.311 0.363   9.98
64) 2,3,4,6-Tetr 0.253 0.264 0.263 0.282 0.252 0.322 0.313 0.322 0.284  10.72
65) Diethylphtha 1.115 1.167 1.194 1.211 1.231 1.474 1.461 1.595 1.306  13.55
66) Fluorene     1.129 1.186 1.246 1.282 1.364 1.559 1.488 1.579 1.354  12.68
67) 4-Chlorophen 0.484 0.507 0.521 0.548 0.538 0.622 0.643 0.604 0.558  10.35
68) 4-Nitroanili 0.328 0.333 0.339 0.354 0.349 0.360 0.337 0.299 0.337   5.61

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro- 0.139 0.138 0.140 0.116 0.112 0.101 0.088       0.119  17.12
71) n-Nitrosodip 0.521 0.536 0.550 0.554 0.591 0.632 0.700 0.569 0.582  10.14
72) 1,2-Diphenyl 0.610 0.637 0.658 0.668 0.689 0.772 0.755 0.772 0.695   9.12
73) 2,4,6-Tribro 0.113 0.115 0.114 0.115 0.117 0.124 0.127 0.158 0.123  12.34
74) 4-Bromopheny 0.185 0.190 0.200 0.199 0.191 0.230 0.225 0.240 0.208  10.18
75) Hexachlorobe 0.204 0.212 0.220 0.216 0.223 0.254 0.239 0.294 0.233  12.59
76) Pentachlorop 0.134 0.137 0.131 0.124 0.115 0.119 0.112 0.118 0.124   7.36
77) Phenanthrene 1.027 1.069 1.070 1.071 1.106 1.273 1.230 1.312 1.145   9.55
78) Anthracene   1.056 1.093 1.123 1.130 1.167 1.276 1.324 1.267 1.179   8.24
79) Carbazole    1.024 1.075 1.103 1.093 1.071 1.219 1.253 1.158 1.125   7.03
80) Di-n-butylph 1.290 1.335 1.355 1.337 1.354 1.468 1.537 1.397 1.384   5.84
81) Fluoranthene 1.093 1.092 1.126 1.127 1.123 1.226 1.277 1.498 1.195  11.63
82) Octadecane   0.434 0.445 0.469 0.470 0.480 0.559 0.581 0.533 0.496  10.94

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.204 1.255 1.243 1.268 1.284 1.542 1.541 1.453 1.349  10.37
85) Butyl steara 0.360 0.377 0.371 0.359 0.335 0.398 0.403 0.315 0.365   8.14
86) Terphenyl-d1 0.778 0.801 0.800 0.784 0.795 0.896 0.962 0.909 0.840   8.41
87) Butylbenzylp 0.631 0.658 0.652 0.632 0.603 0.668 0.677 0.628 0.644   3.79
88) Benzo[a]anth 1.089 1.140 1.117 1.116 1.076 1.234 1.289 1.284 1.168   7.47
89) 3,3'-Dichlor 0.387 0.409 0.406 0.420 0.387 0.493 0.454 0.417 0.422   8.46
90) Chrysene     1.008 1.062 1.064 1.085 1.060 1.229 1.361 1.255 1.140  10.92
91) bis(2-Ethylh 0.885 0.922 0.906 0.880 0.830 0.993 0.971 0.861 0.906   6.06

92) I   Perylene-d12          ----------------ISTD---------------------
93) Di-n-octylph 1.530 1.582 1.617 1.582 1.460 1.591 1.594 1.375 1.541   5.41
94) Benzo[b]fluo 1.132 1.196 1.207 1.183 1.170 1.370 1.332 1.511 1.263  10.26
95) Benzo[k]fluo 0.996 1.027 1.079 1.100 1.123 1.281 1.243 1.219 1.134   9.15
96) Benzo[a]pyre 1.025 1.055 1.079 1.114 1.055 1.200 1.194 1.271 1.124   7.80
97) Indeno[1,2,3 1.006 1.049 1.089 1.078 1.068 1.241 1.205 1.252 1.124   8.41
98) Dibenz(a,h)a 0.935 0.988 1.010 1.025 0.996 1.076 1.204 1.277 1.064  11.04
```

Initial Calibration Summary

Job Number: JC18649 **Sample:** EZ5485-ICC5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109748.D
Project: BMSMC, Building 5 Area, PR

```
 99) Dibenz[a,h]a 1.078 1.120 1.128 1.133 1.117 1.309 1.323 1.252 1.183   8.15
100) 7,12-Dimethy 0.509 0.534 0.539 0.535 0.509 0.617 0.627 0.726 0.575  13.24
101) Benzo[g,h,i] 1.029 1.090 1.141 1.142 1.102 1.309 1.338 1.509 1.208  13.41


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

          MZ5485.M          Thu Apr 14 15:14:55 2016   RTE
```

Initial Calibration Summary

Job Number: JC18649 **Sample:** EZ5486-ICC5486
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109757.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MSZ

Method : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update : Thu Apr 14 12:08:11 2016
Response via : Initial Calibration

Calibration Files
100 =z109750.D 80 =z109751.D 50 =z109757.D 25 =z109752.D
10 =z109753.D 5 =z109754.D 2 =z109755.D 1 =z109756.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD
102) 1,4-Dichlorobenzene-d	ISTD									
103) Benzaldehyde	0.755	0.920	1.044	1.065	1.092	1.158	1.046	1.371	1.056	16.78
104) Phenanthrene-d10a	ISTD									
105) 1-chloroocta	0.297	0.298	0.285	0.310	0.301	0.332	0.327	0.275	0.303	6.42
106) o-terphenyl	0.462	0.477	0.477	0.505	0.486	0.586	0.554	0.621	0.521	11.29
107) Atrazine	0.090	0.088	0.090	0.094	0.097	0.115	0.104	0.118	0.100	11.72
108) Chrysene-d12a	ISTD									
109) Benzidine	0.410	0.566	0.568	0.588	0.678	0.602	0.424	0.548		17.68
110) Acenaphthene-d10a	ISTD									
111) 1,2,4,5-Tetr	0.454	0.461	0.495	0.513	0.475	0.577	0.553	0.574	0.513	9.70
112) I Naphthalene-d8a	ISTD									
113) Hydroquinone	0.309	0.287	0.296	0.286	0.203	0.280	0.173	0.299	0.267	18.75

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

MZ5485.M Thu Apr 14 12:08:40 2016 RTE

Initial Calibration Verification

Job Number: JC18649 **Sample:** EZ5486-ICV5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109758.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109758.D          Vial: 20
Acq On    : 14 Apr 2016   7:59 am                   Operator: sarad
Sample    : icv5485-50                              Inst    : MSZ
Misc      : op92825,ez5486                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	123	0.00	4.33
9	t	Phenol	1.643	1.649	-0.4	127	0.00	4.16
12	t	2-Chlorophenol	1.515	1.469	3.0	130	0.00	4.20
19	t	2-Methylphenol	1.284	1.268	1.2	126	0.00	4.58
21	t	3&4-Methylphenol	1.340	1.330	0.7	124	0.00	4.69
24	I	Naphthalene-d8	1.000	1.000	0.0	117	0.00	5.25
29	t	2-Nitrophenol	0.202	0.207	-2.5	124	0.00	5.00
30	t	2,4-Dimethylphenol	0.318	0.324	-1.9	125	0.00	5.05
31		Benzoic Acid	0.229	0.220	3.9	108	0.02	5.19
33	t	2,4-Dichlorophenol	0.280	0.289	-3.2	125	0.00	5.18
34		2,6-Dichlorophenol	0.274	0.266	2.9	120	0.00	5.34
43	t	4-Chloro-3-methylphenol	0.297	0.302	-1.7	124	0.00	5.71
47	I	Acenaphthene-d10	1.000	1.000	0.0	116	0.00	6.56
49	t	2,4,6-Trichlorophenol	0.330	0.337	-2.1	123	0.00	5.98
50	t	2,4,5-Trichlorophenol	0.358	0.318	11.2	117	0.00	6.02
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	46.150	7.7	101	0.00	6.64
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.155	0.158	-1.9	129	0.00	6.79
64		2,3,4,6-Tetrachlorophenol	0.284	0.262	7.7	116	0.00	6.89
69	I	Phenanthrene-d10	1.000	1.000	0.0	117	0.00	8.22
70	t	4,6-Dinitro-2-methylpheno	0.119	0.131	-10.1	110	0.00	7.16
76	t	Pentachlorophenol	0.124	0.132	-6.5	118	0.00	8.01

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 z109757a.D MZ5485.M          Thu Apr 14 12:50:21 2016   RTE
```

Initial Calibration Verification

Job Number: JC18649 **Sample:** EZ5486-ICV5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109759.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109759.D          Vial: 21
Acq On    : 14 Apr 2016   8:30 am                   Operator: sarad
Sample    : icv5485-50                              Inst    : MSZ
Misc      : op92825,ez5486                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	113	0.00	4.33
10	t	Aniline	1.890	1.827	3.3	116	0.00	4.12
16	t	Benzyl alcohol	0.693	0.799	-15.3	123	0.00	4.47
24	I	Naphthalene-d8	1.000	1.000	0.0	115	0.00	5.25
39	t	4-Chloroaniline	0.437	0.393	10.1	116	0.00	5.34
44	t	2-Methylnaphthalene	0.611	0.566	7.4	111	0.00	5.75
47	I	Acenaphthene-d10	1.000	1.000	0.0	110	0.00	6.55
54	t	2-Nitroaniline	0.306	0.288	5.9	107	0.00	6.22
58	t	3-Nitroaniline	0.337	0.325	3.6	109	0.00	6.57
62	t	Dibenzofuran	1.645	1.546	6.0	110	0.00	6.74
68	t	4-Nitroaniline	0.337	0.315	6.5	102	0.00	7.17
69	I	Phenanthrene-d10	1.000	1.000	0.0	112	0.00	8.22
79	t	Carbazole	1.125	1.068	5.1	108	0.00	8.63

```
   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    z109757a.D MZ5485.M         Thu Apr 14 13:02:29 2016   RTE
```

Initial Calibration Verification

Job Number: JC18649 **Sample:** EZ5486-ICV5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109760.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109760.D          Vial: 22
Acq On    : 14 Apr 2016   9:01 am                   Operator: sarad
Sample    : icv5485-50                              Inst    : MSZ
Misc      : op92825,ez5486                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	134	0.00	4.33
5	S	2-Fluorophenol	1.381	1.437	-4.1	141	0.00	3.41
8	S	Phenol-d5	1.619	1.666	-2.9	140	0.00	4.15
24	I	Naphthalene-d8	1.000	1.000	0.0	131	0.00	5.25
25	S	Nitrobenzene-d5	0.323	0.325	-0.6	140	0.00	4.75
47	I	Acenaphthene-d10	1.000	1.000	0.0	125	0.00	6.55
51	S	2-Fluorobiphenyl	1.282	1.356	-5.8	146	0.00	6.02
69	I	Phenanthrene-d10	1.000	1.000	0.0	122	0.00	8.22
73	S	2,4,6-Tribromophenol	0.123	0.121	1.6	130	0.00	7.35
83	I	Chrysene-d12	1.000	1.000	0.0	117	-0.02	13.20
86	S	Terphenyl-d14	0.840	0.905	-7.7	133	0.00	11.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757a.D MZ5485.M Thu Apr 14 13:06:59 2016 RTE

Initial Calibration Verification

Job Number: JC18649 **Sample:** EZ5486-ICV5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109761.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109761.D          Vial: 23
Acq On    : 14 Apr 2016   9:32 am                   Operator: sarad
Sample    : icv5485-50                              Inst    : MSZ
Misc      : op92825,ez5486                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	112	0.00	4.33
4	t	N-Nitrosodimethylamine	0.778	0.798	-2.6	107	0.02	2.15
11	t	bis(2-Chloroethyl)ether	1.125	1.231	-9.4	131	0.00	4.15
14	t	1,3-Dichlorobenzene	1.648	1.645	0.2	118	0.00	4.28
15	t	1,4-Dichlorobenzene	1.564	1.597	-2.1	119	0.00	4.34
17	t	1,2-Dichlorobenzene	1.515	1.550	-2.3	122	0.00	4.46
20	t	2,2'-oxybis(1-Chloropropa	0.393	0.306	22.1	91	0.00	4.54
22	t	n-Nitroso-di-n-propylamin	0.912	0.910	0.2	123	0.00	4.64
23	t	Hexachloroethane	0.456	0.468	-2.6	119	0.00	4.70
24	I	Naphthalene-d8	1.000	1.000	0.0	107	0.00	5.25
26	t	Nitrobenzene	0.325	0.331	-1.8	120	0.00	4.77
28	t	Isophorone	0.566	0.600	-6.0	118	0.00	4.92
32	t	bis(2-Chloroethoxy)methan	0.351	0.364	-3.7	119	0.00	5.09
36	t	1,2,4-Trichlorobenzene	0.292	0.305	-4.5	121	0.00	5.21
38	t	Naphthalene	1.098	1.085	1.2	115	0.00	5.27
42	t	Hexachlorobutadiene	0.130	0.152	-16.9	132	0.00	5.35
47	I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00	6.56
48	t	Hexachlorocyclopentadiene	0.267	0.278	7.1	104	0.00	5.87
52	t	2-Chloronaphthalene	1.133	1.174	-3.6	116	0.00	6.11
55	t	Dimethylphthalate	1.273	1.315	-3.3	110	0.00	6.34
56	t	Acenaphthylene	1.991	1.900	4.6	102	0.00	6.44
57	t	2,6-Dinitrotoluene	0.279	0.288	-3.2	106	0.00	6.39
59	t	Acenaphthene	1.191	1.254	-5.3	112	0.00	6.58
63	t	2,4-Dinitrotoluene	0.363	0.368	-1.4	102	0.00	6.75
65	t	Diethylphthalate	1.306	1.327	-1.6	112	0.00	6.97
66	t	Fluorene	1.354	1.314	3.0	106	0.00	7.07
67	t	4-Chlorophenyl-phenylethe	0.558	0.560	-0.4	108	0.00	7.07
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00	8.22
71	t	n-Nitrosodiphenylamine	0.582	0.596	-2.4	110	0.00	7.22
72	t	1,2-Diphenylhydrazine	0.695	0.700	-0.7	108	0.00	7.24
74	t	4-Bromophenyl-phenylether	0.208	0.201	3.4	102	0.00	7.63
75	t	Hexachlorobenzene	0.233	0.227	2.6	105	0.00	7.70
77	t	Phenanthrene	1.145	1.121	2.1	107	0.00	8.25
78	t	Anthracene	1.179	1.131	4.1	102	0.00	8.32
80	t	Di-n-butylphthalate	1.384	1.425	-3.0	107	0.00	9.21
81	t	Fluoranthene	1.195	1.171	2.0	106	0.00	10.23
83	I	Chrysene-d12	1.000	1.000	0.0	91	-0.01	13.21
84	t	Pyrene	1.349	1.453	-7.7	106	0.00	10.65

Initial Calibration Verification

Job Number: JC18649 **Sample:** EZ5486-ICV5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109761.D
Project: BMSMC, Building 5 Area, PR

87	t	Butylbenzylphthalate	0.644	0.709	-10.1	99	0.00	12.19
88	t	Benzo[a]anthracene	1.168	1.205	-3.2	98	0.00	13.18
90	t	Chrysene	1.140	1.103	3.2	94	0.00	13.26
91	t	bis(2-Ethylhexyl)phthalat	0.906	0.982	-8.4	99	0.00	13.53
92	I	Perylene-d12	1.000	1.000	0.0	85	-0.01	16.19
93	t	Di-n-octylphthalate	1.541	1.818	-18.0	95	0.00	14.93
94	t	Benzo[b]fluoranthene	1.263	1.259	0.3	88	0.00	15.45
95	t	Benzo[k]fluoranthene	1.134	1.239	-9.3	97	0.00	15.50
96	t	Benzo[a]pyrene	1.124	1.171	-4.2	92	0.00	16.08
97	t	Indeno[1,2,3-cd]pyrene	1.124	1.169	-4.0	91	0.00	18.11
99	t	Dibenz[a,h]anthracene	1.183	1.184	-0.1	89	0.00	18.16
101	t	Benzo[g,h,i]perylene	1.208	1.176	2.6	87	0.00	18.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757a.D MZ5485.M Thu Apr 14 13:07:01 2016 RTE

6.8.62

6

Initial Calibration Verification

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EZ5486-ICV5486
Lab FileID: Z109761A.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109761a.D          Vial: 23
Acq On    : 14 Apr 2016   9:32 am                    Operator: sarad
Sample    : icv5486-50                               Inst    : MSZ
Misc      : op92825,ez5486                           Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
108	Chrysene-d12a	1.000	1.000	0.0	80	0.00	13.21
109	Benzidine	0.548	0.851	-55.3#	120	0.00	10.63
110	Acenaphthene-d10a	1.000	1.000	0.0	105	0.00	6.56
111	1,2,4,5-Tetrachlorobenzen	0.513	0.522	-1.8	110	0.00	5.87

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757a.D MZ5485.M Thu Apr 14 13:35:22 2016 RTE

Initial Calibration Verification

Job Number: JC18649 **Sample:** EZ5486-ICV5486
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109762A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109762.D          Vial: 24
Acq On    : 14 Apr 2016  10:03 am                   Operator: sarad
Sample    : icv5486-50                              Inst    : MSZ
Misc      : op92825,ez5486                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	104	0.00	4.33
103	Benzaldehyde	1.056	1.064	-0.8	106	0.00	4.02
104	Phenanthrene-d10a	1.000	1.000	0.0	95	0.00	8.22
107	Atrazine	0.100	0.101	-1.0	107	0.00	7.89

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757a.D MZ5485.M Thu Apr 14 13:07:03 2016 RTE

Initial Calibration Verification

Job Number: JC18649 **Sample:** EZ5486-ICV5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109762.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109762.D          Vial: 24
Acq On    : 14 Apr 2016  10:03 am                   Operator: sarad
Sample    : icv5485-50                              Inst    : MSZ
Misc      : op92825,ez5486                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	118	0.00	4.33
2		1,4-Dioxane	0.594	0.532	10.4	109	0.02	1.81
6	t	Indene	2.542	2.429	4.4	122	0.00	4.52
7	t	Cumene	3.243	3.003	7.4	113	0.00	3.72
13	t	Decane	1.396	1.291	7.5	122	0.00	4.19
18	t	Acetophenone	1.763	1.643	6.8	112	0.00	4.64
24	I	Naphthalene-d8	1.000	1.000	0.0	114	0.00	5.25
27	t	Quinoline	0.757	0.703	7.1	110	0.00	5.51
40	t	2,3-Dichloroaniline	0.352	0.275	21.9	97	0.00	5.98
41	t	Caprolactam	0.142	0.116	18.3	96	-0.02	5.58
45	t	1-Methylnaphthalene	0.654	0.578	11.6	107	0.00	5.82
46	t	Dimethylnaphthalene	0.632	0.586	7.3	113	0.00	6.21
47	I	Acenaphthene-d10	1.000	1.000	0.0	108	0.00	6.55
53	t	Biphenyl	1.588	1.444	9.1	108	0.00	6.09
69	I	Phenanthrene-d10	1.000	1.000	0.0	105	0.00	8.22
82	t	Octadecane	0.496	0.480	3.2	108	0.00	8.07
92	I	Perylene-d12	1.000	1.000	0.0	93	-0.01	16.19
100	t	7,12-Dimethylbenz(a)anthr	0.575	0.511	11.1	88	-0.01	15.46

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 z109757a.D MZ5485.M         Thu Apr 14 13:07:03 2016   RTE
```

Initial Calibration Verification

Job Number: JC18649 **Sample:** EZ5486-ICV5486
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z109763.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109763.D          Vial: 25
Acq On    : 14 Apr 2016  10:35 am                   Operator: sarad
Sample    : icv5486-50                              Inst    : MSZ
Misc      : op92825,ez5486                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
112 I	Naphthalene-d8a	1.000	1.000	0.0	93	0.00	5.25
113	Hydroquinone	0.267	0.303	-13.5	95	0.00	5.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757a.D MZ5485.M Thu Apr 14 13:07:05 2016 RTE

Initial Calibration Verification

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EZ5486-ICV5485
Lab FileID: Z109764.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5486\z109764.D          Vial: 26
Acq On    : 14 Apr 2016  11:06 am                   Operator: sarad
Sample    : icv5485-50                              Inst    : MSZ
Misc      : op92825,ez5486                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Thu Apr 14 12:08:11 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83	I	Chrysene-d12	1.000	1.000	0.0	101	-0.02	13.20
89	t	3,3'-Dichlorobenzidine	0.422	0.405	4.0	101	-0.01	13.28

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757a.D MZ5485.M Thu Apr 14 13:07:07 2016 RTE

Continuing Calibration Summary

Job Number: JC18649 **Sample:** EZ5500-CC5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110074.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5500\Z110074.D          Vial: 2
Acq On    : 26 Apr 2016  12:24 pm                   Operator: ariellec
Sample    : cc5485-50                               Inst    : MSZ
Misc      : op93086,ez5500                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Tue Apr 26 14:35:23 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	113	0.00	4.19
2		1,4-Dioxane	0.594	0.580	2.4	114	-0.02	1.62
3	t	Pyridine	0.934	1.097	-17.5	138	-0.12	1.98
4	t	N-Nitrosodimethylamine	0.778	0.702	9.8	95	-0.13	1.93
5	S	2-Fluorophenol	1.381	1.229	11.0	102	0.00	3.26
6	t	Indene	2.542	2.204	13.3	106	0.00	4.38
7	t	Cumene	3.243	3.255	-0.4	117	0.00	3.57
8	S	Phenol-d5	1.619	1.518	6.2	107	0.00	4.03
9	t	Phenol	1.643	1.508	8.2	107	0.00	4.03
10	t	Aniline	1.890	1.373	27.4#	87	0.00	3.98
11	t	bis(2-Chloroethyl)ether	1.125	1.161	-3.2	125	0.00	4.01
12	t	2-Chlorophenol	1.515	1.275	15.8	104	0.00	4.07
13	t	Decane	1.396	1.000	28.4#	90	0.00	4.06
14	t	1,3-Dichlorobenzene	1.648	1.570	4.7	114	0.00	4.15
15	t	1,4-Dichlorobenzene	1.564	1.498	4.2	113	0.00	4.20
16	t	Benzyl alcohol	0.693	0.727	-4.9	112	0.00	4.34
17	t	1,2-Dichlorobenzene	1.515	1.439	5.0	115	0.00	4.32
18	t	Acetophenone	1.763	1.691	4.1	110	0.02	4.50
19	t	2-Methylphenol	1.284	1.151	10.4	105	0.02	4.46
20	t	2,2'-oxybis(1-Chloropropa	0.393	0.349	11.2	105	0.01	4.40
21	t	3&4-Methylphenol	1.340	1.187	11.4	101	0.02	4.57
22	t	n-Nitroso-di-n-propylamin	0.912	0.884	3.1	121	0.00	4.51
23	t	Hexachloroethane	0.456	0.597	-30.9#	153	0.01	4.56
24	I	Naphthalene-d8	1.000	1.000	0.0	103	0.00	5.11
25	S	Nitrobenzene-d5	0.323	0.358	-10.8	121	-0.01	4.62
26	t	Nitrobenzene	0.325	0.361	-11.1	127	0.00	4.63
27	t	Quinoline	0.757	0.696	8.1	99	0.01	5.39
28	t	Isophorone	0.566	0.624	-10.2	119	0.00	4.80
29	t	2-Nitrophenol	0.202	0.196	3.0	104	0.00	4.86
30	t	2,4-Dimethylphenol	0.318	0.332	-4.4	113	0.00	4.93
31		Benzoic Acid	0.229	0.218	4.8	94	0.04	5.08
32	t	bis(2-Chloroethoxy)methan	0.351	0.341	2.8	108	0.00	4.96
33	t	2,4-Dichlorophenol	0.280	0.316	-12.9	121	0.00	5.05
34		2,6-Dichlorophenol	0.274	0.314	-14.6	125	0.00	5.20
35	t	1,3,5-Trichlorobenzene	0.313	0.375	-19.8	133	0.00	4.84
36	t	1,2,4-Trichlorobenzene	0.292	0.353	-20.9#	136	0.00	5.07
37	t	1,2,3-Trichlorobenzene	0.284	0.338	-19.0	132	0.00	5.24
38	t	Naphthalene	1.098	1.009	8.1	104	0.00	5.13
39	t	4-Chloroaniline	0.437	0.355	18.8	95	0.00	5.20
40	t	2,3-Dichloroaniline	0.352	0.375	-6.5	121	0.02	5.84
41	t	Caprolactam	0.142	0.128	9.9	96	0.05	5.49

Continuing Calibration Summary

Job Number: JC18649 **Sample:** EZ5500-CC5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110074.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.130	0.212	-63.1#	178	0.00	5.21
43	t	4-Chloro-3-methylphenol	0.297	0.307	-3.4	112	0.02	5.59
44	t	2-Methylnaphthalene	0.611	0.583	4.6	103	0.01	5.62
45	t	1-Methylnaphthalene	0.654	0.609	6.9	103	0.00	5.68
46	t	Dimethylnaphthalene	0.632	0.643	-1.7	113	0.01	6.06
47	I	Acenaphthene-d10	1.000	1.000	0.0	118	0.00	6.38
48	t	Hexachlorocyclopentadiene	0.267	0.385	-44.2#	169	0.01	5.73
49	t	2,4,6-Trichlorophenol	0.330	0.394	-19.4	146	0.02	5.84
50	t	2,4,5-Trichlorophenol	0.358	0.400	-11.7	150	0.02	5.89
51	S	2-Fluorobiphenyl	1.282	1.226	4.4	125	0.02	5.88
52	t	2-Chloronaphthalene	1.133	1.028	9.3	119	0.01	5.96
53	t	Biphenyl	1.588	1.327	16.4	108	0.01	5.95
54	t	2-Nitroaniline	0.306	0.288	5.9	115	0.02	6.08
55	t	Dimethylphthalate	1.273	1.269	0.3	125	0.02	6.19
56	t	Acenaphthylene	1.991	1.705	14.4	108	0.00	6.27
57	t	2,6-Dinitrotoluene	0.279	0.269	3.6	116	0.02	6.25
58	t	3-Nitroaniline	0.337	0.269	20.2#	97	0.02	6.41
59	t	Acenaphthene	1.191	1.048	12.0	110	0.00	6.41
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	95.824	4.2	114	0.01	6.48
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.155	0.160	-3.2	132	0.02	6.64
62	t	Dibenzofuran	1.645	1.545	6.1	119	0.00	6.57
63	t	2,4-Dinitrotoluene	0.363	0.364	-0.3	118	0.01	6.59
64		2,3,4,6-Tetrachlorophenol	0.284	0.353	-24.3#	158	0.00	6.70
65	t	Diethylphthalate	1.306	1.222	6.4	121	0.00	6.80
66	t	Fluorene	1.354	1.235	8.8	117	0.00	6.88
67	t	4-Chlorophenyl-phenylethe	0.558	0.644	-15.4	146	0.00	6.88
68	t	4-Nitroaniline	0.337	0.272	19.3	95	0.00	6.99
69	I	Phenanthrene-d10	1.000	1.000	0.0	129	0.00	7.98
70	t	4,6-Dinitro-2-methylpheno	0.119	0.138	-16.0	128	0.03	6.97
71	t	n-Nitrosodiphenylamine	0.582	0.512	12.0	120	0.02	7.03
72	t	1,2-Diphenylhydrazine	0.695	0.642	7.6	126	0.04	7.05
73	S	2,4,6-Tribromophenol	0.123	0.116	5.7	132	0.02	7.15
74	t	4-Bromophenyl-phenylether	0.208	0.239	-14.9	155	0.00	7.41
75	t	Hexachlorobenzene	0.233	0.246	-5.6	145	0.00	7.48
76	t	Pentachlorophenol	0.124	0.157	-26.6#	156	0.00	7.78
77	t	Phenanthrene	1.145	1.044	8.8	126	0.00	8.01
78	t	Anthracene	1.179	1.086	7.9	125	0.00	8.08
79	t	Carbazole	1.125	0.984	12.5	115	0.00	8.38
80	t	Di-n-butylphthalate	1.384	1.253	9.5	120	0.00	8.94
81	t	Fluoranthene	1.195	1.255	-5.0	144	0.00	9.93
82	t	Octadecane	0.496	0.350	29.4#	97	0.00	7.83
83	I	Chrysene-d12	1.000	1.000	0.0	149	0.00	12.87
84	t	Pyrene	1.349	1.233	8.6	148	0.02	10.34
85		Butyl stearate	0.365	0.233	36.2#	94	-0.07	12.07
86	S	Terphenyl-d14	0.840	0.829	1.3	154	-0.01	10.74
87	t	Butylbenzylphthalate	0.644	0.524	18.6	120	-0.02	11.87
88	t	Benzo[a]anthracene	1.168	1.151	1.5	153	0.00	12.84
89	t	3,3'-Dichlorobenzidine	0.422	0.381	9.7	140	0.09	12.96
90	t	Chrysene	1.140	1.092	4.2	153	0.01	12.92
91	t	bis(2-Ethylhexyl)phthalat	0.906	0.702	22.5#	115	0.00	13.20
92	I	Perylene-d12	1.000	1.000	0.0	133	0.00	15.85
93	t	Di-n-octylphthalate	1.541	1.362	11.6	112	0.00	14.60

Continuing Calibration Summary

Job Number: JC18649 **Sample:** EZ5500-CC5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110074.D
Project: BMSMC, Building 5 Area, PR

94	t	Benzo[b]fluoranthene	1.263	1.261	0.2	139	0.00	15.11
95	t	Benzo[k]fluoranthene	1.134	1.192	-5.1	147	0.00	15.17
96	t	Benzo[a]pyrene	1.124	1.132	-0.7	139	0.00	15.73
97	t	Indeno[1,2,3-cd]pyrene	1.124	1.116	0.7	136	0.05	17.76
98	t	Dibenz(a,h)acridine	1.064	1.027	3.5	135	0.02	17.40
99	t	Dibenz[a,h]anthracene	1.183	1.130	4.5	133	0.02	17.81
100	t	7,12-Dimethylbenz(a)anthr	0.575	0.592	-3.0	146	0.00	15.12
101	t	Benzo[g,h,i]perylene	1.208	1.159	4.1	135	0.06	18.19

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757.D MZ5485.M Tue Apr 26 14:40:37 2016 RTE

Continuing Calibration Summary

Job Number: JC18649 **Sample:** EZ5500-CC5486
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110075A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5500\Z110075A.D          Vial: 3
Acq On    : 26 Apr 2016   1:45 pm                    Operator: ariellec
Sample    : cc5486-50                                Inst    : MSZ
Misc      : op93086,ez5500                           Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5485.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Tue Apr 26 14:35:23 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	97	0.00	4.19
103	Benzaldehyde	1.056	0.945	10.5	88	-0.02	3.88
104	Phenanthrene-d10a	1.000	1.000	0.0	115	0.00	7.98
105	Atrazine	0.100	0.111	-11.0	142	0.03	7.68
106	Chrysene-d12a	1.000	1.000	0.0	133	0.00	12.86
107	Benzidine	0.547	0.272	50.3#	65	0.06	10.33
108	Acenaphthene-d10a	1.000	1.000	0.0	121	0.00	6.38
109	1,2,4,5-Tetrachlorobenzen	0.513	0.571	-11.3	139	0.00	5.73
110 I	Naphthalene-d8a	1.000	1.000	0.0	90	0.00	5.11
111	Hydroquinone	0.264	0.289	-9.5	95	0.03	5.51

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 z109757.D  MZ5485.M         Tue Apr 26 14:40:40 2016   RTE
```

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83247.D
Acq On : 21 Apr 2016 11:46 am
Operator : ashleyn
Sample : jc18649-1
Misc : op93236,e2m3657,810,,,1,200
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 13:18:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.863	152	171202	40.00	ppm	-0.03
24) Naphthalene-d8	5.986	136	685986	40.00	ppm	-0.04
47) Acenaphthene-d10	8.099	164	412761	40.00	ppm	-0.04
69) Phenanthrene-d10	10.292	188	642812	40.00	ppm	-0.05
83) Chrysene-d12	14.496	240	590126	40.00	ppm	-0.05
92) Perylene-d12	16.619	264	594117	40.00	ppm	-0.05
102) 1,4-Dichlorobenzene-d4a	4.863	152	171202	40.00	ppm	-0.03
104) Acenaphthene-d10a	8.099	164	412761	40.00	ppm	-0.04
106) Chrysene-d12a	14.496	240	590126	40.00	ppm	-0.05
108) Phenanthrene-d10a	10.292	188	642812	40.00	ppm	-0.05
110) Naphthalene-d8a	5.986	136	685986	40.00	ppm	-0.04

System Monitoring Compounds

5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

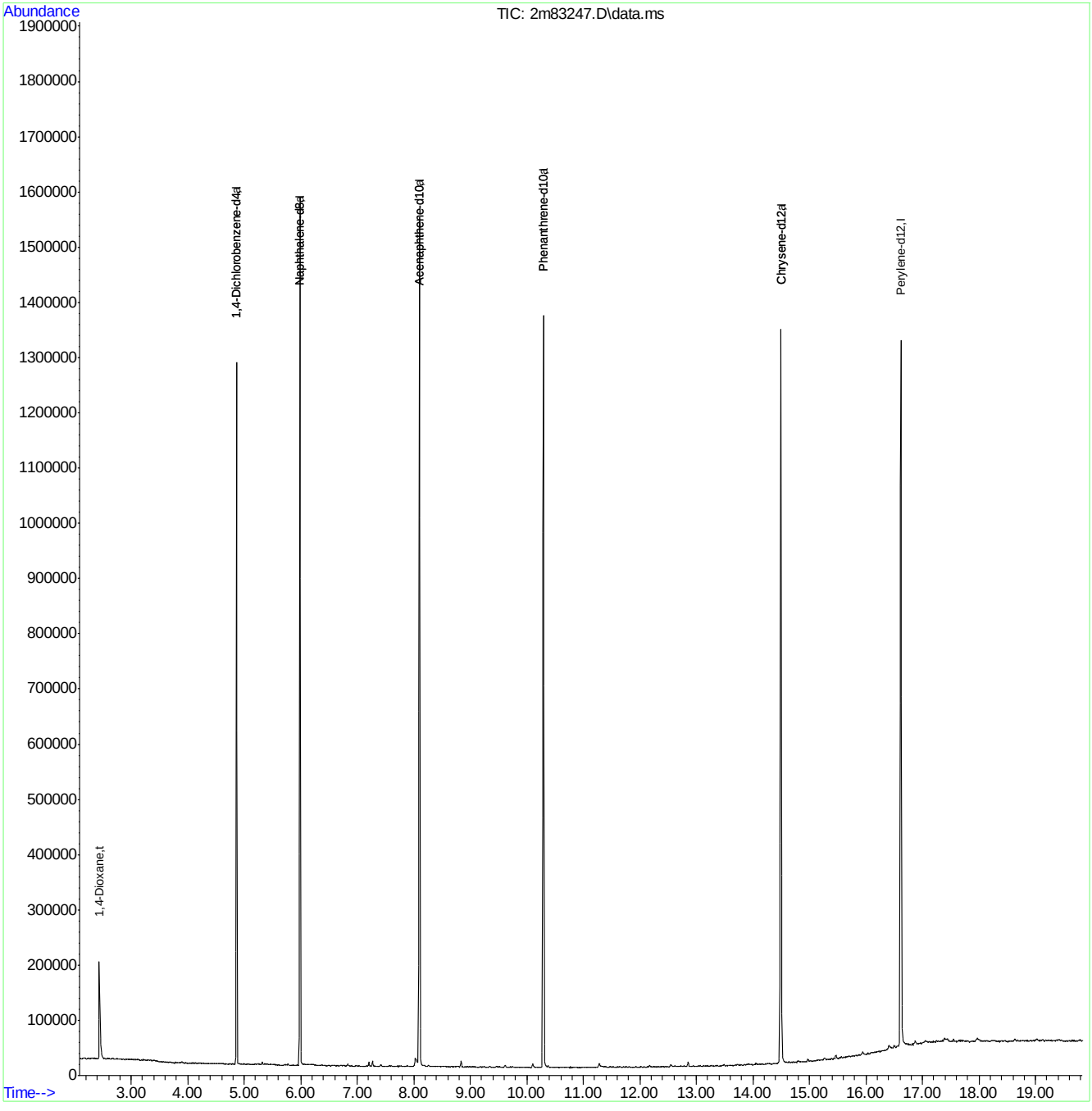
Target Compounds						Qvalue
2) 1,4-Dioxane	2.434	88	91344	31.92	ppm	96

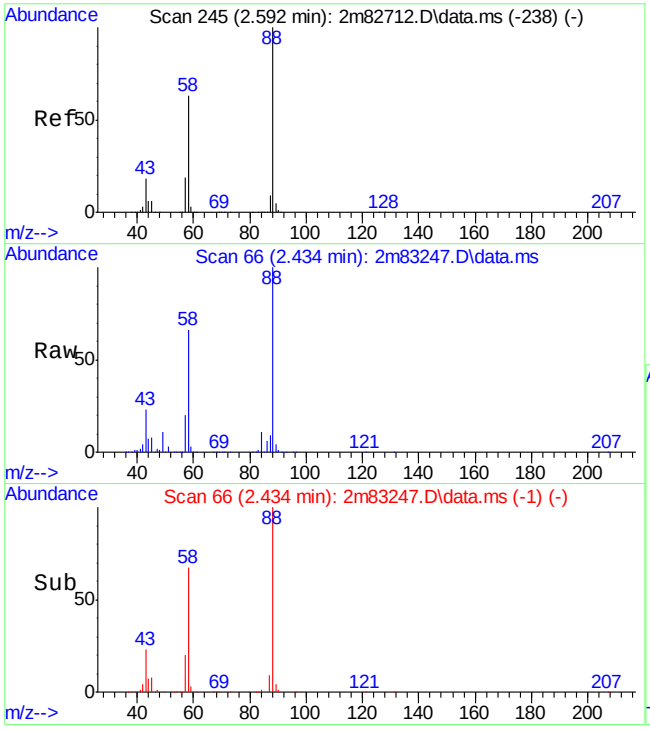
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83247.D
Acq On : 21 Apr 2016 11:46 am
Operator : ashleyn
Sample : jc18649-1
Misc : op93236,e2m3657,810,,,1,200
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 13:18:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

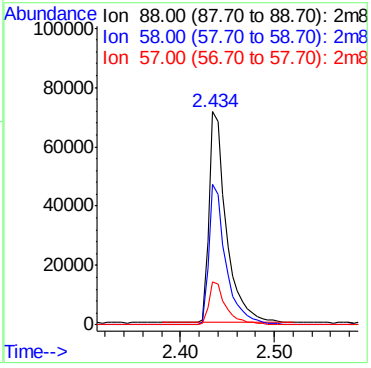




#2
1,4-Dioxane
Concen: 31.92 ppm
RT: 2.434 min Scan# 66
Delta R.T. -0.037 min
Lab File: 2m83247.D
Acq: 21 Apr 2016 11:46 am

Tgt Ion: 88 Resp: 91344

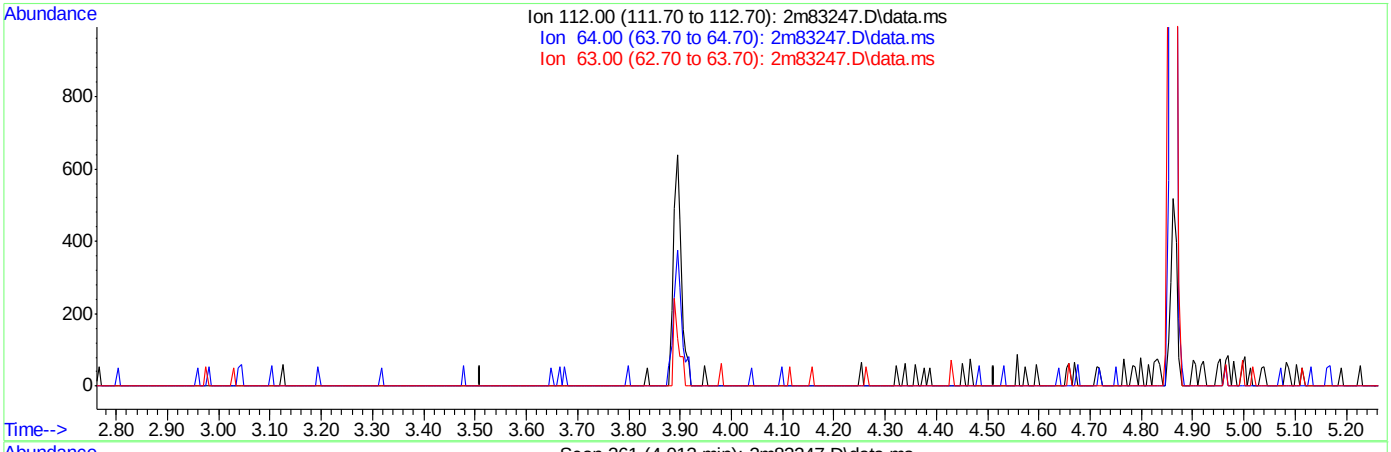
Ion	Ratio	Lower	Upper
88	100		
58	66.4	33.3	93.3
57	20.4	0.0	49.2

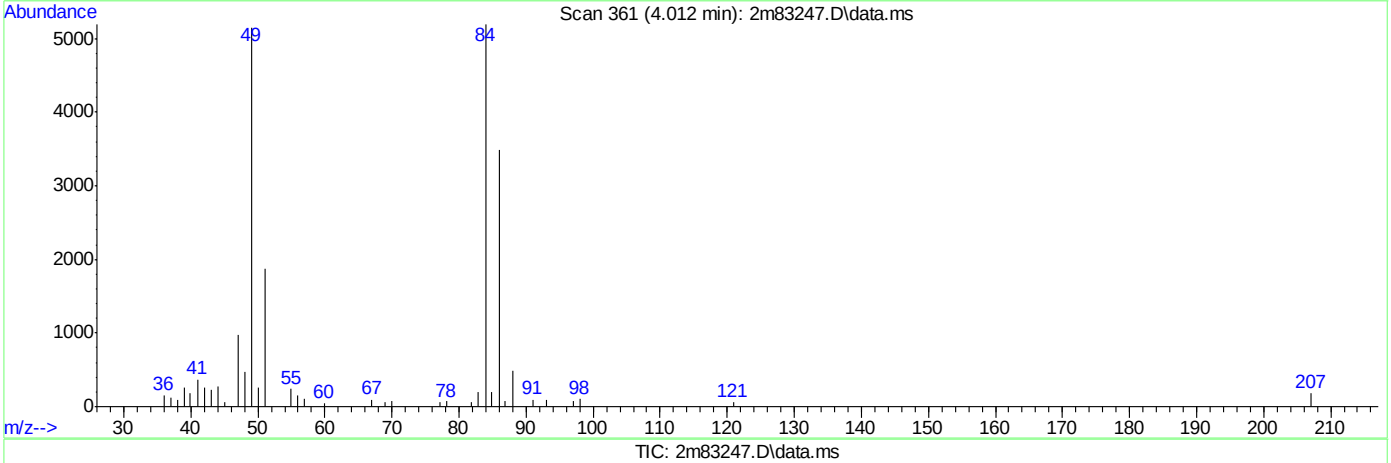


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83247.D
Acq On : 21 Apr 2016 11:46 am
Operator : ashleyn
Sample : jc18649-1
Misc : op93236,e2m3657,810,,,1,200
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 12:06:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration





TIC: 2m83247.D\data.ms

(5) 2-Fluorophenol (S)

4.012min (-4.012) 0.00ppm

response 0

Ion	Exp%	Act%
112.00	100	0.00
64.00	50.20	0.00#
63.00	24.40	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27667a.D
Acq On : 21 Apr 2016 12:14 am
Operator : sarad
Sample : jc18649-1
Misc : op93236,e5p1400,810
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 10:43:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Wed Apr 20 23:19:34 2016
Response via : Initial Calibration

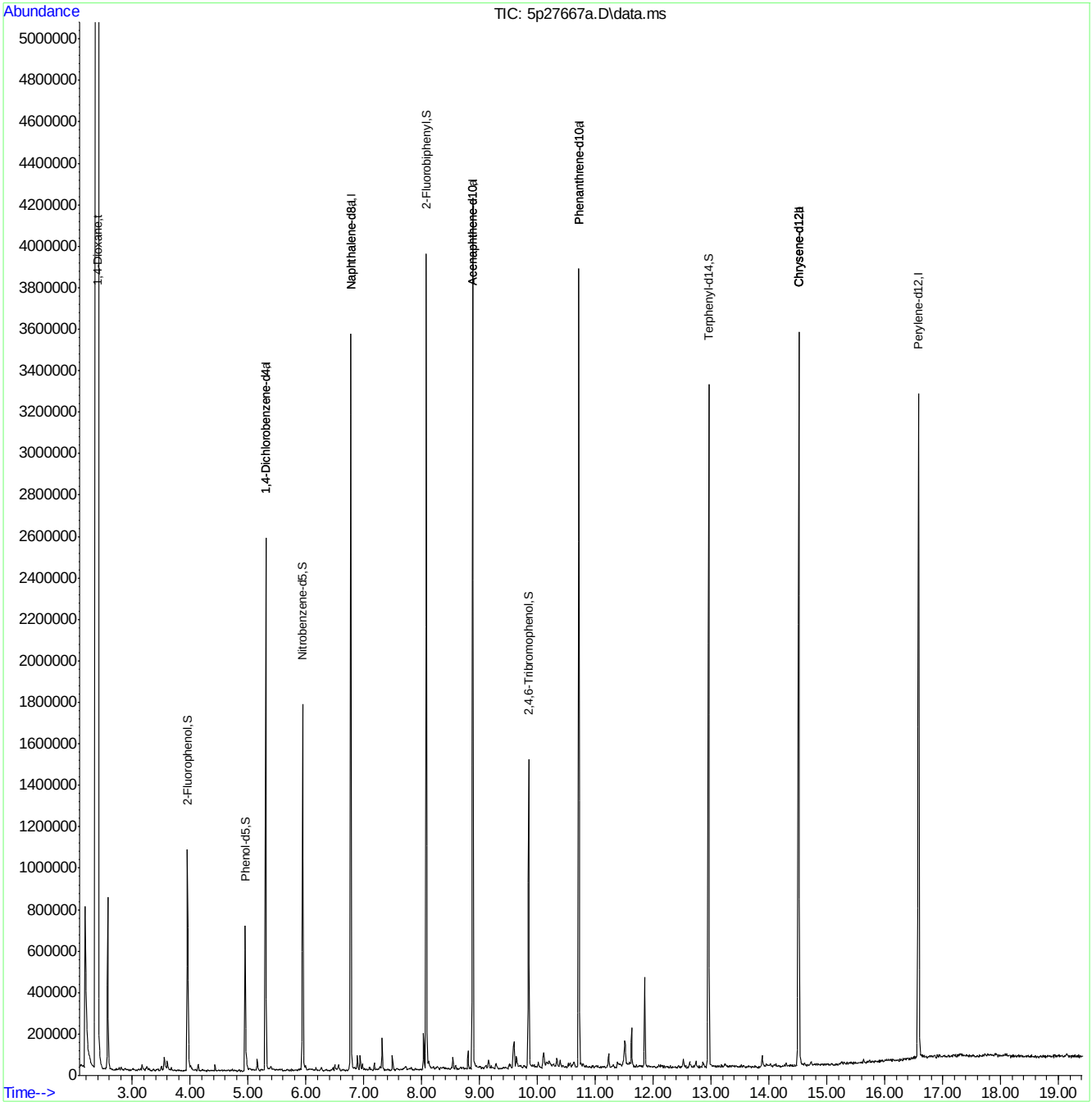
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	431954	40.00	ppm	0.00
24) Naphthalene-d8	6.772	136	1693599	40.00	ppm	0.00
47) Acenaphthene-d10	8.883	164	981646	40.00	ppm	0.00
69) Phenanthrene-d10	10.715	188	1587628	40.00	ppm	0.00
83) Chrysene-d12	14.513	240	1493944	40.00	ppm	0.00
92) Perylene-d12	16.581	264	1420700	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	431954	40.00	ppm	0.00
104) Acenaphthene-d10a	8.883	164	981646	40.00	ppm	0.00
106) Chrysene-d12a	14.513	240	1493745	40.00	ppm	0.00
109) Phenanthrene-d10a	10.715	188	1587628	40.00	ppm	0.00
112) Naphthalene-d8a	6.772	136	1693599	40.00	ppm	0.00
114) Chrysene-d12b	14.513	240	1493745	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.952	112	338890	25.60	ppm	0.01
Spiked Amount 50.000			Recovery	=	51.20%	
8) Phenol-d5	4.951	99	237524	15.79	ppm	-0.02
Spiked Amount 50.000			Recovery	=	31.58%	
25) Nitrobenzene-d5	5.944	82	463714	36.07	ppm	0.01
Spiked Amount 50.000			Recovery	=	72.14%	
51) 2-Fluorobiphenyl	8.076	172	1199452	38.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	76.76%	
73) 2,4,6-Tribromophenol	9.844	330	165651	43.22	ppm	0.00
Spiked Amount 50.000			Recovery	=	86.44%	
85) Terphenyl-d14	12.959	244	1215082	40.47	ppm	0.00
Spiked Amount 50.000			Recovery	=	80.94%	
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	2.392	88	23765055	4691.73	ppm	93

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

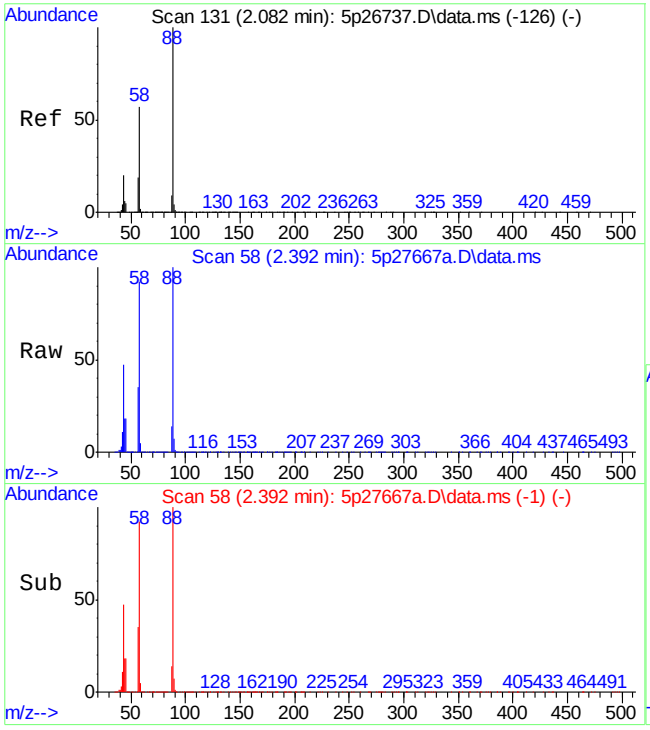
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27667a.D
Acq On : 21 Apr 2016 12:14 am
Operator : sarad
Sample : jc18649-1
Misc : op93236,e5p1400,810
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 10:43:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Wed Apr 20 23:19:34 2016
Response via : Initial Calibration



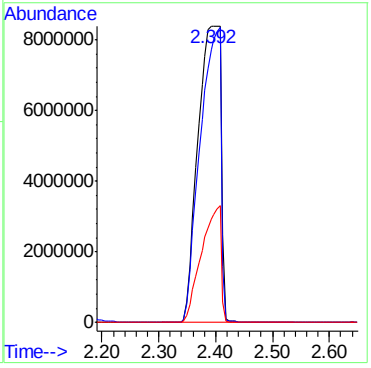
SGS ACCUTEST JC18649



#2
1,4-Dioxane
Concen: 4691.73 ppm
RT: 2.392 min Scan# 58
Delta R.T. 0.110 min
Lab File: 5p27667a.D
Acq: 21 Apr 16 12:14 am

Tgt Ion: 88 Resp:23765055

Ion	Ratio	Lower	Upper
88	100		
58	92.1	54.0	114.0
57	34.9	4.2	64.2



7.1.2

7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83248.D
Acq On : 21 Apr 2016 12:12 pm
Operator : ashleyn
Sample : jc18649-2
Misc : op93236,e2m3657,810,,,1,200
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 13:18:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.863	152	174774	40.00	ppm	-0.03
24) Naphthalene-d8	5.986	136	695101	40.00	ppm	-0.04
47) Acenaphthene-d10	8.099	164	415692	40.00	ppm	-0.04
69) Phenanthrene-d10	10.292	188	648299	40.00	ppm	-0.05
83) Chrysene-d12	14.496	240	603812	40.00	ppm	-0.05
92) Perylene-d12	16.619	264	601209	40.00	ppm	-0.05
102) 1,4-Dichlorobenzene-d4a	4.863	152	174774	40.00	ppm	-0.03
104) Acenaphthene-d10a	8.099	164	415692	40.00	ppm	-0.04
106) Chrysene-d12a	14.496	240	603812	40.00	ppm	-0.05
108) Phenanthrene-d10a	10.292	188	648299	40.00	ppm	-0.05
110) Naphthalene-d8a	5.986	136	695101	40.00	ppm	-0.04

System Monitoring Compounds

5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds						Qvalue
2) 1,4-Dioxane	2.434	88	97930	33.52	ppm	97

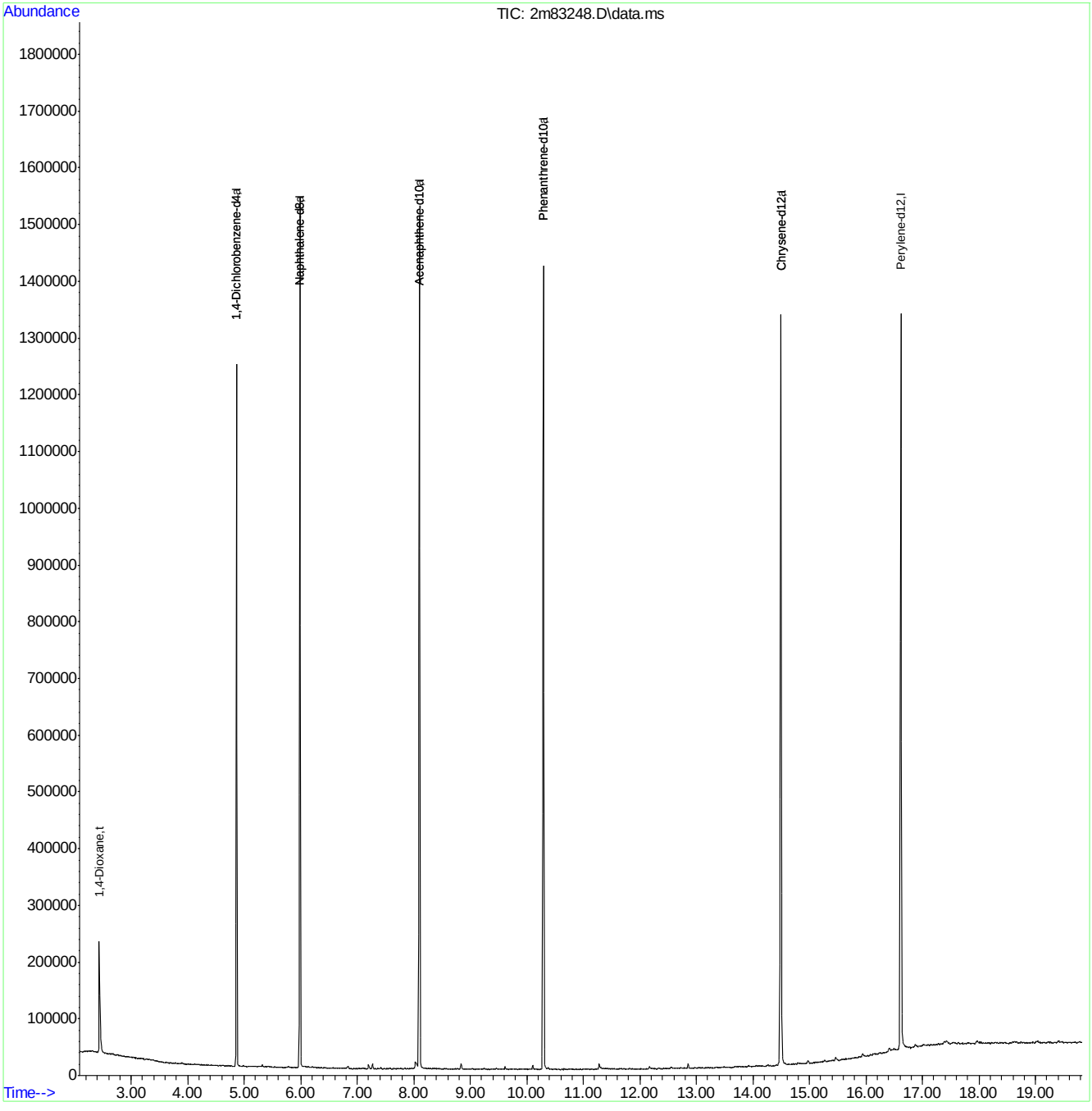
(#) = qualifier out of range (m) = manual integration (+) = signals summed

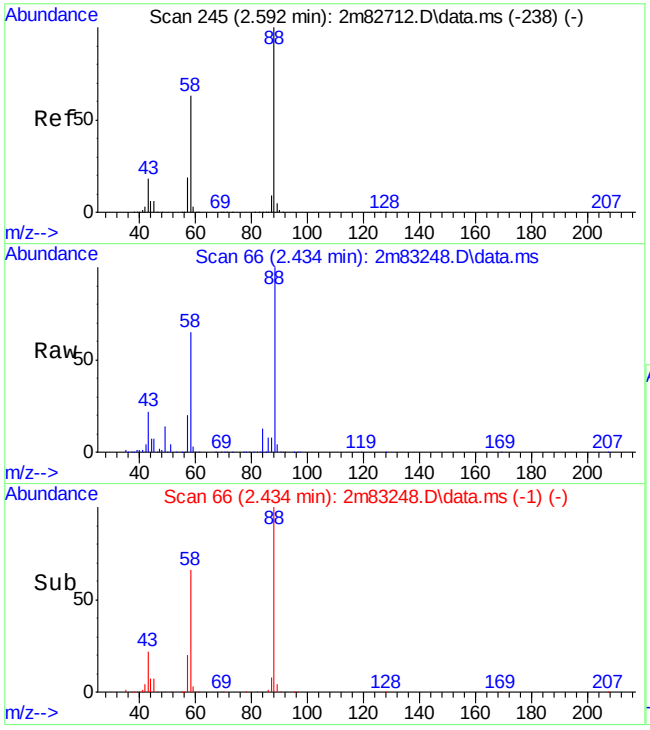
SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83248.D
Acq On : 21 Apr 2016 12:12 pm
Operator : ashleyn
Sample : jc18649-2
Misc : op93236,e2m3657,810,,,1,200
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 13:18:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

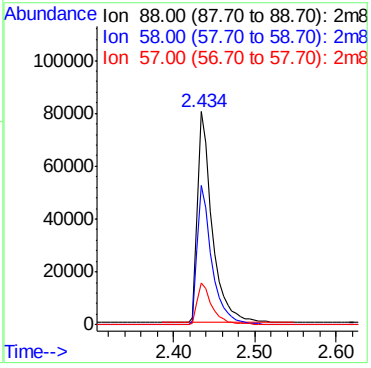




#2
1,4-Dioxane
Concen: 33.52 ppm
RT: 2.434 min Scan# 66
Delta R.T. -0.037 min
Lab File: 2m83248.D
Acq: 21 Apr 2016 12:12 pm

Tgt Ion: 88 Resp: 97930

Ion	Ratio	Lower	Upper
88	100		
58	65.8	33.3	93.3
57	19.9	0.0	49.2



7.1.3

7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27668.D
Acq On : 21 Apr 2016 12:40 am
Operator : sarad
Sample : jc18649-2
Misc : op93236,e5p1400,810
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 10:45:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Wed Apr 20 23:19:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	444307	40.00	ppm	0.00
24) Naphthalene-d8	6.773	136	1743143	40.00	ppm	0.00
47) Acenaphthene-d10	8.883	164	999749	40.00	ppm	0.00
69) Phenanthrene-d10	10.715	188	1643685	40.00	ppm	0.00
83) Chrysene-d12	14.513	240	1530488	40.00	ppm	0.00
92) Perylene-d12	16.581	264	1455159	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	444307	40.00	ppm	0.00
104) Acenaphthene-d10a	8.883	164	999749	40.00	ppm	0.00
106) Chrysene-d12a	14.513	240	1530928	40.00	ppm	0.00
109) Phenanthrene-d10a	10.715	188	1643685	40.00	ppm	0.00
112) Naphthalene-d8a	6.773	136	1743143	40.00	ppm	0.00
114) Chrysene-d12b	14.513	240	1530928	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.952	112	328204	24.10	ppm	0.01
Spiked Amount 50.000			Recovery	=	48.20%	
8) Phenol-d5	4.951	99	244831	15.83	ppm	-0.02
Spiked Amount 50.000			Recovery	=	31.66%	
25) Nitrobenzene-d5	5.945	82	449432	33.97	ppm	0.01
Spiked Amount 50.000			Recovery	=	67.94%	
51) 2-Fluorobiphenyl	8.076	172	1221050	38.36	ppm	0.00
Spiked Amount 50.000			Recovery	=	76.72%	
73) 2,4,6-Tribromophenol	9.850	330	187655	47.29	ppm	0.00
Spiked Amount 50.000			Recovery	=	94.58%	
85) Terphenyl-d14	12.959	244	1363302	44.32	ppm	0.00
Spiked Amount 50.000			Recovery	=	88.64%	
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	2.392	88	23813039	4570.50	ppm	94

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

7.1.4

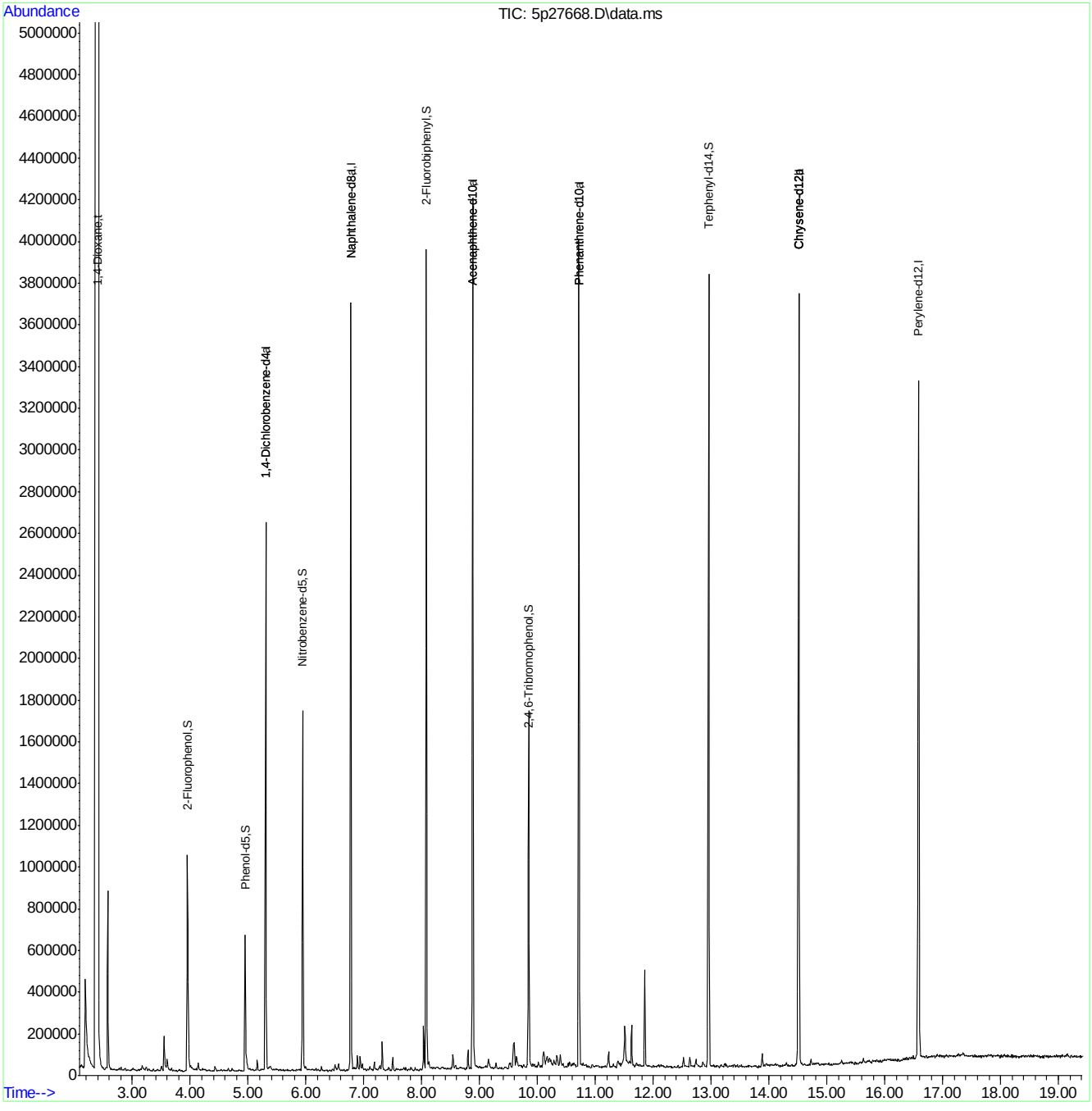
7

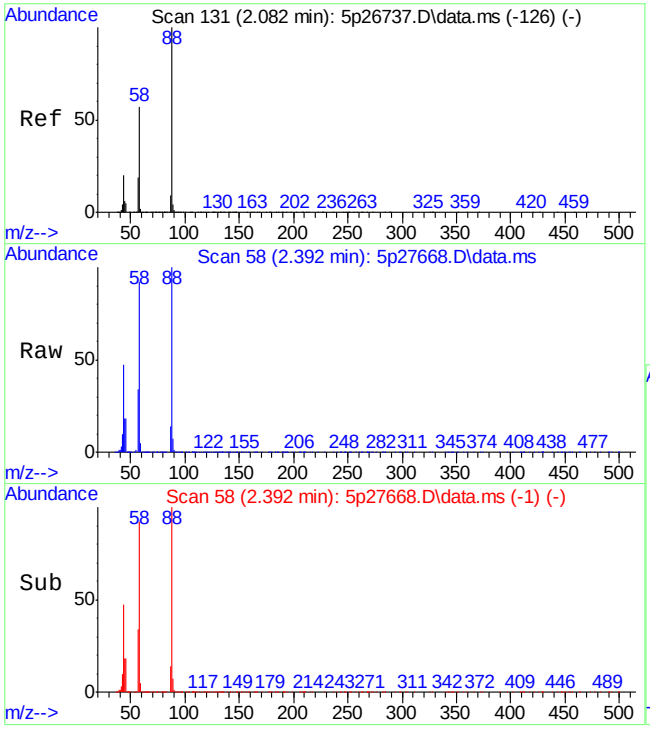
SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27668.D
Acq On : 21 Apr 2016 12:40 am
Operator : sarad
Sample : jc18649-2
Misc : op93236,e5p1400,810
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 10:45:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Wed Apr 20 23:19:34 2016
Response via : Initial Calibration

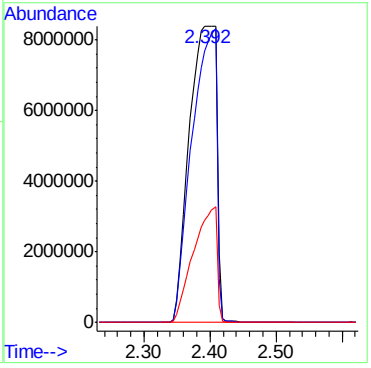




#2
1,4-Dioxane
Concen: 4570.50 ppm
RT: 2.392 min Scan# 58
Delta R.T. 0.110 min
Lab File: 5p27668.D
Acq: 21 Apr 16 12:40 am

Tgt Ion: 88 Resp:23813039

Ion	Ratio	Lower	Upper
88	100		
58	91.5	54.0	114.0
57	34.4	4.2	64.2



7.1.4

7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83450.D
Acq On : 28 Apr 2016 4:48 pm
Operator : ashleyn
Sample : jc18649-3
Misc : op93364,e2m3668,31.7
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 29 16:08:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 14:55:04 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.761	152	257545	40.00 ppm	0.00
24) Naphthalene-d8	5.863	136	1031353	40.00 ppm	0.00
47) Acenaphthene-d10	7.954	164	622445	40.00 ppm	0.00
69) Phenanthrene-d10	10.142	188	939577	40.00 ppm	0.00
83) Chrysene-d12	14.346	240	778723	40.00 ppm	0.00
92) Perylene-d12	16.469	264	673728	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.761	152	257545	40.00 ppm	0.00
104) Acenaphthene-d10a	7.954	164	622445	40.00 ppm	0.00
106) Chrysene-d12a	14.346	240	778723	40.00 ppm	0.00
108) Phenanthrene-d10a	10.142	188	939577	40.00 ppm	0.00
110) Naphthalene-d8a	5.863	136	1031353	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	3.793	112	332117	34.38 ppm	-0.01
Spiked Amount 50.000			Recovery	= 68.76%	
8) Phenol-d5	4.504	99	432263	35.64 ppm	0.00
Spiked Amount 50.000			Recovery	= 71.28%	
25) Nitrobenzene-d5	5.205	82	406802	42.10 ppm	-0.01
Spiked Amount 50.000			Recovery	= 84.20%	
51) 2-Fluorobiphenyl	7.072	172	746850	37.81 ppm	-0.01
Spiked Amount 50.000			Recovery	= 75.62%	
73) 2,4,6-Tribromophenol	9.099	330	105793	43.73 ppm	-0.01
Spiked Amount 50.000			Recovery	= 87.46%	
85) Terphenyl-d14	12.709	244	691037	41.32 ppm	-0.02
Spiked Amount 50.000			Recovery	= 82.64%	

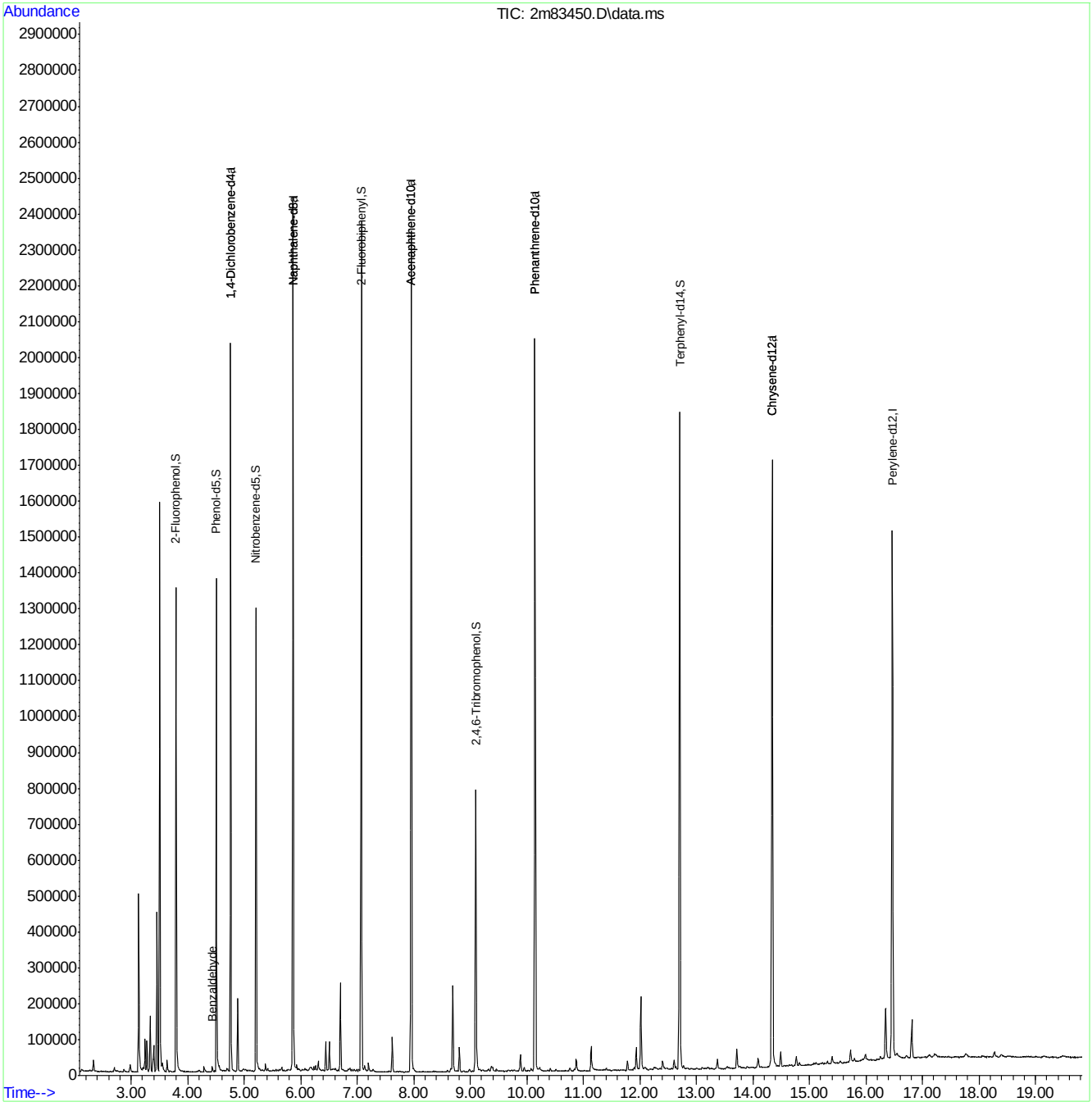
Target Compounds					Qvalue
103) Benzaldehyde	4.435	105	3611	0.52 ppm	82

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

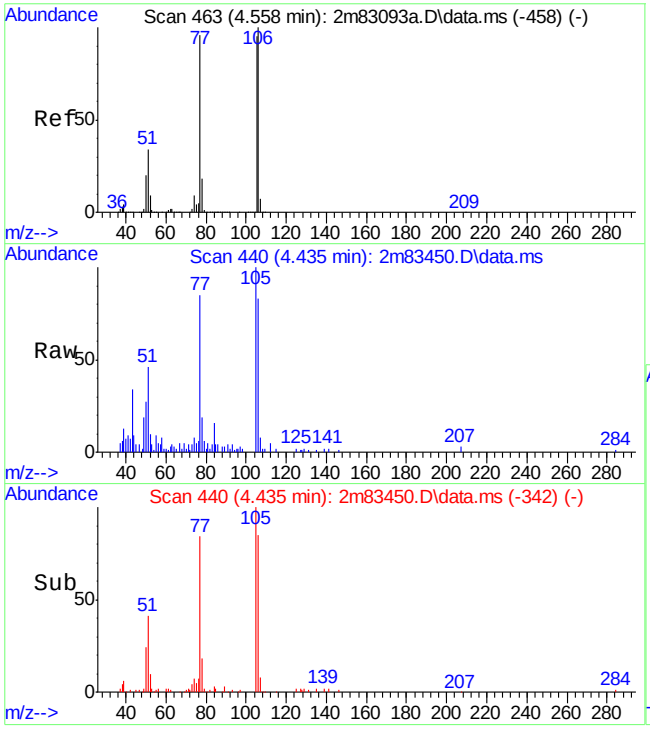
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83450.D
Acq On : 28 Apr 2016 4:48 pm
Operator : ashleyn
Sample : jc18649-3
Misc : op93364,e2m3668,31.7
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 29 16:08:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 14:55:04 2016
Response via : Initial Calibration



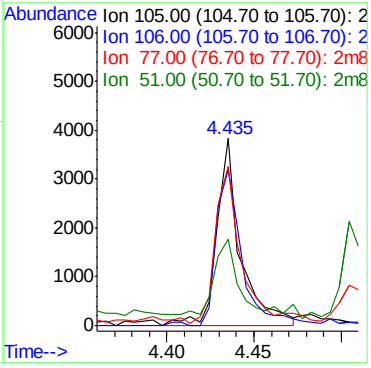
SGS ACCUTEST JC18649



#103
Benzaldehyde
Concen: 0.52 ppm
RT: 4.435 min Scan# 440
Delta R.T. 0.026 min
Lab File: 2m83450.D
Acq: 28 Apr 2016 4:48 pm

Tgt Ion:105 Resp: 3611

Ion	Ratio	Lower	Upper
105	100		
106	83.4	75.2	135.2
77	81.6	70.5	130.5
51	38.7	6.3	66.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58449.D
Acq On : 21 Apr 2016 4:28 pm
Operator : robertl1
Sample : jc18649-4
Misc : op93271,e2p2552,910
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 21 16:50:18 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

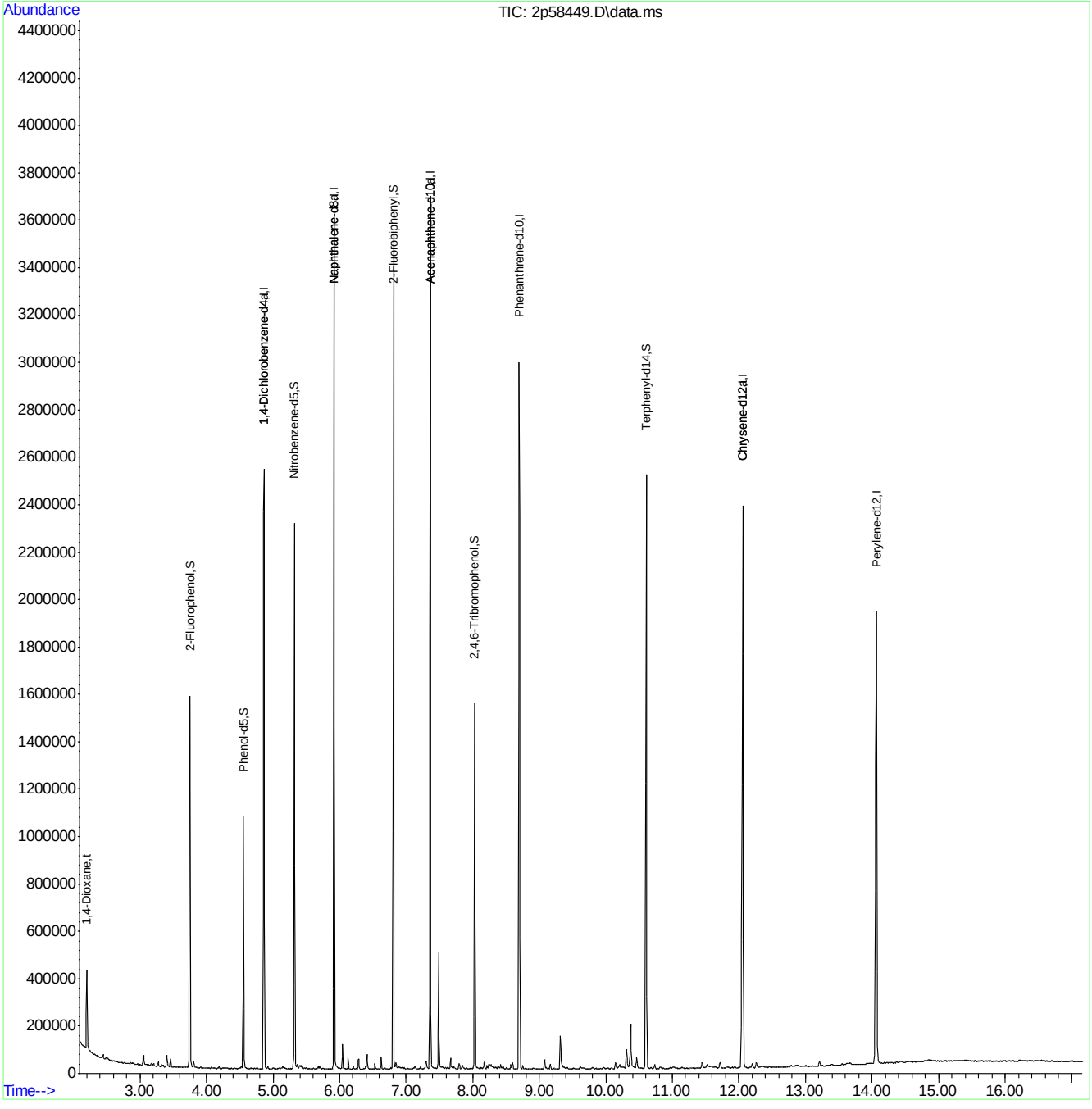
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.863	152	343932	40.00 ppm	-0.05
24) Naphthalene-d8	5.917	136	1207179	40.00 ppm	-0.05
47) Acenaphthene-d10	7.361	164	661051	40.00 ppm	-0.05
69) Phenanthrene-d10	8.698	188	1035315	40.00 ppm	-0.06
83) Chrysene-d12	12.057	240	989811	40.00 ppm	-0.08
92) Perylene-d12	14.068	264	849196	40.00 ppm	-0.08
102) 1,4-Dichlorobenzene-d4a	4.863	152	343932	40.00 ppm	-0.05
104) Naphthalene-d8a	5.917	136	1207179	40.00 ppm	-0.05
106) Acenaphthene-d10a	7.361	164	661051	40.00 ppm	-0.05
109) Chrysene-d12a	12.057	240	989811	40.00 ppm	-0.08
System Monitoring Compounds					
5) 2-Fluorophenol	3.750	112	375090	26.92 ppm	-0.04
Spiked Amount 50.000	Range 11 - 58		Recovery = 53.84%		
8) Phenol-d5	4.553	99	299397	18.34 ppm	-0.04
Spiked Amount 50.000	Range 10 - 59		Recovery = 36.68%		
25) Nitrobenzene-d5	5.323	82	533795	44.85 ppm	-0.05
Spiked Amount 50.000	Range 19 - 61		Recovery = 89.70%#		
51) 2-Fluorobiphenyl	6.810	172	996172	48.43 ppm	-0.05
Spiked Amount 50.000	Range 21 - 58		Recovery = 96.86%#		
73) 2,4,6-Tribromophenol	8.029	330	123479	53.72 ppm	-0.06
Spiked Amount 50.000	Range 12 - 68		Recovery = 107.44%#		
85) Terphenyl-d14	10.607	244	876969	44.02 ppm	-0.07
Spiked Amount 50.000	Range 16 - 65		Recovery = 88.04%#		
Target Compounds					Qvalue
2) 1,4-Dioxane	2.199	88	103584	16.39 ppm	99

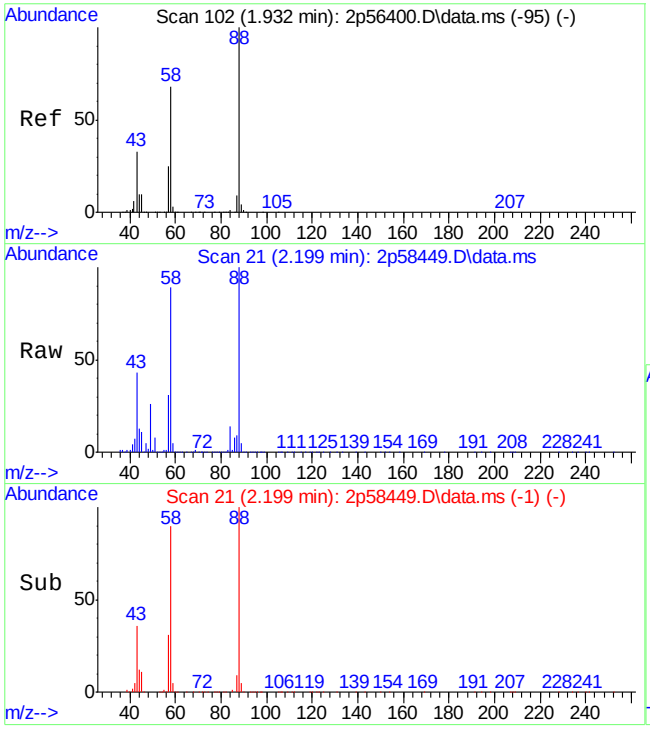
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58449.D
Acq On : 21 Apr 2016 4:28 pm
Operator : robertl1
Sample : jc18649-4
Misc : op93271,e2p2552,910
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 21 16:50:18 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

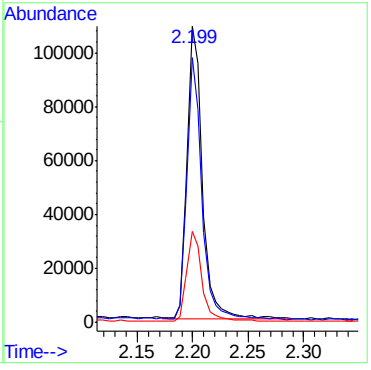




#2
1,4-Dioxane
Concen: 16.39 ppm
RT: 2.199 min Scan# 21
Delta R.T. -0.069 min
Lab File: 2p58449.D
Acq: 21 Apr 2016 4:28 pm

Tgt Ion: 88 Resp: 103584

Ion	Ratio	Lower	Upper
88	100		
58	89.4	60.5	120.5
57	30.5	0.6	60.6



7.1.6

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83249.D
Acq On : 21 Apr 2016 12:38 pm
Operator : ashleyn
Sample : jc18649-5
Misc : op93236,e2m3657,80,,,1,2
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 21 13:19:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.863	152	182907	40.00 ppm	-0.03
24) Naphthalene-d8	5.986	136	726895	40.00 ppm	-0.04
47) Acenaphthene-d10	8.099	164	435444	40.00 ppm	-0.04
69) Phenanthrene-d10	10.292	188	679013	40.00 ppm	-0.05
83) Chrysene-d12	14.496	240	625718	40.00 ppm	-0.05
92) Perylene-d12	16.619	264	620904	40.00 ppm	-0.05
102) 1,4-Dichlorobenzene-d4a	4.863	152	182907	40.00 ppm	-0.03
104) Acenaphthene-d10a	8.099	164	435444	40.00 ppm	-0.04
106) Chrysene-d12a	14.496	240	625718	40.00 ppm	-0.05
108) Phenanthrene-d10a	10.292	188	679013	40.00 ppm	-0.05
110) Naphthalene-d8a	5.986	136	726895	40.00 ppm	-0.04

System Monitoring Compounds					
5) 2-Fluorophenol	3.889	112	73207	10.67 ppm	-0.12
Spiked Amount 50.000			Recovery	= 21.34%	
8) Phenol-d5	4.601	99	64480	7.49 ppm	-0.02
Spiked Amount 50.000			Recovery	= 14.98%	
25) Nitrobenzene-d5	5.317	82	118440	17.39 ppm	-0.04
Spiked Amount 50.000			Recovery	= 34.78%	
51) 2-Fluorobiphenyl	7.206	172	231984	16.79 ppm	-0.04
Spiked Amount 50.000			Recovery	= 33.58%	
73) 2,4,6-Tribromophenol	9.243	330	33877	19.38 ppm	-0.04
Spiked Amount 50.000			Recovery	= 38.76%	
85) Terphenyl-d14	12.854	244	235564	17.53 ppm	-0.05
Spiked Amount 50.000			Recovery	= 35.06%	

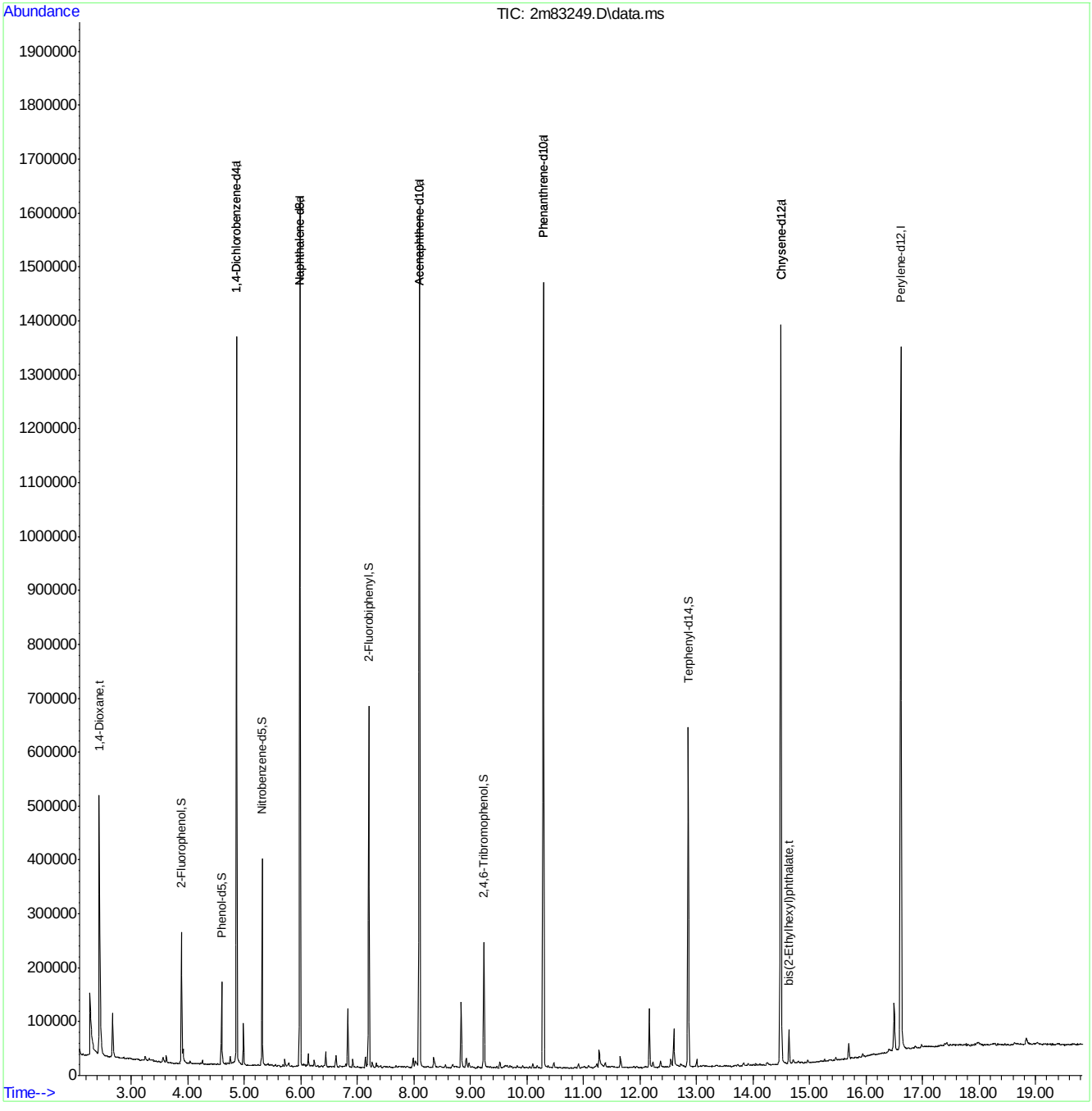
Target Compounds					Qvalue
2) 1,4-Dioxane	2.435	88	236310	77.30 ppm	97
91) bis(2-Ethylhexyl)phtha...	14.640	149	21004	1.42 ppm	100

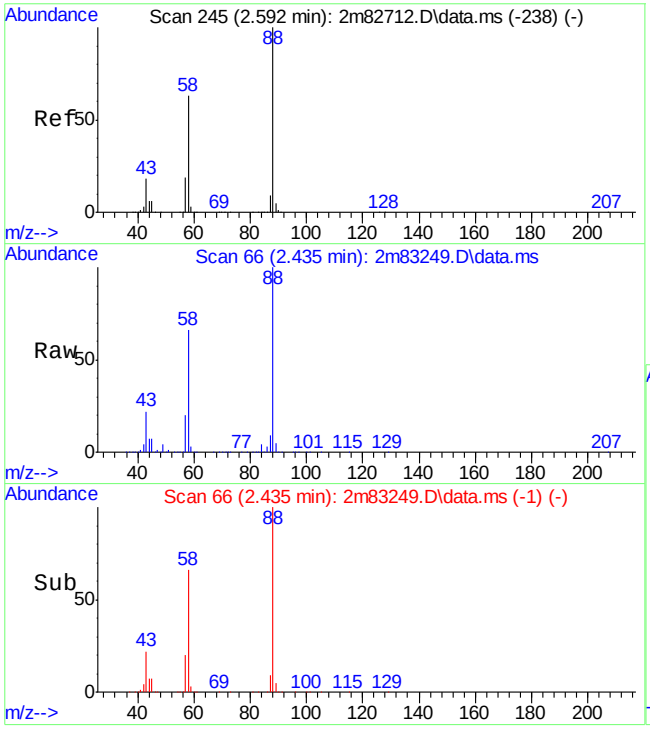
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83249.D
Acq On : 21 Apr 2016 12:38 pm
Operator : ashleyn
Sample : jc18649-5
Misc : op93236,e2m3657,80,,,1,2
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 21 13:19:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

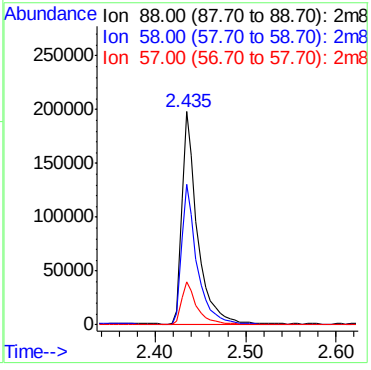


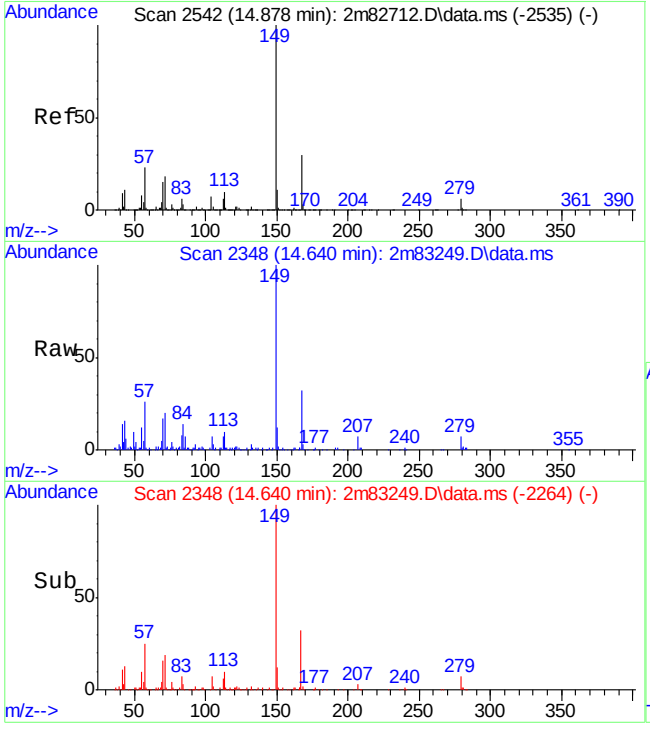


#2
1,4-Dioxane
Concen: 77.30 ppm
RT: 2.435 min Scan# 66
Delta R.T. -0.037 min
Lab File: 2m83249.D
Acq: 21 Apr 2016 12:38 pm

Tgt Ion: 88 Resp: 236310

Ion	Ratio	Lower	Upper
88	100		
58	65.8	33.3	93.3
57	19.9	0.0	49.2

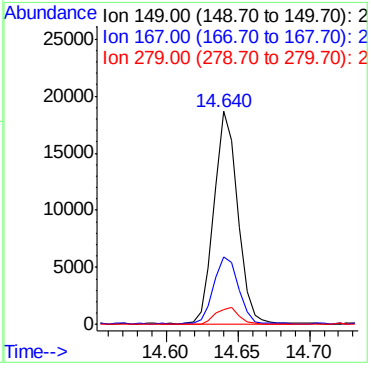




#91
bis(2-Ethylhexyl)phthalate
Concen: 1.42 ppm
RT: 14.640 min Scan# 2348
Delta R.T. -0.053 min
Lab File: 2m83249.D
Acq: 21 Apr 2016 12:38 pm

Tgt Ion:149 Resp: 21004

Ion	Ratio	Lower	Upper
149	100		
167	31.6	1.5	61.5
279	6.8	0.0	37.0



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27670.D
Acq On : 21 Apr 2016 1:32 am
Operator : sarad
Sample : jc18649-5
Misc : op93236,e5p1400,800
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 21 10:50:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Wed Apr 20 23:19:34 2016
Response via : Initial Calibration

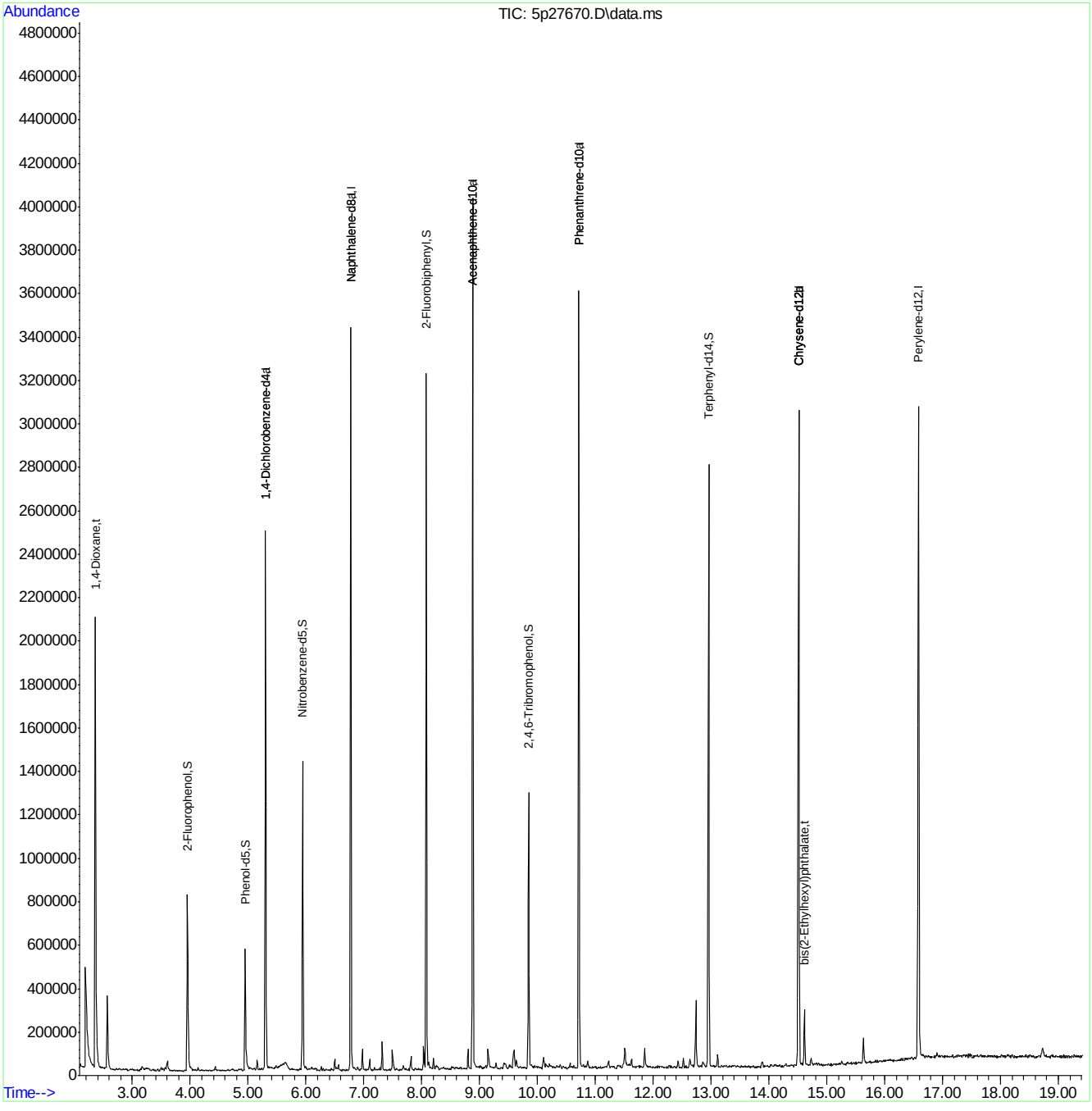
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.304	152	426726	40.00	ppm	0.00
24) Naphthalene-d8	6.773	136	1661928	40.00	ppm	0.00
47) Acenaphthene-d10	8.883	164	941949	40.00	ppm	0.00
69) Phenanthrene-d10	10.715	188	1474042	40.00	ppm	0.00
83) Chrysene-d12	14.514	240	1334772	40.00	ppm	0.00
92) Perylene-d12	16.581	264	1262455	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.304	152	426726	40.00	ppm	0.00
104) Acenaphthene-d10a	8.883	164	941949	40.00	ppm	0.00
106) Chrysene-d12a	14.514	240	1334772	40.00	ppm	0.00
109) Phenanthrene-d10a	10.715	188	1474042	40.00	ppm	0.00
112) Naphthalene-d8a	6.773	136	1661928	40.00	ppm	0.00
114) Chrysene-d12b	14.514	240	1334772	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.947	112	264665	20.24	ppm	0.00
Spiked Amount 50.000			Recovery	=	40.48%	
8) Phenol-d5	4.951	99	202412	13.62	ppm	-0.02
Spiked Amount 50.000			Recovery	=	27.24%	
25) Nitrobenzene-d5	5.945	82	382793	30.34	ppm	0.01
Spiked Amount 50.000			Recovery	=	60.68%	
51) 2-Fluorobiphenyl	8.076	172	1001770	33.40	ppm	0.00
Spiked Amount 50.000			Recovery	=	66.80%	
73) 2,4,6-Tribromophenol	9.844	330	138749	38.99	ppm	0.00
Spiked Amount 50.000			Recovery	=	77.98%	
85) Terphenyl-d14	12.959	244	1014082	37.80	ppm	0.00
Spiked Amount 50.000			Recovery	=	75.60%	
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	2.360	88	751925	150.26	ppm	98
91) bis(2-Ethylhexyl)phtha...	14.615	149	84776	2.97	ppm	98

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

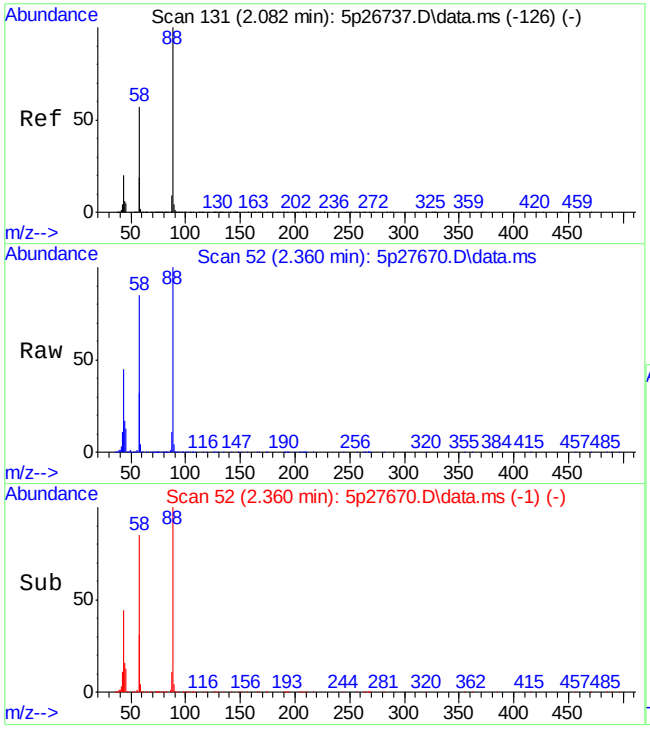
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27670.D
Acq On : 21 Apr 2016 1:32 am
Operator : sarad
Sample : jc18649-5
Misc : op93236,e5p1400,800
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 21 10:50:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Wed Apr 20 23:19:34 2016
Response via : Initial Calibration



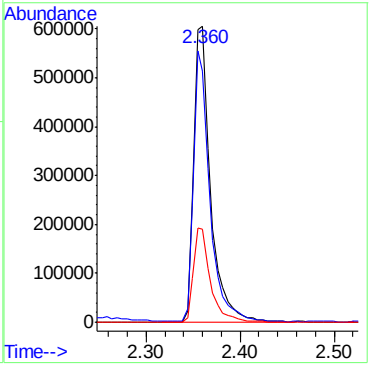
M5P1382.M Thu Apr 21 10:56:08 2016 RPT1 Page: 2

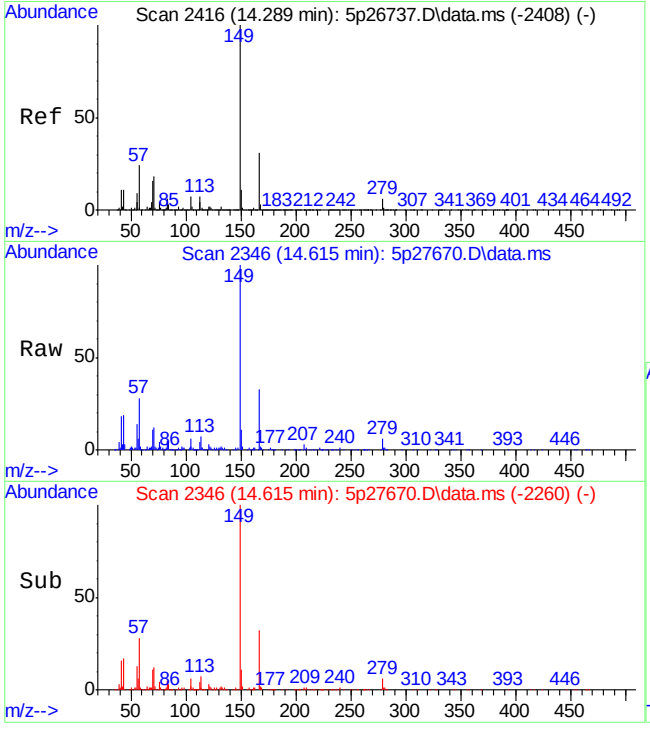


#2
1,4-Dioxane
Concen: 150.26 ppm
RT: 2.360 min Scan# 52
Delta R.T. 0.078 min
Lab File: 5p27670.D
Acq: 21 Apr 16 1:32 am

Tgt Ion: 88 Resp: 751925

Ion	Ratio	Lower	Upper
88	100		
58	84.5	54.0	114.0
57	31.4	4.2	64.2

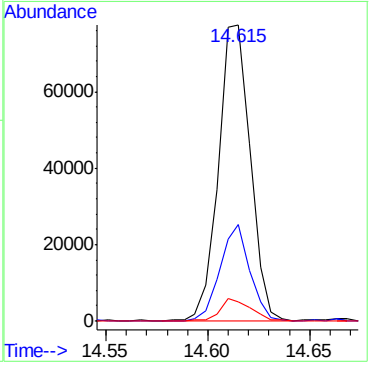




#91
bis(2-Ethylhexyl)phthalate
Concen: 2.97 ppm
RT: 14.615 min Scan# 2346
Delta R.T. -0.038 min
Lab File: 5p27670.D
Acq: 21 Apr 16 1:32 am

Tgt Ion:149 Resp: 84776

Ion	Ratio	Lower	Upper
149	100		
167	32.6	1.3	61.3
279	6.4	0.0	35.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64882.D
Acq On : 21 Apr 2016 11:56 am
Operator : linseyk
Sample : jc18649-1
Misc : op93236a,e4m2889,810
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 13:38:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 21 13:31:40 2016
Response via : Initial Calibration

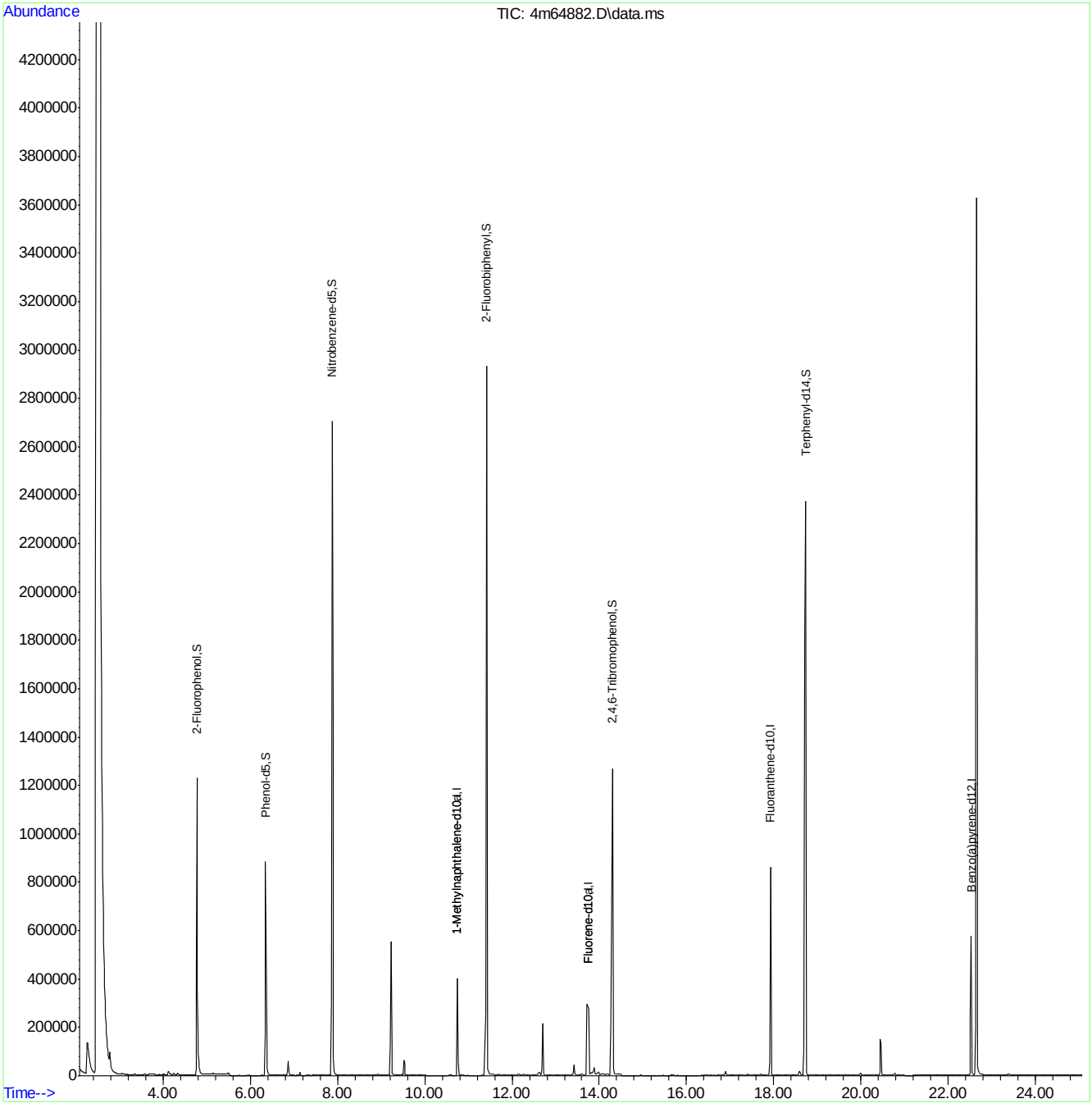
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	238644	4.00	ppm	# 0.05
12) Fluorene-d10	13.748	176	413273	4.00	ppm	0.07
22) Fluoranthene-d10	17.923	212	888468	4.00	ppm	0.06
28) Benzo(a)pyrene-d12	22.525	264	631675	4.00	ppm	0.05
35) 1-Methylnaphthalene-d10a	10.746	152	238644	4.00	ppm	# 0.05
38) Fluorene-d10a	13.748	176	413273	4.00	ppm	# 0.07
System Monitoring Compounds						
2) 2-Fluorophenol	4.773	112	852819	27.29	ppm	0.05
Spiked Amount 50.000	Range 11 - 58		Recovery = 54.58%			
3) Phenol-d5	6.352	99	971530	18.49	ppm	0.04
Spiked Amount 50.000			Recovery = 36.98%			
6) Nitrobenzene-d5	7.879	82	1959788	41.59	ppm	0.04
Spiked Amount 50.000			Recovery = 83.18%			
11) 2-Fluorobiphenyl	11.414	172	3386492	49.17	ppm	0.05
Spiked Amount 50.000			Recovery = 98.34%			
17) 2,4,6-Tribromophenol	14.297	330	1000743	45.40	ppm	0.07
Spiked Amount 50.000			Recovery = 90.80%			
25) Terphenyl-d14	18.732	244	3811997	31.76	ppm	0.06
Spiked Amount 50.000			Recovery = 63.52%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64882.D
Acq On : 21 Apr 2016 11:56 am
Operator : linseyk
Sample : jc18649-1
Misc : op93236a,e4m2889,810
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 13:38:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 21 13:31:40 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64883.D
Acq On : 21 Apr 2016 12:26 pm
Operator : linseyk
Sample : jc18649-2
Misc : op93236a,e4m2889,810
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 13:38:14 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 21 13:31:40 2016
Response via : Initial Calibration

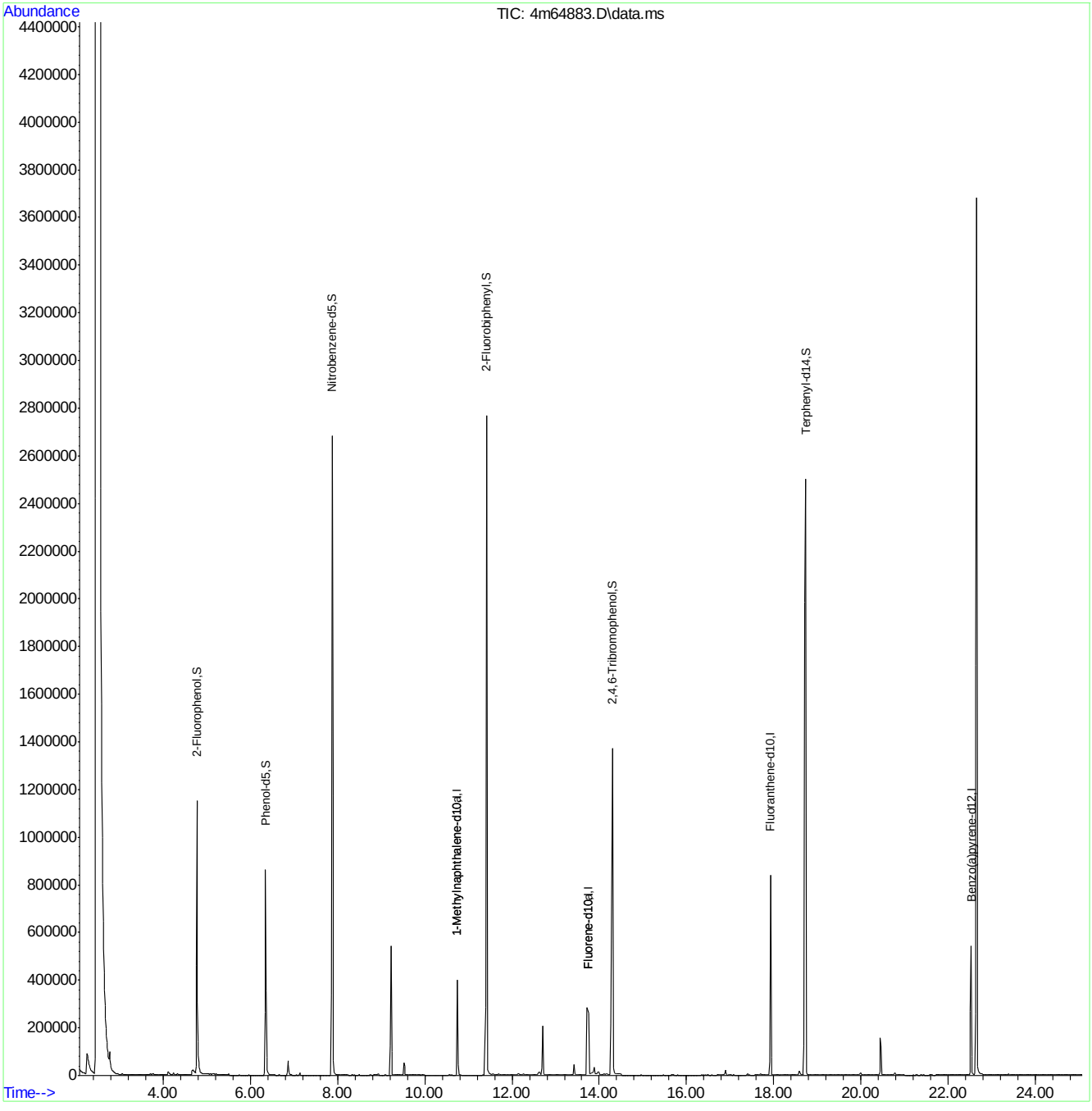
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	235248	4.00	ppm	# 0.05
12) Fluorene-d10	13.748	176	398401	4.00	ppm	0.07
22) Fluoranthene-d10	17.923	212	854683	4.00	ppm	0.06
28) Benzo(a)pyrene-d12	22.525	264	614128	4.00	ppm	0.05
35) 1-Methylnaphthalene-d10a	10.746	152	235248	4.00	ppm	# 0.05
38) Fluorene-d10a	13.748	176	398401	4.00	ppm	# 0.07
System Monitoring Compounds						
2) 2-Fluorophenol	4.773	112	787132	25.55	ppm	0.05
Spiked Amount 50.000	Range 11 - 58		Recovery = 51.10%			
3) Phenol-d5	6.352	99	901396	17.40	ppm	0.04
Spiked Amount 50.000			Recovery = 34.80%			
6) Nitrobenzene-d5	7.879	82	1868680	40.23	ppm	0.04
Spiked Amount 50.000			Recovery = 80.46%			
11) 2-Fluorobiphenyl	11.414	172	3236586	47.67	ppm	0.05
Spiked Amount 50.000			Recovery = 95.34%			
17) 2,4,6-Tribromophenol	14.297	330	1089639	51.28	ppm	0.07
Spiked Amount 50.000			Recovery = 102.56%			
25) Terphenyl-d14	18.732	244	4115872	35.65	ppm	0.06
Spiked Amount 50.000			Recovery = 71.30%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64883.D
Acq On : 21 Apr 2016 12:26 pm
Operator : linseyk
Sample : jc18649-2
Misc : op93236a,e4m2889,810
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 13:38:14 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 21 13:31:40 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60903.D
Acq On : 27 Apr 2016 2:45 am
Operator : juliusj
Sample : jc18649-3
Misc : op93364a,e3m2863,31.7
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 27 14:04:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 26 09:22:28 2016
Response via : Initial Calibration

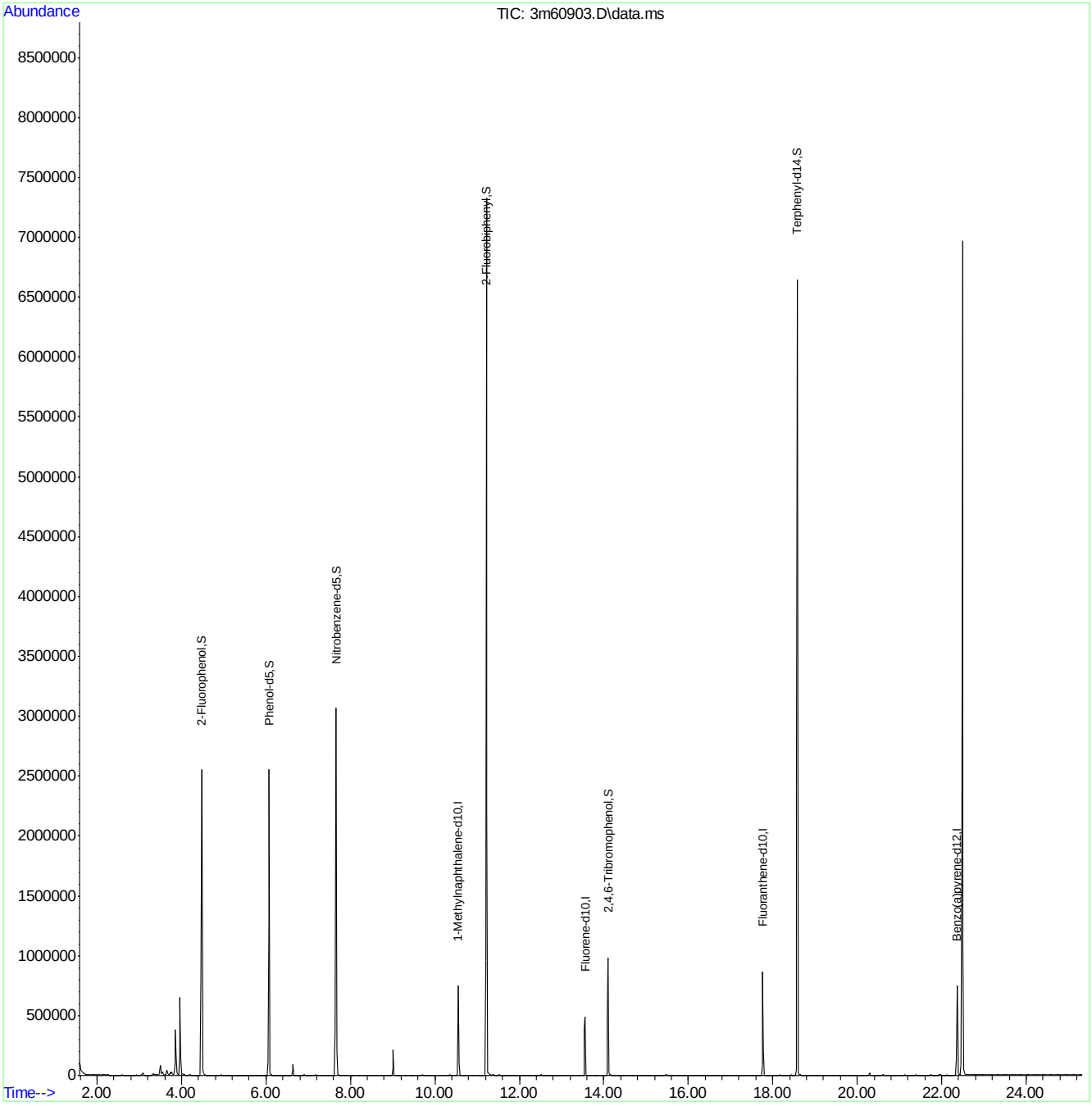
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.549	150	406344	4.00	ppm	-0.07
14) Fluorene-d10	13.562	176	531157	4.00	ppm	-0.08
21) Fluoranthene-d10	17.762	212	864031	4.00	ppm	-0.10
31) Benzo(a)pyrene-d12	22.367	264	687369	4.00	ppm	-0.08
System Monitoring Compounds						
3) 2-Fluorophenol	4.477	112	1777474	34.96	ppm	-0.03
Spiked Amount 50.000			Recovery = 69.92%			
4) Phenol-d5	6.073	99	2905101	34.54	ppm	-0.02
Spiked Amount 50.000			Recovery = 69.08%			
7) Nitrobenzene-d5	7.662	82	2929674	37.46	ppm	-0.05
Spiked Amount 50.000			Recovery = 74.92%			
15) 2-Fluorobiphenyl	11.222	172	5704469	39.08	ppm	-0.08
Spiked Amount 50.000			Recovery = 78.16%			
20) 2,4,6-Tribromophenol	14.108	330	670941	40.36	ppm	-0.06
Spiked Amount 50.000			Recovery = 80.72%			
28) Terphenyl-d14	18.581	244	5726421	45.69	ppm	-0.08
Spiked Amount 50.000			Recovery = 91.38%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60903.D
Acq On : 27 Apr 2016 2:45 am
Operator : juliusj
Sample : jc18649-3
Misc : op93364a,e3m2863,31.7
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 27 14:04:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 26 09:22:28 2016
Response via : Initial Calibration



M3M2855SIM.M Wed Apr 27 14:07:47 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2890\
Data File : 4m64891.D
Acq On : 21 Apr 2016 4:50 pm
Operator : linseyk
Sample : jc18649-4
Misc : op93271a,e4m2890,910
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 17:17:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration

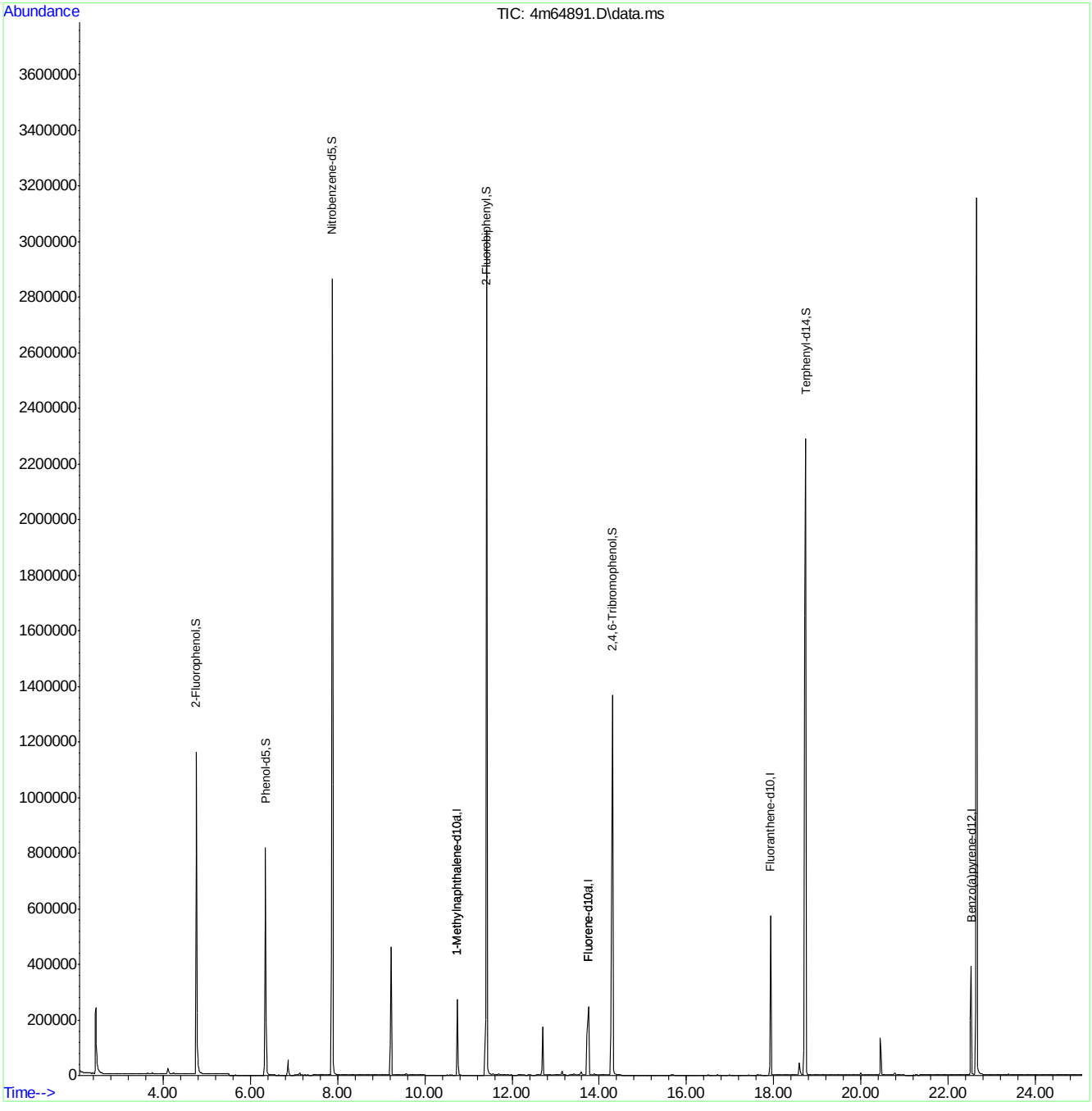
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	162348	4.00	ppm	# 0.05
12) Fluorene-d10	13.748	176	294085	4.00	ppm	0.07
22) Fluoranthene-d10	17.923	212	595727	4.00	ppm	0.06
28) Benzo(a)pyrene-d12	22.525	264	444700	4.00	ppm	0.05
35) 1-Methylnaphthalene-d10a	10.746	152	162348	4.00	ppm	# 0.05
38) Fluorene-d10a	13.748	176	294085	4.00	ppm	# 0.07
System Monitoring Compounds						
2) 2-Fluorophenol	4.762	112	806928	37.96	ppm	0.04
Spiked Amount 50.000	Range 11 - 58		Recovery = 75.92%#			
3) Phenol-d5	6.352	99	944760	26.43	ppm	0.04
Spiked Amount 50.000			Recovery = 52.86%			
6) Nitrobenzene-d5	7.879	82	1929372	60.19	ppm	0.04
Spiked Amount 50.000			Recovery = 120.38%			
11) 2-Fluorobiphenyl	11.414	172	3402482	72.61	ppm	0.05
Spiked Amount 50.000			Recovery = 145.22%			
17) 2,4,6-Tribromophenol	14.297	330	1058963	67.51	ppm	0.07
Spiked Amount 50.000			Recovery = 135.02%			
25) Terphenyl-d14	18.732	244	3591686	44.63	ppm	0.06
Spiked Amount 50.000			Recovery = 89.26%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2890\
Data File : 4m64891.D
Acq On : 21 Apr 2016 4:50 pm
Operator : linseyk
Sample : jc18649-4
Misc : op93271a,e4m2890,910
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 17:17:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64884.D
Acq On : 21 Apr 2016 12:58 pm
Operator : linseyk
Sample : jc18649-5
Misc : op93236a,e4m2889,800
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 13:38:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 21 13:31:40 2016
Response via : Initial Calibration

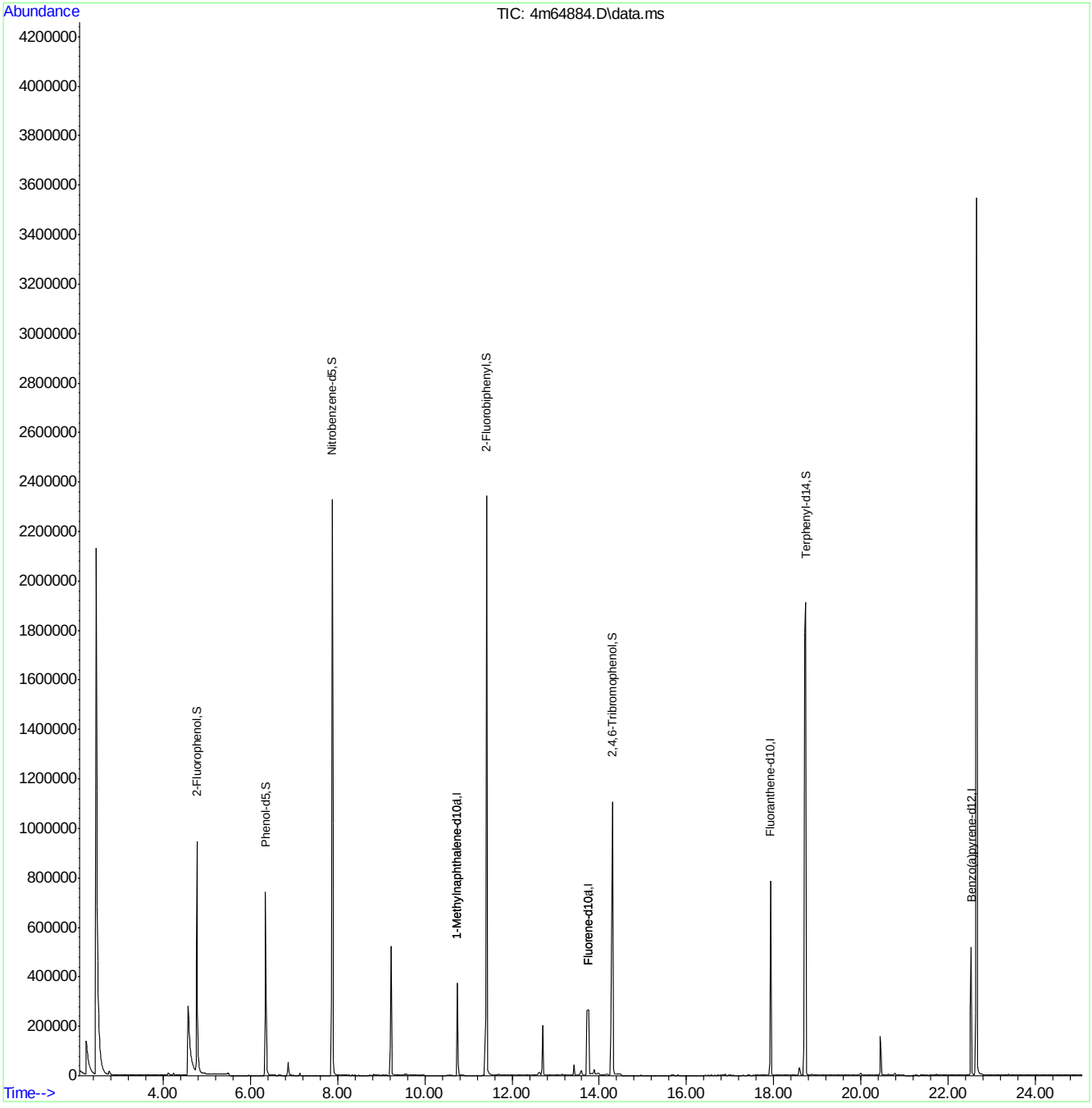
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	220355	4.00	ppm	# 0.05
12) Fluorene-d10	13.748	176	387261	4.00	ppm	0.07
22) Fluoranthene-d10	17.923	212	813281	4.00	ppm	0.06
28) Benzo(a)pyrene-d12	22.525	264	595243	4.00	ppm	0.06
35) 1-Methylnaphthalene-d10a	10.746	152	220355	4.00	ppm	# 0.05
38) Fluorene-d10a	13.748	176	387261	4.00	ppm	# 0.07
System Monitoring Compounds						
2) 2-Fluorophenol	4.773	112	667906	23.15	ppm	0.05
Spiked Amount 50.000	Range 11 - 58		Recovery = 46.30%			
3) Phenol-d5	6.352	99	799721	16.48	ppm	0.04
Spiked Amount 50.000			Recovery = 32.96%			
6) Nitrobenzene-d5	7.879	82	1623586	37.32	ppm	0.04
Spiked Amount 50.000			Recovery = 74.64%			
11) 2-Fluorobiphenyl	11.414	172	2749248	43.23	ppm	0.05
Spiked Amount 50.000			Recovery = 86.46%			
17) 2,4,6-Tribromophenol	14.297	330	871618	42.20	ppm	0.07
Spiked Amount 50.000			Recovery = 84.40%			
25) Terphenyl-d14	18.732	244	3366302	30.64	ppm	0.06
Spiked Amount 50.000			Recovery = 61.28%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64884.D
Acq On : 21 Apr 2016 12:58 pm
Operator : linseyk
Sample : jc18649-5
Misc : op93236a,e4m2889,800
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 13:38:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 21 13:31:40 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27665.D
Acq On : 20 Apr 2016 10:04 pm
Operator : sarad
Sample : op93236-mb1
Misc : op93236,e5p1400,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 07:43:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue Apr 19 22:36:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	5.303	152	469350	40.00 ppm	0.17
24) Naphthalene-d8	6.772	136	1805609	40.00 ppm	0.18
47) Acenaphthene-d10	8.883	164	1023184	40.00 ppm	0.18
69) Phenanthrene-d10	10.720	188	1624993	40.00 ppm	0.19
83) Chrysene-d12	14.513	240	1449062	40.00 ppm	0.19
92) Perylene-d12	16.586	264	1384248	40.00 ppm	0.19
102) 1,4-Dichlorobenzene-d4a	5.303	152	469350	40.00 ppm	0.17
104) Acenaphthene-d10a	8.883	164	1023184	40.00 ppm	0.18
106) Chrysene-d12a	14.513	240	1449062	40.00 ppm	0.19
109) Phenanthrene-d10a	10.720	188	1624993	40.00 ppm	0.19
112) Naphthalene-d8a	6.772	136	1805609	40.00 ppm	0.18
114) Chrysene-d12b	14.513	240	1449062	40.00 ppm	0.19
System Monitoring Compounds					
5) 2-Fluorophenol	3.946	112	318967	22.17 ppm	0.13
Spiked Amount 50.000			Recovery	= 44.34%	
8) Phenol-d5	4.951	99	222520	13.62 ppm	0.14
Spiked Amount 50.000			Recovery	= 27.24%	
25) Nitrobenzene-d5	5.944	82	451443	32.94 ppm	0.17
Spiked Amount 50.000			Recovery	= 65.88%	
51) 2-Fluorobiphenyl	8.081	172	1179458	36.21 ppm	0.16
Spiked Amount 50.000			Recovery	= 72.42%	
73) 2,4,6-Tribromophenol	9.850	330	163832	41.76 ppm	0.17
Spiked Amount 50.000			Recovery	= 83.52%	
85) Terphenyl-d14	12.959	244	1347110	46.25 ppm	0.18
Spiked Amount 50.000			Recovery	= 92.50%	
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	2.370	88	4052	0.74 ppm	79

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

7.2.1

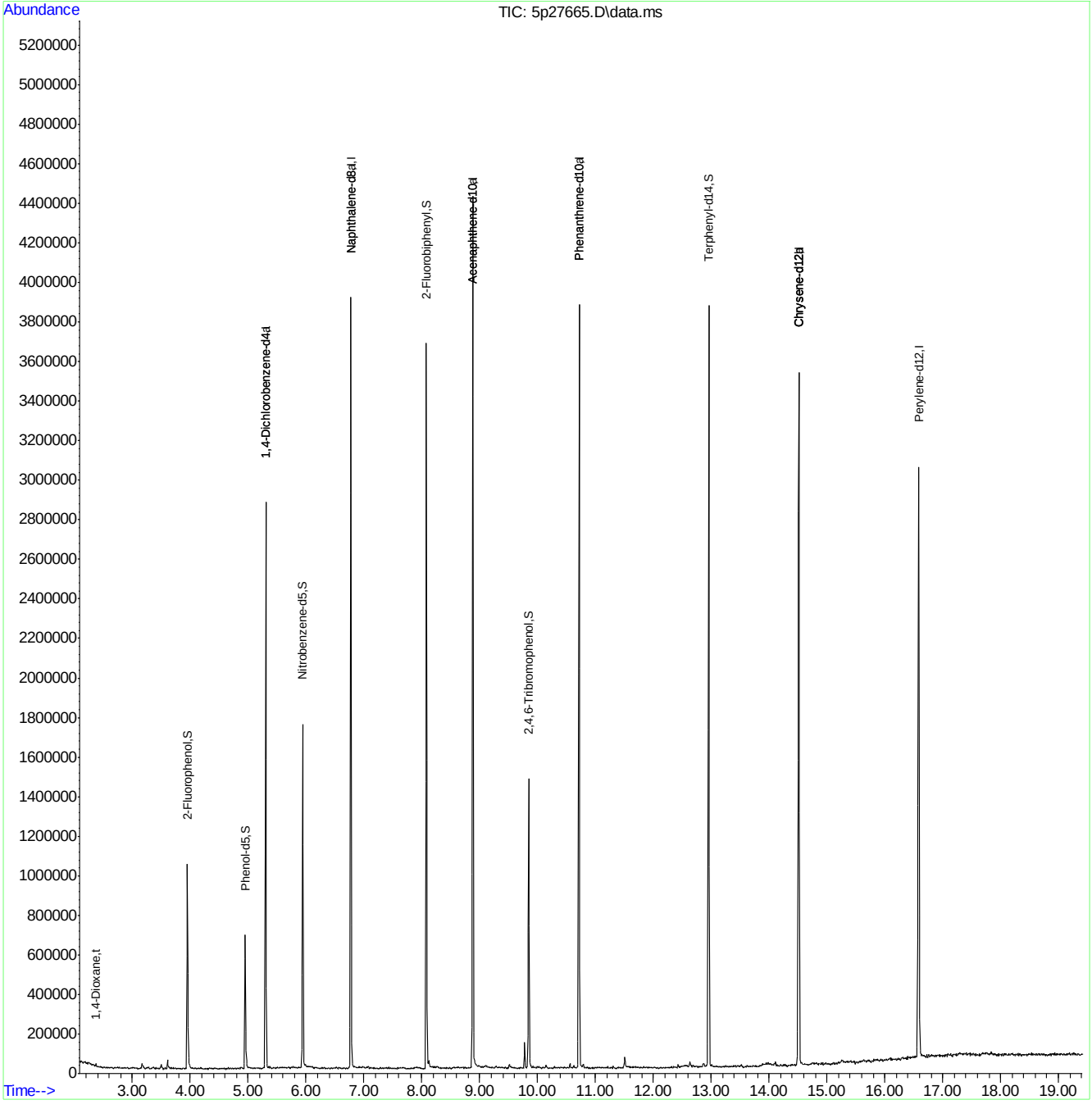
7

SGS ACCUTEST JC18649

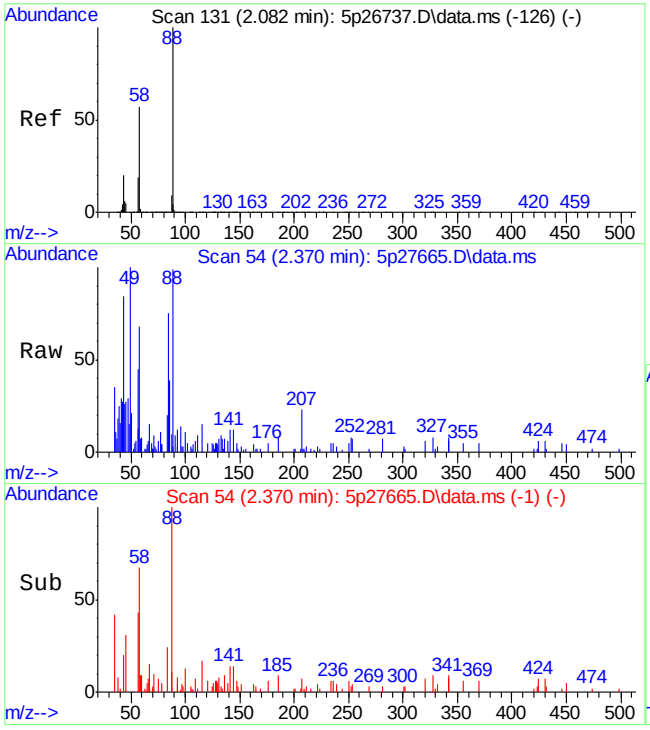
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27665.D
Acq On : 20 Apr 2016 10:04 pm
Operator : sarad
Sample : op93236-mb1
Misc : op93236,e5p1400,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 07:43:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue Apr 19 22:36:29 2016
Response via : Initial Calibration



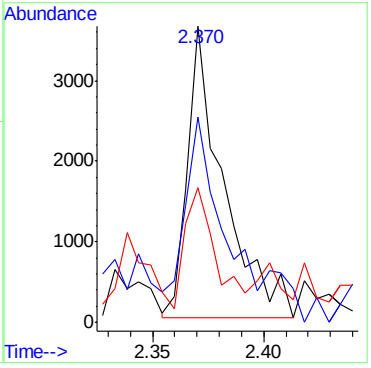
M5P1382.M Thu Apr 21 07:43:40 2016 RPT1 Page: 2



#2
1,4-Dioxane
Concen: 0.74 ppm
RT: 2.370 min Scan# 54
Delta R.T. 0.089 min
Lab File: 5p27665.D
Acq: 20 Apr 16 10:04 pm

Tgt Ion: 88 Resp: 4052

Ion	Ratio	Lower	Upper
88	100		
58	58.3	54.0	114.0
57	36.3	4.2	64.2



7.2.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83246.D
Acq On : 21 Apr 2016 11:20 am
Operator : ashleyn
Sample : op93236-mb1
Misc : op93236,e2m3657,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 14:35:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.863	152	203398	40.00 ppm	-0.03
24) Naphthalene-d8	5.986	136	809036	40.00 ppm	-0.04
47) Acenaphthene-d10	8.099	164	481262	40.00 ppm	-0.04
69) Phenanthrene-d10	10.297	188	756485	40.00 ppm	-0.04
83) Chrysene-d12	14.496	240	691845	40.00 ppm	-0.05
92) Perylene-d12	16.624	264	699094	40.00 ppm	-0.05
102) 1,4-Dichlorobenzene-d4a	4.863	152	203398	40.00 ppm	-0.03
104) Acenaphthene-d10a	8.099	164	481262	40.00 ppm	-0.04
106) Chrysene-d12a	14.496	240	691845	40.00 ppm	-0.05
108) Phenanthrene-d10a	10.297	188	756485	40.00 ppm	-0.04
110) Naphthalene-d8a	5.986	136	809036	40.00 ppm	-0.04

System Monitoring Compounds					
5) 2-Fluorophenol	3.889	112	168312	22.06 ppm	-0.12
Spiked Amount 50.000			Recovery	= 44.12%	
8) Phenol-d5	4.595	99	141944	14.82 ppm	-0.03
Spiked Amount 50.000			Recovery	= 29.64%	
25) Nitrobenzene-d5	5.317	82	269349	35.53 ppm	-0.04
Spiked Amount 50.000			Recovery	= 71.06%	
51) 2-Fluorobiphenyl	7.205	172	518351	33.94 ppm	-0.04
Spiked Amount 50.000			Recovery	= 67.88%	
73) 2,4,6-Tribromophenol	9.243	330	81478	41.84 ppm	-0.04
Spiked Amount 50.000			Recovery	= 83.68%	
85) Terphenyl-d14	12.859	244	576605	38.81 ppm	-0.05
Spiked Amount 50.000			Recovery	= 77.62%	

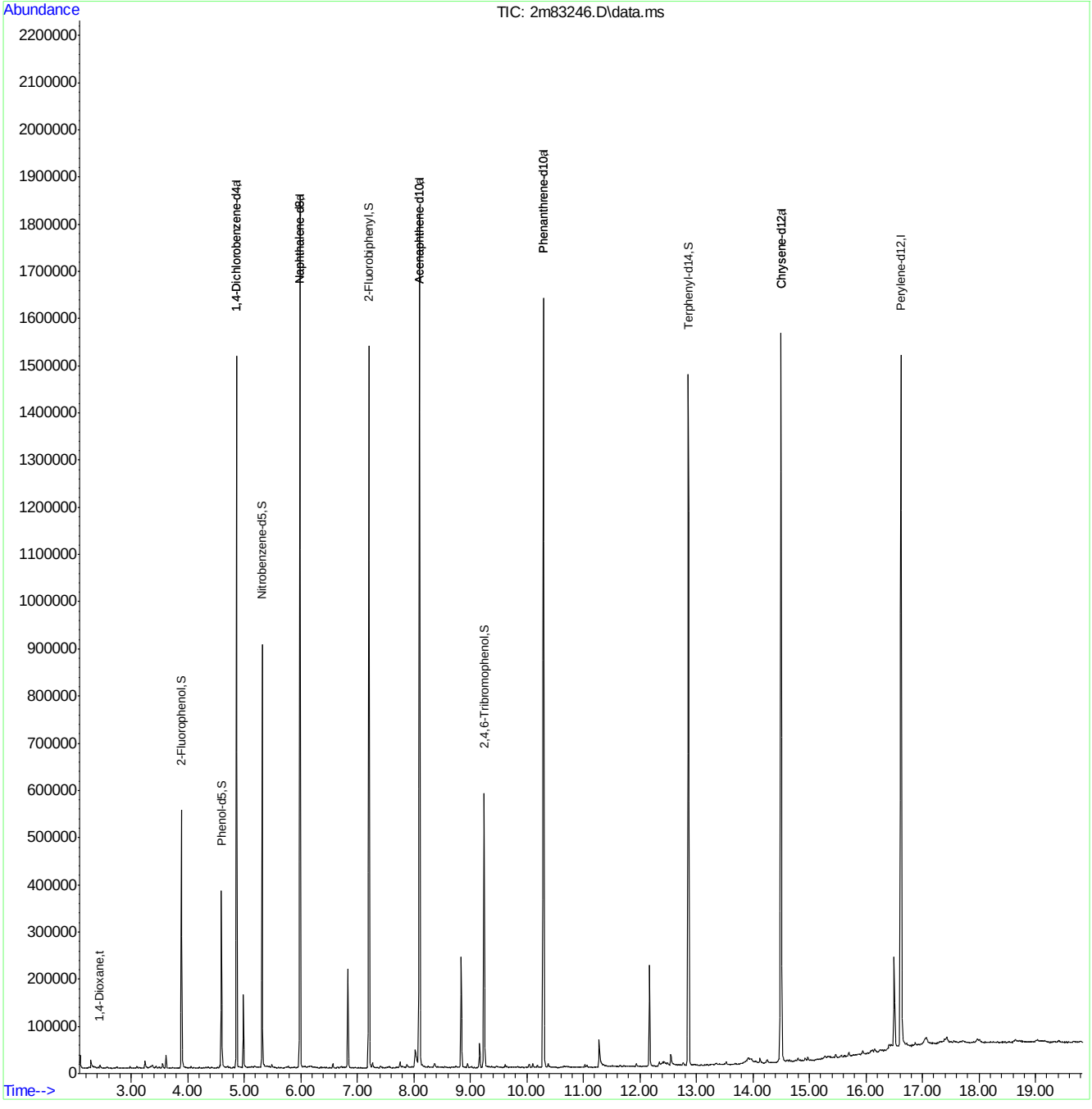
Target Compounds					Qvalue
2) 1,4-Dioxane	2.440	88	2136	0.63 ppm	91

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

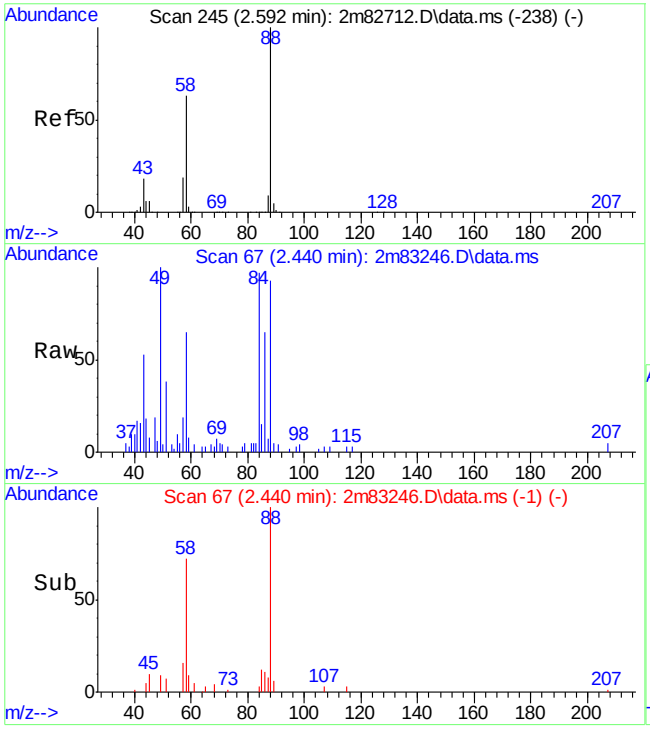
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83246.D
Acq On : 21 Apr 2016 11:20 am
Operator : ashleyn
Sample : op93236-mb1
Misc : op93236,e2m3657,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 14:35:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration



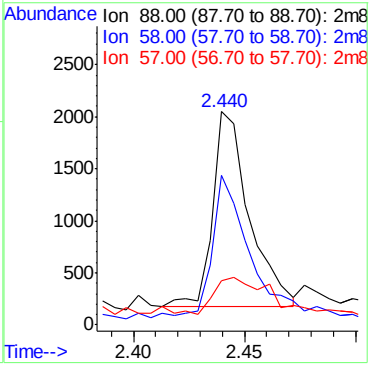
M2M3649.M Thu Apr 21 14:35:59 2016 Page: 2



#2
1,4-Dioxane
Concen: 0.63 ppm
RT: 2.440 min Scan# 67
Delta R.T. -0.032 min
Lab File: 2m83246.D
Acq: 21 Apr 2016 11:20 am

Tgt Ion: 88 Resp: 2136

Ion	Ratio	Lower	Upper
88	100		
58	69.1	33.3	93.3
57	13.0	0.0	49.2



7.2.2

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58446.D
Acq On : 21 Apr 2016 3:17 pm
Operator : robertl1
Sample : op93271-mb1
Misc : op93271,e2p2552,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 15:39:02 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	4.857	152	335521	40.00	ppm	-0.05
24) Naphthalene-d8	5.916	136	1168166	40.00	ppm	-0.05
47) Acenaphthene-d10	7.361	164	628539	40.00	ppm	-0.05
69) Phenanthrene-d10	8.698	188	970624	40.00	ppm	-0.06
83) Chrysene-d12	12.057	240	901817	40.00	ppm	-0.08
92) Perylene-d12	14.068	264	737346	40.00	ppm	-0.08
102) 1,4-Dichlorobenzene-d4a	4.857	152	335521	40.00	ppm	-0.05
104) Naphthalene-d8a	5.916	136	1168166	40.00	ppm	-0.05
106) Acenaphthene-d10a	7.361	164	628539	40.00	ppm	-0.05
109) Chrysene-d12a	12.057	240	901817	40.00	ppm	-0.08
System Monitoring Compounds						
5) 2-Fluorophenol	3.745	112	329416	24.24	ppm	-0.05
Spiked Amount 50.000	Range 11 - 58		Recovery = 48.48%			
8) Phenol-d5	4.552	99	243985	15.32	ppm	-0.04
Spiked Amount 50.000	Range 10 - 59		Recovery = 30.64%			
25) Nitrobenzene-d5	5.323	82	512600	44.50	ppm	-0.05
Spiked Amount 50.000	Range 19 - 61		Recovery = 89.00%#			
51) 2-Fluorobiphenyl	6.810	172	885738	45.29	ppm	-0.05
Spiked Amount 50.000	Range 21 - 58		Recovery = 90.58%#			
73) 2,4,6-Tribromophenol	8.029	330	104022	48.27	ppm	-0.06
Spiked Amount 50.000	Range 12 - 68		Recovery = 96.54%#			
85) Terphenyl-d14	10.607	244	797261	43.92	ppm	-0.07
Spiked Amount 50.000	Range 16 - 65		Recovery = 87.84%#			

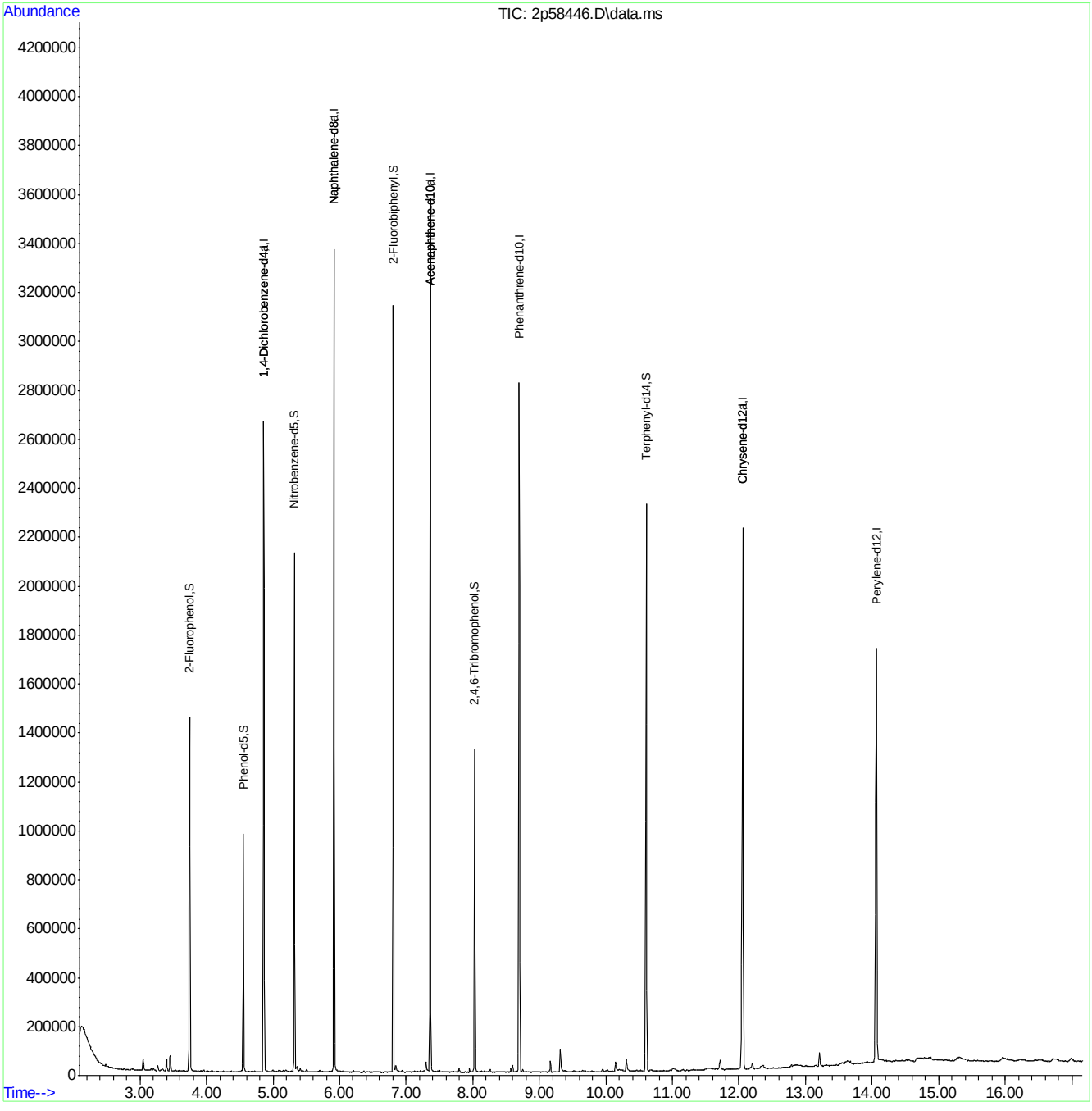
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58446.D
Acq On : 21 Apr 2016 3:17 pm
Operator : robertl1
Sample : op93271-mb1
Misc : op93271,e2p2552,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 21 15:39:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



M2P2547.M Thu Apr 21 15:39:09 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110076.D
Acq On : 26 Apr 2016 2:14 pm
Operator : ariellec
Sample : op93364-mb1
Misc : op93364,ez5500,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 26 15:27:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 15:26:56 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.189	152	345904	40.00	ppm	0.00
24) Naphthalene-d8	5.113	136	1252173	40.00	ppm	0.00
47) Acenaphthene-d10	6.384	164	735373	40.00	ppm	0.00
69) Phenanthrene-d10	7.971	188	1252206	40.00	ppm	0.00
83) Chrysene-d12	12.864	240	1190393	40.00	ppm	0.00
92) Perylene-d12	15.840	264	991458	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.189	152	345904	40.00	ppm	0.00
104) Phenanthrene-d10a	7.971	188	1252206	40.00	ppm	0.00
106) Chrysene-d12a	12.864	240	1190393	40.00	ppm	0.00
108) Acenaphthene-d10a	6.384	164	735373	40.00	ppm	0.00
110) Naphthalene-d8a	5.113	136	1252173	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.270	112	458149	38.36	ppm	0.00
Spiked Amount 50.000			Recovery = 76.72%			
8) Phenol-d5	4.028	99	544037	38.87	ppm	0.00
Spiked Amount 50.000			Recovery = 77.74%			
25) Nitrobenzene-d5	4.616	82	522147	51.67	ppm	-0.01
Spiked Amount 50.000			Recovery = 103.34%			
51) 2-Fluorobiphenyl	5.877	172	1130738	47.97	ppm	0.01
Spiked Amount 50.000			Recovery = 95.94%			
73) 2,4,6-Tribromophenol	7.143	330	150729	39.16	ppm	0.01
Spiked Amount 50.000			Recovery = 78.32%			
86) Terphenyl-d14	10.744	244	1168866	46.74	ppm	-0.01
Spiked Amount 50.000			Recovery = 93.48%			

Target Compounds Qvalue

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

7.2.4

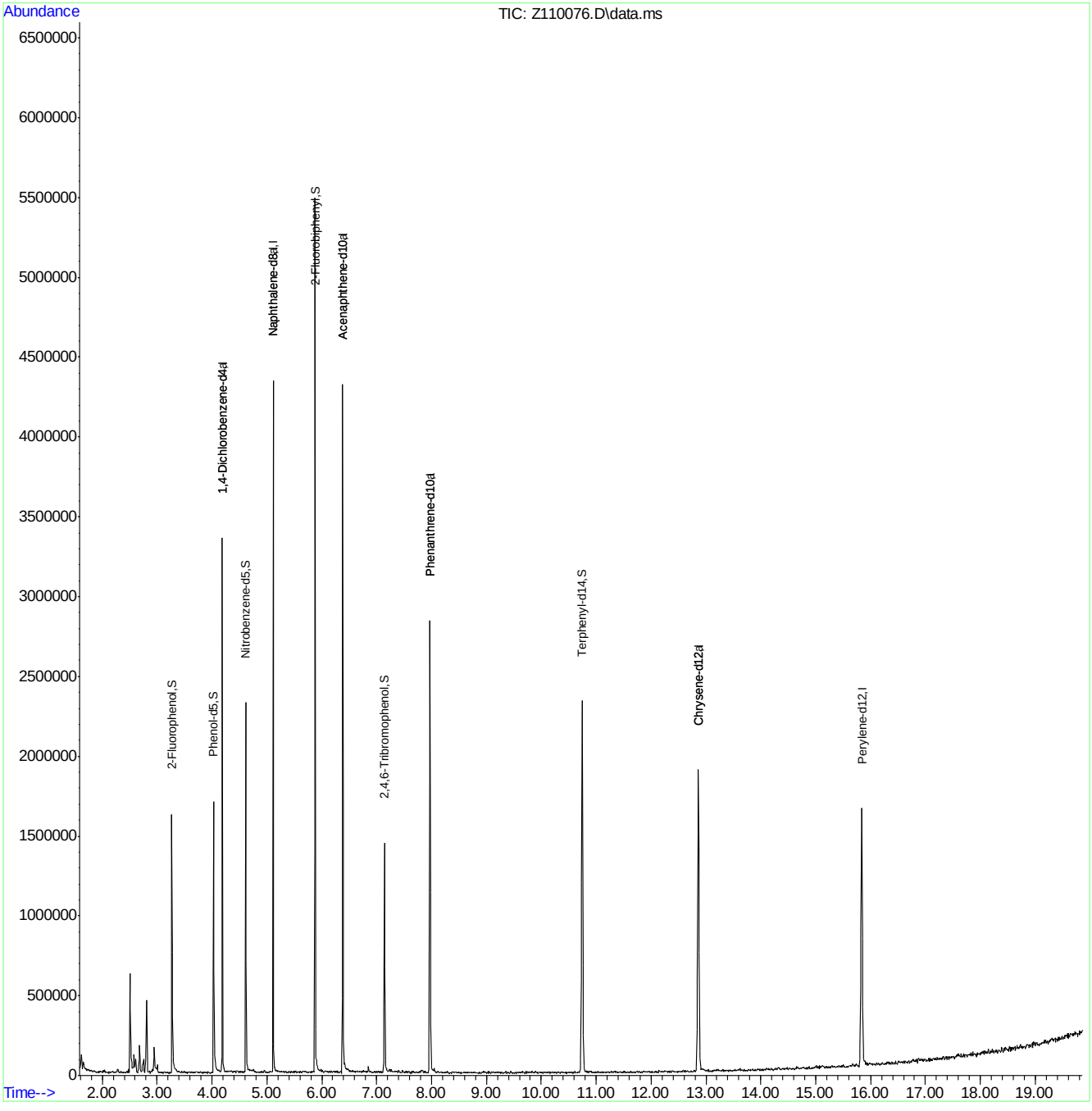
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110076.D
Acq On : 26 Apr 2016 2:14 pm
Operator : ariellec
Sample : op93364-mb1
Misc : op93364,ez5500,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 26 15:27:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 15:26:56 2016
Response via : Initial Calibration



MZ5485.M Tue Apr 26 15:27:33 2016 RTE

Page: 2

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83441.D
Acq On : 28 Apr 2016 12:54 pm
Operator : ashleyn
Sample : op93364-mb1
Misc : op93364,e2m3668,30.0
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 28 15:14:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 15:13:15 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.761	152	460430	80.00 ppm	0.00
24) Naphthalene-d8	5.868	136	1873288	80.00 ppm	0.00
47) Acenaphthene-d10	7.960	164	1128084	80.00 ppm	0.00
69) Phenanthrene-d10	10.153	188	1707722	80.00 ppm	0.00
83) Chrysene-d12	14.351	240	1426529	80.00 ppm	0.00
92) Perylene-d12	16.480	264	1228823	80.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.761	152	460430	80.00 ppm	0.00
104) Acenaphthene-d10a	7.960	164	1128084	80.00 ppm	0.00
106) Chrysene-d12a	14.351	240	1426529	80.00 ppm	0.00
108) Phenanthrene-d10a	10.153	188	1707722	80.00 ppm	0.00
110) Naphthalene-d8a	5.868	136	1873288	80.00 ppm	0.00

System Monitoring Compounds

5) 2-Fluorophenol	3.798	112	356428	41.27 ppm	0.00
Spiked Amount 50.000			Recovery = 82.54%		
8) Phenol-d5	4.510	99	464381	42.84 ppm	0.00
Spiked Amount 50.000			Recovery = 85.68%		
25) Nitrobenzene-d5	5.210	82	433828	49.44 ppm	0.00
Spiked Amount 50.000			Recovery = 98.88%		
51) 2-Fluorobiphenyl	7.072	172	801429	44.78 ppm	-0.01
Spiked Amount 50.000			Recovery = 89.56%		
73) 2,4,6-Tribromophenol	9.099	330	109035	49.60 ppm	-0.01
Spiked Amount 50.000			Recovery = 99.20%		
85) Terphenyl-d14	12.709	244	746942	48.76 ppm	-0.02
Spiked Amount 50.000			Recovery = 97.52%		

Target Compounds Qvalue

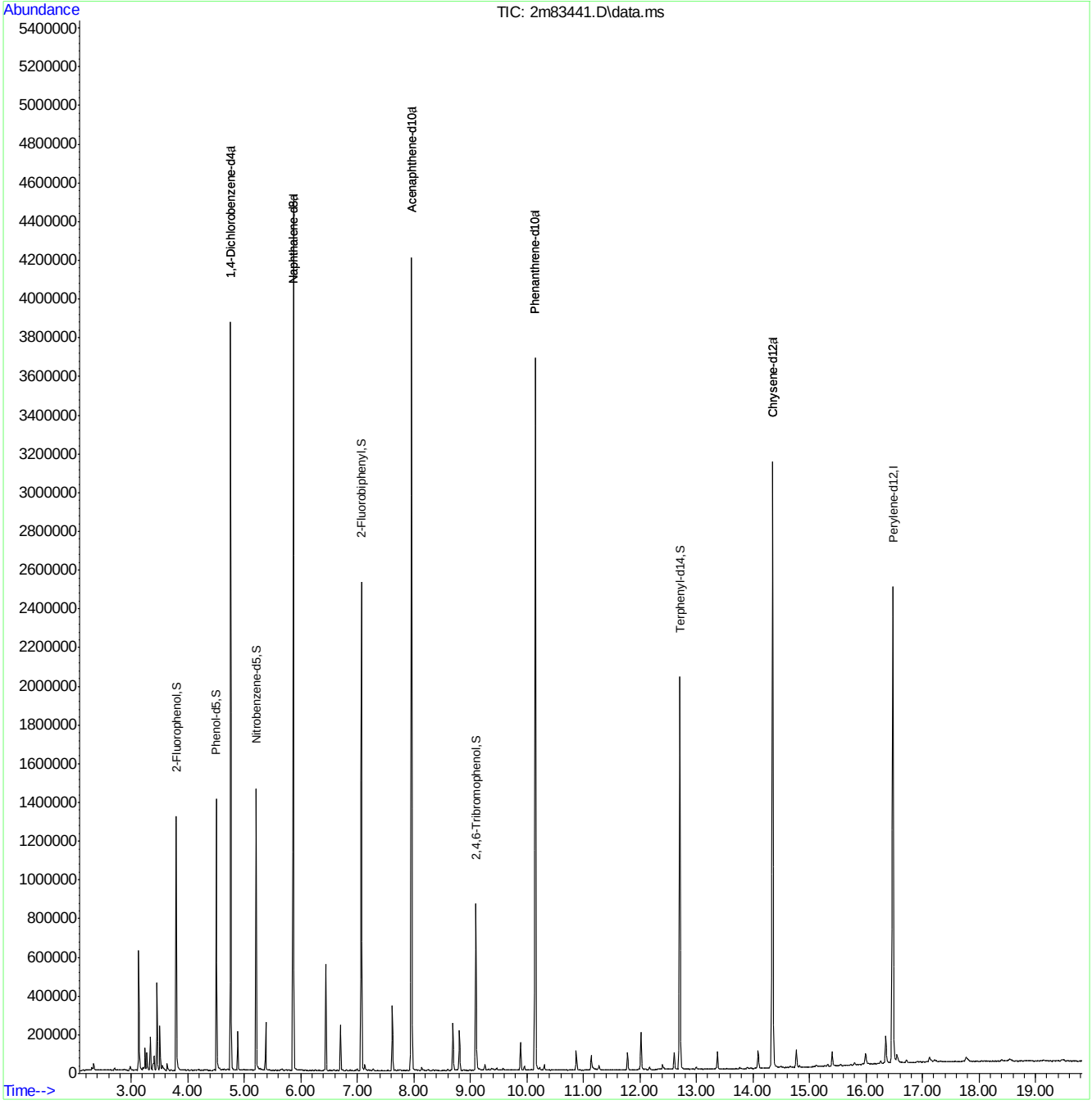
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83441.D
Acq On : 28 Apr 2016 12:54 pm
Operator : ashleyn
Sample : op93364-mb1
Misc : op93364,e2m3668,30.0
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 28 15:14:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 15:13:15 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64880.D
Acq On : 21 Apr 2016 10:53 am
Operator : linseyk
Sample : op93236a-mb1
Misc : op93236a,e4m2889,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 13:37:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	243602	4.00	ppm	# 0.05
12) Fluorene-d10	13.748	176	445321	4.00	ppm	0.07
22) Fluoranthene-d10	17.923	212	911610	4.00	ppm	0.06
28) Benzo(a)pyrene-d12	22.525	264	654660	4.00	ppm	0.06
35) 1-Methylnaphthalene-d10a	10.746	152	243602	4.00	ppm	# 0.05
38) Fluorene-d10a	13.748	176	445321	4.00	ppm	# 0.07
System Monitoring Compounds						
2) 2-Fluorophenol	4.773	112	842078	26.40	ppm	0.05
Spiked Amount 50.000	Range 11 - 58		Recovery = 52.80%			
3) Phenol-d5	6.352	99	948550	17.68	ppm	0.04
Spiked Amount 50.000			Recovery = 35.36%			
6) Nitrobenzene-d5	7.879	82	2000946	41.60	ppm	0.04
Spiked Amount 50.000			Recovery = 83.20%			
11) 2-Fluorobiphenyl	11.414	172	3466075	49.30	ppm	0.05
Spiked Amount 50.000			Recovery = 98.60%			
17) 2,4,6-Tribromophenol	14.297	330	1211620	51.01	ppm	0.07
Spiked Amount 50.000			Recovery = 102.02%			
25) Terphenyl-d14	18.732	244	4882572	39.65	ppm	0.06
Spiked Amount 50.000			Recovery = 79.30%			
Target Compounds						Qvalue

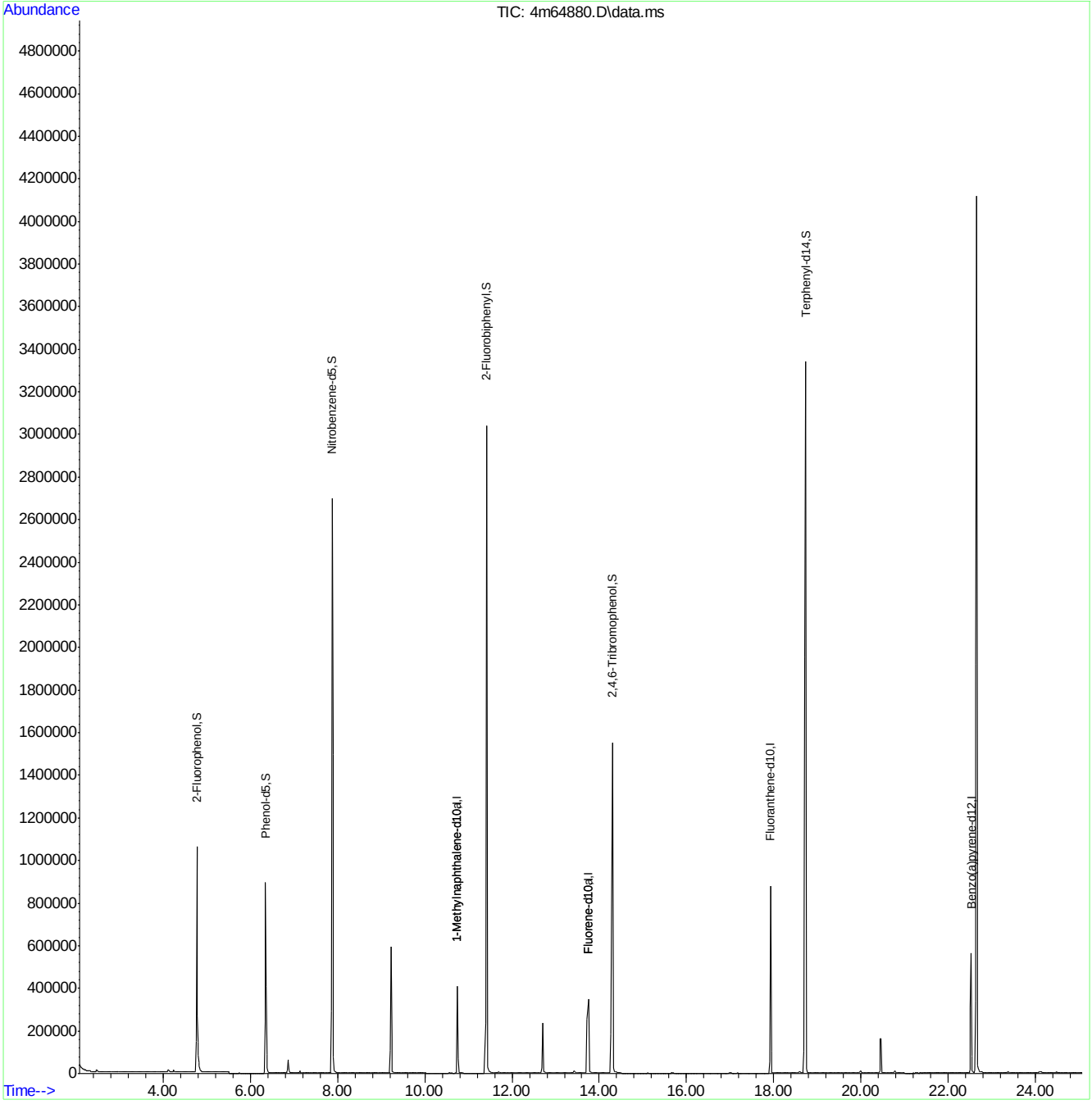
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64880.D
Acq On : 21 Apr 2016 10:53 am
Operator : linseyk
Sample : op93236a-mb1
Misc : op93236a,e4m2889,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 13:37:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2890\
Data File : 4m64889.D
Acq On : 21 Apr 2016 3:44 pm
Operator : linseyk
Sample : op93271a-mb1
Misc : op93271a,e4m2890,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 17:10:52 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 21 17:09:01 2016
Response via : Initial Calibration

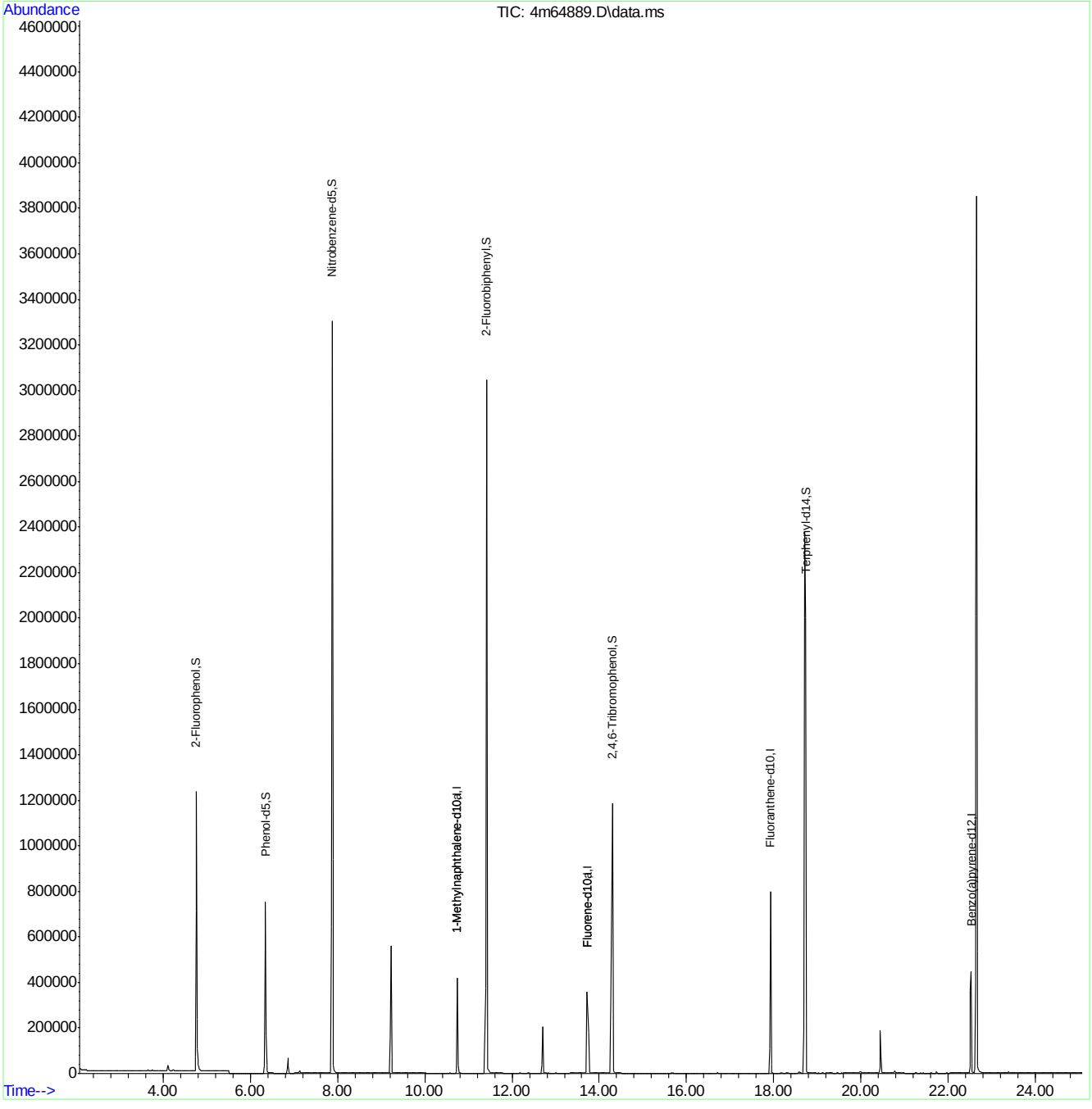
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	248250	4.00	ppm	0.05
12) Fluorene-d10	13.724	176	385231	4.00	ppm	0.05
22) Fluoranthene-d10	17.923	212	829648	4.00	ppm	0.06
28) Benzo(a)pyrene-d12	22.525	264	595100	4.00	ppm	0.05
35) 1-Methylnaphthalene-d10a	10.746	152	248250	4.00	ppm	# 0.05
38) Fluorene-d10a	13.724	176	385231	4.00	ppm	0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.762	112	804192	24.74	ppm	0.04
Spiked Amount 50.000	Range 11 - 58		Recovery = 49.48%			
3) Phenol-d5	6.352	99	878819	16.08	ppm	0.04
Spiked Amount 50.000			Recovery = 32.16%			
6) Nitrobenzene-d5	7.879	82	2169210	44.26	ppm	0.04
Spiked Amount 50.000			Recovery = 88.52%			
11) 2-Fluorobiphenyl	11.414	172	3639083	50.79	ppm	0.05
Spiked Amount 50.000			Recovery = 101.58%			
17) 2,4,6-Tribromophenol	14.297	330	1008755	49.09	ppm	0.07
Spiked Amount 50.000			Recovery = 98.18%			
25) Terphenyl-d14	18.732	244	4010978	35.79	ppm	0.06
Spiked Amount 50.000			Recovery = 71.58%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2890\
Data File : 4m64889.D
Acq On : 21 Apr 2016 3:44 pm
Operator : linseyk
Sample : op93271a-mb1
Misc : op93271a,e4m2890,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 17:10:52 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 21 17:09:01 2016
Response via : Initial Calibration

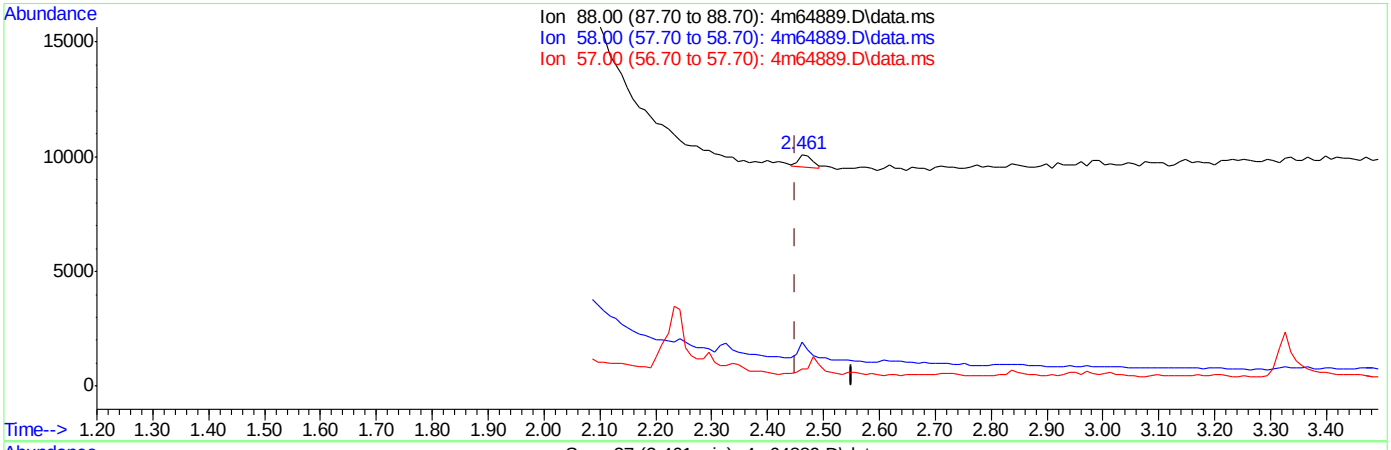


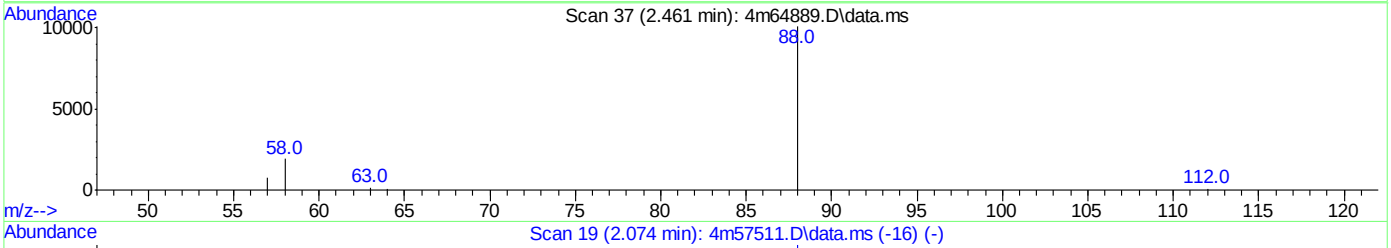
SGS ACCUTEST JC18649

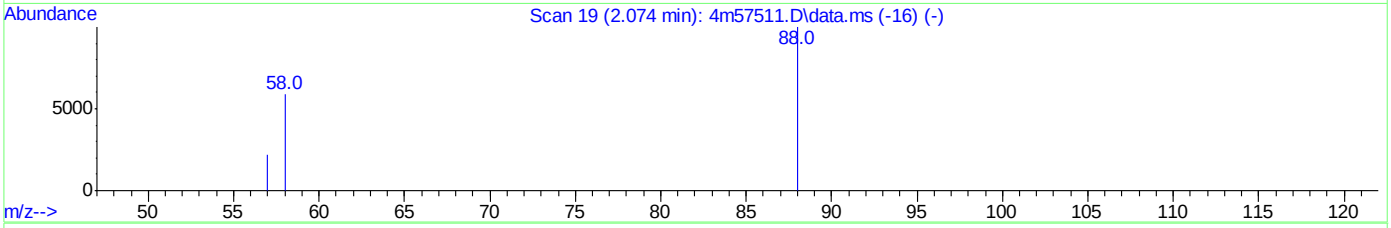
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2890\
Data File : 4m64889.D
Acq On : 21 Apr 2016 3:44 pm
Operator : linseyk
Sample : op93271a-mb1
Misc : op93271a,e4m2890,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 17:04:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration







TIC: 4m64889.D\data.ms

(36) 1,4-Dioxane (t)

2.461min (+0.011) -1.00ppm

response 926

Ion	Exp%	Act%
88.00	100	100
58.00	83.20	143.96#
57.00	25.70	0.00#
0.00	0.00	0.00

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60789.D
Acq On : 22 Apr 2016 4:20 pm
Operator : linseyk
Sample : op93271a-mb1
Misc : op93271a,e3m2856,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 22 18:22:48 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	547696	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	847567	4.00	ppm	0.00
21) Fluoranthene-d10	17.843	212	1355163	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	1033522	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.530	112	1415940	20.66	ppm	0.02
Spiked Amount 50.000			Recovery = 41.32%			
4) Phenol-d5	6.116	99	1546646	13.64	ppm	0.01
Spiked Amount 50.000			Recovery = 27.28%			
7) Nitrobenzene-d5	7.745	82	4005749	38.00	ppm	0.02
Spiked Amount 50.000			Recovery = 76.00%			
15) 2-Fluorobiphenyl	11.319	172	8101471	34.79	ppm	0.02
Spiked Amount 50.000			Recovery = 69.58%			
20) 2,4,6-Tribromophenol	14.191	330	920607	34.71	ppm	0.02
Spiked Amount 50.000			Recovery = 69.42%			
28) Terphenyl-d14	18.662	244	7116396	36.20	ppm	0.02
Spiked Amount 50.000			Recovery = 72.40%			

Target Compounds Qvalue

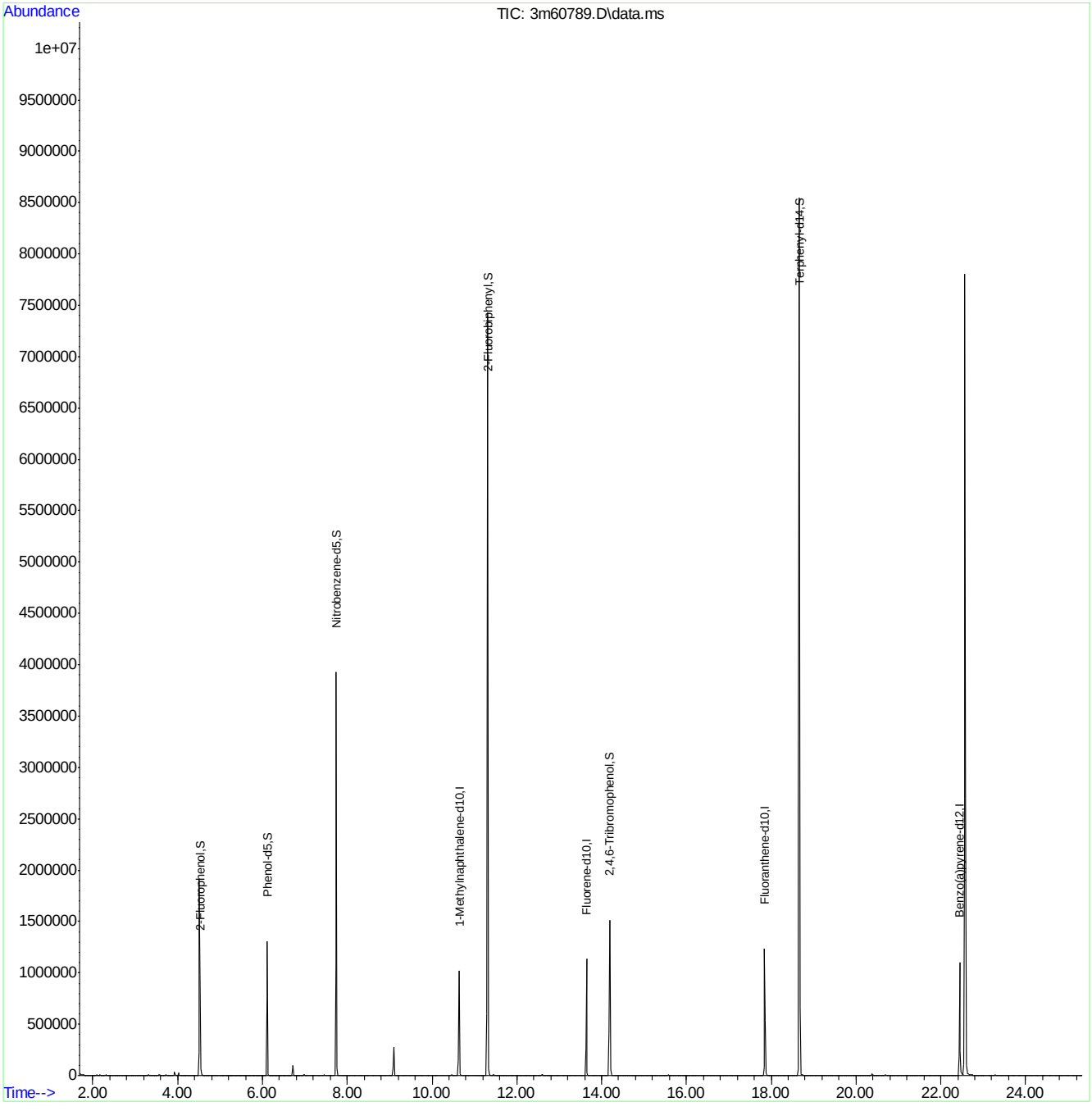
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60789.D
Acq On : 22 Apr 2016 4:20 pm
Operator : linseyk
Sample : op93271a-mb1
Misc : op93271a,e3m2856,1000
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 22 18:22:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60899.D
Acq On : 27 Apr 2016 12:37 am
Operator : juliusj
Sample : op93364a-mb1
Misc : op93364a,e3m2863,30.0
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 27 14:02:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 26 09:22:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.549	150	365261	4.00	ppm	-0.07
14) Fluorene-d10	13.562	176	567539	4.00	ppm	-0.08
21) Fluoranthene-d10	17.762	212	841380	4.00	ppm	-0.10
31) Benzo(a)pyrene-d12	22.367	264	685215	4.00	ppm	-0.08
System Monitoring Compounds						
3) 2-Fluorophenol	4.476	112	1915547	41.92	ppm	-0.03
Spiked Amount 50.000			Recovery = 83.84%			
4) Phenol-d5	6.072	99	3138866	41.51	ppm	-0.02
Spiked Amount 50.000			Recovery = 83.02%			
7) Nitrobenzene-d5	7.662	82	3084753	43.88	ppm	-0.05
Spiked Amount 50.000			Recovery = 87.76%			
15) 2-Fluorobiphenyl	11.222	172	6489803	41.61	ppm	-0.08
Spiked Amount 50.000			Recovery = 83.22%			
20) 2,4,6-Tribromophenol	14.108	330	766285	43.14	ppm	-0.06
Spiked Amount 50.000			Recovery = 86.28%			
28) Terphenyl-d14	18.581	244	5757956	47.18	ppm	-0.08
Spiked Amount 50.000			Recovery = 94.36%			

Target Compounds Qvalue

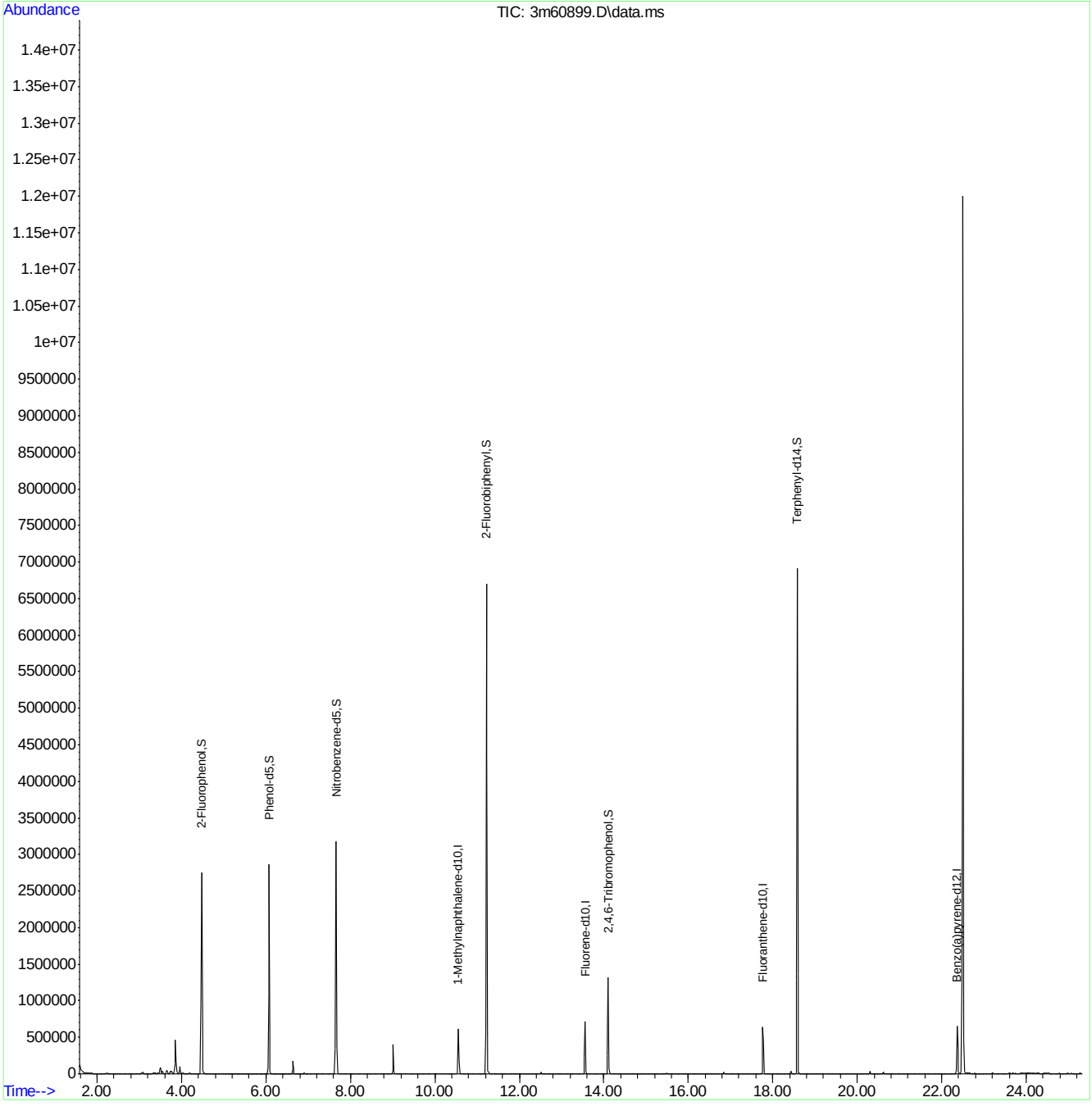
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60899.D
Acq On : 27 Apr 2016 12:37 am
Operator : juliusj
Sample : op93364a-mb1
Misc : op93364a,e3m2863,30.0
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 27 14:02:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 26 09:22:28 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Manual Integrations
APPROVED
(compounds with "m" flag)
Nina Pandya
04/21/16 10:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27666.D
Acq On : 20 Apr 2016 10:30 pm
Operator : sarad
Sample : op93236-bs1
Misc : op93236,e5p1400,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 07:47:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Thu Apr 21 07:46:07 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.304	152	468914	40.00	ppm	0.00
24) Naphthalene-d8	6.773	136	1795619	40.00	ppm	0.00
47) Acenaphthene-d10	8.883	164	1023289	40.00	ppm	0.00
69) Phenanthrene-d10	10.721	188	1655127	40.00	ppm	0.00
83) Chrysene-d12	14.519	240	1533536	40.00	ppm	0.00
92) Perylene-d12	16.586	264	1433069	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.304	152	468914	40.00	ppm	0.00
104) Acenaphthene-d10a	8.883	164	1023289	40.00	ppm	0.00
106) Chrysene-d12a	14.519	240	1533473	40.00	ppm	0.00
109) Phenanthrene-d10a	10.721	188	1655127	40.00	ppm	0.00
112) Naphthalene-d8a	6.773	136	1795619	40.00	ppm	0.00
114) Chrysene-d12b	14.519	240	1533473	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.952	112	300961	20.94	ppm	0.00
Spiked Amount 50.000			Recovery	=	41.88%	
8) Phenol-d5	4.951	99	242965	14.88	ppm	0.00
Spiked Amount 50.000			Recovery	=	29.76%	
25) Nitrobenzene-d5	5.945	82	447941	32.86	ppm	0.00
Spiked Amount 50.000			Recovery	=	65.72%	
51) 2-Fluorobiphenyl	8.082	172	1275465	39.15	ppm	0.00
Spiked Amount 50.000			Recovery	=	78.30%	
73) 2,4,6-Tribromophenol	9.850	330	194196	48.60	ppm	0.00
Spiked Amount 50.000			Recovery	=	97.20%	
85) Terphenyl-d14	12.959	244	1443090	46.82	ppm	0.00
Spiked Amount 50.000			Recovery	=	93.64%	
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	2.365	88	82828	15.06	ppm	98
3) Pyridine	2.686	79	131118	10.83	ppm	92
4) N-Nitrosodimethylamine	2.643	74	124800	18.39	ppm	95
6) Indene	5.592	116	835569	32.57	ppm	96
7) Cumene	4.433	105	966821	27.94	ppm	97
9) Phenol	4.967	94	249330	14.77	ppm	84
10) Aniline	4.962	93	176107	9.63	ppm #	46
11) bis(2-Chloroethyl)ether	5.020	93	359877	28.73	ppm	98
12) 2-Chlorophenol	5.090	128	473290	29.12	ppm	97
13) Decane	5.106	43	408822	38.01	ppm	76
14) 1,3-Dichlorobenzene	5.234	146	464463	25.76	ppm	96
15) 1,4-Dichlorobenzene	5.320	146	477162	26.24	ppm	97
16) Benzyl alcohol	5.485	108	243297	26.15	ppm	92
17) 1,2-Dichlorobenzene	5.491	146	458026	26.50	ppm	98
18) Acetophenone	5.768	105	675513	33.52	ppm	94
19) 2-Methylphenol	5.629	108	361185	29.19	ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.619	45	510085m	35.44	ppm	

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27666.D
Acq On : 20 Apr 2016 10:30 pm
Operator : sarad
Sample : op93236-bs1
Misc : op93236,e5p1400,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 07:47:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Thu Apr 21 07:46:07 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.806	108	374736	28.47	ppm		100
22) n-Nitroso-di-n-propyla...	5.774	70	266810	29.74	ppm		94
23) Hexachloroethane	5.870	201	138497	23.63	ppm		92
26) Nitrobenzene	5.971	77	398110	29.63	ppm		69
27) Quinoline	7.205	129	1193420	37.90	ppm		96
28) Isophorone	6.238	82	778909	33.18	ppm		96
29) 2-Nitrophenol	6.335	139	299208	35.52	ppm		84
30) 2,4-Dimethylphenol	6.415	107	516468	39.07	ppm		95
31) Benzoic acid	6.538	105	68001	6.30	ppm		74
32) bis(2-Chloroethoxy)met...	6.511	93	443403	28.90	ppm		96
33) 2,4-Dichlorophenol	6.628	162	460738	36.02	ppm		93
34) 2,6-Dichlorophenol	6.896	162	435050	34.59	ppm	#	1
36) 1,2,4-Trichlorobenzene	6.703	180	396038	27.52	ppm		97
38) Naphthalene	6.799	128	1440619	31.66	ppm		96
39) 4-Chloroaniline	6.890	127	218318	11.46	ppm		97
40) 2,3-Dichloroaniline	7.985	161	496879	31.17	ppm		99
41) Caprolactam	7.312	55	71806	14.04	ppm		78
42) Hexachlorobutadiene	6.944	225	189041	25.52	ppm		96
43) 4-Chloro-3-methylphenol	7.505	107	511990	37.46	ppm		96
44) 2-Methylnaphthalene	7.627	141	938964	35.79	ppm		92
45) 1-Methylnaphthalene	7.745	141	986038	36.18	ppm		93
46) Dimethylnaphthalene	8.381	156	1046334	36.62	ppm		93
48) Hexachlorocyclopentadiene	7.809	237	391390	61.03	ppm		100
49) 2,4,6-Trichlorophenol	7.991	196	351105	40.29	ppm		99
50) 2,4,5-Trichlorophenol	8.044	196	357652	38.02	ppm		99
52) 2-Chloronaphthalene	8.215	162	975238	33.82	ppm		91
53) Biphenyl	8.199	154	1375400	36.83	ppm		95
54) 2-Nitroaniline	8.375	65	322579	44.50	ppm		84
55) Dimethylphthalate	8.594	163	1328083	38.86	ppm		98
56) Acenaphthylene	8.712	152	1698673	37.07	ppm		97
57) 2,6-Dinitrotoluene	8.664	165	300032	42.64	ppm		93
58) 3-Nitroaniline	8.877	138	128114	15.65	ppm		91
59) Acenaphthene	8.926	153	1100196	37.55	ppm		92
60) 2,4-Dinitrophenol	8.995	184	309115	71.44	ppm		85
61) 4-Nitrophenol	9.145	109	109430	26.34	ppm	#	65
62) Dibenzofuran	9.139	168	1587794	39.81	ppm		99
63) 2,4-Dinitrotoluene	9.150	165	419195	44.59	ppm		98
64) 2,3,4,6-Tetrachlorophenol	9.305	232	281286	37.91	ppm		93
65) Diethylphthalate	9.449	149	1411443	40.42	ppm		96
66) Fluorene	9.551	166	1289428	39.24	ppm		99
67) 4-Chlorophenyl-phenyle...	9.561	204	548717	35.44	ppm		78
68) 4-Nitroaniline	9.631	138	320958	38.81	ppm		98
70) 4,6-Dinitro-2-methylph...	9.641	198	232437	43.93	ppm		92
71) n-Nitrosodiphenylamine	9.716	169	941964	39.48	ppm		97
72) 1,2-Diphenylhydrazine	9.754	77	926458	37.44	ppm		78
74) 4-Bromophenyl-phenylether	10.160	248	335852	36.63	ppm		89
75) Hexachlorobenzene	10.213	284	357410	38.40	ppm		96
76) Pentachlorophenol	10.491	266	220249	38.79	ppm		99
77) Phenanthrene	10.753	178	1787106	38.44	ppm		98
78) Anthracene	10.817	178	1800102	38.53	ppm		99

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27666.D
Acq On : 20 Apr 2016 10:30 pm
Operator : sarad
Sample : op93236-bs1
Misc : op93236,e5p1400,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 07:47:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Thu Apr 21 07:46:07 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	11.057	167	1781653	40.50	ppm	92
80)	Di-n-butylphthalate	11.538	149	2330782	41.82	ppm	99
81)	Fluoranthene	12.377	202	1855195	38.61	ppm	95
82)	Octadecane	10.592	57	824739	53.80	ppm	74
84)	Pyrene	12.697	202	1913922	40.54	ppm	99
86)	Butylbenzylphthalate	13.723	149	998730	43.12	ppm	82
88)	Benzo[a]anthracene	14.503	228	1719000	40.53	ppm	98
89)	3,3'-Dichlorobenzidine	14.514	252	690857	44.47	ppm	99
90)	Chrysene	14.556	228	1671815	38.61	ppm	98
91)	bis(2-Ethylhexyl)phtha...	14.615	149	1423997	43.37	ppm	98
93)	Di-n-octylphthalate	15.587	149	2378631	47.85	ppm	99
94)	Benzo[b]fluoranthene	16.068	252	1796596	42.97	ppm	95
95)	Benzo[k]fluoranthene	16.106	252	1660744	41.56	ppm	99
96)	Benzo[a]pyrene	16.506	252	1552497	41.42	ppm	96
97)	Indeno[1,2,3-cd]pyrene	18.216	276	1593297	43.34	ppm	99
99)	Dibenz[a,h]anthracene	18.258	278	1626499	42.33	ppm	97
100)	7,12-Dimethylbenz(a)an...	16.063	256	727362	45.20	ppm	98
101)	Benzo[g,h,i]perylene	18.691	276	1587592	40.64	ppm	97
103)	Benzaldehyde	4.833	105	318888	28.01	ppm	90
105)	1,2,4,5-Tetrachloroben...	7.825	216	430568	30.45	ppm	98
107)	Benzidine	12.622	184	356650	17.50	ppm	98
111)	Atrazine	10.400	215	170905	40.10	ppm	94

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

7.3.1

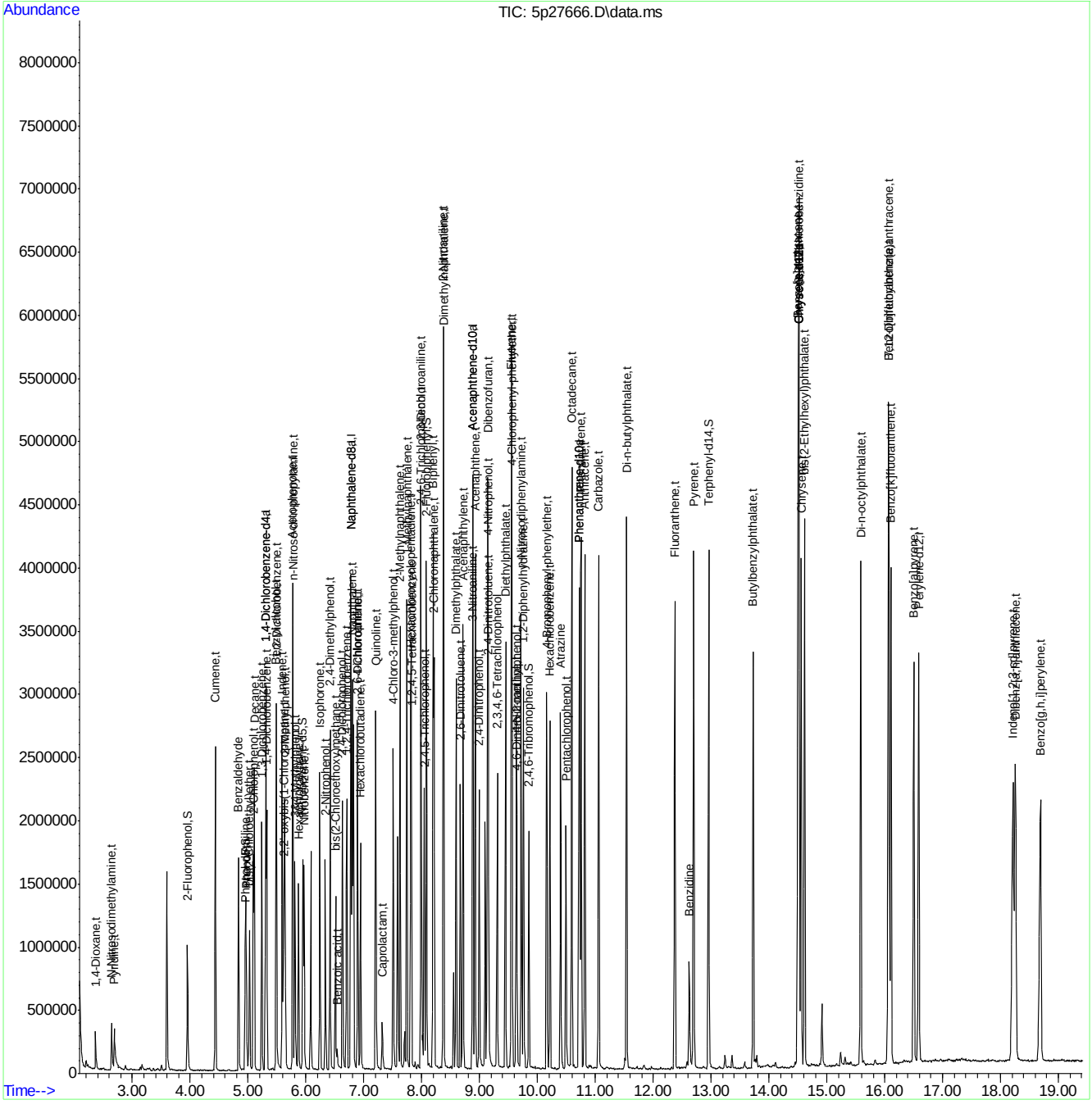
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27666.D
Acq On : 20 Apr 2016 10:30 pm
Operator : sarad
Sample : op93236-bs1
Misc : op93236,e5p1400,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 07:47:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Thu Apr 21 07:46:07 2016
Response via : Initial Calibration



M5P1382.M Thu Apr 21 07:47:59 2016 RPT1 Page: 4

SGS ACCUTEST JC18649

Manual Integration Approval Summary

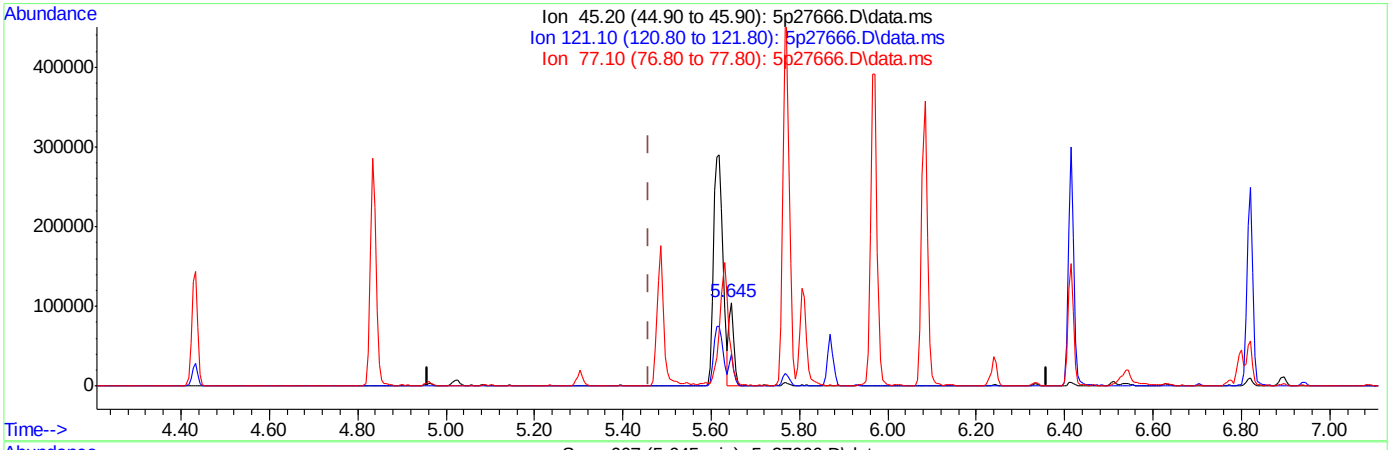
Sample Number:	OP93236-BS1	**Method:**	SW846 8270D
Lab FileID:	5P27666.D	**Analyst approved:**	04/21/16 09:06 Kristi Schollenberger
Injection Time:	04/20/16 22:30	**Supervisor approved:**	04/21/16 10:30 Nina Pandya

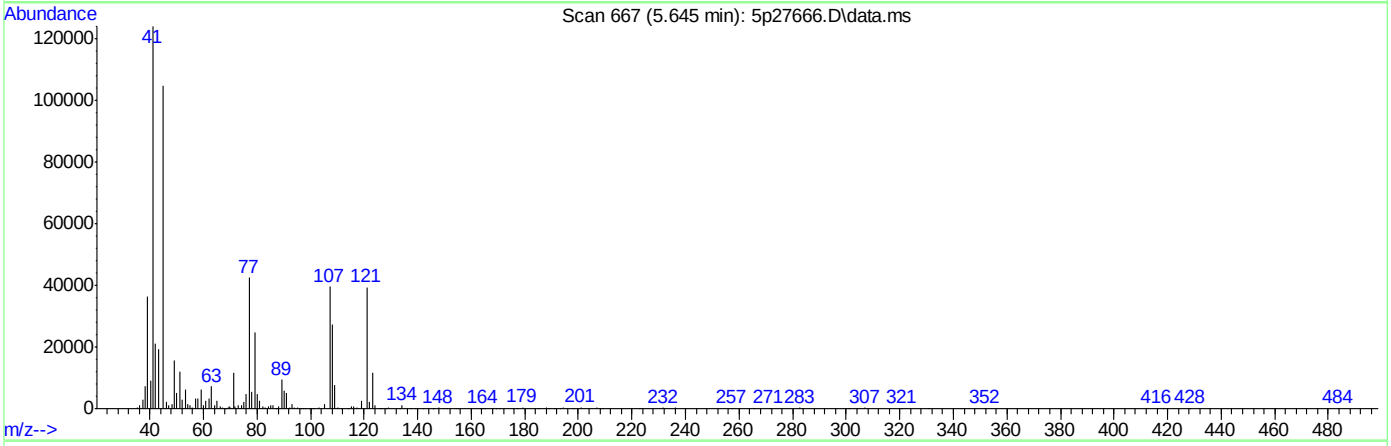
Parameter	CAS	Sig#	R.T. (min.)	Reason
bis(2-Chloroisopropyl)ether	108-60-1		5.62	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27666.D
Acq On : 20 Apr 2016 10:30 pm
Operator : sarad
Sample : op93236-bs1
Misc : op93236,e5p1400,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 20 22:50:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue Apr 19 22:36:29 2016
Response via : Initial Calibration





TIC: 5p27666.D\data.ms

(20) 2,2'-oxybis(1-Chloropropane (t)

5.645min (+0.186) 5.99ppm

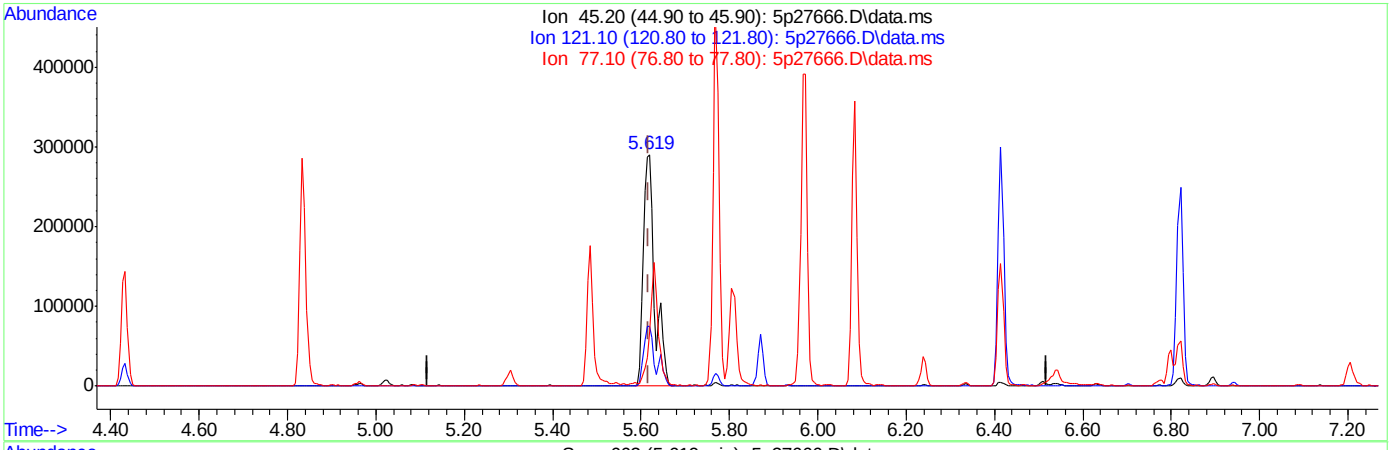
response 86224

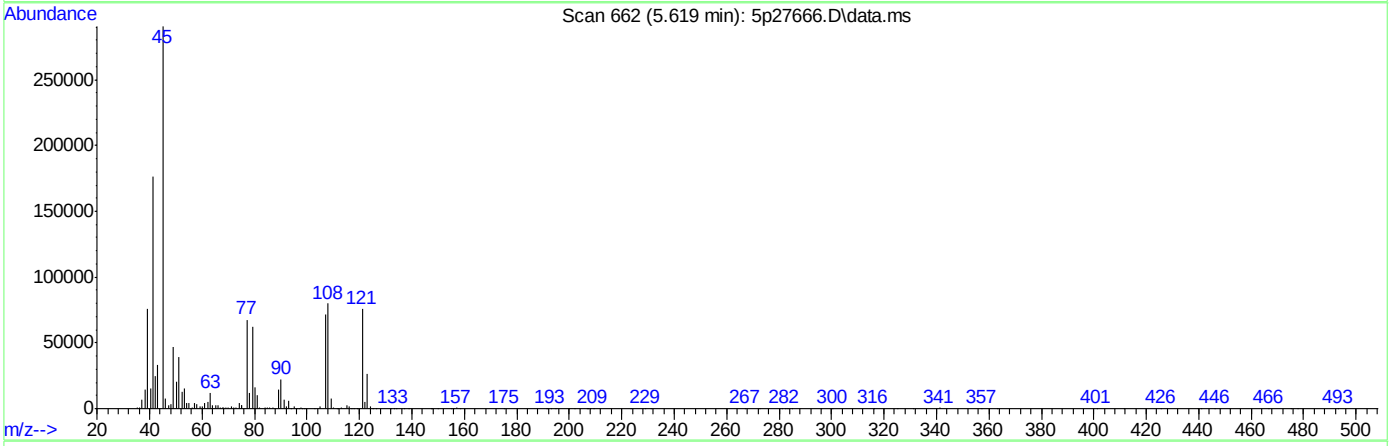
Ion	Exp%	Act%
45.20	100	100
121.10	35.70	38.41
77.10	19.50	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27666.D
Acq On : 20 Apr 2016 10:30 pm
Operator : sarad
Sample : op93236-bs1
Misc : op93236,e5p1400,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 21 07:46:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Thu Apr 21 07:46:07 2016
Response via : Initial Calibration





TIC: 5p27666.D\data.ms

(20) 2,2'-oxybis(1-Chloropropane (t)

5.619min (+0.000) 35.44ppm m

response 510085

Ion	Exp%	Act%
45.20	100	100
121.10	35.70	26.02
77.10	19.50	23.24
0.00	0.00	0.00

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58447.D
Acq On : 21 Apr 2016 3:40 pm
Operator : robertl1
Sample : op93271-bs1
Misc : op93271,e2p2552,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 16:34:19 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	4.863	152	280246	40.00	ppm	-0.05
24) Naphthalene-d8	5.916	136	940977	40.00	ppm	-0.05
47) Acenaphthene-d10	7.366	164	513831	40.00	ppm	-0.05
69) Phenanthrene-d10	8.703	188	825808	40.00	ppm	-0.06
83) Chrysene-d12	12.062	240	794692	40.00	ppm	-0.07
92) Perylene-d12	14.068	264	682012	40.00	ppm	-0.08
102) 1,4-Dichlorobenzene-d4a	4.863	152	280246	40.00	ppm	-0.05
104) Naphthalene-d8a	5.916	136	940977	40.00	ppm	-0.05
106) Acenaphthene-d10a	7.366	164	513831	40.00	ppm	-0.05
109) Chrysene-d12a	12.062	240	794692	40.00	ppm	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	3.750	112	367236	32.35	ppm	-0.04
Spiked Amount 50.000	Range 11 - 58		Recovery = 64.70%#			
8) Phenol-d5	4.558	99	287394	21.61	ppm	-0.04
Spiked Amount 50.000	Range 10 - 59		Recovery = 43.22%			
25) Nitrobenzene-d5	5.323	82	404556	43.60	ppm	-0.05
Spiked Amount 50.000	Range 19 - 61		Recovery = 87.20%#			
51) 2-Fluorobiphenyl	6.810	172	730120	45.67	ppm	-0.05
Spiked Amount 50.000	Range 21 - 58		Recovery = 91.34%#			
73) 2,4,6-Tribromophenol	8.035	330	92407	50.40	ppm	-0.05
Spiked Amount 50.000	Range 12 - 68		Recovery = 100.80%#			
85) Terphenyl-d14	10.607	244	802483	50.17	ppm	-0.07
Spiked Amount 50.000	Range 16 - 65		Recovery = 100.34%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.205	88	122178	23.72	ppm	97
3) Pyridine	2.531	79	296185	23.25	ppm	99
4) N-Nitrosodimethylamine	2.499	74	190017	25.24	ppm	89
6) Indene	5.077	116	629318	39.99	ppm	97
7) Cumene	4.189	105	945052	38.03	ppm	97
9) Phenol	4.574	94	317882	22.55	ppm	88
10) Aniline	4.585	93	484535	29.93	ppm	93
11) bis(2-Chloroethyl)ether	4.649	93	397785	40.04	ppm	99
12) 2-Chlorophenol	4.686	128	420687	40.91	ppm	91
13) Decane	4.729	57	470905	30.75	ppm	96
14) 1,3-Dichlorobenzene	4.815	146	417260	36.93	ppm	100
15) 1,4-Dichlorobenzene	4.879	146	413272	37.16	ppm	99
16) Benzyl alcohol	4.980	108	233435	36.25	ppm	96
17) 1,2-Dichlorobenzene	5.002	146	391363	38.08	ppm	98
18) Acetophenone	5.200	105	474238	37.56	ppm	98
19) 2-Methylphenol	5.077	108	303901	34.44	ppm	93
20) 2,2'-oxybis(1-Chloropr...	5.093	121	103234	35.64	ppm #	94
21) 3&4-Methylphenol	5.205	108	291670	31.68	ppm	98
22) n-Nitroso-di-n-propyla...	5.205	70	219427	32.72	ppm	92
23) Hexachloroethane	5.280	201	128593	38.10	ppm	88
26) Nitrobenzene	5.344	77	360360	38.49	ppm	91
27) Quinoline	6.216	129	712656	42.71	ppm	99
28) Isophorone	5.542	82	687360	41.00	ppm	97

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58447.D
Acq On : 21 Apr 2016 3:40 pm
Operator : robertl1
Sample : op93271-bs1
Misc : op93271,e2p2552,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 16:34:19 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)
29)	2-Nitrophenol	5.601	139	213636	46.16	ppm		93
30)	2,4-Dimethylphenol	5.644	107	341160	41.45	ppm		97
31)	Benzoic acid	5.729	105	131661	20.43	ppm		94
32)	bis(2-Chloroethoxy)met...	5.724	93	406462	38.98	ppm		95
33)	2,4-Dichlorophenol	5.804	162	324595	45.82	ppm		94
34)	2,6-Dichlorophenol	5.991	162	285549	42.80	ppm		98
36)	1,2,4-Trichlorobenzene	5.868	180	312692	40.06	ppm		99
38)	Naphthalene	5.938	128	945165	38.99	ppm		99
39)	4-Chloroaniline	5.986	127	291336	27.80	ppm		94
40)	2,3-Dichloroaniline	6.735	161	331139	38.15	ppm		94
41)	Caprolactam	6.280	113	33735	12.42	ppm		96
42)	Hexachlorobutadiene	6.034	225	155128	40.19	ppm		95
43)	4-Chloro-3-methylphenol	6.382	107	304146	41.83	ppm	#	47
44)	2-Methylnaphthalene	6.505	141	559618	41.33	ppm		95
45)	1-Methylnaphthalene	6.585	141	579332	41.74	ppm		96
46)	Dimethylnaphthalene	7.018	156	561584	41.07	ppm		95
48)	Hexachlorocyclopentadiene	6.633	237	316631	76.63	ppm		93
49)	2,4,6-Trichlorophenol	6.740	196	201267	42.35	ppm		97
50)	2,4,5-Trichlorophenol	6.767	196	212972	41.61	ppm		98
52)	2-Chloronaphthalene	6.906	162	590314	39.15	ppm		98
53)	Biphenyl	6.890	154	784750	41.46	ppm		96
54)	2-Nitroaniline	6.992	65	200254	38.23	ppm		92
55)	Dimethylphthalate	7.147	163	672541	41.08	ppm		99
56)	Acenaphthylene	7.248	152	964742	39.30	ppm		99
57)	2,6-Dinitrotoluene	7.195	165	159680	45.97	ppm		79
58)	3-Nitroaniline	7.329	138	140764	30.70	ppm		88
59)	Acenaphthene	7.393	153	600915	39.96	ppm		97
60)	2,4-Dinitrophenol	7.419	184	176948	96.64	ppm	#	100
61)	4-Nitrophenol	7.468	109	60588	29.20	ppm		93
62)	Dibenzofuran	7.532	168	820941	41.30	ppm		94
63)	2,4-Dinitrotoluene	7.521	165	201785	44.33	ppm		88
64)	2,3,4,6-Tetrachlorophenol	7.633	232	175594	45.09	ppm		92
65)	Diethylphthalate	7.730	149	681074	41.00	ppm		95
66)	Fluorene	7.821	166	652232	39.50	ppm		97
67)	4-Chlorophenyl-phenyle...	7.821	204	290768	40.29	ppm		96
68)	4-Nitroaniline	7.842	138	191840	42.35	ppm		93
70)	4,6-Dinitro-2-methylph...	7.869	198	119788	49.59	ppm		90
71)	n-Nitrosodiphenylamine	7.928	169	469419	41.99	ppm		96
72)	1,2-Diphenylhydrazine	7.965	77	654525	36.41	ppm		87
74)	4-Bromophenyl-phenylether	8.265	248	191608	45.58	ppm		94
75)	Hexachlorobenzene	8.313	284	191127	42.47	ppm		96
76)	Pentachlorophenol	8.505	266	134427	44.19	ppm		100
77)	Phenanthrene	8.725	178	965480	39.81	ppm		98
78)	Anthracene	8.778	178	963941	40.07	ppm		98
79)	Carbazole	8.949	167	960887	42.48	ppm		98
80)	Di-n-butylphthalate	9.350	149	1292597	42.95	ppm		99
81)	Fluoranthene	10.083	202	1169264	44.39	ppm		94
82)	Octadecane	8.601	43	420343	39.60	ppm		97
84)	Pyrene	10.372	202	1184974	43.20	ppm		98
86)	Butylbenzylphthalate	11.324	149	593428	44.09	ppm		89

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58447.D
Acq On : 21 Apr 2016 3:40 pm
Operator : robertl1
Sample : op93271-bs1
Misc : op93271,e2p2552,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 16:34:19 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)
88)	Benzo[a]anthracene	12.046	228	1041672	41.09 ppm	100
89)	3,3'-Dichlorobenzidine	12.046	252	548414	63.93 ppm	96
90)	Chrysene	12.100	228	938082	40.92 ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.201	149	739563	43.94 ppm	98
93)	Di-n-octylphthalate	13.159	149	1388940	44.78 ppm	94
94)	Benzo[b]fluoranthene	13.565	252	965460	40.74 ppm	92
95)	Benzo[k]fluoranthene	13.608	252	872500	42.15 ppm	90
96)	Benzo[a]pyrene	13.993	252	842747	41.91 ppm	92
97)	Indeno[1,2,3-cd]pyrene	15.576	276	696397	40.05 ppm	89
99)	Dibenz[a,h]anthracene	15.630	278	692985	39.80 ppm	92
100)	7,12-Dimethylbenz(a)an...	13.570	256	434679	45.01 ppm	99
101)	Benzo[g,h,i]perylene	16.015	276	704705	38.33 ppm	89
103)	Benzaldehyde	4.499	105	372260	46.59 ppm	96
107)	Atrazine	8.425	215	99756	47.10 ppm	95
108)	1,2,4,5-Tetrachloroben...	6.644	216	308019	40.43 ppm	98
110)	Benzidine	10.276	184	625967	62.75 ppm	99

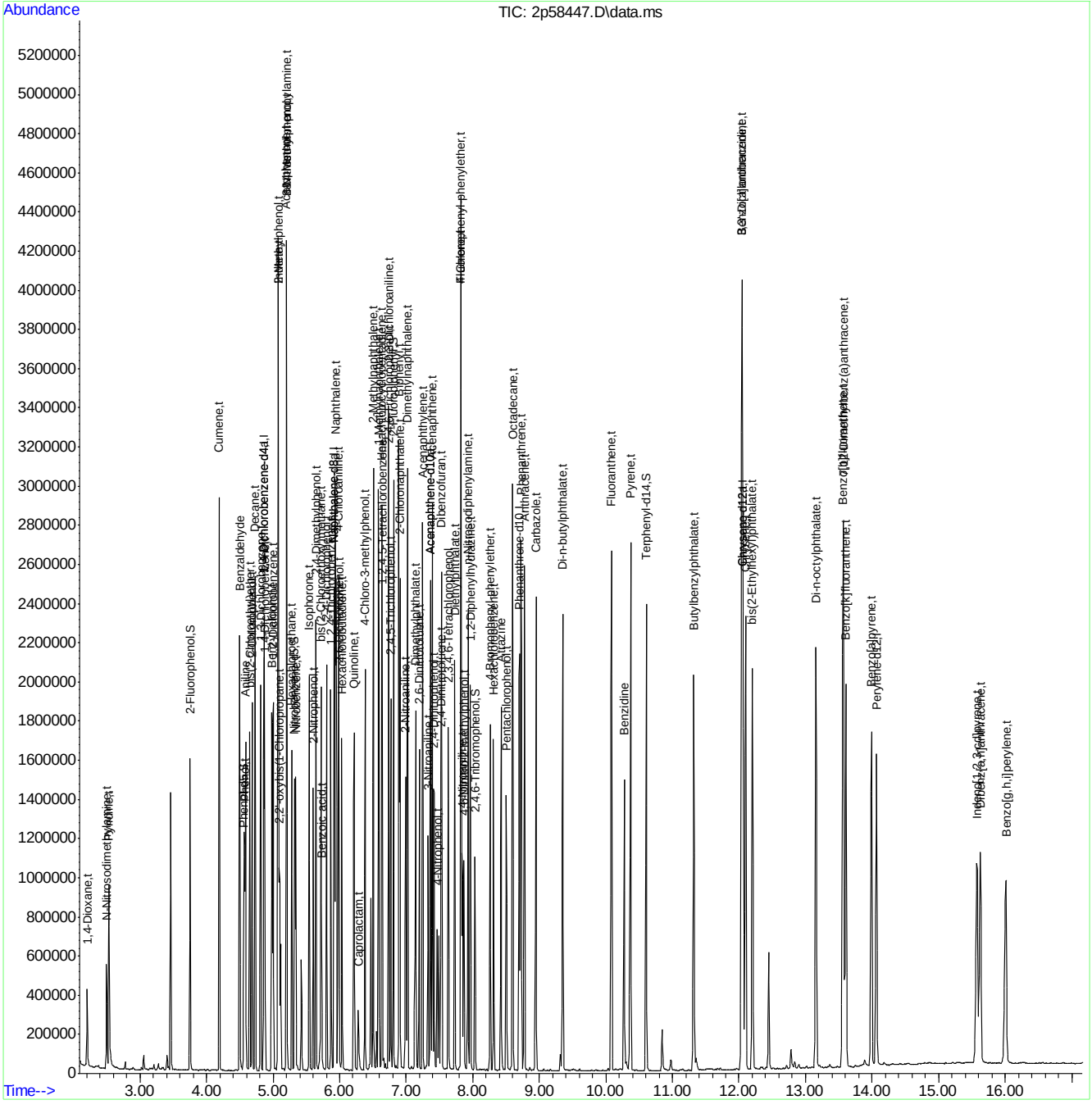
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58447.D
Acq On : 21 Apr 2016 3:40 pm
Operator : robertl1
Sample : op93271-bs1
Misc : op93271,e2p2552,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 21 16:34:19 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 JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58448.D
Acq On : 21 Apr 2016 4:04 pm
Operator : robertl1
Sample : op93271-bsd
Misc : op93271,e2p2552,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 21 16:34:11 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	4.863	152	251860	40.00	ppm	-0.05
24) Naphthalene-d8	5.916	136	849299	40.00	ppm	-0.05
47) Acenaphthene-d10	7.366	164	462661	40.00	ppm	-0.05
69) Phenanthrene-d10	8.703	188	740943	40.00	ppm	-0.06
83) Chrysene-d12	12.062	240	737125	40.00	ppm	-0.08
92) Perylene-d12	14.068	264	617752	40.00	ppm	-0.08
102) 1,4-Dichlorobenzene-d4a	4.863	152	251860	40.00	ppm	-0.05
104) Naphthalene-d8a	5.916	136	849299	40.00	ppm	-0.05
106) Acenaphthene-d10a	7.366	164	462661	40.00	ppm	-0.05
109) Chrysene-d12a	12.062	240	737125	40.00	ppm	-0.08
System Monitoring Compounds						
5) 2-Fluorophenol	3.750	112	347537	34.06	ppm	-0.04
Spiked Amount 50.000	Range 11 - 58		Recovery = 68.12%#			
8) Phenol-d5	4.558	99	272777	22.82	ppm	-0.04
Spiked Amount 50.000	Range 10 - 59		Recovery = 45.64%			
25) Nitrobenzene-d5	5.323	82	382744	45.71	ppm	-0.05
Spiked Amount 50.000	Range 19 - 61		Recovery = 91.42%#			
51) 2-Fluorobiphenyl	6.810	172	678442	47.13	ppm	-0.05
Spiked Amount 50.000	Range 21 - 58		Recovery = 94.26%#			
73) 2,4,6-Tribromophenol	8.034	330	87829	53.39	ppm	-0.05
Spiked Amount 50.000	Range 12 - 68		Recovery = 106.78%#			
85) Terphenyl-d14	10.607	244	755238	50.90	ppm	-0.07
Spiked Amount 50.000	Range 16 - 65		Recovery = 101.80%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.199	88	114459	24.73	ppm	97
3) Pyridine	2.525	79	264399	23.10	ppm	97
4) N-Nitrosodimethylamine	2.493	74	177013	26.16	ppm	84
6) Indene	5.071	116	594827	42.06	ppm	97
7) Cumene	4.189	105	903727	40.47	ppm	97
9) Phenol	4.569	94	293592	23.17	ppm	88
10) Aniline	4.585	93	342862	23.57	ppm	92
11) bis(2-Chloroethyl)ether	4.649	93	374921	41.99	ppm	99
12) 2-Chlorophenol	4.686	128	403226	43.63	ppm	89
13) Decane	4.729	57	461425	33.52	ppm	96
14) 1,3-Dichlorobenzene	4.809	146	397284	39.12	ppm	97
15) 1,4-Dichlorobenzene	4.873	146	389575	38.97	ppm	98
16) Benzyl alcohol	4.980	108	221552	38.28	ppm	96
17) 1,2-Dichlorobenzene	5.002	146	370283	40.09	ppm	97
18) Acetophenone	5.200	105	452806	39.91	ppm	96
19) 2-Methylphenol	5.077	108	288215	36.34	ppm	95
20) 2,2'-oxybis(1-Chloropr...	5.093	121	97597	37.49	ppm #	90
21) 3&4-Methylphenol	5.200	108	279349	33.76	ppm	97
22) n-Nitroso-di-n-propyla...	5.205	70	208963	34.67	ppm	92
23) Hexachloroethane	5.280	201	119115	39.27	ppm	89
26) Nitrobenzene	5.339	77	341710	40.44	ppm	99
27) Quinoline	6.216	129	668845	44.41	ppm	98
28) Isophorone	5.542	82	654356	43.24	ppm	97

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58448.D
Acq On : 21 Apr 2016 4:04 pm
Operator : robertl1
Sample : op93271-bsd
Misc : op93271,e2p2552,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 21 16:34:11 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)
29)	2-Nitrophenol	5.601	139	199431	47.74	ppm		92
30)	2,4-Dimethylphenol	5.644	107	325196	43.78	ppm		97
31)	Benzoic acid	5.735	105	148980	25.61	ppm		97
32)	bis(2-Chloroethoxy)met...	5.724	93	382775	40.67	ppm		95
33)	2,4-Dichlorophenol	5.804	162	304592	47.64	ppm		93
34)	2,6-Dichlorophenol	5.991	162	271068	45.02	ppm		98
36)	1,2,4-Trichlorobenzene	5.868	180	292233	41.48	ppm		99
38)	Naphthalene	5.938	128	884141	40.41	ppm		99
39)	4-Chloroaniline	5.981	127	177891	18.81	ppm		99
40)	2,3-Dichloroaniline	6.735	161	289003	36.89	ppm		93
41)	Caprolactam	6.275	113	33025	13.47	ppm		91
42)	Hexachlorobutadiene	6.034	225	147398	42.30	ppm		94
43)	4-Chloro-3-methylphenol	6.382	107	290943	44.34	ppm		95
44)	2-Methylnaphthalene	6.505	141	524003	42.88	ppm		93
45)	1-Methylnaphthalene	6.585	141	544803	43.49	ppm		94
46)	Dimethylnaphthalene	7.018	156	529542	42.91	ppm		94
48)	Hexachlorocyclopentadiene	6.633	237	298810	80.32	ppm		94
49)	2,4,6-Trichlorophenol	6.740	196	194425	45.43	ppm		98
50)	2,4,5-Trichlorophenol	6.767	196	200945	43.61	ppm		97
52)	2-Chloronaphthalene	6.906	162	552587	40.70	ppm		98
53)	Biphenyl	6.890	154	741003	43.48	ppm		96
54)	2-Nitroaniline	6.991	65	189598	40.20	ppm		92
55)	Dimethylphthalate	7.147	163	639153	43.36	ppm		100
56)	Acenaphthylene	7.248	152	903860	40.90	ppm		98
57)	2,6-Dinitrotoluene	7.195	165	151408	48.41	ppm		78
58)	3-Nitroaniline	7.328	138	97018	23.50	ppm		92
59)	Acenaphthene	7.393	153	570465	42.13	ppm		96
60)	2,4-Dinitrophenol	7.419	184	170378	102.68	ppm	#	100
61)	4-Nitrophenol	7.468	109	57877	30.98	ppm		91
62)	Dibenzofuran	7.532	168	773119	43.19	ppm		94
63)	2,4-Dinitrotoluene	7.521	165	189870	46.32	ppm		86
64)	2,3,4,6-Tetrachlorophenol	7.633	232	167647	47.81	ppm		91
65)	Diethylphthalate	7.730	149	654650	43.77	ppm		95
66)	Fluorene	7.821	166	629377	42.33	ppm		98
67)	4-Chlorophenyl-phenyle...	7.821	204	277350	42.68	ppm		98
68)	4-Nitroaniline	7.842	138	177756	43.58	ppm		92
70)	4,6-Dinitro-2-methylph...	7.869	198	116063	53.56	ppm		90
71)	n-Nitrosodiphenylamine	7.927	169	445078	44.37	ppm		96
72)	1,2-Diphenylhydrazine	7.965	77	622658	38.61	ppm		89
74)	4-Bromophenyl-phenylether	8.264	248	179801	47.67	ppm		93
75)	Hexachlorobenzene	8.313	284	184364	45.66	ppm		93
76)	Pentachlorophenol	8.505	266	128346	47.02	ppm		99
77)	Phenanthrene	8.724	178	916452	42.12	ppm		98
78)	Anthracene	8.778	178	906239	41.99	ppm		99
79)	Carbazole	8.949	167	908278	44.75	ppm		98
80)	Di-n-butylphthalate	9.350	149	1226602	45.42	ppm		99
81)	Fluoranthene	10.083	202	1105603	46.78	ppm		94
82)	Octadecane	8.601	43	396662	41.64	ppm		97
84)	Pyrene	10.372	202	1131764	44.48	ppm		98
86)	Butylbenzylphthalate	11.324	149	558369	44.72	ppm		91

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58448.D
Acq On : 21 Apr 2016 4:04 pm
Operator : robertl1
Sample : op93271-bsd
Misc : op93271,e2p2552,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 21 16:34:11 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)
88)	Benzo[a]anthracene	12.046	228	1000815	42.56	ppm	100
89)	3,3'-Dichlorobenzidine	12.046	252	400888	50.38	ppm	96
90)	Chrysene	12.099	228	890704	41.89	ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.206	149	702466	44.99	ppm	99
93)	Di-n-octylphthalate	13.158	149	1296911	46.16	ppm	95
94)	Benzo[b]fluoranthene	13.565	252	930954	43.37	ppm	92
95)	Benzo[k]fluoranthene	13.608	252	826989	44.11	ppm	89
96)	Benzo[a]pyrene	13.993	252	797381	43.78	ppm	93
97)	Indeno[1,2,3-cd]pyrene	15.576	276	686667	43.60	ppm	88
99)	Dibenz[a,h]anthracene	15.624	278	682676	43.29	ppm	94
100)	7,12-Dimethylbenz(a)an...	13.570	256	406670	46.49	ppm	98
101)	Benzo[g,h,i]perylene	16.009	276	691840	41.55	ppm	90
103)	Benzaldehyde	4.494	105	355297	49.48	ppm	98
107)	Atrazine	8.425	215	92046	48.26	ppm	96
108)	1,2,4,5-Tetrachloroben...	6.644	216	289510	42.20	ppm	98
110)	Benzidine	10.276	184	468064	50.58	ppm	98

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

7.3.3

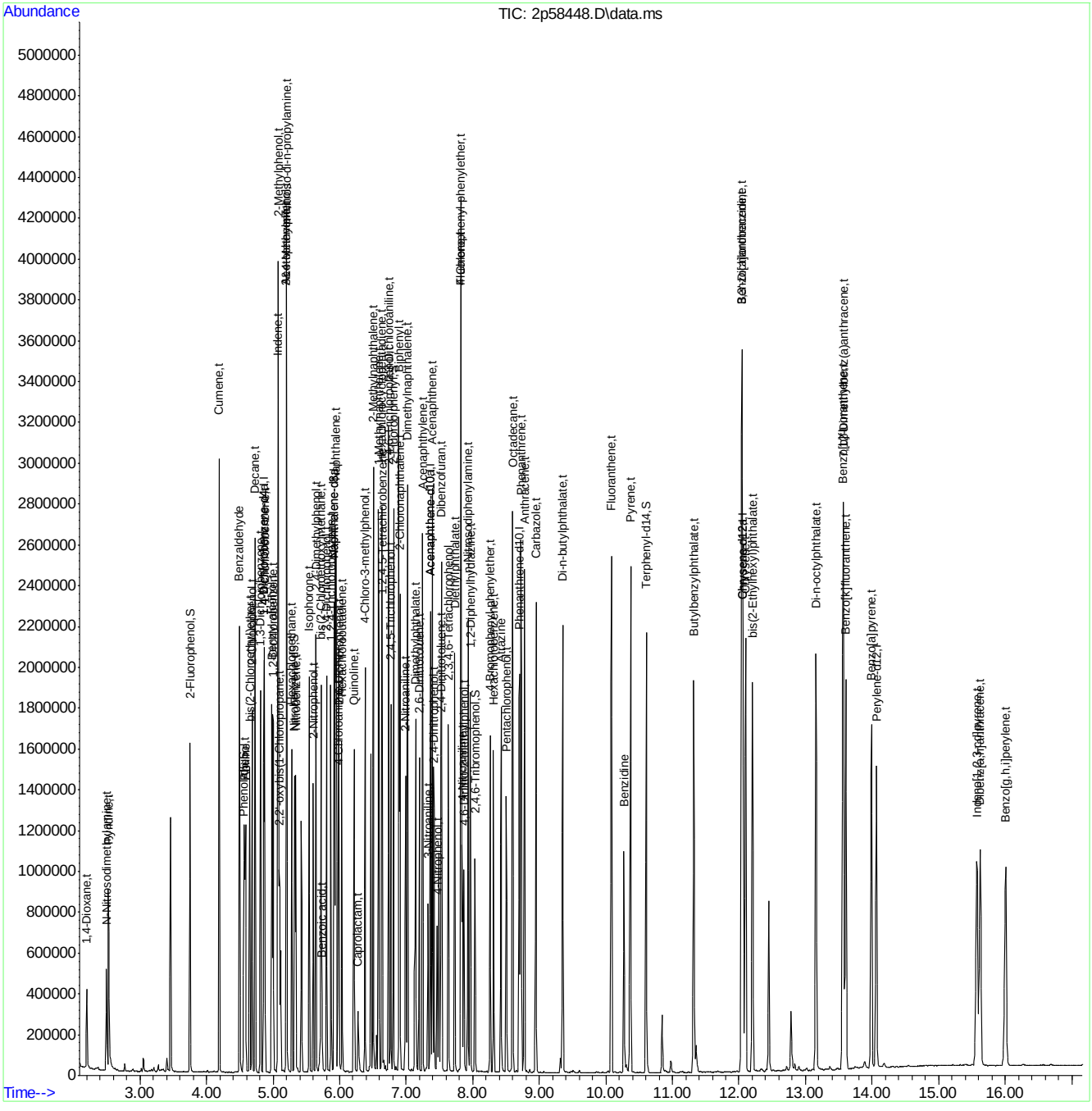
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58448.D
Acq On : 21 Apr 2016 4:04 pm
Operator : robertl1
Sample : op93271-bsd
Misc : op93271,e2p2552,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 21 16:34:11 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 JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110077.D
Acq On : 26 Apr 2016 2:44 pm
Operator : ariellec
Sample : op93364-bs1
Misc : op93364,ez5500,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 26 15:28:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 15:26:56 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.189	152	326824	40.00	ppm	0.00
24) Naphthalene-d8	5.113	136	1157192	40.00	ppm	0.00
47) Acenaphthene-d10	6.384	164	714727	40.00	ppm	0.00
69) Phenanthrene-d10	7.976	188	1200908	40.00	ppm	0.00
83) Chrysene-d12	12.870	240	1186711	40.00	ppm	0.00
92) Perylene-d12	15.840	264	992221	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.189	152	326824	40.00	ppm	0.00
104) Phenanthrene-d10a	7.976	188	1200908	40.00	ppm	0.00
106) Chrysene-d12a	12.870	240	1186711	40.00	ppm	0.00
108) Acenaphthene-d10a	6.384	164	714727	40.00	ppm	0.00
110) Naphthalene-d8a	5.113	136	1157192	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.270	112	428874	38.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	76.00%	
8) Phenol-d5	4.029	99	506430	38.30	ppm	0.00
Spiked Amount 50.000			Recovery	=	76.60%	
25) Nitrobenzene-d5	4.616	82	466998	50.01	ppm	-0.01
Spiked Amount 50.000			Recovery	=	100.02%	
51) 2-Fluorobiphenyl	5.877	172	1042450	45.51	ppm	0.01
Spiked Amount 50.000			Recovery	=	91.02%	
73) 2,4,6-Tribromophenol	7.148	330	154034	41.73	ppm	0.02
Spiked Amount 50.000			Recovery	=	83.46%	
86) Terphenyl-d14	10.744	244	1169046	46.89	ppm	-0.01
Spiked Amount 50.000			Recovery	=	93.78%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.657	88	140931	29.06	ppm	86
3) Pyridine	1.993	79	353196	46.29	ppm	92
4) N-Nitrosodimethylamine	1.956	74	227994	35.87	ppm	95
6) Indene	4.381	116	752618	36.23	ppm	91
7) Cumene	3.574	105	997965	37.66	ppm	97
9) Phenol	4.034	94	491366	36.60	ppm	86
10) Aniline	3.980	93	377303	24.43	ppm	97
11) bis(2-Chloroethyl)ether	4.013	93	381191	41.47	ppm	95
12) 2-Chlorophenol	4.071	128	418547	33.81	ppm	97
13) Decane	4.055	43	318315	27.90	ppm	96
14) 1,3-Dichlorobenzene	4.146	146	488606	36.28	ppm	99
15) 1,4-Dichlorobenzene	4.199	146	487563	38.17	ppm	97
16) Benzyl alcohol	4.338	108	241503	42.63	ppm	77
17) 1,2-Dichlorobenzene	4.317	146	494362	39.94	ppm	95
18) Acetophenone	4.504	105	575257	39.93	ppm	98
19) 2-Methylphenol	4.456	108	374978	35.74	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.402	121	82071	25.53	ppm #	63
21) 3&4-Methylphenol	4.568	108	377465	34.49	ppm	97
22) n-Nitroso-di-n-propyla...	4.509	70	285757	38.34	ppm	84
23) Hexachloroethane	4.557	201	194768	52.32	ppm #	69
26) Nitrobenzene	4.632	77	392585	41.71	ppm	99
27) Quinoline	5.380	129	857146	39.14	ppm	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110077.D
Acq On : 26 Apr 2016 2:44 pm
Operator : ariellec
Sample : op93364-bs1
Misc : op93364,ez5500,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 26 15:28:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 15:26:56 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) Isophorone	4.792	82	783309	47.80	ppm		95
29) 2-Nitrophenol	4.857	139	251306	42.97	ppm		74
30) 2,4-Dimethylphenol	4.926	107	366809	39.87	ppm		88
31) Benzoic Acid	5.060	105	160850	24.24	ppm		93
32) bis(2-Chloroethoxy)met...	4.958	93	411984	40.53	ppm		98
33) 2,4-Dichlorophenol	5.049	162	395276	48.78	ppm		94
34) 2,6-Dichlorophenol	5.198	162	361590	45.61	ppm		97
36) 1,2,4-Trichlorobenzene	5.070	180	415535	49.24	ppm		94
38) Naphthalene	5.129	128	1198898	37.73	ppm		99
39) 4-Chloroaniline	5.204	127	224885	17.78	ppm		96
40) 2,3-Dichloroaniline	5.845	161	404580	39.78	ppm		96
41) Caprolactam	5.482	55	145785	35.39	ppm		94
42) Hexachlorobutadiene	5.215	225	251792	67.15	ppm		98
43) 4-Chloro-3-methylphenol	5.583	107	384410	44.74	ppm		89
44) 2-Methylnaphthalene	5.615	141	671600	37.97	ppm		95
45) 1-Methylnaphthalene	5.685	141	731183	38.62	ppm		96
46) Dimethylnaphthalene	6.053	156	780199	42.64	ppm		96
48) Hexachlorocyclopentadiene	5.727	237	535663	112.44	ppm		97
49) 2,4,6-Trichlorophenol	5.845	196	304299	51.55	ppm		100
50) 2,4,5-Trichlorophenol	5.888	196	285782	44.70	ppm		100
52) 2-Chloronaphthalene	5.962	162	783915	38.71	ppm		96
53) Biphenyl	5.946	154	1029766	36.29	ppm		97
54) 2-Nitroaniline	6.080	65	214379	39.26	ppm		79
55) Dimethylphthalate	6.192	163	947853	41.68	ppm		99
56) Acenaphthylene	6.272	152	1260711	35.43	ppm		97
57) 2,6-Dinitrotoluene	6.246	165	210960	42.33	ppm		89
58) 3-Nitroaniline	6.406	138	132969	22.08	ppm		76
59) Acenaphthene	6.411	153	822268	38.64	ppm		98
60) 2,4-Dinitrophenol	6.475	184	152887	58.63	ppm		89
61) 4-Nitrophenol	6.636	109	112656	40.62	ppm	#	66
62) Dibenzofuran	6.566	168	1169931	39.80	ppm		99
63) 2,4-Dinitrotoluene	6.582	165	268250	41.38	ppm		97
64) 2,3,4,6-Tetrachlorophenol	6.705	232	257662	50.77	ppm		95
65) Diethylphthalate	6.790	149	905205	38.79	ppm		98
66) Fluorene	6.881	166	950077	39.27	ppm		92
67) 4-Chlorophenyl-phenyle...	6.881	204	490809	49.20	ppm		88
68) 4-Nitroaniline	6.993	138	183689	30.48	ppm	#	69
70) 4,6-Dinitro-2-methylph...	6.972	198	146882	41.11	ppm		97
71) n-Nitrosodiphenylamine	7.026	169	661410	37.88	ppm		97
72) 1,2-Diphenylhydrazine	7.047	77	838186	40.16	ppm		63
74) 4-Bromophenyl-phenylether	7.410	248	303604	48.73	ppm		88
75) Hexachlorobenzene	7.480	284	310451	44.43	ppm		92
76) Pentachlorophenol	7.779	266	164766	44.43	ppm		73
77) Phenanthrene	8.008	178	1308968	38.09	ppm		98
78) Anthracene	8.078	178	1328073	37.51	ppm		98
79) Carbazole	8.372	167	1256974	37.23	ppm		96
80) Di-n-butylphthalate	8.943	149	1589190	38.24	ppm		97
81) Fluoranthene	9.932	202	1537691	42.86	ppm		85
82) Octadecane	7.832	57	474856	31.86	ppm		96
84) Pyrene	10.338	202	1563091	39.06	ppm		92

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110077.D
Acq On : 26 Apr 2016 2:44 pm
Operator : ariellec
Sample : op93364-bs1
Misc : op93364,ez5500,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 26 15:28:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 15:26:56 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
87)	Butylbenzylphthalate	11.871	149	646987	33.88	ppm		98
88)	Benzo[a]anthracene	12.843	228	1394612	40.24	ppm		94
89)	3,3'-Dichlorobenzidine	12.955	252	618180	49.39	ppm		93
90)	Chrysene	12.923	228	1300723	38.44	ppm		91
91)	bis(2-Ethylhexyl)phtha...	13.196	149	868708	32.32	ppm		97
93)	Di-n-octylphthalate	14.590	149	1443387	37.75	ppm		99
94)	Benzo[b]fluoranthene	15.108	252	1315746	42.01	ppm		91
95)	Benzo[k]fluoranthene	15.156	252	1254252	44.61	ppm		92
96)	Benzo[a]pyrene	15.723	252	1196029	42.90	ppm		89
97)	Indeno[1,2,3-cd]pyrene	17.753	276	1134225	40.70	ppm		78
99)	Dibenz[a,h]anthracene	17.806	278	1156727	39.43	ppm		90
100)	7,12-Dimethylbenz(a)an...	15.114	256	643539	45.16	ppm		91
101)	Benzo[g,h,i]perylene	18.180	276	1179204	39.37	ppm		82
103)	Benzaldehyde	3.879	105	344933	39.98	ppm		96
105)	Atrazine	7.672	215	151212	50.60	ppm	#	74
107)	Benzidine	10.332	184	601571	37.09	ppm		96
109)	1,2,4,5-Tetrachloroben...	5.733	216	451435	49.27	ppm		94

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

7.3.4

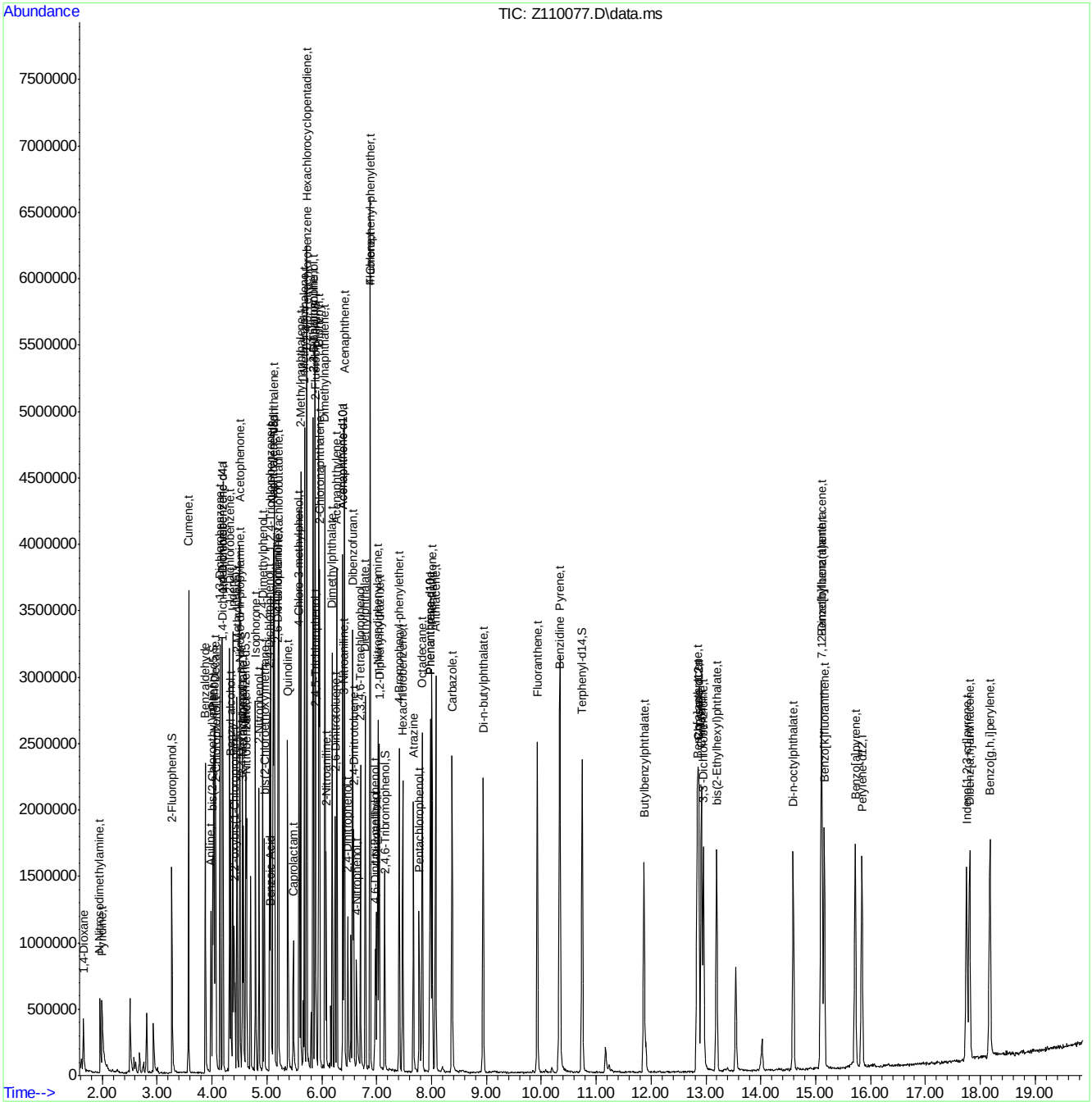
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110077.D
Acq On : 26 Apr 2016 2:44 pm
Operator : ariellec
Sample : op93364-bs1
Misc : op93364,ez5500,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 26 15:28:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 15:26:56 2016
Response via : Initial Calibration



MZ5485.M Tue Apr 26 15:28:37 2016 RTE Page: 4

SGS ACCUTEST JC18649

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 04/30/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83440.D
Acq On : 28 Apr 2016 12:28 pm
Operator : ashleyn
Sample : op93364-bs1
Misc : op93364,e2m3668,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 28 15:14:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 15:13:15 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.761	152	428819	80.00	ppm	0.00
24) Naphthalene-d8	5.868	136	1832134	80.00	ppm	0.00
47) Acenaphthene-d10	7.965	164	1054770	80.00	ppm	0.00
69) Phenanthrene-d10	10.153	188	1616307	80.00	ppm	0.00
83) Chrysene-d12	14.357	240	1349428	80.00	ppm	0.01
92) Perylene-d12	16.480	264	1179649	80.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.761	152	428819	80.00	ppm	0.00
104) Acenaphthene-d10a	7.965	164	1054770	80.00	ppm	0.00
106) Chrysene-d12a	14.357	240	1349428	80.00	ppm	0.01
108) Phenanthrene-d10a	10.153	188	1616307	80.00	ppm	0.00
110) Naphthalene-d8a	5.868	136	1832134	80.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.798	112	331657	41.24	ppm	0.00
Spiked Amount 50.000			Recovery	=	82.48%	
8) Phenol-d5	4.510	99	427597	42.35	ppm	0.00
Spiked Amount 50.000			Recovery	=	84.70%	
25) Nitrobenzene-d5	5.210	82	397476	46.31	ppm	0.00
Spiked Amount 50.000			Recovery	=	92.62%	
51) 2-Fluorobiphenyl	7.077	172	745559	44.55	ppm	0.00
Spiked Amount 50.000			Recovery	=	89.10%	
73) 2,4,6-Tribromophenol	9.104	330	109542	52.65	ppm	0.00
Spiked Amount 50.000			Recovery	=	105.30%	
85) Terphenyl-d14	12.709	244	715972	49.41	ppm	-0.02
Spiked Amount 50.000			Recovery	=	98.82%	

Target Compounds							Qvalue
2) 1,4-Dioxane	2.322	88	70609	19.70	ppm		83
3) Pyridine	2.643	79	246650	27.92	ppm		84
4) N-Nitrosodimethylamine	2.611	74	174197	32.86	ppm		62
6) Indene	4.964	116	563838	42.62	ppm		99
7) Cumene	4.162	105	734228	37.66	ppm		99
9) Phenol	4.521	94	428731	38.23	ppm		78
10) Aniline	4.515	93	288455	24.60	ppm	#	39
11) bis(2-Chloroethyl)ether	4.553	93	318407	39.54	ppm		93
12) 2-Chlorophenol	4.611	128	344554	40.79	ppm		96
13) Decane	4.633	43	289473	44.83	ppm		88
14) 1,3-Dichlorobenzene	4.718	146	348028	37.73	ppm		99
15) 1,4-Dichlorobenzene	4.777	146	356097	38.36	ppm		100
16) Benzyl alcohol	4.874	108	223229	42.72	ppm		87
17) 1,2-Dichlorobenzene	4.895	146	334423	38.80	ppm		98
18) Acetophenone	5.082	105	446044	42.96	ppm		86
19) 2-Methylphenol	4.975	108	297494	41.62	ppm		99
20) 2,2'-oxybis(1-Chloropr...	4.970	45	345132	40.09	ppm		92
21) 3&4-Methylphenol	5.098	108	324830	43.16	ppm		97
22) n-Nitroso-di-n-propyla...	5.082	70	229022	44.74	ppm		99
23) Hexachloroethane	5.168	201	108074	42.16	ppm		93
26) Nitrobenzene	5.227	77	350454	40.22	ppm		91
27) Quinoline	6.232	129	696731	39.61	ppm		99
28) Isophorone	5.430	82	665635	43.72	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83440.D
Acq On : 28 Apr 2016 12:28 pm
Operator : ashleyn
Sample : op93364-bs1
Misc : op93364,e2m3668,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 28 15:14:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 15:13:15 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2-Nitrophenol	5.510	139	187964	41.30	ppm		95
30) 2,4-Dimethylphenol	5.553	107	296884	36.26	ppm		95
31) Benzoic acid	5.670	105	220202m	35.78	ppm		
32) bis(2-Chloroethoxy)met...	5.622	93	363314	37.61	ppm		99
33) 2,4-Dichlorophenol	5.745	162	281988	41.79	ppm		99
34) 2,6-Dichlorophenol	5.959	162	266121	40.34	ppm		97
36) 1,2,4-Trichlorobenzene	5.815	180	270964	38.00	ppm		98
38) Naphthalene	5.890	128	961900	35.90	ppm		99
39) 4-Chloroaniline	5.943	127	210862	20.91	ppm		96
40) 2,3-Dichloroaniline	6.970	161	305795	37.92	ppm		97
41) Caprolactam	6.323	55	151259	47.89	ppm		92
42) Hexachlorobutadiene	6.013	225	140483	43.13	ppm		99
43) 4-Chloro-3-methylphenol	6.483	107	310807	43.60	ppm		92
44) 2-Methylnaphthalene	6.633	141	544779	38.62	ppm		98
45) 1-Methylnaphthalene	6.746	141	573715	39.08	ppm		97
46) Dimethylnaphthalene	7.403	156	607207	41.15	ppm		98
48) Hexachlorocyclopentadiene	6.826	237	280087	82.22	ppm		98
49) 2,4,6-Trichlorophenol	6.986	196	187400	45.14	ppm		99
50) 2,4,5-Trichlorophenol	7.040	196	190318	42.26	ppm		99
52) 2-Chloronaphthalene	7.227	162	600413	39.59	ppm		99
53) Biphenyl	7.200	154	804930	40.15	ppm		100
54) 2-Nitroaniline	7.366	65	201443	49.13	ppm		88
55) Dimethylphthalate	7.607	163	720803	42.80	ppm		100
56) Acenaphthylene	7.767	152	983676	39.93	ppm		100
57) 2,6-Dinitrotoluene	7.687	165	165829	45.98	ppm		87
58) 3-Nitroaniline	7.922	138	126733	28.57	ppm		93
59) Acenaphthene	8.008	153	627280	40.31	ppm		100
60) 2,4-Dinitrophenol	8.077	184	154627	77.09	ppm		75
61) 4-Nitrophenol	8.222	109	106303	52.13	ppm	#	84
62) Dibenzofuran	8.249	168	849142	41.23	ppm		93
63) 2,4-Dinitrotoluene	8.254	165	223990	45.98	ppm		92
64) 2,3,4,6-Tetrachlorophenol	8.446	232	140449	43.44	ppm		97
65) Diethylphthalate	8.612	149	722030	44.56	ppm		99
66) Fluorene	8.741	166	715426	42.32	ppm		100
67) 4-Chlorophenyl-phenyle...	8.751	204	303090	43.60	ppm		92
68) 4-Nitroaniline	8.799	138	188271	42.50	ppm		80
70) 4,6-Dinitro-2-methylph...	8.858	198	121399	46.43	ppm		91
71) n-Nitrosodiphenylamine	8.938	169	508147	44.32	ppm		99
72) 1,2-Diphenylhydrazine	8.992	77	774495	47.01	ppm		97
74) 4-Bromophenyl-phenylether	9.484	248	183029	46.16	ppm		98
75) Hexachlorobenzene	9.575	284	205196	45.14	ppm		99
76) Pentachlorophenol	9.896	266	100223	38.07	ppm		99
77) Phenanthrene	10.190	178	997533	40.50	ppm		99
78) Anthracene	10.265	178	1010977	41.77	ppm		99
79) Carbazole	10.543	167	965883	43.25	ppm		99
80) Di-n-butylphthalate	11.153	149	1227247	45.64	ppm		99
81) Fluoranthene	12.057	202	967703	43.29	ppm		97
82) Octadecane	10.083	57	504769	51.75	ppm		92
84) Pyrene	12.410	202	1014484	42.98	ppm		97
86) Butylbenzylphthalate	13.538	149	517544	44.03	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83440.D
Acq On : 28 Apr 2016 12:28 pm
Operator : ashleyn
Sample : op93364-bs1
Misc : op93364,e2m3668,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 28 15:14:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 15:13:15 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
88) Benzo[a]anthracene	14.335	228	846784	41.84 ppm	100
89) 3,3'-Dichlorobenzidine	14.335	252	372053	51.43 ppm	99
90) Chrysene	14.394	228	804484	38.50 ppm	100
91) bis(2-Ethylhexyl)phtha...	14.496	149	694036	43.64 ppm	99
93) Di-n-octylphthalate	15.485	149	1130557	49.70 ppm	96
94) Benzo[b]fluoranthene	15.956	252	811616	43.76 ppm	97
95) Benzo[k]fluoranthene	15.993	252	783250	42.77 ppm	98
96) Benzo[a]pyrene	16.394	252	714163	43.35 ppm	96
97) Indeno[1,2,3-cd]pyrene	18.074	276	671232m	42.35 ppm	
99) Dibenz[a,h]anthracene	18.111	278	658423	36.73 ppm	99
100) 7,12-Dimethylbenz(a)an...	15.951	256	396094	48.86 ppm	97
101) Benzo[g,h,i]perylene	18.534	276	636247	35.50 ppm	92
103) Benzaldehyde	4.430	105	248811	42.89 ppm	95
105) 1,2,4,5-Tetrachloroben...	6.836	216	260142	40.52 ppm	99
107) Benzidine	12.313	184	335361	39.42 ppm	99
109) Atrazine	9.789	215	99821	56.58 ppm	98

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

7.3.5

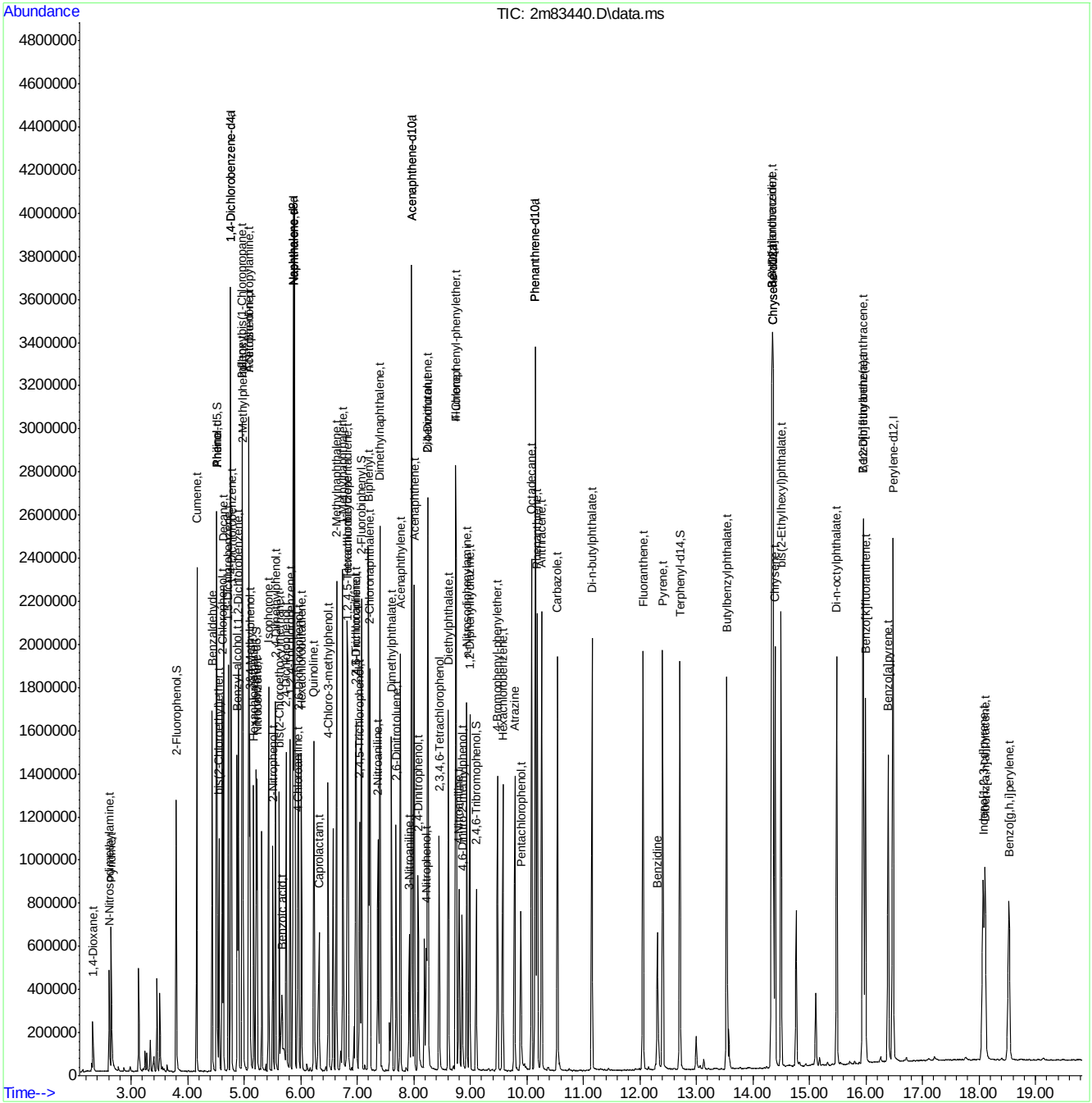
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83440.D
Acq On : 28 Apr 2016 12:28 pm
Operator : ashleyn
Sample : op93364-bs1
Misc : op93364,e2m3668,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 28 15:14:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 15:13:15 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Manual Integration Approval Summary

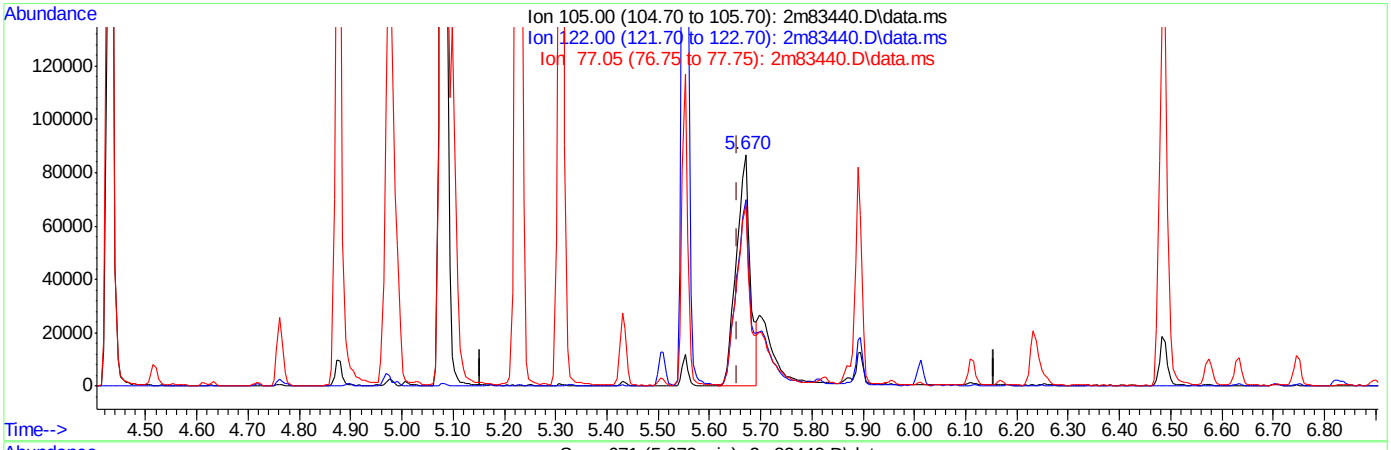
Sample Number:	OP93364-BS1	**Method:**	SW846 8270D
Lab FileID:	2M83440.D	**Analyst approved:**	04/28/16 15:15 Ashley Noble
Injection Time:	04/28/16 12:28	**Supervisor approved:**	04/30/16 15:48 Kristi Schollenberger

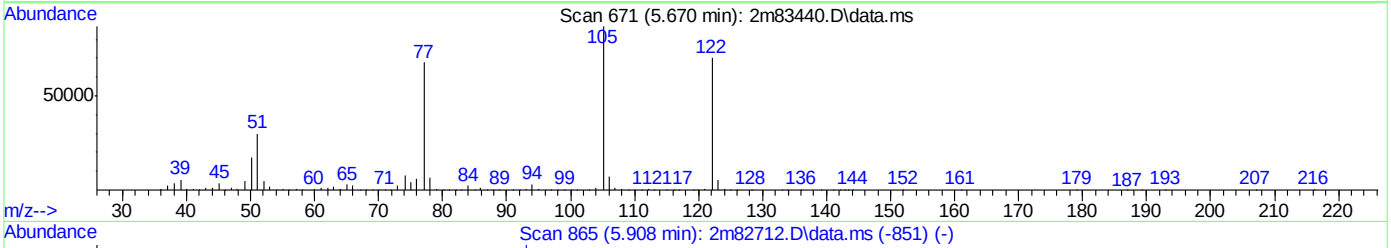
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.67	Split peak
Indeno(1,2,3-cd)pyrene	193-39-5		18.07	Overlapping peak

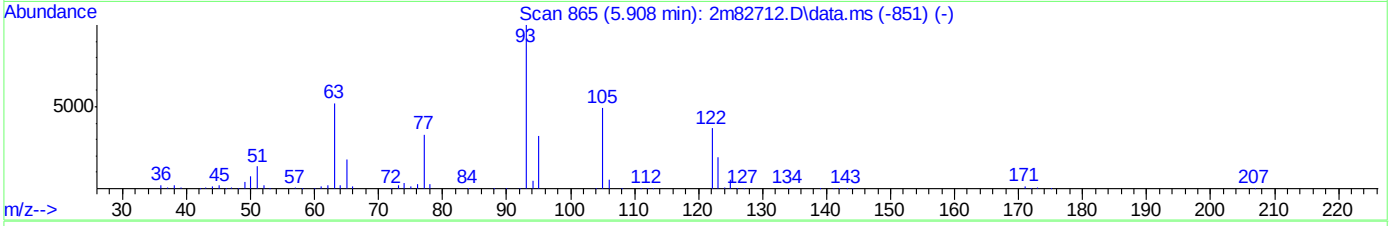
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83440.D
Acq On : 28 Apr 2016 12:28 pm
Operator : ashleyn
Sample : op93364-bs1
Misc : op93364,e2m3668,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 28 14:55:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 14:55:04 2016
Response via : Initial Calibration







TIC: 2m83440.D\data.ms

(31) Benzoic acid (t)

5.670min (+0.016) 13.20ppm

response 162507

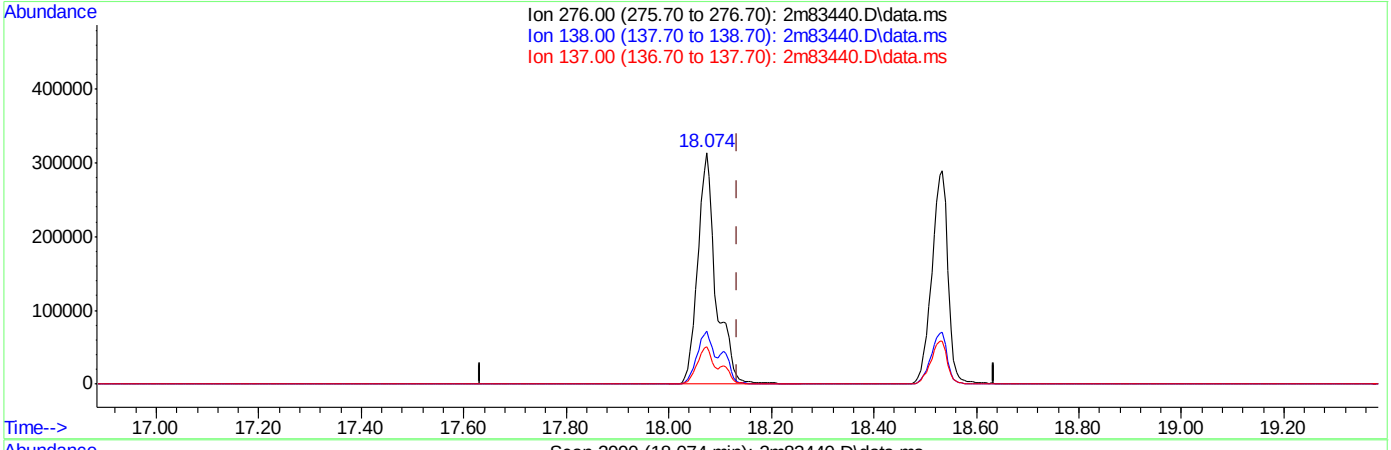
Ion	Exp%	Act%
105.00	100	100
122.00	82.40	79.84
77.05	70.70	77.47
0.00	0.00	0.00

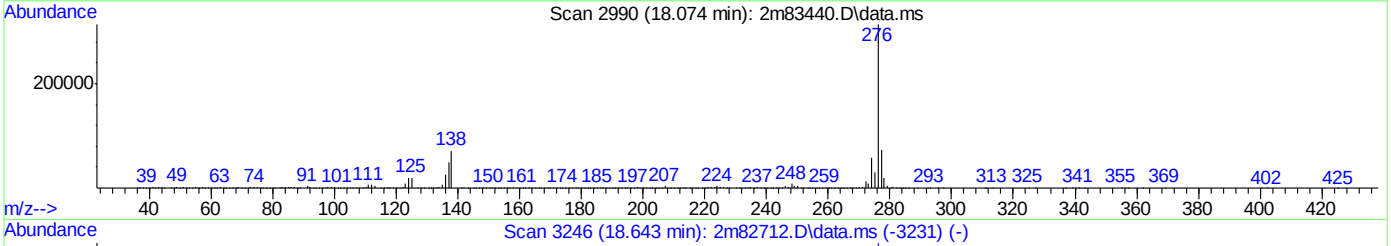
SGS ACCUTEST JC18649

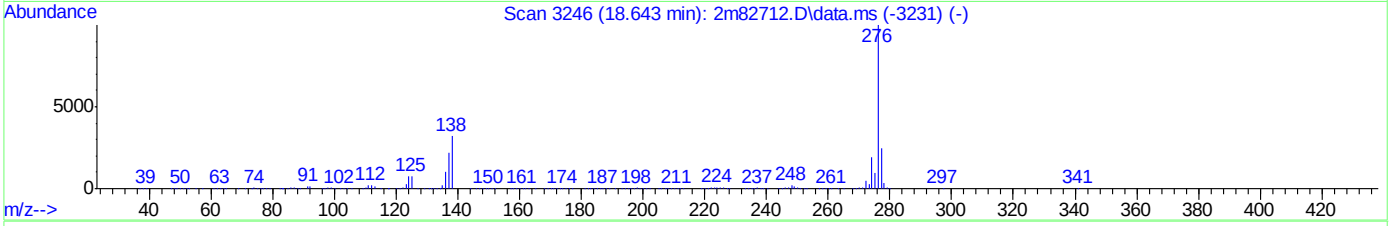
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83440.D
Acq On : 28 Apr 2016 12:28 pm
Operator : ashleyn
Sample : op93364-bs1
Misc : op93364,e2m3668,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 28 14:55:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 14:55:04 2016
Response via : Initial Calibration







TIC: 2m83440.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.074min (-0.060) 24.68ppm

response 782234

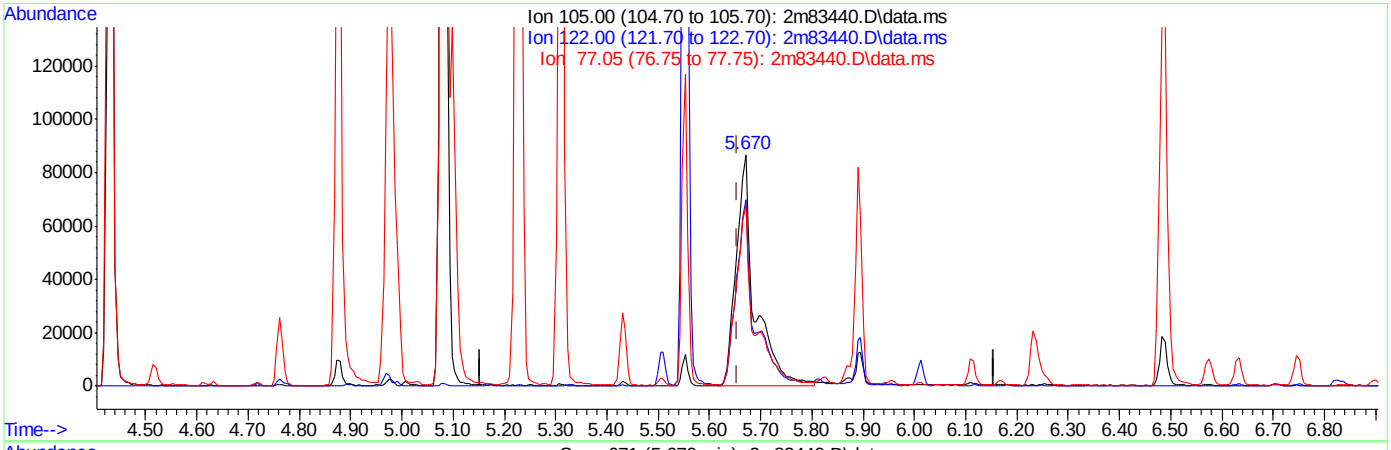
Ion	Exp%	Act%
276.00	100	100
138.00	24.70	22.68
137.00	17.90	16.00
0.00	0.00	0.00

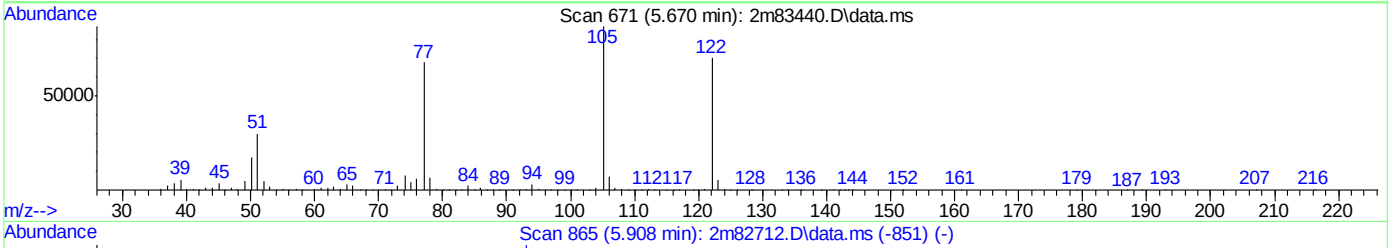
SGS ACCUTEST JC18649

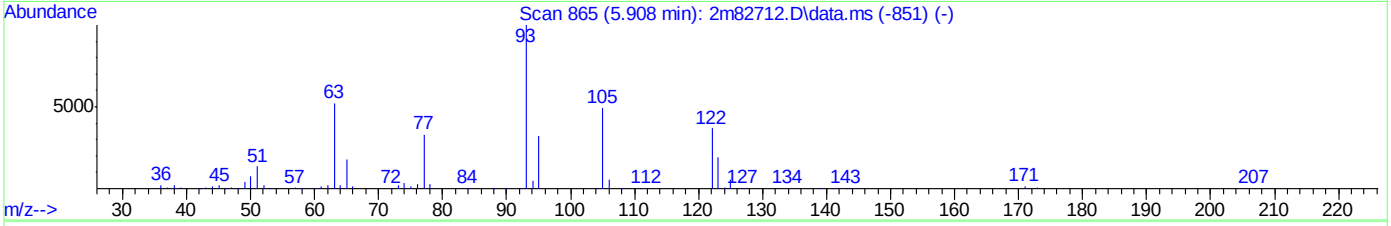
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83440.D
Acq On : 28 Apr 2016 12:28 pm
Operator : ashleyn
Sample : op93364-bs1
Misc : op93364,e2m3668,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 28 15:13:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 15:13:15 2016
Response via : Initial Calibration







TIC: 2m83440.D\data.ms

(31) Benzoic acid (t)

5.670min (+0.016) 35.78ppm m

response 220202

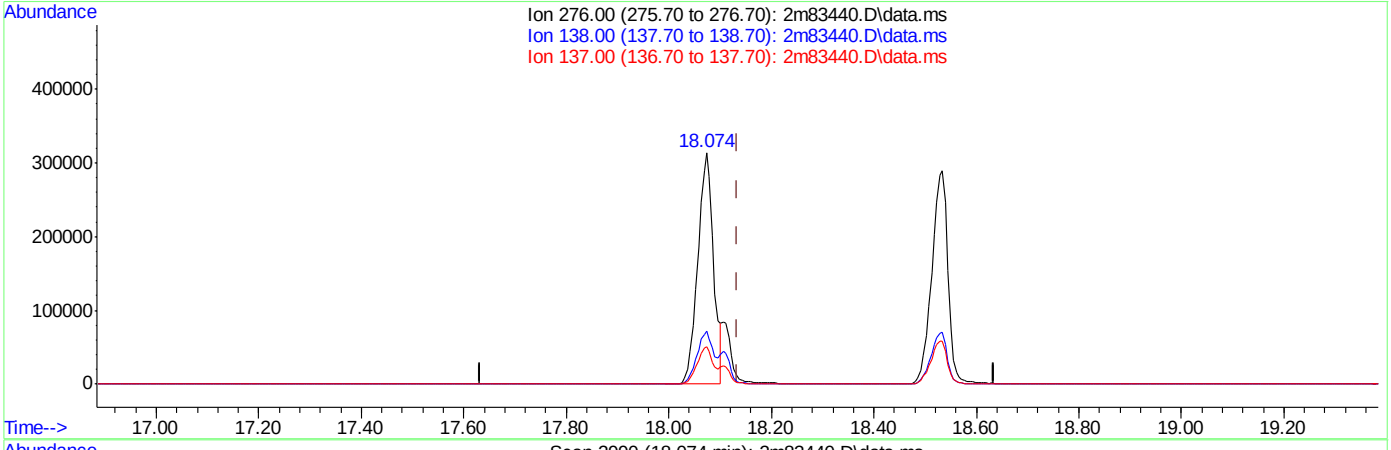
Ion	Exp%	Act%
105.00	100	100
122.00	82.40	80.61
77.05	70.70	77.98
0.00	0.00	0.00

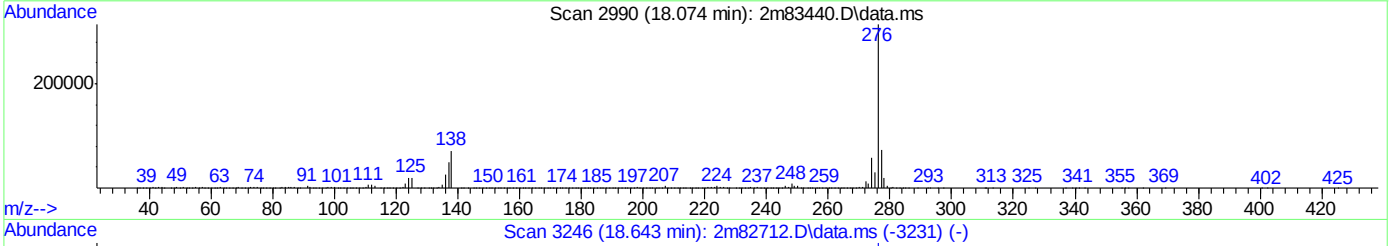
SGS ACCUTEST JC18649

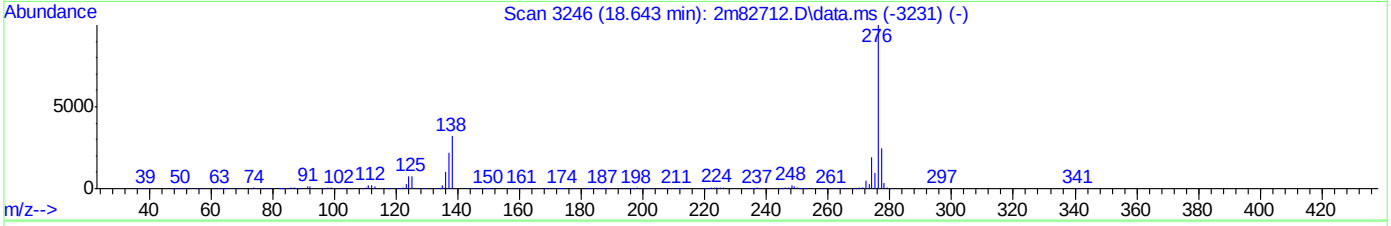
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83440.D
Acq On : 28 Apr 2016 12:28 pm
Operator : ashleyn
Sample : op93364-bs1
Misc : op93364,e2m3668,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 28 15:13:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 15:13:15 2016
Response via : Initial Calibration







TIC: 2m83440.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.074min (-0.060) 42.35ppm m

response 671232

Ion	Exp%	Act%
276.00	100	100
138.00	24.70	22.76
137.00	17.90	16.05
0.00	0.00	0.00

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64881.D
Acq On : 21 Apr 2016 11:23 am
Operator : linseyk
Sample : op93236a-bs12
Misc : op93236a,e4m2889,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 13:38:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	241673	4.00	ppm	# 0.05
12) Fluorene-d10	13.748	176	397589	4.00	ppm	0.07
22) Fluoranthene-d10	17.923	212	859105	4.00	ppm	0.06
28) Benzo(a)pyrene-d12	22.525	264	604271	4.00	ppm	0.05
35) 1-Methylnaphthalene-d10a	10.746	152	241673	4.00	ppm	# 0.05
38) Fluorene-d10a	13.748	176	397589	4.00	ppm	# 0.07
System Monitoring Compounds						
2) 2-Fluorophenol	4.773	112	877577	27.73	ppm	0.05
Spiked Amount 50.000	Range 11 - 58		Recovery = 55.46%			
3) Phenol-d5	6.352	99	1000451	18.80	ppm	0.04
Spiked Amount 50.000			Recovery = 37.60%			
6) Nitrobenzene-d5	7.879	82	2020431	42.34	ppm	0.04
Spiked Amount 50.000			Recovery = 84.68%			
11) 2-Fluorobiphenyl	11.414	172	3518411	50.44	ppm	0.05
Spiked Amount 50.000			Recovery = 100.88%			
17) 2,4,6-Tribromophenol	14.297	330	1113660	52.51	ppm	0.07
Spiked Amount 50.000			Recovery = 105.02%			
25) Terphenyl-d14	18.732	244	4315554	37.18	ppm	0.06
Spiked Amount 50.000			Recovery = 74.36%			
Target Compounds						Qvalue
4) Phenol	6.379	94	115103	2.11	ppm	80
5) bis(2-Chloroethyl)ether	6.448	93	34905	0.85	ppm #	47
7) Naphthalene	9.271	128	110271	0.81	ppm	98
8) Hexachlorobutadiene	9.565	225	25552	0.76	ppm	82
9) 2-Methylnaphthalene	10.626	142	60153	1.02	ppm	79
10) Hexachlorocyclopentadiene	10.984	237	14995	0.86	ppm	83
13) Acenaphthylene	12.388	152	83973	0.92	ppm	91
14) Acenaphthene	12.742	153	52112	0.89	ppm	79
15) Dibenzofuran	13.120	168	70764	0.81	ppm	71
16) Fluorene	13.795	166	75687	0.71	ppm	78
18) Hexachlorobenzene	14.898	284	38329	0.92	ppm	92
19) Pentachlorophenol	15.331	266	94101	5.53	ppm	98
20) Phenanthrene	15.687	178	138419	0.97	ppm	92
21) Anthracene	15.795	178	134626	0.99	ppm	97
23) Fluoranthene	17.941	202	153923	0.66	ppm	89
24) Pyrene	18.337	202	171690	0.75	ppm	87
26) Benzo[a]anthracene	20.427	228	148552	0.70	ppm	93
27) Chrysene	20.483	228	137792	0.66	ppm	84
29) Benzo[b]fluoranthene	22.098	252	131915	0.61	ppm	94
30) Benzo[k]fluoranthene	22.139	252	125516	0.69	ppm	95
31) Benzo[a]pyrene	22.552	252	116839	0.65	ppm	99
32) Indeno[1,2,3-cd]pyrene	24.081	276	135772	0.60	ppm	98
33) Dibenz[a,h]anthracene	24.122	278	100595	0.55	ppm	75
34) Benzo[g,h,i]perylene	24.480	276	109538	0.58	ppm	100
39) 4,6-dinitro-2-methylph...	13.962	198	70886	6.14	ppm	73
40) 1,2-Diphenylhydrazine	14.154	77	88194	0.94	ppm	87
41) n-nitrosodiphenylamine	14.106	169	58978	0.84	ppm	77

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64881.D
Acq On : 21 Apr 2016 11:23 am
Operator : linseyk
Sample : op93236a-bs12
Misc : op93236a,e4m2889,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 13:38:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.3.6

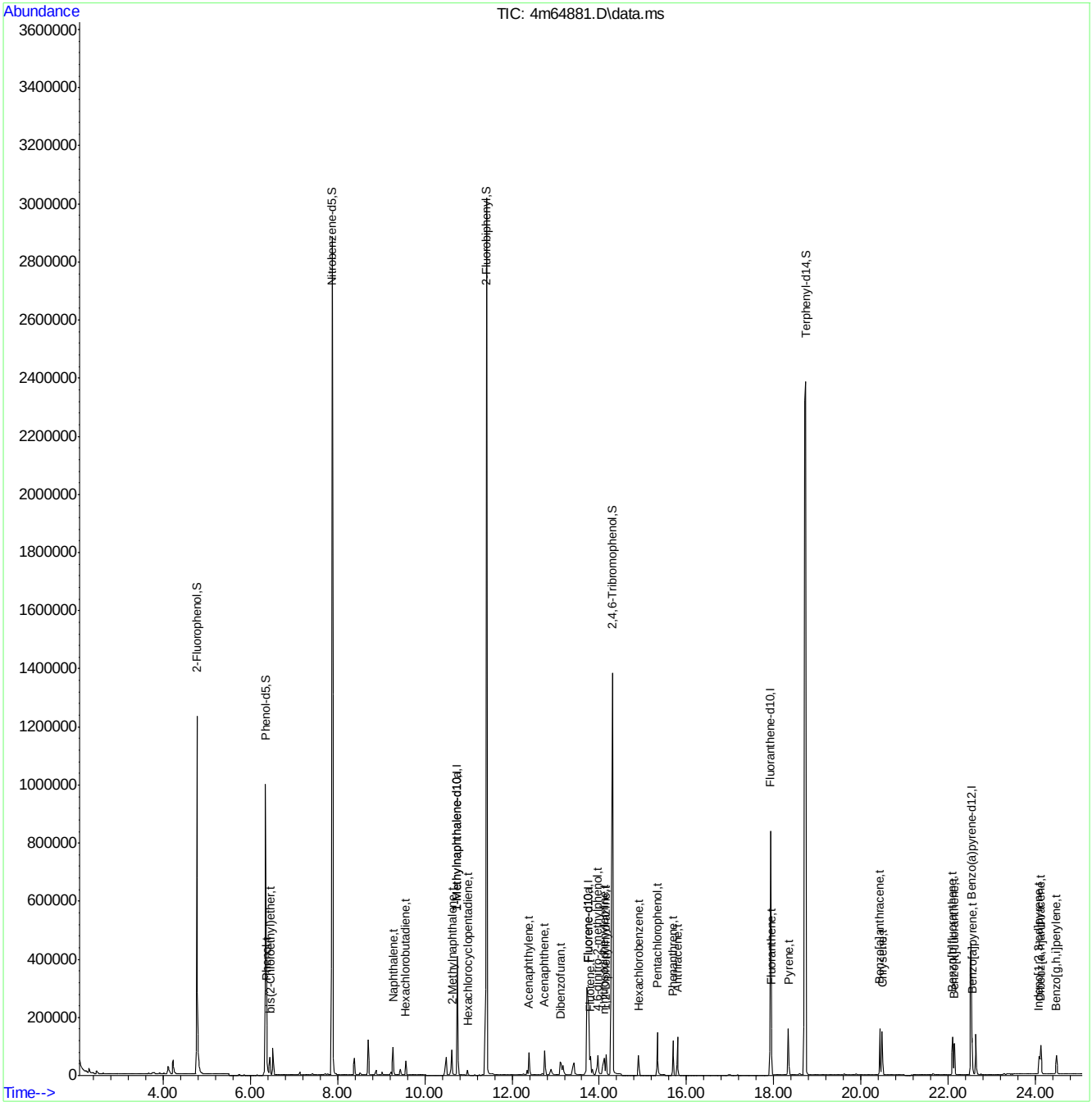
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64881.D
Acq On : 21 Apr 2016 11:23 am
Operator : linseyk
Sample : op93236a-bs12
Misc : op93236a,e4m2889,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 21 13:38:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2890\
Data File : 4m64890.D
Acq On : 21 Apr 2016 4:17 pm
Operator : linseyk
Sample : op93271a-bs12
Misc : op93271a,e4m2890,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 02 15:30:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : 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	10.746	152	235232	4.00	ppm		0.05
12) Fluorene-d10	13.724	176	378673	4.00	ppm		0.05
22) Fluoranthene-d10	17.923	212	824232	4.00	ppm		0.06
28) Benzo(a)pyrene-d12	22.511	264	574777	4.00	ppm		0.08
35) 1-Methylnaphthalene-d10a	10.746	152	235232	4.00	ppm	#	0.05
38) Fluorene-d10a	13.724	176	378673	4.00	ppm		0.05
System Monitoring Compounds							
2) 2-Fluorophenol	4.762	112	723697	23.50	ppm		0.04
Spiked Amount 50.000	Range 11 - 58		Recovery = 47.00%				
3) Phenol-d5	6.352	99	822387	15.88	ppm		0.04
Spiked Amount 50.000			Recovery = 31.76%				
6) Nitrobenzene-d5	7.879	82	1683466	36.25	ppm		0.04
Spiked Amount 50.000			Recovery = 72.50%				
11) 2-Fluorobiphenyl	11.414	172	2776353	40.89	ppm		0.05
Spiked Amount 50.000			Recovery = 81.78%				
17) 2,4,6-Tribromophenol	14.297	330	762839	37.77	ppm		0.07
Spiked Amount 50.000			Recovery = 75.54%				
25) Terphenyl-d14	18.713	244	3274445	29.41	ppm		0.04
Spiked Amount 50.000			Recovery = 58.82%				
Target Compounds							Qvalue
4) Phenol	6.366	94	99969	1.88	ppm		85
5) bis(2-Chloroethyl)ether	6.448	93	29810	0.75	ppm	#	49
7) Naphthalene	9.272	128	91757	0.69	ppm		97
8) Hexachlorobutadiene	9.566	225	21524	0.66	ppm		85
9) 2-Methylnaphthalene	10.626	142	49371	0.86	ppm		81
10) Hexachlorocyclopentadiene	10.984	237	12848	0.77	ppm		85
13) Acenaphthylene	12.388	152	71724	0.83	ppm		92
14) Acenaphthene	12.743	153	43966	0.79	ppm		80
15) Dibenzofuran	13.120	168	58400	0.70	ppm		71
16) Fluorene	13.795	166	62186	0.62	ppm		75
18) Hexachlorobenzene	14.899	284	31172	0.79	ppm		91
19) Pentachlorophenol	15.331	266	70304	4.34	ppm		96
20) Phenanthrene	15.687	178	117006	0.86	ppm		92
21) Anthracene	15.795	178	108211	0.84	ppm		96
23) Fluoranthene	17.941	202	116761	0.52	ppm		90
24) Pyrene	18.337	202	127203	0.58	ppm		87
26) Benzo[a]anthracene	20.427	228	105976	0.52	ppm		93
27) Chrysene	20.483	228	101011	0.51	ppm		85
29) Benzo[b]fluoranthene	22.098	252	87425	0.42	ppm		96
30) Benzo[k]fluoranthene	22.126	252	80972	0.47	ppm		93
31) Benzo[a]pyrene	22.552	252	75030	0.44	ppm		86
32) Indeno[1,2,3-cd]pyrene	24.081	276	81641	0.38	ppm		98
33) Dibenz[a,h]anthracene	24.122	278	64867	0.38	ppm		73
34) Benzo[g,h,i]perylene	24.480	276	67175	0.37	ppm		92
36) 1,4-Dioxane	2.472	88	6274	0.41	ppm	#	76
39) 4,6-dinitro-2-methylph...	13.963	198	63857	5.86	ppm		79
40) 1,2-Diphenylhydrazine	14.154	77	72041	0.80	ppm		86

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2890\
Data File : 4m64890.D
Acq On : 21 Apr 2016 4:17 pm
Operator : linseyk
Sample : op93271a-bs12
Misc : op93271a,e4m2890,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 02 15:30:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.106	169	46320	0.70	ppm	76

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

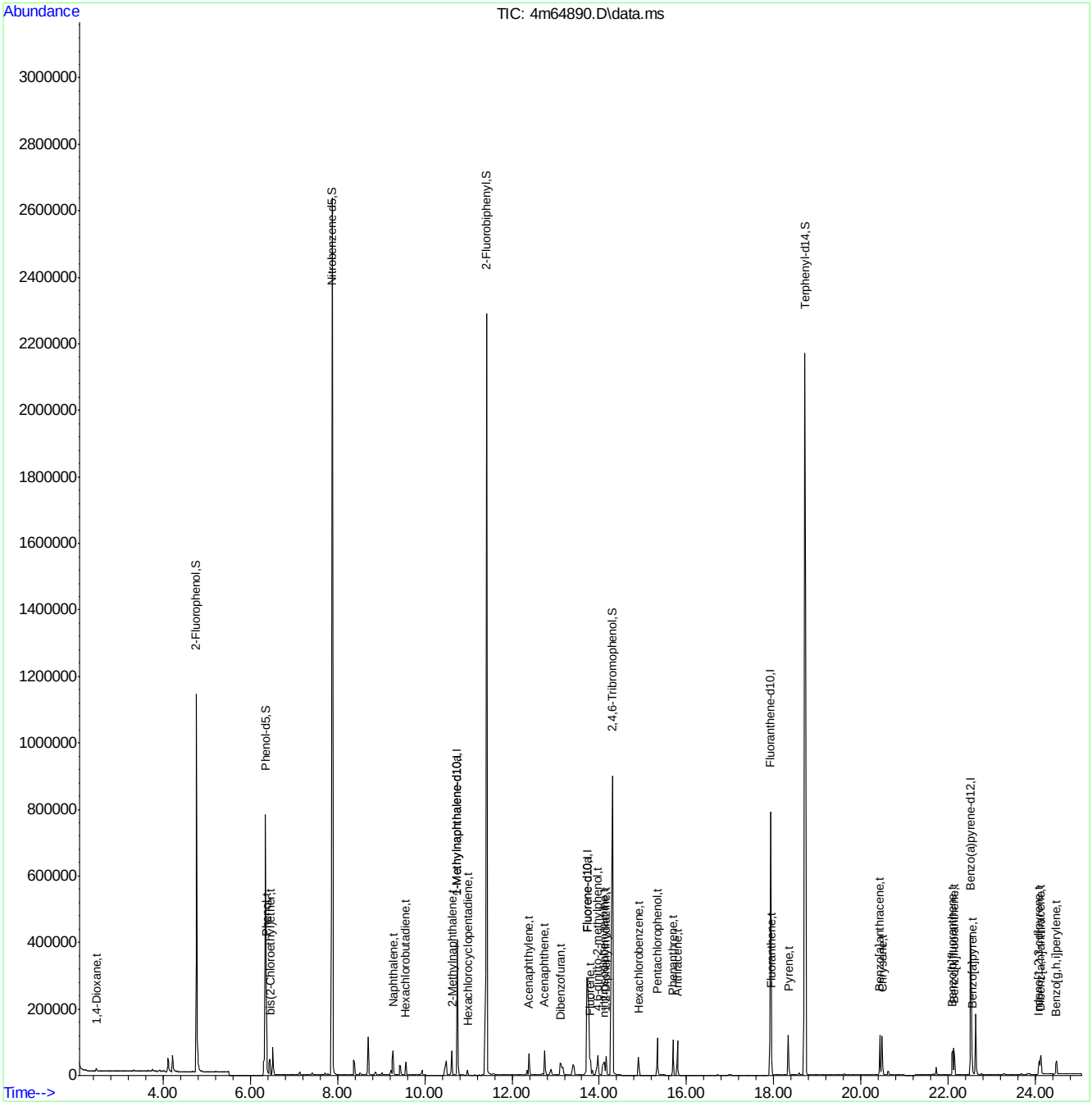
7.3.7

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2890\
Data File : 4m64890.D
Acq On : 21 Apr 2016 4:17 pm
Operator : linseyk
Sample : op93271a-bs12
Misc : op93271a,e4m2890,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 02 15:30:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60900.D
Acq On : 27 Apr 2016 1:09 am
Operator : juliusj
Sample : op93364a-bs12
Misc : op93364a,e3m2863,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 27 14:03:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 27 14:02:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.550	150	410266	4.00	ppm	-0.07
14) Fluorene-d10	13.562	176	534966	4.00	ppm	-0.08
21) Fluoranthene-d10	17.762	212	849256	4.00	ppm	-0.10
31) Benzo(a)pyrene-d12	22.367	264	703819	4.00	ppm	-0.08
System Monitoring Compounds						
3) 2-Fluorophenol	4.477	112	1963967	38.26	ppm	-0.03
Spiked Amount 50.000			Recovery = 76.52%			
4) Phenol-d5	6.073	99	3282375	38.65	ppm	-0.02
Spiked Amount 50.000			Recovery = 77.30%			
7) Nitrobenzene-d5	7.663	82	3205866	40.60	ppm	-0.05
Spiked Amount 50.000			Recovery = 81.20%			
15) 2-Fluorobiphenyl	11.222	172	6550718	44.56	ppm	-0.08
Spiked Amount 50.000			Recovery = 89.12%			
20) 2,4,6-Tribromophenol	14.108	330	803966	48.02	ppm	-0.06
Spiked Amount 50.000			Recovery = 96.04%			
28) Terphenyl-d14	18.581	244	6673474	54.17	ppm	-0.08
Spiked Amount 50.000			Recovery = 108.34%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.267	88	9062	0.43	ppm #	57
5) Phenol	6.085	94	351836	3.84	ppm #	82
6) bis(2-Chloroethyl)ether	6.218	93	49565	0.72	ppm	65
8) Nitrobenzene	7.700	77	65276	0.76	ppm	68
9) Naphthalene	9.056	128	191547	0.84	ppm	95
10) Hexachlorobutadiene	9.338	225	28614	0.72	ppm	91
11) 2-Methylnaphthalene	10.427	141	101105	0.85	ppm #	63
13) Hexachlorocyclopentadiene	10.775	237	20593	0.65	ppm	81
16) Acenaphthylene	12.212	152	175272	0.95	ppm	98
17) Acenaphthene	12.567	153	120193	0.97	ppm	98
18) 4,6-dinitro-2-methylph...	13.769	198	71386	4.24	ppm #	1
19) Fluorene	13.599	166	139751	0.94	ppm	95
22) Hexachlorobenzene	14.702	284	39957	1.00	ppm	96
23) Pentachlorophenol	15.135	266	118074	4.28	ppm	86
24) Phenanthrene	15.521	178	215086	1.03	ppm #	56
25) Anthracene	15.630	178	198073	1.08	ppm	99
26) Fluoranthene	17.793	202	259635	0.99	ppm	96
27) Pyrene	18.180	202	256616	1.06	ppm	93
29) Benzo[a]anthracene	20.281	228	212055	0.91	ppm	91
30) Chrysene	20.327	228	216985	0.97	ppm	90
32) Benzo[b]fluoranthene	21.934	252	222049	0.95	ppm	93
33) Benzo[k]fluoranthene	21.980	252	190012	0.88	ppm	94
34) Benzo[a]pyrene	22.398	252	198473	0.91	ppm	91
35) Indeno[1,2,3-cd]pyrene	23.881	276	205590	0.93	ppm	97
36) Dibenz[a,h]anthracene	23.919	278	160897	0.88	ppm	100
37) Benzo[g,h,i]perylene	24.257	276	173536	0.90	ppm	98

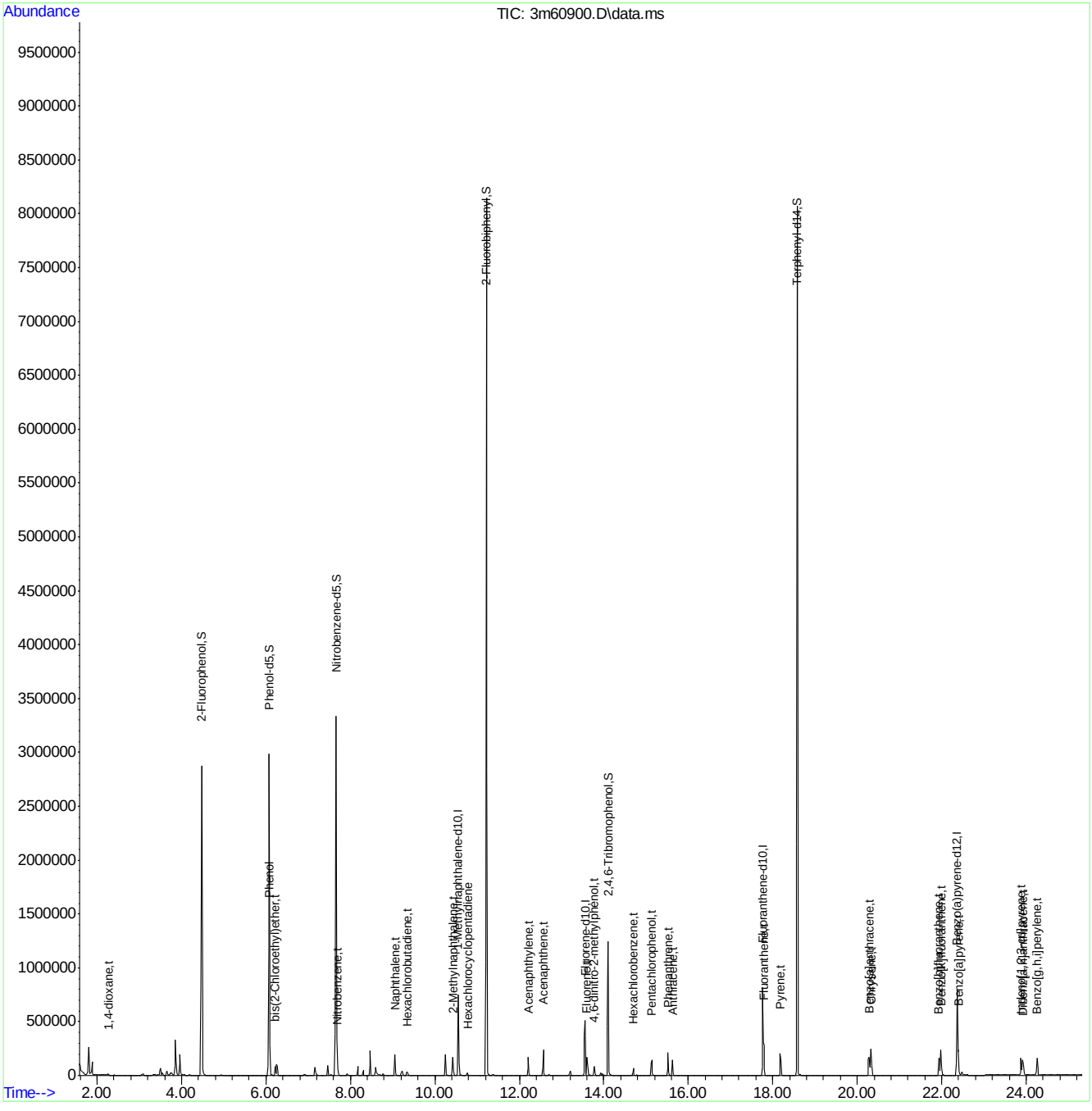
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60900.D
Acq On : 27 Apr 2016 1:09 am
Operator : juliusj
Sample : op93364a-bs12
Misc : op93364a,e3m2863,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 27 14:03:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 27 14:02:45 2016
Response via : Initial Calibration



M3M2855SIM.M Wed Apr 27 14:07:20 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27671.D
Acq On : 21 Apr 2016 1:58 am
Operator : sarad
Sample : op93236-ms
Misc : op93236,e5p1400,400
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 21 07:56:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Thu Apr 21 07:46:07 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	428444	40.00	ppm	0.00
24) Naphthalene-d8	6.772	136	1649480	40.00	ppm	0.00
47) Acenaphthene-d10	8.883	164	932180	40.00	ppm	0.00
69) Phenanthrene-d10	10.720	188	1454142	40.00	ppm	0.00
83) Chrysene-d12	14.519	240	1321851	40.00	ppm	0.00
92) Perylene-d12	16.586	264	1271799	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	428444	40.00	ppm	0.00
104) Acenaphthene-d10a	8.883	164	932180	40.00	ppm	0.00
106) Chrysene-d12a	14.519	240	1321851	40.00	ppm	0.00
109) Phenanthrene-d10a	10.720	188	1454142	40.00	ppm	0.00
112) Naphthalene-d8a	6.772	136	1649480	40.00	ppm	0.00
114) Chrysene-d12b	14.519	240	1321851	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.952	112	414801	31.59	ppm	0.00
Spiked Amount 50.000			Recovery	=	63.18%	
8) Phenol-d5	4.951	99	400411	26.84	ppm	0.00
Spiked Amount 50.000			Recovery	=	53.68%	
25) Nitrobenzene-d5	5.944	82	432056	34.51	ppm	0.00
Spiked Amount 50.000			Recovery	=	69.02%	
51) 2-Fluorobiphenyl	8.081	172	1136066	38.28	ppm	0.00
Spiked Amount 50.000			Recovery	=	76.56%	
73) 2,4,6-Tribromophenol	9.850	330	151674	43.20	ppm	0.00
Spiked Amount 50.000			Recovery	=	86.40%	
85) Terphenyl-d14	12.959	244	1095318	41.23	ppm	0.00
Spiked Amount 50.000			Recovery	=	82.46%	
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	2.392	88	13947326	2776.06	ppm	96
3) Pyridine	2.680	79	169358	15.31	ppm	77
4) N-Nitrosodimethylamine	2.643	74	149861	24.17	ppm	88
6) Indene	5.586	116	799581	34.11	ppm	94
7) Cumene	4.433	105	881230	27.87	ppm	98
9) Phenol	4.967	94	425251	27.57	ppm	73
10) Aniline	4.961	93	442077	26.45	ppm	75
11) bis(2-Chloroethyl)ether	5.020	93	338408	29.57	ppm	94
12) 2-Chlorophenol	5.090	128	495903	33.40	ppm	96
13) Decane	5.106	43	387747	39.46	ppm	77
14) 1,3-Dichlorobenzene	5.234	146	438662	26.62	ppm	97
15) 1,4-Dichlorobenzene	5.319	146	460526	27.71	ppm	98
16) Benzyl alcohol	5.485	108	278380	32.74	ppm	92
17) 1,2-Dichlorobenzene	5.490	146	445852	28.23	ppm	97
18) Acetophenone	5.768	105	634613	34.47	ppm	91
19) 2-Methylphenol	5.629	108	400045	35.38	ppm	95
20) 2,2'-oxybis(1-Chloropr...	5.618	45	412205	31.34	ppm	74

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27671.D
Acq On : 21 Apr 2016 1:58 am
Operator : sarad
Sample : op93236-ms
Misc : op93236,e5p1400,400
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 21 07:56:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Thu Apr 21 07:46:07 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.805	108	426041	35.42	ppm		97
22) n-Nitroso-di-n-propyla...	5.773	70	255629	31.19	ppm		99
23) Hexachloroethane	5.870	201	127847	23.88	ppm		86
26) Nitrobenzene	5.971	77	382014	30.95	ppm		70
27) Quinoline	7.205	129	1089228	37.65	ppm		97
28) Isophorone	6.238	82	732988	33.99	ppm		96
29) 2-Nitrophenol	6.334	139	290359	37.52	ppm		85
30) 2,4-Dimethylphenol	6.414	107	479148	39.46	ppm		95
31) Benzoic acid	6.559	105	197683	19.93	ppm		91
32) bis(2-Chloroethoxy)met...	6.505	93	418281	29.68	ppm		95
33) 2,4-Dichlorophenol	6.633	162	408042	34.73	ppm		92
34) 2,6-Dichlorophenol	6.895	162	399194	34.55	ppm	#	1
36) 1,2,4-Trichlorobenzene	6.703	180	376305	28.47	ppm		96
38) Naphthalene	6.799	128	1394413	33.36	ppm		96
39) 4-Chloroaniline	6.895	127	476332	27.22	ppm		99
40) 2,3-Dichloroaniline	7.985	161	507830	34.68	ppm		96
41) Caprolactam	7.323	55	123813	26.35	ppm		78
42) Hexachlorobutadiene	6.943	225	177647	26.10	ppm		98
43) 4-Chloro-3-methylphenol	7.504	107	429041	34.17	ppm		95
44) 2-Methylnaphthalene	7.627	141	883774	36.67	ppm		93
45) 1-Methylnaphthalene	7.745	141	933499	37.29	ppm		88
46) Dimethylnaphthalene	8.380	156	936511	35.68	ppm		93
48) Hexachlorocyclopentadiene	7.809	237	411252	70.40	ppm		97
49) 2,4,6-Trichlorophenol	7.990	196	282554	35.60	ppm		98
50) 2,4,5-Trichlorophenol	8.044	196	286302	33.41	ppm		95
52) 2-Chloronaphthalene	8.215	162	901538	34.32	ppm		92
53) Biphenyl	8.193	154	1257689	36.97	ppm		95
54) 2-Nitroaniline	8.375	65	269987	40.88	ppm		83
55) Dimethylphthalate	8.594	163	1078625	34.64	ppm		99
56) Acenaphthylene	8.712	152	1500960	35.96	ppm		96
57) 2,6-Dinitrotoluene	8.664	165	242933	37.90	ppm		90
58) 3-Nitroaniline	8.877	138	232214	31.15	ppm		100
59) Acenaphthene	8.925	153	984483	36.88	ppm		89
60) 2,4-Dinitrophenol	8.995	184	256426	65.58	ppm		87
61) 4-Nitrophenol	9.144	109	135535	35.82	ppm	#	13
62) Dibenzofuran	9.134	168	1356189	37.32	ppm		97
63) 2,4-Dinitrotoluene	9.150	165	335818	39.21	ppm		100
64) 2,3,4,6-Tetrachlorophenol	9.305	232	219002	32.40	ppm		94
65) Diethylphthalate	9.444	149	1125966	35.40	ppm		95
66) Fluorene	9.550	166	1087956	36.34	ppm		97
67) 4-Chlorophenyl-phenyle...	9.561	204	459587	32.59	ppm		78
68) 4-Nitroaniline	9.630	138	269294	35.74	ppm		97
70) 4,6-Dinitro-2-methylph...	9.636	198	170002	36.57	ppm		82
71) n-Nitrosodiphenylamine	9.716	169	757749	36.15	ppm		98
72) 1,2-Diphenylhydrazine	9.753	77	758546	34.89	ppm		78
74) 4-Bromophenyl-phenylether	10.159	248	276873	34.37	ppm		90
75) Hexachlorobenzene	10.213	284	288268	35.25	ppm		98
76) Pentachlorophenol	10.491	266	169872	34.05	ppm		97
77) Phenanthrene	10.747	178	1451686	35.55	ppm		99
78) Anthracene	10.816	178	1461148	35.60	ppm		99

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27671.D
Acq On : 21 Apr 2016 1:58 am
Operator : sarad
Sample : op93236-ms
Misc : op93236,e5p1400,400
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 21 07:56:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Thu Apr 21 07:46:07 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	11.057	167	1405133	36.36	ppm	93
80)	Di-n-butylphthalate	11.538	149	1814023	37.04	ppm	99
81)	Fluoranthene	12.371	202	1445414	34.24	ppm	96
82)	Octadecane	10.592	57	678010	50.34	ppm	72
84)	Pyrene	12.697	202	1515959	37.25	ppm	99
86)	Butylbenzylphthalate	13.723	149	769489	38.55	ppm	79
88)	Benzo[a]anthracene	14.497	228	1317220	36.03	ppm	98
89)	3,3'-Dichlorobenzidine	14.513	252	781754	58.38	ppm	96
90)	Chrysene	14.556	228	1281183	34.32	ppm	99
91)	bis(2-Ethylhexyl)phtha...	14.615	149	1090281	38.52	ppm	98
93)	Di-n-octylphthalate	15.582	149	1800581	40.82	ppm	98
94)	Benzo[b]fluoranthene	16.068	252	1386067	37.35	ppm	97
95)	Benzo[k]fluoranthene	16.105	252	1338490	37.75	ppm	99
96)	Benzo[a]pyrene	16.506	252	1220759	36.70	ppm	97
97)	Indeno[1,2,3-cd]pyrene	18.210	276	1300166	39.85	ppm	94
99)	Dibenz[a,h]anthracene	18.253	278	1259494	36.93	ppm	97
100)	7,12-Dimethylbenz(a)an...	16.063	256	615847	43.13	ppm	96
101)	Benzo[g,h,i]perylene	18.686	276	1233827	35.59	ppm	98
103)	Benzaldehyde	4.833	105	355834	34.20	ppm	91
105)	1,2,4,5-Tetrachloroben...	7.825	216	404611	31.42	ppm	97
107)	Benzidine	12.622	184	209370	11.92	ppm	96
111)	Atrazine	10.400	215	141357	37.75	ppm	85

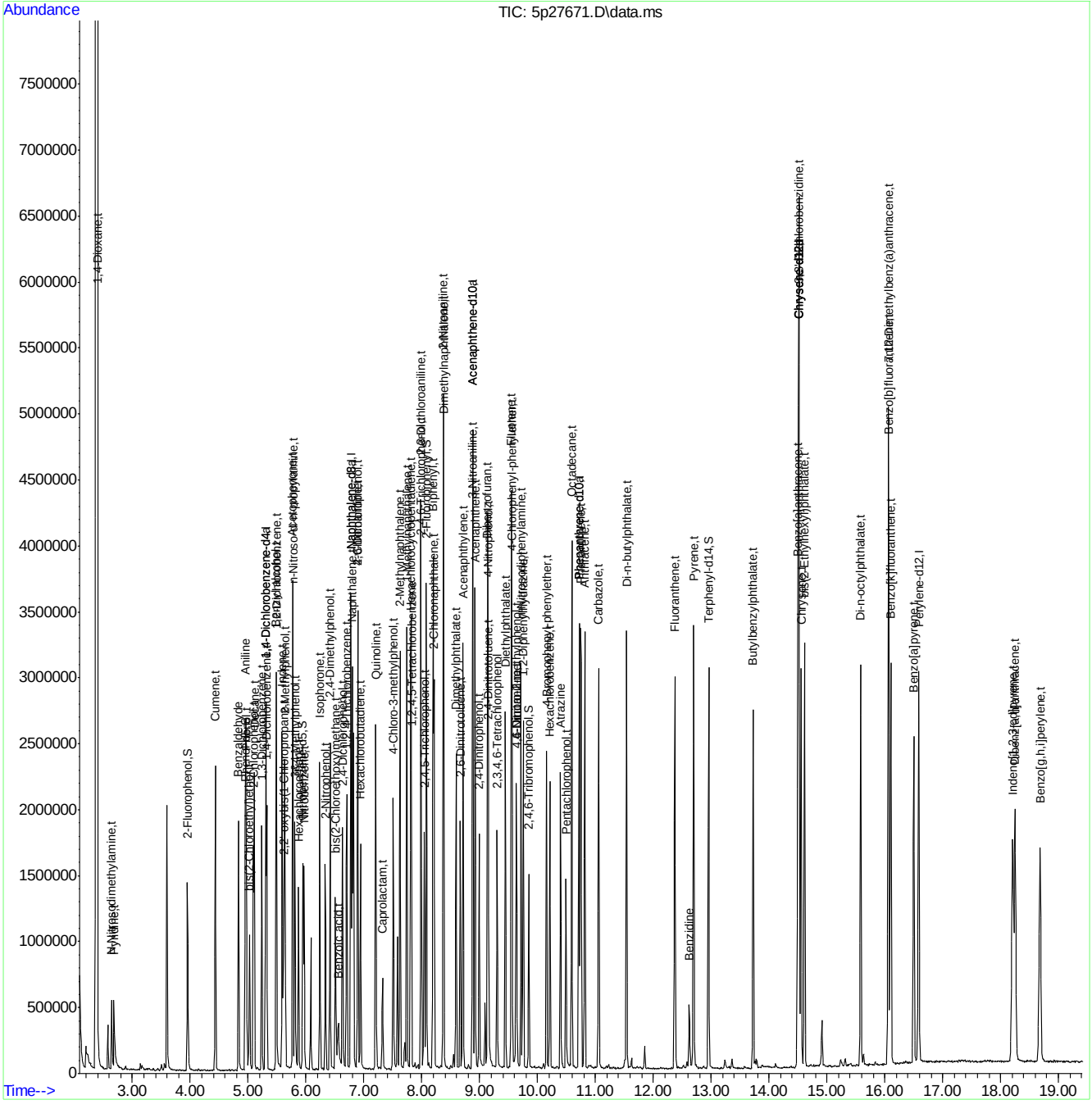
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27671.D
Acq On : 21 Apr 2016 1:58 am
Operator : sarad
Sample : op93236-ms
Misc : op93236,e5p1400,400
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 21 07:56:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Thu Apr 21 07:46:07 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27672.D
Acq On : 21 Apr 2016 2:24 am
Operator : sarad
Sample : op93236-msd
Misc : op93236,e5p1400,400
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 21 07:57:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Thu Apr 21 07:46:07 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	457109	40.00	ppm	0.00
24) Naphthalene-d8	6.772	136	1697429	40.00	ppm	0.00
47) Acenaphthene-d10	8.883	164	998084	40.00	ppm	0.00
69) Phenanthrene-d10	10.720	188	1512905	40.00	ppm	0.00
83) Chrysene-d12	14.519	240	1386396	40.00	ppm	0.00
92) Perylene-d12	16.586	264	1315224	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	457109	40.00	ppm	0.00
104) Acenaphthene-d10a	8.883	164	998084	40.00	ppm	0.00
106) Chrysene-d12a	14.519	240	1386396	40.00	ppm	0.00
109) Phenanthrene-d10a	10.720	188	1512905	40.00	ppm	0.00
112) Naphthalene-d8a	6.772	136	1697429	40.00	ppm	0.00
114) Chrysene-d12b	14.519	240	1386396	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.952	112	472491	33.73	ppm	0.00
Spiked Amount 50.000			Recovery	=	67.46%	
8) Phenol-d5	4.951	99	447566	28.12	ppm	0.00
Spiked Amount 50.000			Recovery	=	56.24%	
25) Nitrobenzene-d5	5.944	82	482250	37.43	ppm	0.00
Spiked Amount 50.000			Recovery	=	74.86%	
51) 2-Fluorobiphenyl	8.081	172	1276132	40.16	ppm	0.00
Spiked Amount 50.000			Recovery	=	80.32%	
73) 2,4,6-Tribromophenol	9.850	330	173354	47.46	ppm	0.00
Spiked Amount 50.000			Recovery	=	94.92%	
85) Terphenyl-d14	12.959	244	1175769	42.20	ppm	0.00
Spiked Amount 50.000			Recovery	=	84.40%	
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	2.397	88	17883015	3336.21	ppm	96
3) Pyridine	2.680	79	220501	18.68	ppm	87
4) N-Nitrosodimethylamine	2.643	74	168176	25.43	ppm	76
6) Indene	5.592	116	948532	37.92	ppm	96
7) Cumene	4.433	105	1118079	33.15	ppm	97
9) Phenol	4.967	94	451774	27.45	ppm	78
10) Aniline	4.961	93	369348	20.71	ppm #	57
11) bis(2-Chloroethyl)ether	5.026	93	386659	31.66	ppm	99
12) 2-Chlorophenol	5.090	128	561256	35.43	ppm	97
13) Decane	5.106	43	494923	47.20	ppm	77
14) 1,3-Dichlorobenzene	5.239	146	493316	28.06	ppm	94
15) 1,4-Dichlorobenzene	5.325	146	508243	28.67	ppm	96
16) Benzyl alcohol	5.485	108	310111	34.19	ppm	88
17) 1,2-Dichlorobenzene	5.490	146	489826	29.07	ppm	98
18) Acetophenone	5.768	105	714389	36.37	ppm	90
19) 2-Methylphenol	5.629	108	428472	35.52	ppm	95
20) 2,2'-oxybis(1-Chloropr...	5.619	45	474059	33.79	ppm	73

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27672.D
Acq On : 21 Apr 2016 2:24 am
Operator : sarad
Sample : op93236-msd
Misc : op93236,e5p1400,400
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 21 07:57:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Thu Apr 21 07:46:07 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.811	108	451629	35.20	ppm		97
22) n-Nitroso-di-n-propyla...	5.773	70	281864	32.23	ppm		99
23) Hexachloroethane	5.870	201	144064	25.22	ppm		91
26) Nitrobenzene	5.971	77	410703	32.33	ppm		67
27) Quinoline	7.205	129	1170644	39.32	ppm		97
28) Isophorone	6.238	82	809540	36.48	ppm		97
29) 2-Nitrophenol	6.334	139	313230	39.34	ppm		88
30) 2,4-Dimethylphenol	6.415	107	519503	41.58	ppm		94
31) Benzoic acid	6.569	105	242071	23.71	ppm		80
32) bis(2-Chloroethoxy)met...	6.505	93	469022	32.34	ppm		96
33) 2,4-Dichlorophenol	6.634	162	456973	37.79	ppm		91
34) 2,6-Dichlorophenol	6.895	162	451614	37.98	ppm	#	1
36) 1,2,4-Trichlorobenzene	6.703	180	425473	31.28	ppm		94
38) Naphthalene	6.799	128	1525708	35.47	ppm		96
39) 4-Chloroaniline	6.895	127	393173	21.83	ppm		98
40) 2,3-Dichloroaniline	7.985	161	547001	36.30	ppm		99
41) Caprolactam	7.323	55	134900	27.90	ppm		77
42) Hexachlorobutadiene	6.943	225	199239	28.45	ppm		97
43) 4-Chloro-3-methylphenol	7.504	107	486990	37.69	ppm		99
44) 2-Methylnaphthalene	7.627	141	983756	39.66	ppm		87
45) 1-Methylnaphthalene	7.745	141	1012419	39.30	ppm		93
46) Dimethylnaphthalene	8.380	156	1032271	38.21	ppm		92
48) Hexachlorocyclopentadiene	7.814	237	491431	78.57	ppm		99
49) 2,4,6-Trichlorophenol	7.990	196	319647	37.61	ppm		98
50) 2,4,5-Trichlorophenol	8.044	196	311357	33.93	ppm		99
52) 2-Chloronaphthalene	8.215	162	984313	35.00	ppm		94
53) Biphenyl	8.199	154	1366851	37.53	ppm		95
54) 2-Nitroaniline	8.375	65	292185	41.32	ppm	#	79
55) Dimethylphthalate	8.594	163	1180305	35.41	ppm		98
56) Acenaphthylene	8.712	152	1631554	36.51	ppm		97
57) 2,6-Dinitrotoluene	8.664	165	272563	39.72	ppm		89
58) 3-Nitroaniline	8.877	138	215794	27.03	ppm		93
59) Acenaphthene	8.925	153	1064258	37.24	ppm		92
60) 2,4-Dinitrophenol	8.995	184	293696	69.74	ppm		86
61) 4-Nitrophenol	9.144	109	145534	35.92	ppm	#	31
62) Dibenzofuran	9.139	168	1489401	38.28	ppm		94
63) 2,4-Dinitrotoluene	9.150	165	369727	40.32	ppm		99
64) 2,3,4,6-Tetrachlorophenol	9.305	232	239094	33.04	ppm		94
65) Diethylphthalate	9.444	149	1212480	35.60	ppm		96
66) Fluorene	9.550	166	1192231	37.20	ppm		97
67) 4-Chlorophenyl-phenyle...	9.561	204	509567	33.74	ppm		82
68) 4-Nitroaniline	9.631	138	287682	35.66	ppm		97
70) 4,6-Dinitro-2-methylph...	9.641	198	194047	40.12	ppm		87
71) n-Nitrosodiphenylamine	9.716	169	824578	37.81	ppm		96
72) 1,2-Diphenylhydrazine	9.753	77	829191	36.66	ppm		75
74) 4-Bromophenyl-phenylether	10.159	248	303056	36.16	ppm		89
75) Hexachlorobenzene	10.213	284	321333	37.77	ppm		94
76) Pentachlorophenol	10.491	266	190912	36.78	ppm		96
77) Phenanthrene	10.747	178	1561776	36.76	ppm		99
78) Anthracene	10.817	178	1584402	37.10	ppm		99

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27672.D
Acq On : 21 Apr 2016 2:24 am
Operator : sarad
Sample : op93236-msd
Misc : op93236,e5p1400,400
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 21 07:57:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Thu Apr 21 07:46:07 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	11.057	167	1531692	38.09	ppm	93
80)	Di-n-butylphthalate	11.538	149	2022209	39.69	ppm	99
81)	Fluoranthene	12.371	202	1592037	36.25	ppm	96
82)	Octadecane	10.592	57	724089	51.67	ppm	73
84)	Pyrene	12.697	202	1651441	38.69	ppm	98
86)	Butylbenzylphthalate	13.723	149	832615	39.77	ppm	81
88)	Benzo[a]anthracene	14.497	228	1457169	38.00	ppm	97
89)	3,3'-Dichlorobenzidine	14.513	252	802795	57.16	ppm	99
90)	Chrysene	14.556	228	1369911	34.99	ppm	98
91)	bis(2-Ethylhexyl)phtha...	14.615	149	1167506	39.33	ppm	98
93)	Di-n-octylphthalate	15.582	149	1989130	43.60	ppm	98
94)	Benzo[b]fluoranthene	16.063	252	1519190	39.59	ppm	95
95)	Benzo[k]fluoranthene	16.105	252	1468059	40.03	ppm	98
96)	Benzo[a]pyrene	16.506	252	1349547	39.23	ppm	98
97)	Indeno[1,2,3-cd]pyrene	18.210	276	1471991	43.63	ppm	96
99)	Dibenz[a,h]anthracene	18.253	278	1425562	40.42	ppm	97
100)	7,12-Dimethylbenz(a)an...	16.063	256	672180	45.52	ppm	95
101)	Benzo[g,h,i]perylene	18.686	276	1406769	39.24	ppm	99
103)	Benzaldehyde	4.839	105	426950	38.47	ppm	89
105)	1,2,4,5-Tetrachloroben...	7.825	216	449348	32.59	ppm	98
107)	Benzidine	12.622	184	121435	6.59	ppm	94
111)	Atrazine	10.400	215	154607	39.68	ppm	89

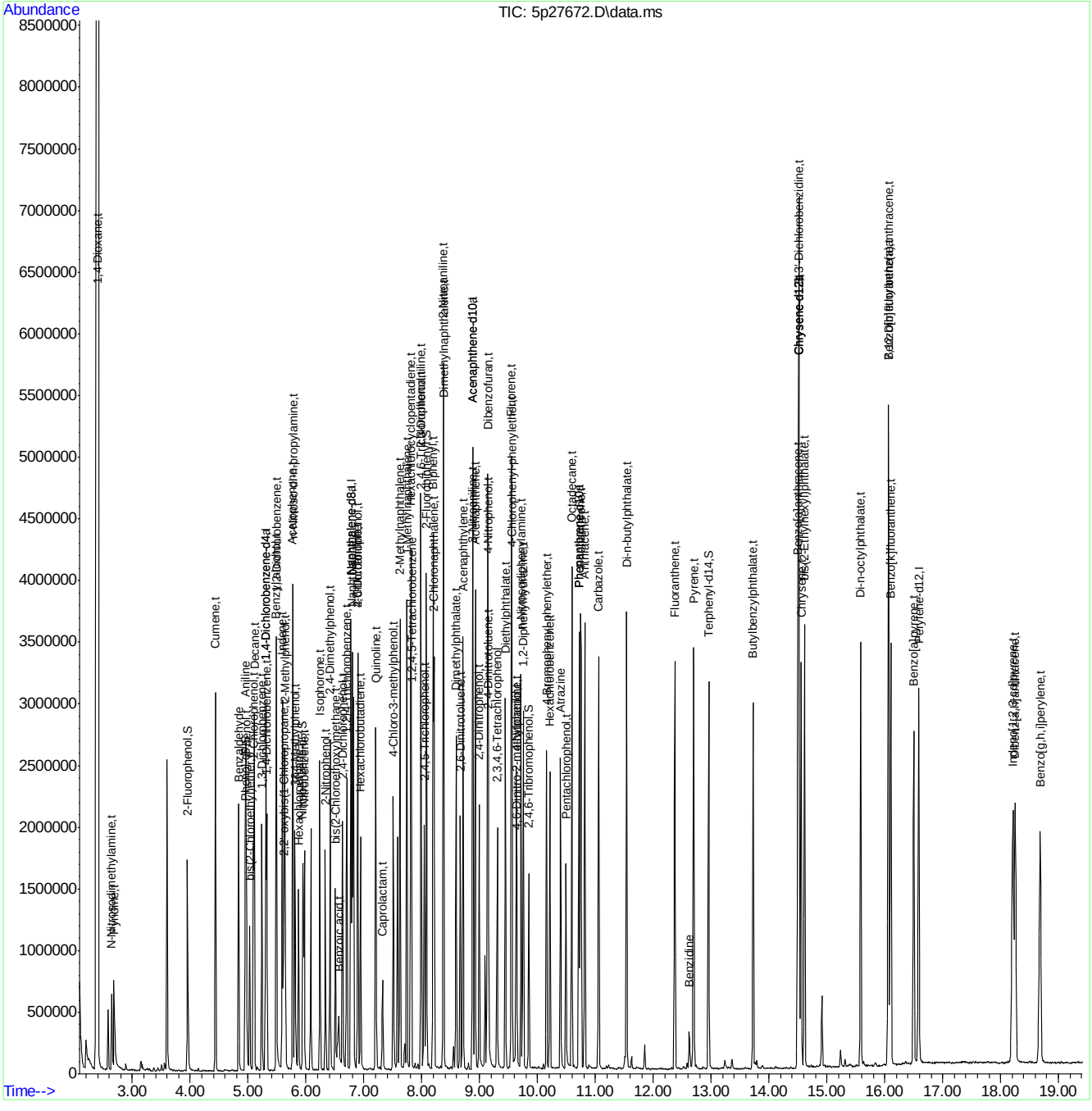
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27672.D
Acq On : 21 Apr 2016 2:24 am
Operator : sarad
Sample : op93236-msd
Misc : op93236,e5p1400,400
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 21 07:57:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Thu Apr 21 07:46:07 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 04/27/16 16:50

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110084.D
Acq On : 26 Apr 2016 6:19 pm
Operator : juliusj
Sample : op93364-ms
Misc : op93364,ez5500,31.4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 27 00:09:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.189	152	340980	40.00	ppm	0.00
24) Naphthalene-d8	5.113	136	1197517	40.00	ppm	0.00
47) Acenaphthene-d10	6.384	164	745050	40.00	ppm	0.00
69) Phenanthrene-d10	7.976	188	1196889	40.00	ppm	0.00
83) Chrysene-d12	12.875	240	1128579	40.00	ppm	0.00
92) Perylene-d12	15.851	264	1085649	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.189	152	340980	40.00	ppm	0.00
104) Phenanthrene-d10a	7.976	188	1196889	40.00	ppm	0.00
106) Chrysene-d12a	12.875	240	1128579	40.00	ppm	0.00
108) Acenaphthene-d10a	6.384	164	745050	40.00	ppm	0.00
110) Naphthalene-d8a	5.113	136	1197517	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.270	112	396925	33.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	67.42%	
8) Phenol-d5	4.029	99	431934	31.31	ppm	0.00
Spiked Amount 50.000			Recovery	=	62.62%	
25) Nitrobenzene-d5	4.616	82	416184	43.06	ppm	-0.01
Spiked Amount 50.000			Recovery	=	86.12%	
51) 2-Fluorobiphenyl	5.882	172	901587	37.76	ppm	0.02
Spiked Amount 50.000			Recovery	=	75.52%	
73) 2,4,6-Tribromophenol	7.148	330	136413	37.08	ppm	0.02
Spiked Amount 50.000			Recovery	=	74.16%	
86) Terphenyl-d14	10.749	244	1002144	42.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	84.52%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.657	88	138026	27.28	ppm #	80
3) Pyridine	1.993	79	312527	39.26	ppm	88
4) N-Nitrosodimethylamine	1.956	74	214246	32.31	ppm	95
6) Indene	4.381	116	673540	31.08	ppm	95
7) Cumene	3.574	105	918329	33.22	ppm	97
9) Phenol	4.039	94	403752	28.83	ppm	94
10) Aniline	3.980	93	412296	25.59	ppm	91
11) bis(2-Chloroethyl)ether	4.012	93	343650	35.83	ppm	95
12) 2-Chlorophenol	4.071	128	358274	27.74	ppm	96
13) Decane	4.055	43	295604	24.84	ppm	93
14) 1,3-Dichlorobenzene	4.146	146	448844	31.94	ppm	98
15) 1,4-Dichlorobenzene	4.205	146	440564	33.05	ppm	100
16) Benzyl alcohol	4.338	108	220579	37.32	ppm	82
17) 1,2-Dichlorobenzene	4.317	146	435910	33.75	ppm	97
18) Acetophenone	4.504	105	506868	33.72	ppm	95
19) 2-Methylphenol	4.456	108	280503m	25.62	ppm	
20) 2,2'-oxybis(1-Chloropr...	4.402	121	90460	26.97	ppm #	58
21) 3&4-Methylphenol	4.573	108	247528	21.68	ppm	92
22) n-Nitroso-di-n-propyla...	4.504	70	254231	32.70	ppm	94
23) Hexachloroethane	4.557	201	169532	43.65	ppm #	72
26) Nitrobenzene	4.632	77	376040	38.61	ppm	95
27) Quinoline	5.380	129	735049	32.43	ppm	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110084.D
Acq On : 26 Apr 2016 6:19 pm
Operator : juliusj
Sample : op93364-ms
Misc : op93364,ez5500,31.4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 27 00:09:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28)	Isophorone	4.792	82	699580	41.25	ppm		95
29)	2-Nitrophenol	4.857	139	215942	35.68	ppm		68
30)	2,4-Dimethylphenol	4.926	107	223496	23.47	ppm		88
31)	Benzoic Acid	5.060	105	125974	18.34	ppm	#	74
32)	bis(2-Chloroethoxy)met...	4.958	93	386479	36.74	ppm		94
33)	2,4-Dichlorophenol	5.054	162	341312	40.70	ppm		97
34)	2,6-Dichlorophenol	5.204	162	318788	38.86	ppm		97
36)	1,2,4-Trichlorobenzene	5.070	180	386546	44.26	ppm		90
38)	Naphthalene	5.129	128	1099281	33.43	ppm		99
39)	4-Chloroaniline	5.204	127	323328	24.71	ppm		97
40)	2,3-Dichloroaniline	5.845	161	382881	36.37	ppm		95
41)	Caprolactam	5.482	55	124194	29.13	ppm		89
42)	Hexachlorobutadiene	5.214	225	227941	58.74	ppm		97
43)	4-Chloro-3-methylphenol	5.588	107	322841	36.31	ppm		97
44)	2-Methylnaphthalene	5.615	141	612610	33.47	ppm		95
45)	1-Methylnaphthalene	5.685	141	636731	32.50	ppm		92
46)	Dimethylnaphthalene	6.059	156	682623	36.05	ppm		96
48)	Hexachlorocyclopentadiene	5.727	237	332628	66.98	ppm		99
49)	2,4,6-Trichlorophenol	5.845	196	258004	41.93	ppm		93
50)	2,4,5-Trichlorophenol	5.888	196	239713	35.97	ppm		97
52)	2-Chloronaphthalene	5.962	162	691480	32.75	ppm		95
53)	Biphenyl	5.946	154	888319	30.03	ppm		97
54)	2-Nitroaniline	6.080	65	201953	35.48	ppm		82
55)	Dimethylphthalate	6.192	163	864820	36.48	ppm		99
56)	Acenaphthylene	6.272	152	1111727	29.97	ppm		98
57)	2,6-Dinitrotoluene	6.246	165	185787	35.76	ppm		96
58)	3-Nitroaniline	6.411	138	149367	23.79	ppm		89
59)	Acenaphthene	6.411	153	716017	32.28	ppm		97
60)	2,4-Dinitrophenol	6.481	184	113988	43.24	ppm		97
61)	4-Nitrophenol	6.641	109	100898	34.90	ppm	#	55
62)	Dibenzofuran	6.566	168	1045293	34.12	ppm		98
63)	2,4-Dinitrotoluene	6.582	165	243401	36.02	ppm		97
64)	2,3,4,6-Tetrachlorophenol	6.710	232	211964	40.07	ppm		93
65)	Diethylphthalate	6.790	149	830258	34.13	ppm		99
66)	Fluorene	6.881	166	824668	32.70	ppm		97
67)	4-Chlorophenyl-phenyle...	6.881	204	438836	42.20	ppm		90
68)	4-Nitroaniline	6.993	138	183780	29.25	ppm	#	68
70)	4,6-Dinitro-2-methylph...	6.972	198	119677	33.61	ppm		97
71)	n-Nitrosodiphenylamine	7.026	169	608694	34.98	ppm		94
72)	1,2-Diphenylhydrazine	7.047	77	767283	36.88	ppm		62
74)	4-Bromophenyl-phenylether	7.410	248	268101	43.17	ppm		89
75)	Hexachlorobenzene	7.480	284	277211	39.81	ppm		95
76)	Pentachlorophenol	7.779	266	136434	36.91	ppm		98
77)	Phenanthrene	8.008	178	1251099	36.53	ppm		97
78)	Anthracene	8.078	178	1194082	33.84	ppm		99
79)	Carbazole	8.377	167	1100748	32.71	ppm		96
80)	Di-n-butylphthalate	8.943	149	1402652	33.87	ppm		97
81)	Fluoranthene	9.932	202	1487389	41.59	ppm		88
82)	Octadecane	7.832	57	425544	28.65	ppm		93
84)	Pyrene	10.343	202	1501173	39.45	ppm		92

Quantitation Report (QT Reviewed)

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Operator : juliusj
Sample : op93364-ms
Misc : op93364,ez5500,31.4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 27 00:09:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
87) Butylbenzylphthalate	11.871	149	567823	31.26	ppm		99
88) Benzo[a]anthracene	12.849	228	1269513	38.52	ppm		93
89) 3,3'-Dichlorobenzidine	12.961	252	722183	60.68	ppm		91
90) Chrysene	12.923	228	1188477	36.94	ppm		93
91) bis(2-Ethylhexyl)phtha...	13.196	149	782210	30.60	ppm		94
93) Di-n-octylphthalate	14.595	149	1308036	31.27	ppm		97
94) Benzo[b]fluoranthene	15.108	252	1290596	37.66	ppm		96
95) Benzo[k]fluoranthene	15.167	252	1215202	39.50	ppm		89
96) Benzo[a]pyrene	15.728	252	1237631	40.57	ppm		99
97) Indeno[1,2,3-cd]pyrene	17.763	276	1163639	38.16	ppm		93
99) Dibenz[a,h]anthracene	17.817	278	1112746	34.67	ppm		90
100) 7,12-Dimethylbenz(a)an...	15.119	256	539045	34.57	ppm		99
101) Benzo[g,h,i]perylene	18.185	276	1157789	35.33	ppm		95
103) Benzaldehyde	3.879	105	311451	34.60	ppm		93
105) Atrazine	7.677	215	127534	42.82	ppm	#	67
107) Benzidine	10.332	184	337348	21.87	ppm		98
109) 1,2,4,5-Tetrachloroben...	5.733	216	410390	42.97	ppm		95

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

7.4.3

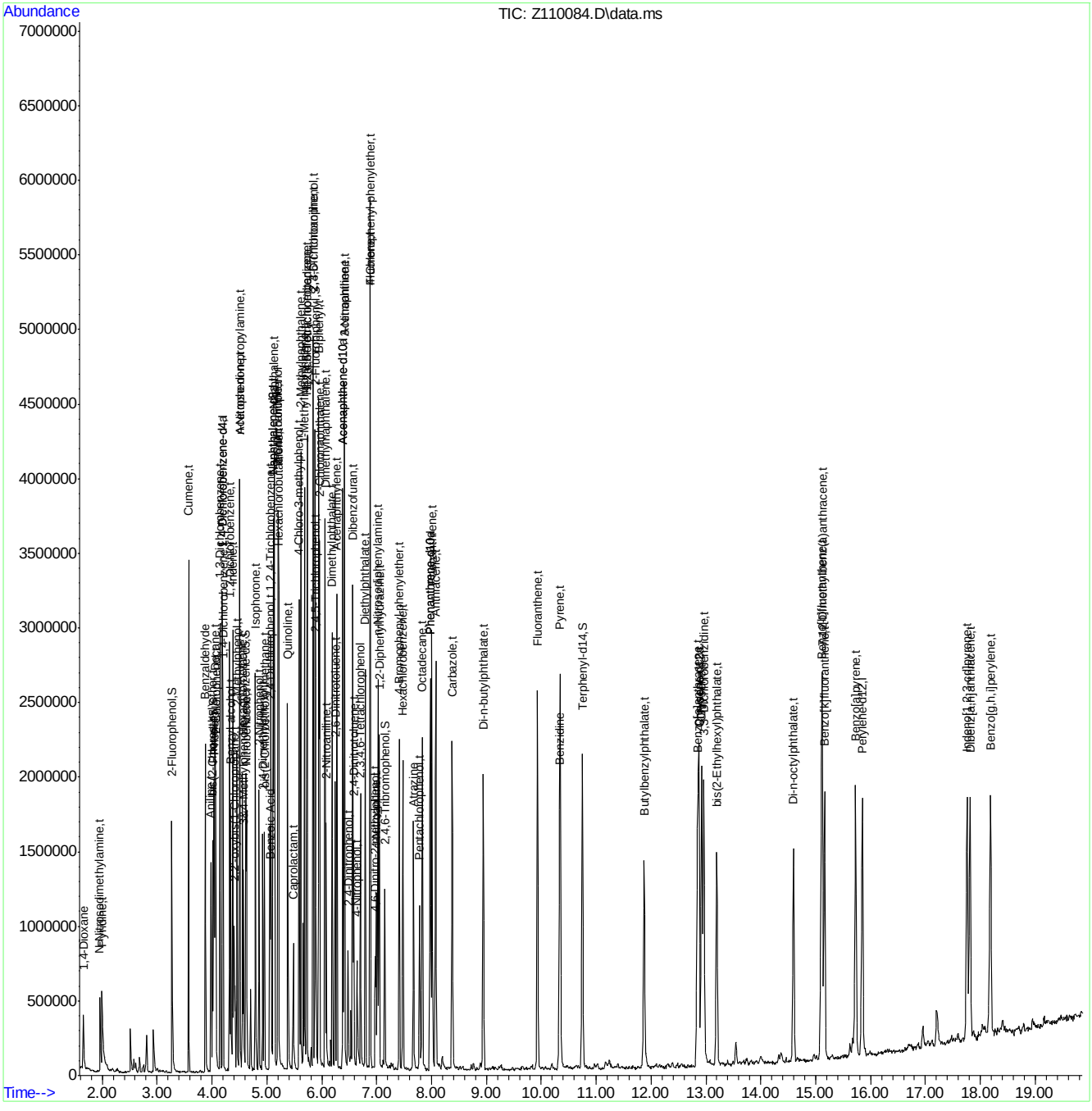
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110084.D
Acq On : 26 Apr 2016 6:19 pm
Operator : juliusj
Sample : op93364-ms
Misc : op93364,ez5500,31.4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 27 00:09:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Manual Integration Approval Summary

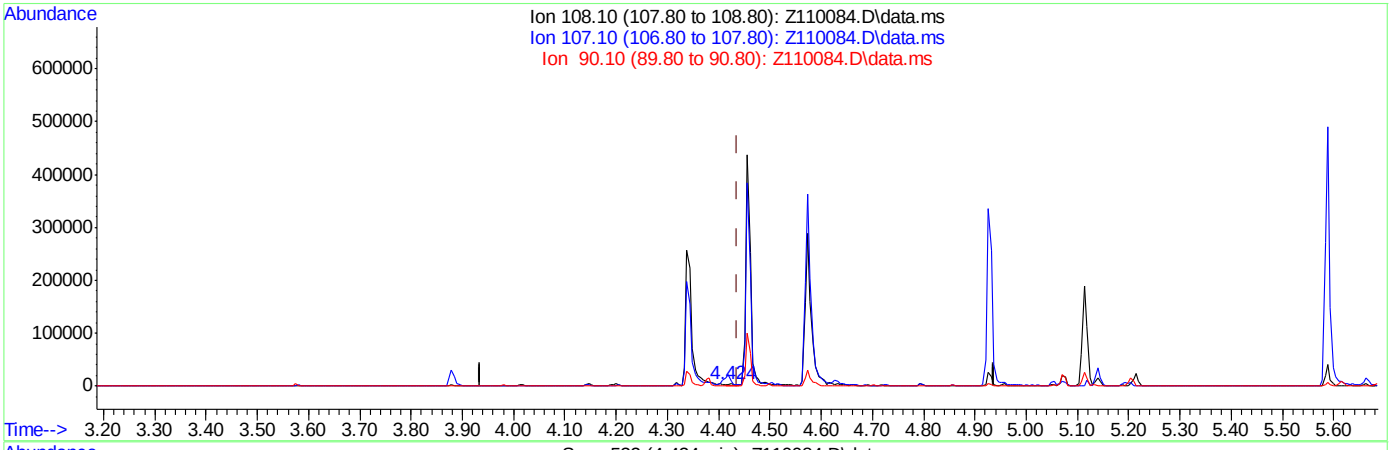
Sample Number:	OP93364-MS	**Method:**	SW846 8270D
Lab FileID:	Z110084.D	**Analyst approved:**	04/27/16 00:36 Sean Block
Injection Time:	04/26/16 18:19	**Supervisor approved:**	04/27/16 16:50 Kristi Schollenberger

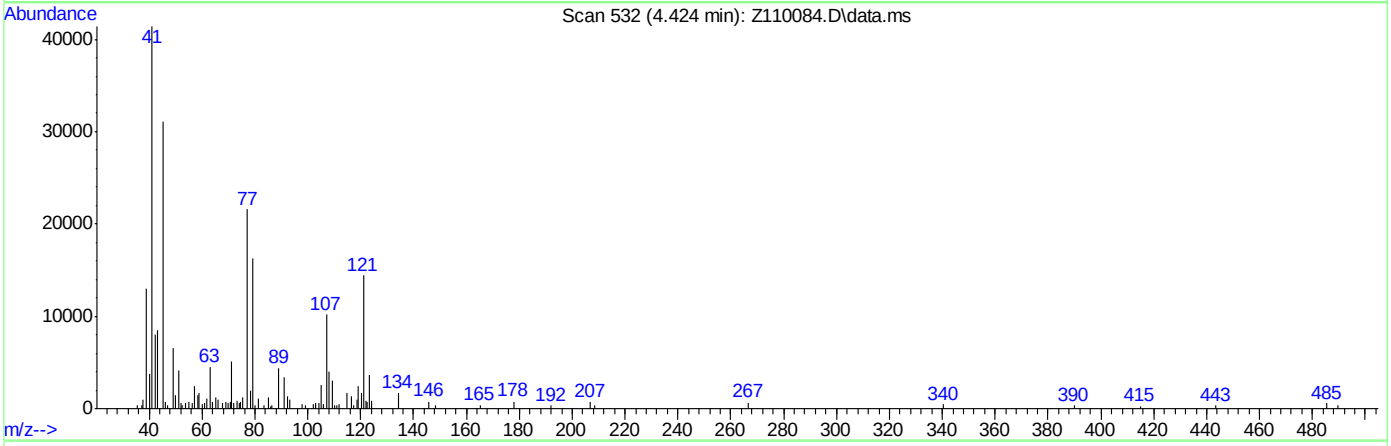
Parameter	CAS	Sig#	R.T. (min.)	Reason
2-Methylphenol	95-48-7		4.46	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110084.D
Acq On : 26 Apr 2016 6:19 pm
Operator : juliusj
Sample : op93364-ms
Misc : op93364,ez5500,31.4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 26 18:39:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration





TIC: Z110084.D\data.ms

(19) 2-Methylphenol (t)

4.424min (-0.013) 0.25ppm

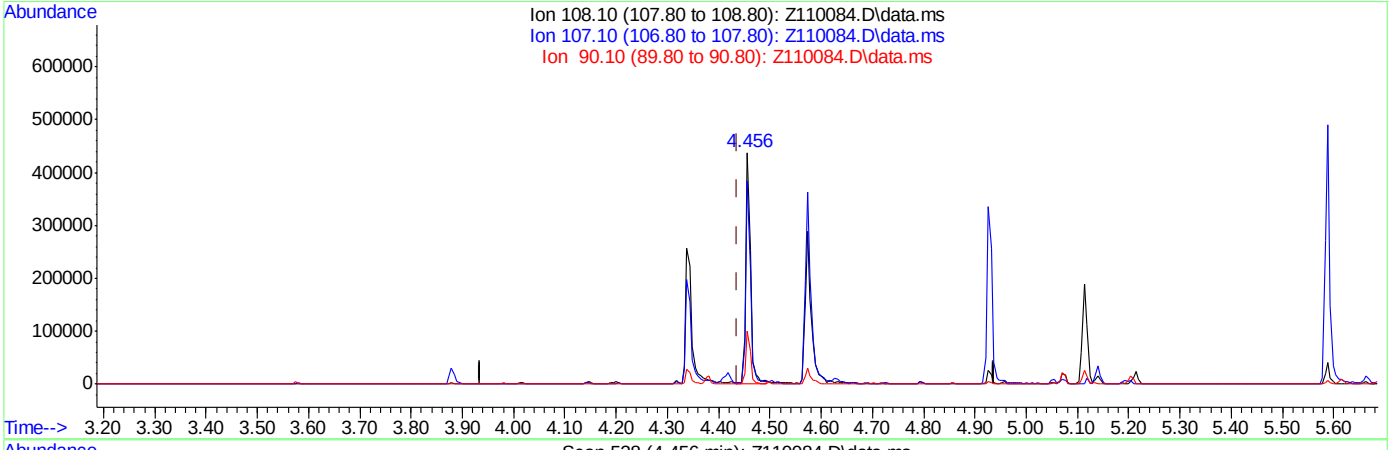
response 2766

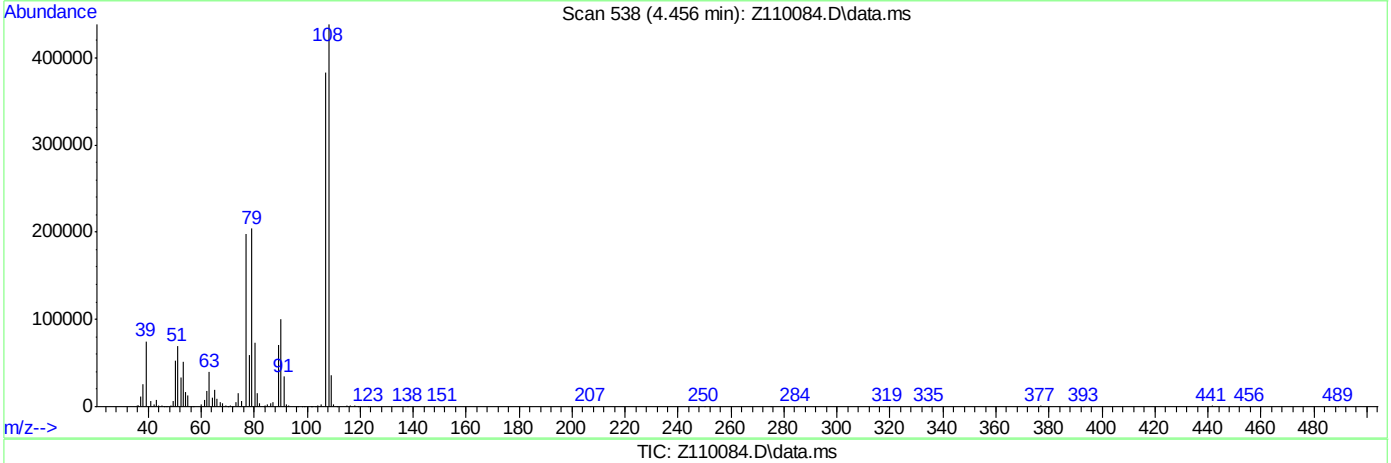
Ion	Exp%	Act%
108.10	100	100
107.10	87.40	83.66
90.10	22.20	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110084.D
Acq On : 26 Apr 2016 6:19 pm
Operator : juliusj
Sample : op93364-ms
Misc : op93364,ez5500,31.4
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 26 18:39:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration





TIC: Z110084.D\data.ms

(19) 2-Methylphenol (t)

4.456min (+0.019) 25.62ppm m

response 280503

Ion	Exp%	Act%
108.10	100	100
107.10	87.40	87.52
90.10	22.20	22.98
0.00	0.00	0.00

SGS ACCUTEST JC18649

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 04/27/16 17:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110085.D
Acq On : 26 Apr 2016 6:48 pm
Operator : juliusj
Sample : op93364-msd
Misc : op93364,ez5500,30.3
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 27 00:11:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.189	152	341481	40.00	ppm	0.00
24) Naphthalene-d8	5.113	136	1161264	40.00	ppm	0.00
47) Acenaphthene-d10	6.384	164	711897	40.00	ppm	0.00
69) Phenanthrene-d10	7.976	188	1165801	40.00	ppm	0.00
83) Chrysene-d12	12.875	240	1112406	40.00	ppm	0.00
92) Perylene-d12	15.851	264	1066392	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.189	152	341481	40.00	ppm	0.00
104) Phenanthrene-d10a	7.976	188	1165801	40.00	ppm	0.00
106) Chrysene-d12a	12.875	240	1112406	40.00	ppm	0.00
108) Acenaphthene-d10a	6.384	164	711897	40.00	ppm	0.00
110) Naphthalene-d8a	5.113	136	1161264	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.270	112	374811	31.79	ppm	0.00
Spiked Amount 50.000			Recovery	=	63.58%	
8) Phenol-d5	4.028	99	428519	31.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	62.02%	
25) Nitrobenzene-d5	4.616	82	401381	42.83	ppm	-0.01
Spiked Amount 50.000			Recovery	=	85.66%	
51) 2-Fluorobiphenyl	5.882	172	914139	40.06	ppm	0.02
Spiked Amount 50.000			Recovery	=	80.12%	
73) 2,4,6-Tribromophenol	7.148	330	135531	37.82	ppm	0.02
Spiked Amount 50.000			Recovery	=	75.64%	
86) Terphenyl-d14	10.749	244	983303	42.07	ppm	0.00
Spiked Amount 50.000			Recovery	=	84.14%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.657	88	135173	26.67	ppm	88
3) Pyridine	1.993	79	286532	35.94	ppm	92
4) N-Nitrosodimethylamine	1.956	74	184143	27.73	ppm	94
6) Indene	4.381	116	654957	30.18	ppm	96
7) Cumene	3.574	105	899708	32.50	ppm	97
9) Phenol	4.039	94	408653	29.14	ppm	83
10) Aniline	3.986	93	293192	18.17	ppm	96
11) bis(2-Chloroethyl)ether	4.012	93	328250	34.18	ppm	97
12) 2-Chlorophenol	4.071	128	358064	27.68	ppm	96
13) Decane	4.055	43	287005	24.08	ppm	96
14) 1,3-Dichlorobenzene	4.146	146	437419	31.09	ppm	98
15) 1,4-Dichlorobenzene	4.205	146	425204	31.86	ppm	98
16) Benzyl alcohol	4.338	108	212416	35.88	ppm #	72
17) 1,2-Dichlorobenzene	4.317	146	419200	32.41	ppm	96
18) Acetophenone	4.504	105	502785	33.40	ppm	98
19) 2-Methylphenol	4.456	108	307576	28.05	ppm	94
20) 2,2'-oxybis(1-Chloropr...	4.402	121	92304m	27.48	ppm	
21) 3&4-Methylphenol	4.573	108	304890	26.66	ppm	97
22) n-Nitroso-di-n-propyla...	4.504	70	253603	32.57	ppm	95
23) Hexachloroethane	4.557	201	166048	42.69	ppm #	71
26) Nitrobenzene	4.632	77	367865	38.95	ppm	95
27) Quinoline	5.380	129	764440	34.78	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110085.D
Acq On : 26 Apr 2016 6:48 pm
Operator : juliusj
Sample : op93364-msd
Misc : op93364,ez5500,30.3
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 27 00:11:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
28) Isophorone	4.792	82	697084	42.39 ppm		94
29) 2-Nitrophenol	4.857	139	204642m	34.87 ppm		
30) 2,4-Dimethylphenol	4.926	107	286948	31.08 ppm		89
31) Benzoic Acid	5.065	105	159225	23.91 ppm		91
32) bis(2-Chloroethoxy)met...	4.958	93	365404	35.83 ppm		98
33) 2,4-Dichlorophenol	5.054	162	330174	40.61 ppm		98
34) 2,6-Dichlorophenol	5.204	162	308673	38.80 ppm		94
36) 1,2,4-Trichlorobenzene	5.070	180	373461	44.10 ppm		92
38) Naphthalene	5.129	128	1074771	33.71 ppm		99
39) 4-Chloroaniline	5.204	127	244214	19.24 ppm		94
40) 2,3-Dichloroaniline	5.845	161	372387	36.48 ppm		93
41) Caprolactam	5.482	55	120380	29.12 ppm		91
42) Hexachlorobutadiene	5.214	225	228376	60.69 ppm		92
43) 4-Chloro-3-methylphenol	5.588	107	312776	36.27 ppm	#	69
44) 2-Methylnaphthalene	5.615	141	607922	34.25 ppm		93
45) 1-Methylnaphthalene	5.685	141	639914	33.68 ppm		95
46) Dimethylnaphthalene	6.059	156	684089	37.26 ppm		99
48) Hexachlorocyclopentadiene	5.727	237	317542	66.92 ppm		92
49) 2,4,6-Trichlorophenol	5.845	196	260640	44.33 ppm		90
50) 2,4,5-Trichlorophenol	5.888	196	235867	37.04 ppm		97
52) 2-Chloronaphthalene	5.962	162	684751	33.94 ppm		96
53) Biphenyl	5.946	154	933711	33.04 ppm		98
54) 2-Nitroaniline	6.080	65	204412m	37.59 ppm		
55) Dimethylphthalate	6.192	163	833094	36.78 ppm		98
56) Acenaphthylene	6.272	152	1107750	31.26 ppm		98
57) 2,6-Dinitrotoluene	6.245	165	184222	37.11 ppm		90
58) 3-Nitroaniline	6.411	138	130068	21.68 ppm		95
59) Acenaphthene	6.411	153	712302	33.60 ppm		99
60) 2,4-Dinitrophenol	6.481	184	124718	48.86 ppm		98
61) 4-Nitrophenol	6.641	109	109657	39.69 ppm	#	61
62) Dibenzofuran	6.566	168	1056763	36.10 ppm		98
63) 2,4-Dinitrotoluene	6.582	165	237874	36.84 ppm		89
64) 2,3,4,6-Tetrachlorophenol	6.710	232	212180	41.97 ppm		93
65) Diethylphthalate	6.790	149	794010	34.16 ppm		97
66) Fluorene	6.881	166	824105	34.19 ppm		95
67) 4-Chlorophenyl-phenyle...	6.881	204	425590	42.83 ppm		94
68) 4-Nitroaniline	6.993	138	165094	27.50 ppm		73
70) 4,6-Dinitro-2-methylph...	6.972	198	122996	35.46 ppm		92
71) n-Nitrosodiphenylamine	7.025	169	593000	34.98 ppm		95
72) 1,2-Diphenylhydrazine	7.047	77	715564	35.31 ppm		63
74) 4-Bromophenyl-phenylether	7.410	248	265182	43.84 ppm		86
75) Hexachlorobenzene	7.480	284	272748	40.21 ppm		98
76) Pentachlorophenol	7.779	266	136126	37.81 ppm		95
77) Phenanthrene	8.008	178	1201375	36.01 ppm		100
78) Anthracene	8.078	178	1189116	34.59 ppm		99
79) Carbazole	8.377	167	1077938	32.89 ppm		98
80) Di-n-butylphthalate	8.943	149	1348580	33.43 ppm		97
81) Fluoranthene	9.932	202	1425195	40.92 ppm		86
82) Octadecane	7.832	57	409307	28.29 ppm		92
84) Pyrene	10.343	202	1440549	38.40 ppm		91

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110085.D
Acq On : 26 Apr 2016 6:48 pm
Operator : juliusj
Sample : op93364-msd
Misc : op93364,ez5500,30.3
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 27 00:11:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
87)	Butylbenzylphthalate	11.876	149	557501	31.14	ppm		97
88)	Benzo[a]anthracene	12.849	228	1239248	38.14	ppm		94
89)	3,3'-Dichlorobenzidine	12.961	252	543553	46.33	ppm		97
90)	Chrysene	12.923	228	1148302	36.21	ppm		91
91)	bis(2-Ethylhexyl)phtha...	13.201	149	737778	29.28	ppm		98
93)	Di-n-octylphthalate	14.595	149	1286129	31.30	ppm		99
94)	Benzo[b]fluoranthene	15.114	252	1322707	39.29	ppm		92
95)	Benzo[k]fluoranthene	15.167	252	1154075	38.19	ppm		90
96)	Benzo[a]pyrene	15.728	252	1199920	40.05	ppm		98
97)	Indeno[1,2,3-cd]pyrene	17.763	276	1152368	38.47	ppm		98
99)	Dibenz[a,h]anthracene	17.817	278	1119852	35.52	ppm		88
100)	7,12-Dimethylbenz(a)an...	15.119	256	500745	32.69	ppm		98
101)	Benzo[g,h,i]perylene	18.191	276	1157747	35.96	ppm		91
103)	Benzaldehyde	3.879	105	306941	34.05	ppm		92
105)	Atrazine	7.672	215	130038	44.83	ppm	#	77
107)	Benzidine	10.338	184	2295	0.15	ppm		64
109)	1,2,4,5-Tetrachloroben...	5.733	216	411781	45.12	ppm		94

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

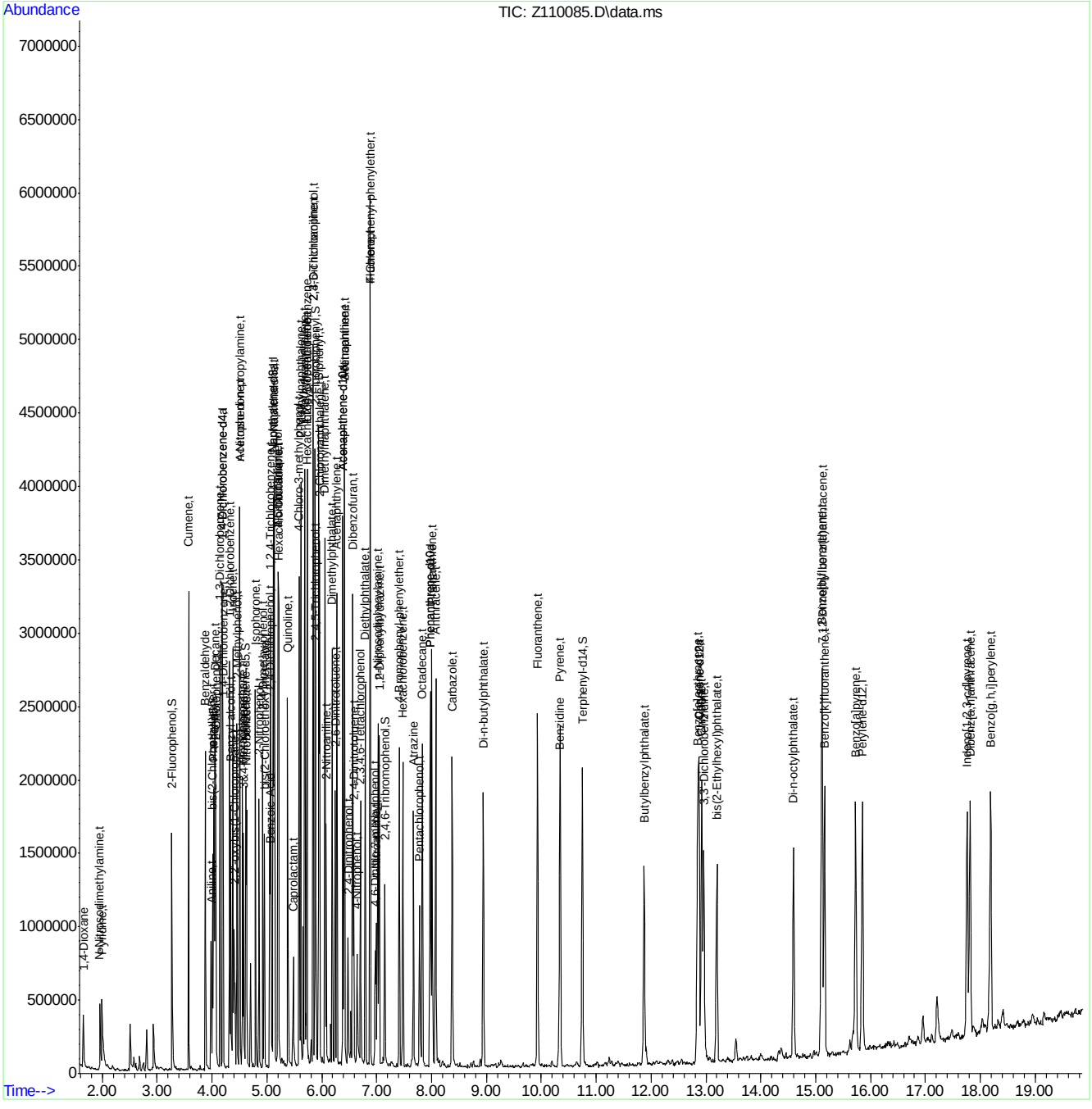
7.4.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110085.D
Acq On : 26 Apr 2016 6:48 pm
Operator : juliusj
Sample : op93364-msd
Misc : op93364,ez5500,30.3
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 27 00:11:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration



MZ5485.M Wed Apr 27 00:11:34 2016 RTE

Page: 4

SGS ACCUTEST JC18649

Manual Integration Approval Summary

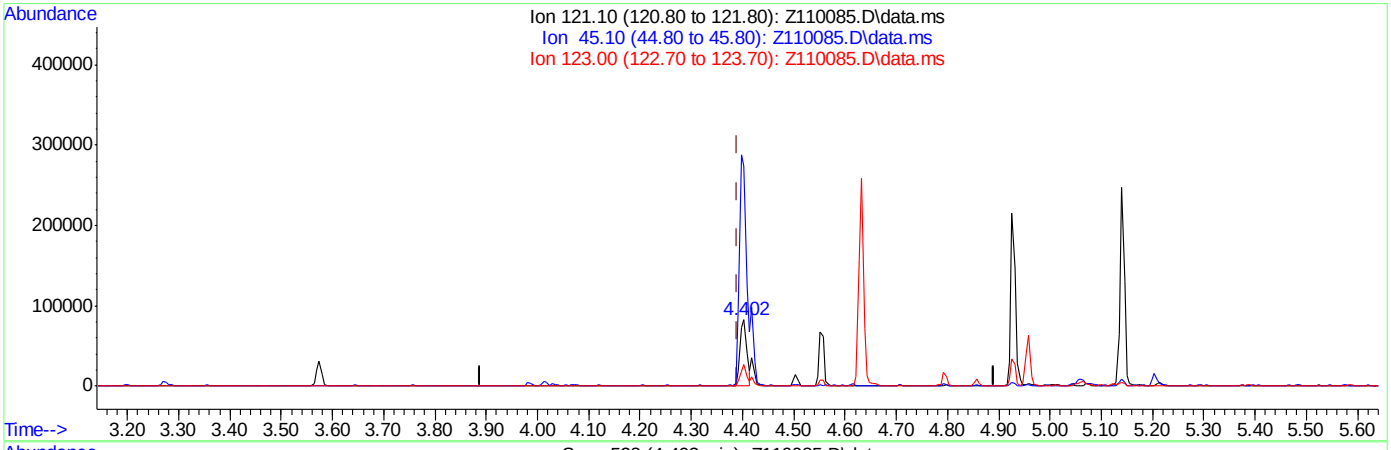
Sample Number:	OP93364-MSD	**Method:**	SW846 8270D
Lab FileID:	Z110085.D	**Analyst approved:**	04/27/16 00:36 Sean Block
Injection Time:	04/26/16 18:48	**Supervisor approved:**	04/27/16 17:07 Kristi Schollenberger

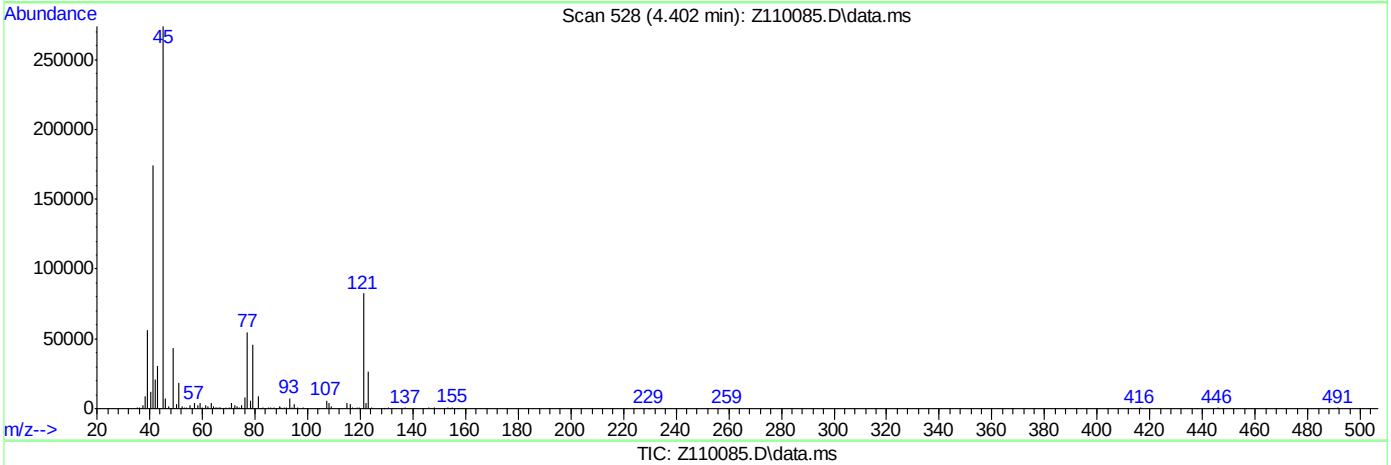
Parameter	CAS	Sig#	R.T. (min.)	Reason
bis(2-Chloroisopropyl)ether	108-60-1		4.40	Split peak
2-Nitrophenol	88-75-5		4.86	Missed peak
2-Nitroaniline	88-74-4		6.08	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110085.D
Acq On : 26 Apr 2016 6:48 pm
Operator : juliusj
Sample : op93364-msd
Misc : op93364,ez5500,30.3
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 26 19:08:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration





TIC: Z110085.D\data.ms

(20) 2,2'-oxybis(1-Chloropropane (t)

4.402min (+0.012) 22.34ppm

response 75018

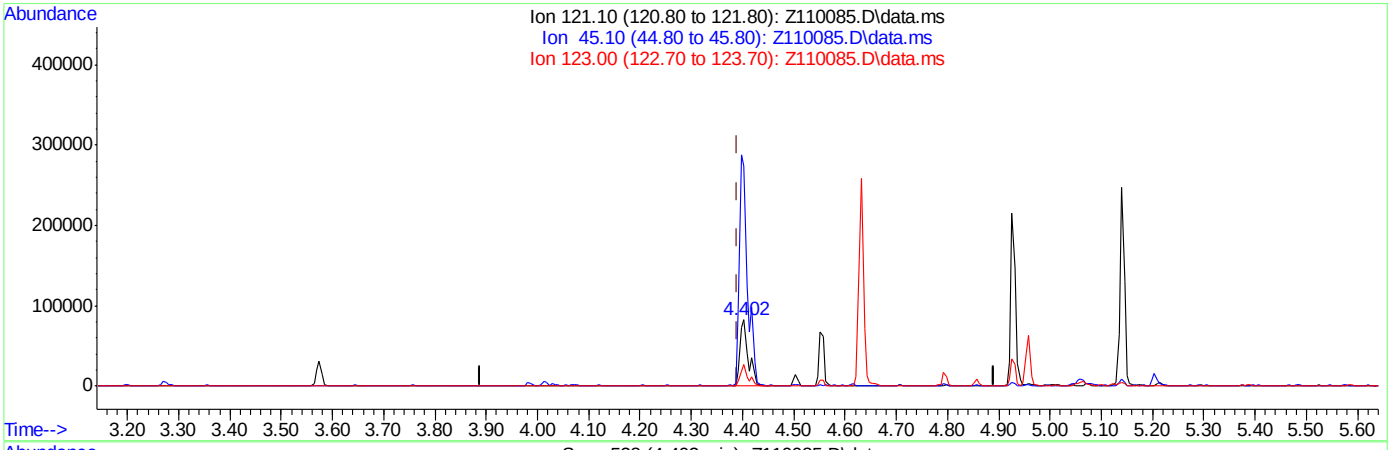
Ion	Exp%	Act%
121.10	100	100
45.10	483.40	327.17#
123.00	33.10	31.61
0.00	0.00	0.00

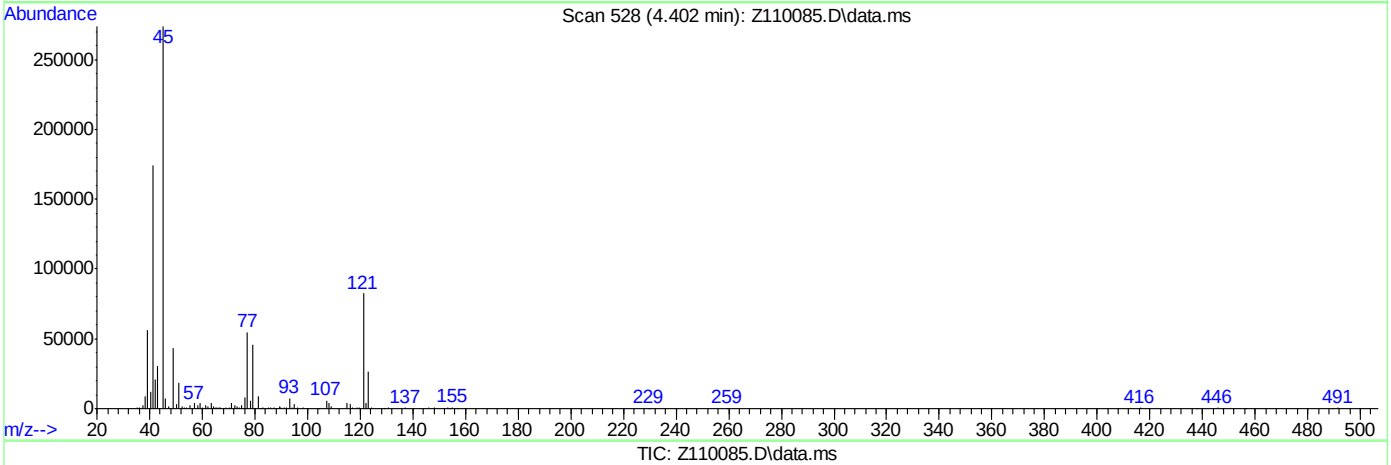
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110085.D
Acq On : 26 Apr 2016 6:48 pm
Operator : juliusj
Sample : op93364-msd
Misc : op93364,ez5500,30.3
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 26 19:08:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration





TIC: Z110085.D\data.ms

(20) 2,2'-oxybis(1-Chloropropane (t)

4.402min (+0.012) 27.48ppm m

response 92304

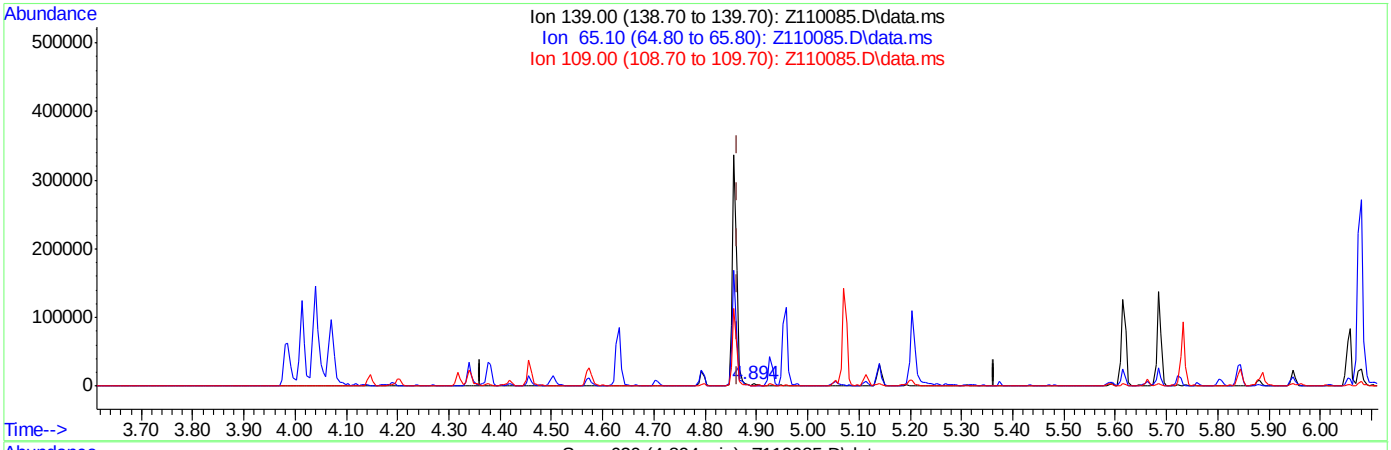
Ion	Exp%	Act%
121.10	100	100
45.10	483.40	331.76#
123.00	33.10	32.09
0.00	0.00	0.00

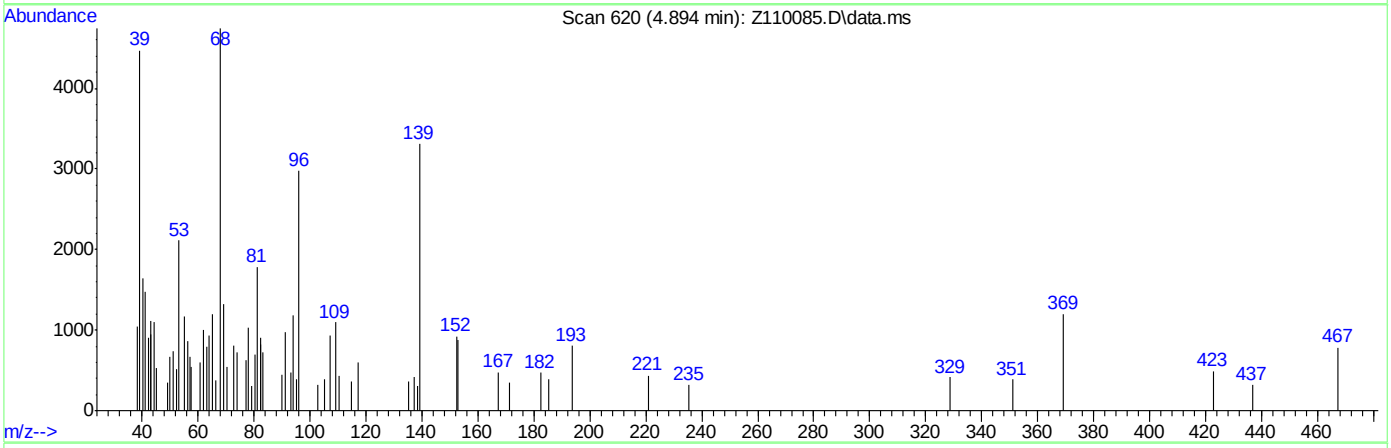
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110085.D
Acq On : 26 Apr 2016 6:48 pm
Operator : juliusj
Sample : op93364-msd
Misc : op93364,ez5500,30.3
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 26 19:08:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration





TIC: Z110085.D\data.ms

(29) 2-Nitrophenol (t)

4.894min (+0.031) 0.28ppm

response 1646

Ion	Exp%	Act%
139.00	100	100
65.10	34.40	6.84
109.00	3.30	27.60
0.00	0.00	0.00

SGS ACCUTEST JC18649

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110085.D
Acq On    : 26 Apr 2016   6:48 pm
Operator  : juliusj
Sample    : op93364-msd
Misc      : op93364,ez5500,30.3
ALS Vial  : 12   Sample Multiplier: 1

Quant Time: Apr 26 19:08:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title  : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration
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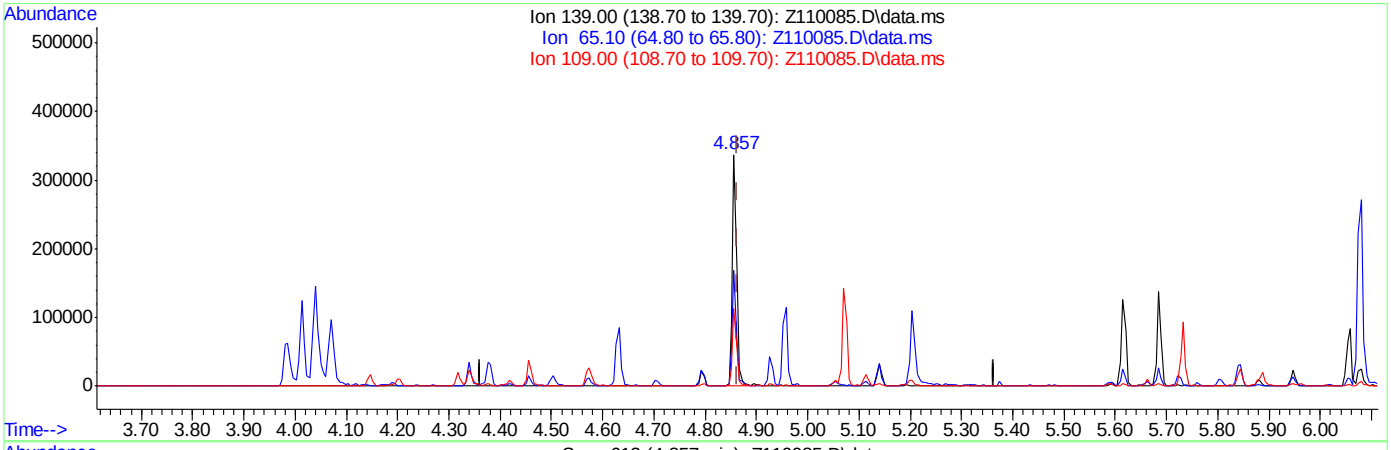
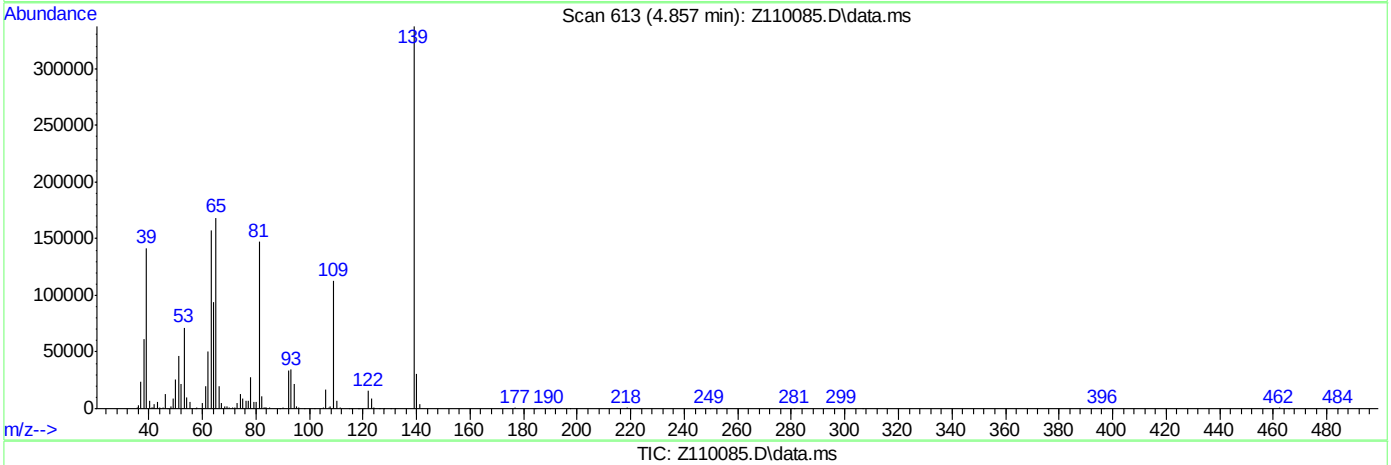




TIC: Z110085.D\data.ms

(29) 2-Nitrophenol (t)

4.857min (-0.007) 34.87ppm m

response 204642

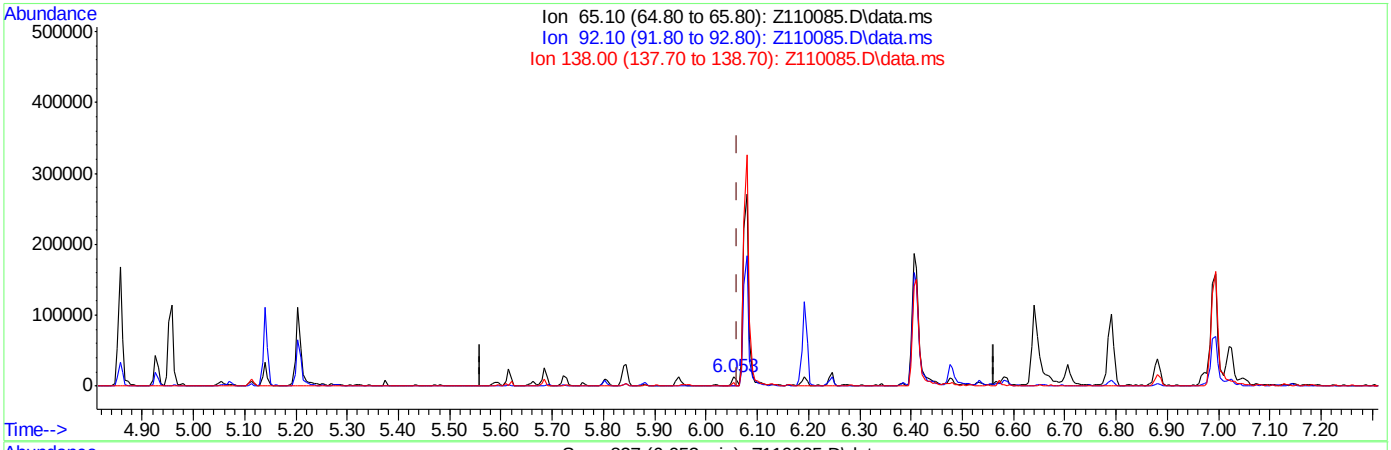
Ion	Exp%	Act%
139.00	100	100
65.10	34.40	49.93
109.00	3.30	33.34#
0.00	0.00	0.00

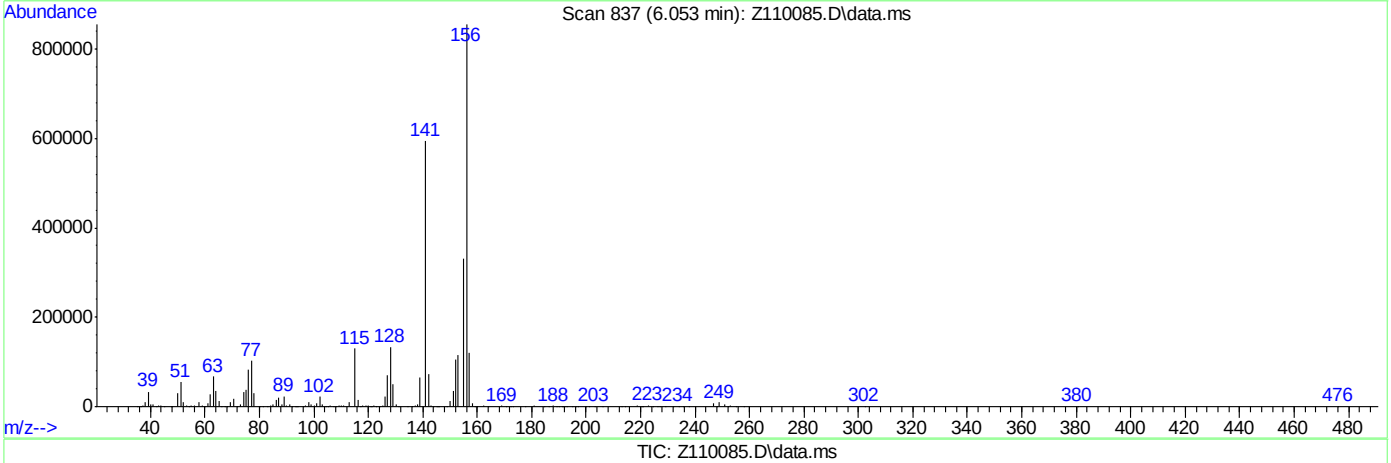
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110085.D
Acq On : 26 Apr 2016 6:48 pm
Operator : juliusj
Sample : op93364-msd
Misc : op93364,ez5500,30.3
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 26 19:08:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration





TIC: Z110085.D\data.ms

(54) 2-Nitroaniline (t)

6.053min (-0.009) 1.62ppm

response 8801

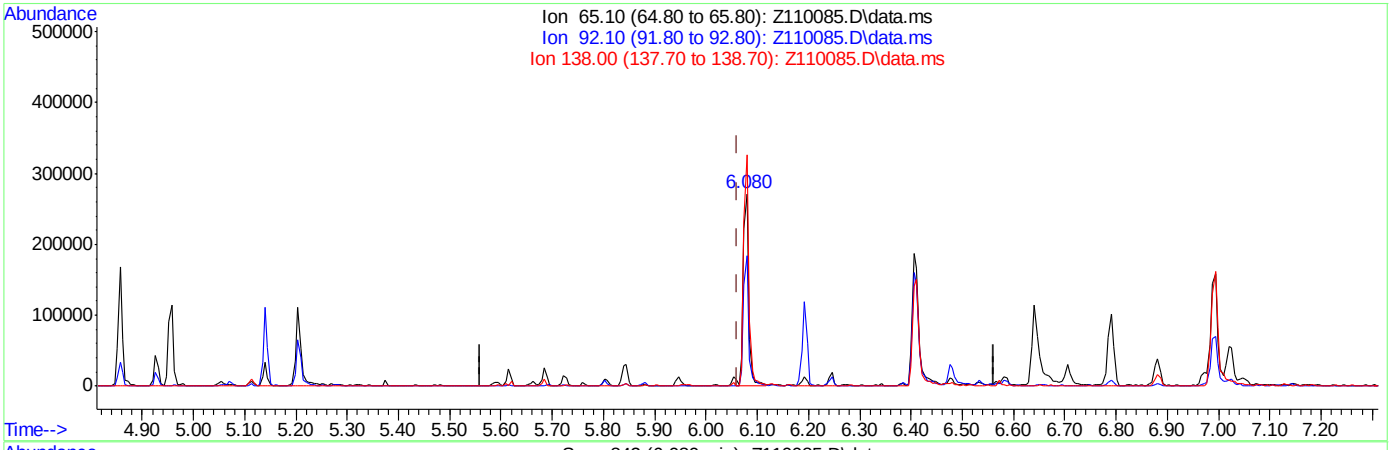
Ion	Exp%	Act%
65.10	100	100
92.10	86.20	8.58#
138.00	153.30	39.07#
0.00	0.00	0.00

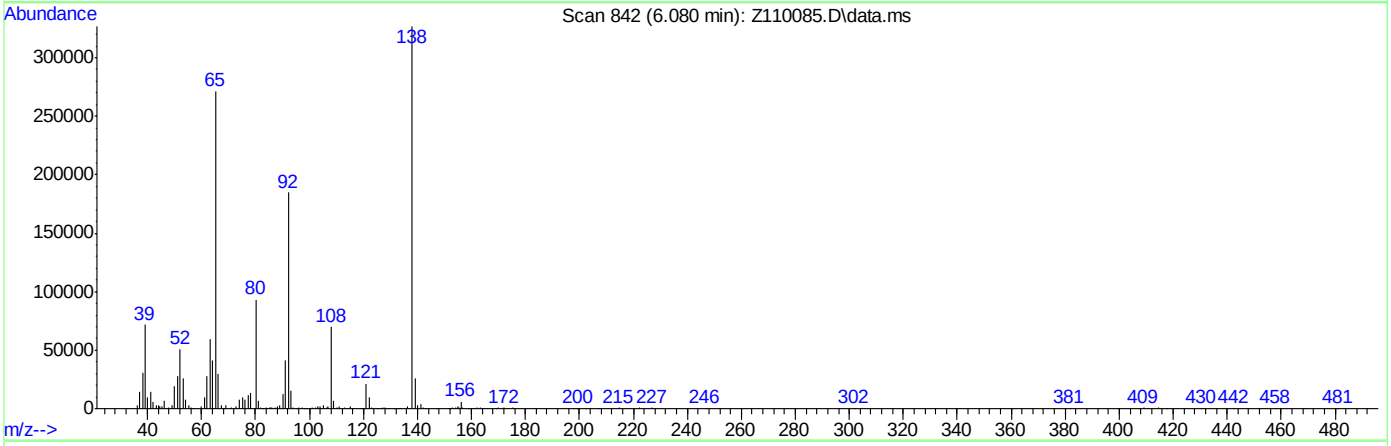
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110085.D
Acq On : 26 Apr 2016 6:48 pm
Operator : juliusj
Sample : op93364-msd
Misc : op93364,ez5500,30.3
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 26 19:08:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 16:05:49 2016
Response via : Initial Calibration





TIC: Z110085.D\data.ms

(54) 2-Nitroaniline (t)

6.080min (+0.018) 37.59ppm m

response 204412

Ion	Exp%	Act%
65.10	100	100
92.10	86.20	68.04
138.00	153.30	120.34#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64885.D
Acq On : 21 Apr 2016 1:31 pm
Operator : linseyk
Sample : op93236a-ms
Misc : op93236a,e4m2889,405
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 10:55:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	206052	4.00	ppm	# 0.05
12) Fluorene-d10	13.748	176	364933	4.00	ppm	0.07
22) Fluoranthene-d10	17.923	212	758266	4.00	ppm	0.06
28) Benzo(a)pyrene-d12	22.525	264	547077	4.00	ppm	0.05
35) 1-Methylnaphthalene-d10a	10.746	152	206052	4.00	ppm	# 0.05
38) Fluorene-d10a	13.748	176	364933	4.00	ppm	# 0.07
System Monitoring Compounds						
2) 2-Fluorophenol	4.773	112	1002549	37.16	ppm	0.05
Spiked Amount 50.000	Range 11 - 58		Recovery = 74.32%#			
3) Phenol-d5	6.352	99	1423561	31.38	ppm	0.04
Spiked Amount 50.000			Recovery = 62.76%			
6) Nitrobenzene-d5	7.879	82	1790333	44.01	ppm	0.04
Spiked Amount 50.000			Recovery = 88.02%			
11) 2-Fluorobiphenyl	11.414	172	3162136	53.17	ppm	0.05
Spiked Amount 50.000			Recovery = 106.34%			
17) 2,4,6-Tribromophenol	14.297	330	959055	49.27	ppm	0.07
Spiked Amount 50.000			Recovery = 98.54%			
25) Terphenyl-d14	18.732	244	3775990	36.86	ppm	0.06
Spiked Amount 50.000			Recovery = 73.72%			
Target Compounds						Qvalue
4) Phenol	6.379	94	168246	3.62	ppm	88
5) bis(2-Chloroethyl)ether	6.448	93	30536	0.87	ppm #	59
7) Naphthalene	9.272	128	98870	0.85	ppm	98
8) Hexachlorobutadiene	9.565	225	22668	0.79	ppm	81
9) 2-Methylnaphthalene	10.626	142	52287	1.04	ppm	75
10) Hexachlorocyclopentadiene	10.984	237	13832	0.91	ppm	78
13) Acenaphthylene	12.388	152	71400	0.85	ppm	90
14) Acenaphthene	12.743	153	44903	0.83	ppm	76
15) Dibenzofuran	13.120	168	65048	0.81	ppm	71
16) Fluorene	13.795	166	69280	0.71	ppm	79
18) Hexachlorobenzene	14.898	284	32963	0.87	ppm	94
19) Pentachlorophenol	15.331	266	83306	5.33	ppm	98
20) Phenanthrene	15.687	178	119896	0.91	ppm	90
21) Anthracene	15.795	178	117201	0.94	ppm	98
23) Fluoranthene	17.960	202	131077	0.64	ppm	95
24) Pyrene	18.337	202	141146	0.70	ppm	84
26) Benzo[a]anthracene	20.427	228	123364	0.66	ppm	97
27) Chrysene	20.483	228	118358	0.65	ppm	80
29) Benzo[b]fluoranthene	22.098	252	116421	0.59	ppm	99
30) Benzo[k]fluoranthene	22.139	252	118271	0.72	ppm	98
31) Benzo[a]pyrene	22.552	252	105466	0.65	ppm	97
32) Indeno[1,2,3-cd]pyrene	24.094	276	118048	0.58	ppm	99
33) Dibenz[a,h]anthracene	24.122	278	99740	0.61	ppm	90
34) Benzo[g,h,i]perylene	24.480	276	99625	0.58	ppm	100
39) 4,6-dinitro-2-methylph...	13.963	198	71337	6.62	ppm	59
40) 1,2-Diphenylhydrazine	14.154	77	79454	0.92	ppm	88
41) n-nitrosodiphenylamine	14.106	169	53353	0.83	ppm	78

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64885.D
Acq On : 21 Apr 2016 1:31 pm
Operator : linseyk
Sample : op93236a-ms
Misc : op93236a,e4m2889,405
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 10:55:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.4.5

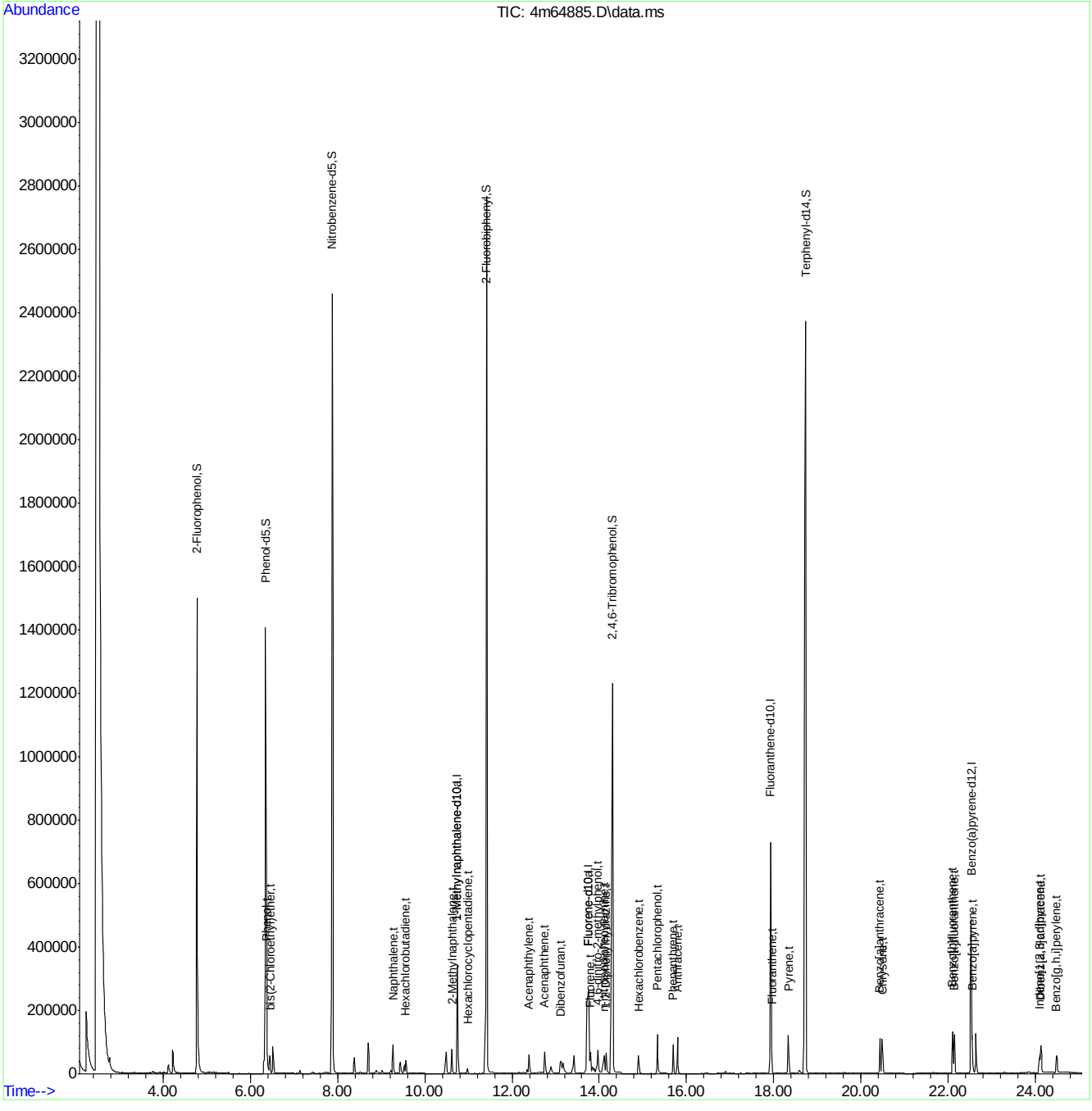
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64885.D
Acq On : 21 Apr 2016 1:31 pm
Operator : linseyk
Sample : op93236a-ms
Misc : op93236a,e4m2889,405
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 10:55:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration



M4M2881SIM.M Fri Apr 22 10:55:24 2016 MANAGER

Page: 3

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64886.D
Acq On : 21 Apr 2016 2:02 pm
Operator : linseyk
Sample : op93236a-msd
Misc : op93236a,e4m2889,405
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 10:55:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.745	152	209482	4.00	ppm	# 0.05
12) Fluorene-d10	13.747	176	374455	4.00	ppm	0.07
22) Fluoranthene-d10	17.922	212	760657	4.00	ppm	0.06
28) Benzo(a)pyrene-d12	22.525	264	548891	4.00	ppm	0.05
35) 1-Methylnaphthalene-d10a	10.745	152	209482	4.00	ppm	# 0.05
38) Fluorene-d10a	13.747	176	374455	4.00	ppm	# 0.07
System Monitoring Compounds						
2) 2-Fluorophenol	4.773	112	967123	35.26	ppm	0.05
Spiked Amount 50.000	Range 11 - 58		Recovery = 70.52%#			
3) Phenol-d5	6.352	99	1313595	28.48	ppm	0.04
Spiked Amount 50.000			Recovery = 56.96%			
6) Nitrobenzene-d5	7.879	82	1759391	42.54	ppm	0.04
Spiked Amount 50.000			Recovery = 85.08%			
11) 2-Fluorobiphenyl	11.414	172	3042195	50.32	ppm	0.05
Spiked Amount 50.000			Recovery = 100.64%			
17) 2,4,6-Tribromophenol	14.297	330	918904	46.01	ppm	0.07
Spiked Amount 50.000			Recovery = 92.02%			
25) Terphenyl-d14	18.732	244	3503747	34.10	ppm	0.06
Spiked Amount 50.000			Recovery = 68.20%			
Target Compounds						Qvalue
4) Phenol	6.379	94	142607	3.02	ppm	83
5) bis(2-Chloroethyl)ether	6.448	93	30208	0.85	ppm	75
7) Naphthalene	9.271	128	97233	0.82	ppm	99
8) Hexachlorobutadiene	9.565	225	22276	0.77	ppm	79
9) 2-Methylnaphthalene	10.626	142	51661	1.01	ppm	77
10) Hexachlorocyclopentadiene	10.984	237	13588	0.89	ppm	79
13) Acenaphthylene	12.387	152	67110	0.78	ppm	89
14) Acenaphthene	12.742	153	42536	0.77	ppm	75
15) Dibenzofuran	13.120	168	63764	0.77	ppm	71
16) Fluorene	13.795	166	67540	0.68	ppm	80
18) Hexachlorobenzene	14.898	284	31683	0.81	ppm	96
19) Pentachlorophenol	15.331	266	71129	4.44	ppm	96
20) Phenanthrene	15.687	178	114634	0.85	ppm	90
21) Anthracene	15.795	178	112743	0.88	ppm	98
23) Fluoranthene	17.960	202	129428	0.63	ppm	96
24) Pyrene	18.337	202	139804	0.69	ppm	83
26) Benzo[a]anthracene	20.426	228	123292	0.66	ppm	96
27) Chrysene	20.483	228	113616	0.62	ppm	79
29) Benzo[b]fluoranthene	22.098	252	113331	0.57	ppm	99
30) Benzo[k]fluoranthene	22.139	252	114649	0.69	ppm	98
31) Benzo[a]pyrene	22.552	252	100542	0.61	ppm	96
32) Indeno[1,2,3-cd]pyrene	24.094	276	117472	0.57	ppm	100
33) Dibenz[a,h]anthracene	24.122	278	94162	0.57	ppm	89
34) Benzo[g,h,i]perylene	24.480	276	97298	0.56	ppm	100
39) 4,6-dinitro-2-methylph...	13.962	198	60707	5.67	ppm	52
40) 1,2-Diphenylhydrazine	14.154	77	79985	0.90	ppm	89
41) n-nitrosodiphenylamine	14.106	169	52759	0.80	ppm	79

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64886.D
Acq On : 21 Apr 2016 2:02 pm
Operator : linseyk
Sample : op93236a-msd
Misc : op93236a,e4m2889,405
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 10:55:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

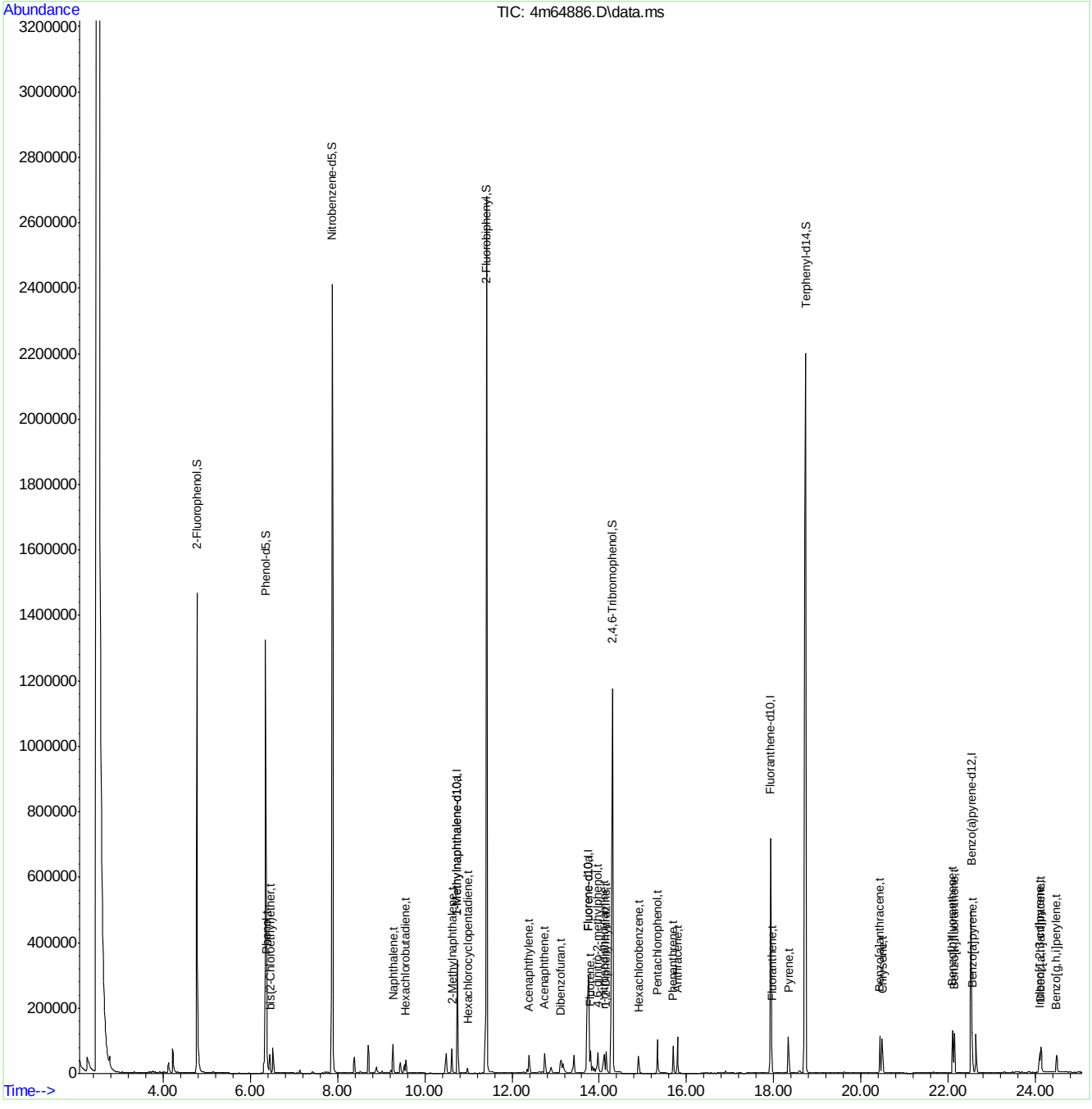
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64886.D
Acq On : 21 Apr 2016 2:02 pm
Operator : linseyk
Sample : op93236a-msd
Misc : op93236a,e4m2889,405
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 10:55:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration



M4M2881SIM.M Fri Apr 22 10:55:50 2016 MANAGER Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2864\
Data File : 3m60923.D
Acq On : 27 Apr 2016 7:58 pm
Operator : linseyk
Sample : op93271a-ms
Misc : op93271a,e3m2864,950
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 28 10:59:22 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

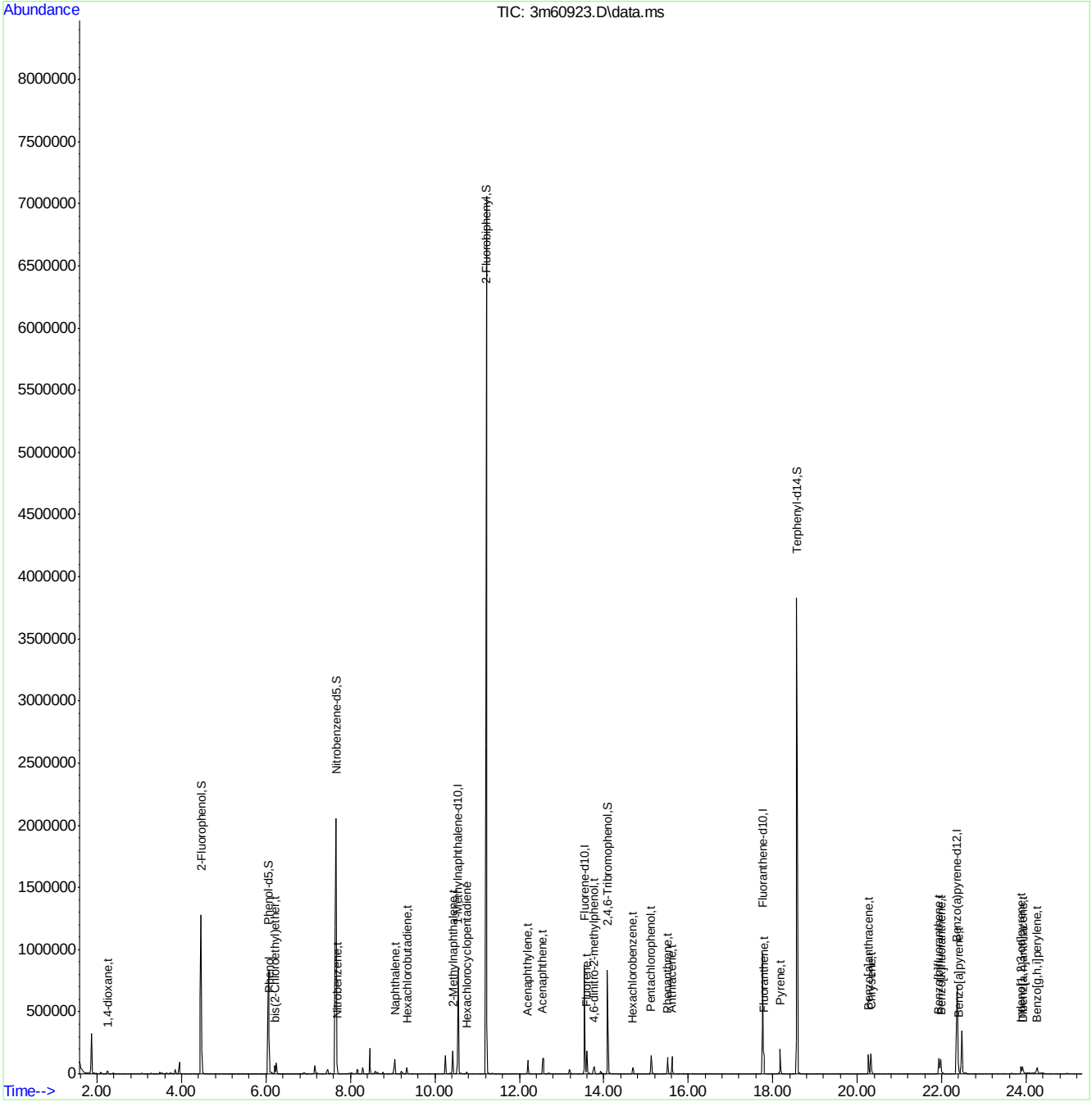
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.549	150	444325	4.00	ppm	-0.07
14) Fluorene-d10	13.543	176	633274	4.00	ppm	-0.10
21) Fluoranthene-d10	17.762	212	1045642	4.00	ppm	-0.10
31) Benzo(a)pyrene-d12	22.367	264	729597	4.00	ppm	-0.08
System Monitoring Compounds						
3) 2-Fluorophenol	4.461	112	975815	17.55	ppm	-0.05
Spiked Amount 50.000			Recovery = 35.10%			
4) Phenol-d5	6.060	99	1069456	11.63	ppm	-0.03
Spiked Amount 50.000			Recovery = 23.26%			
7) Nitrobenzene-d5	7.662	82	2357691	27.57	ppm	-0.05
Spiked Amount 50.000			Recovery = 55.14%			
15) 2-Fluorobiphenyl	11.222	172	5562880	31.97	ppm	-0.08
Spiked Amount 50.000			Recovery = 63.94%			
20) 2,4,6-Tribromophenol	14.089	330	573228	28.92	ppm	-0.08
Spiked Amount 50.000			Recovery = 57.84%			
28) Terphenyl-d14	18.566	244	3795731	25.02	ppm	-0.10
Spiked Amount 50.000			Recovery = 50.04%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.251	88	16565	0.72	ppm	87
5) Phenol	6.072	94	135841	1.37	ppm #	85
6) bis(2-Chloroethyl)ether	6.218	93	44848	0.60	ppm #	52
8) Nitrobenzene	7.681	77	55161	0.59	ppm	66
9) Naphthalene	9.056	128	143290	0.58	ppm	99
10) Hexachlorobutadiene	9.338	225	26723	0.62	ppm	97
11) 2-Methylnaphthalene	10.426	141	87772	0.68	ppm	80
13) Hexachlorocyclopentadiene	10.755	237	15026	0.44	ppm	87
16) Acenaphthylene	12.196	152	129836	0.59	ppm	89
17) Acenaphthene	12.551	153	92744	0.63	ppm	79
18) 4,6-dinitro-2-methylph...	13.769	198	62680	3.34	ppm	83
19) Fluorene	13.599	166	115373	0.66	ppm	92
22) Hexachlorobenzene	14.686	284	30027	0.61	ppm	81
23) Pentachlorophenol	15.119	266	96362	2.89	ppm	96
24) Phenanthrene	15.506	178	157733	0.62	ppm #	58
25) Anthracene	15.614	178	138200	0.61	ppm	92
26) Fluoranthene	17.793	202	179675	0.56	ppm	98
27) Pyrene	18.179	202	183515	0.61	ppm	99
29) Benzo[a]anthracene	20.265	228	139069	0.49	ppm	97
30) Chrysene	20.327	228	149829	0.55	ppm	98
32) Benzo[b]fluoranthene	21.934	252	113200	0.47	ppm	97
33) Benzo[k]fluoranthene	21.980	252	121704	0.54	ppm	97
34) Benzo[a]pyrene	22.397	252	106823	0.47	ppm	87
35) Indeno[1,2,3-cd]pyrene	23.881	276	84364	0.37	ppm	94
36) Dibenz[a,h]anthracene	23.918	278	60420	0.32	ppm	100
37) Benzo[g,h,i]perylene	24.257	276	73666	0.37	ppm	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2864\
Data File : 3m60923.D
Acq On : 27 Apr 2016 7:58 pm
Operator : linseyk
Sample : op93271a-ms
Misc : op93271a,e3m2864,950
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 28 10:59:22 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 JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2864\
Data File : 3m60924.D
Acq On : 27 Apr 2016 8:30 pm
Operator : linseyk
Sample : op93271a-msd
Misc : op93271a,e3m2864,950
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 28 10:59:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 27 14:02:45 2016
Response via : Initial Calibration

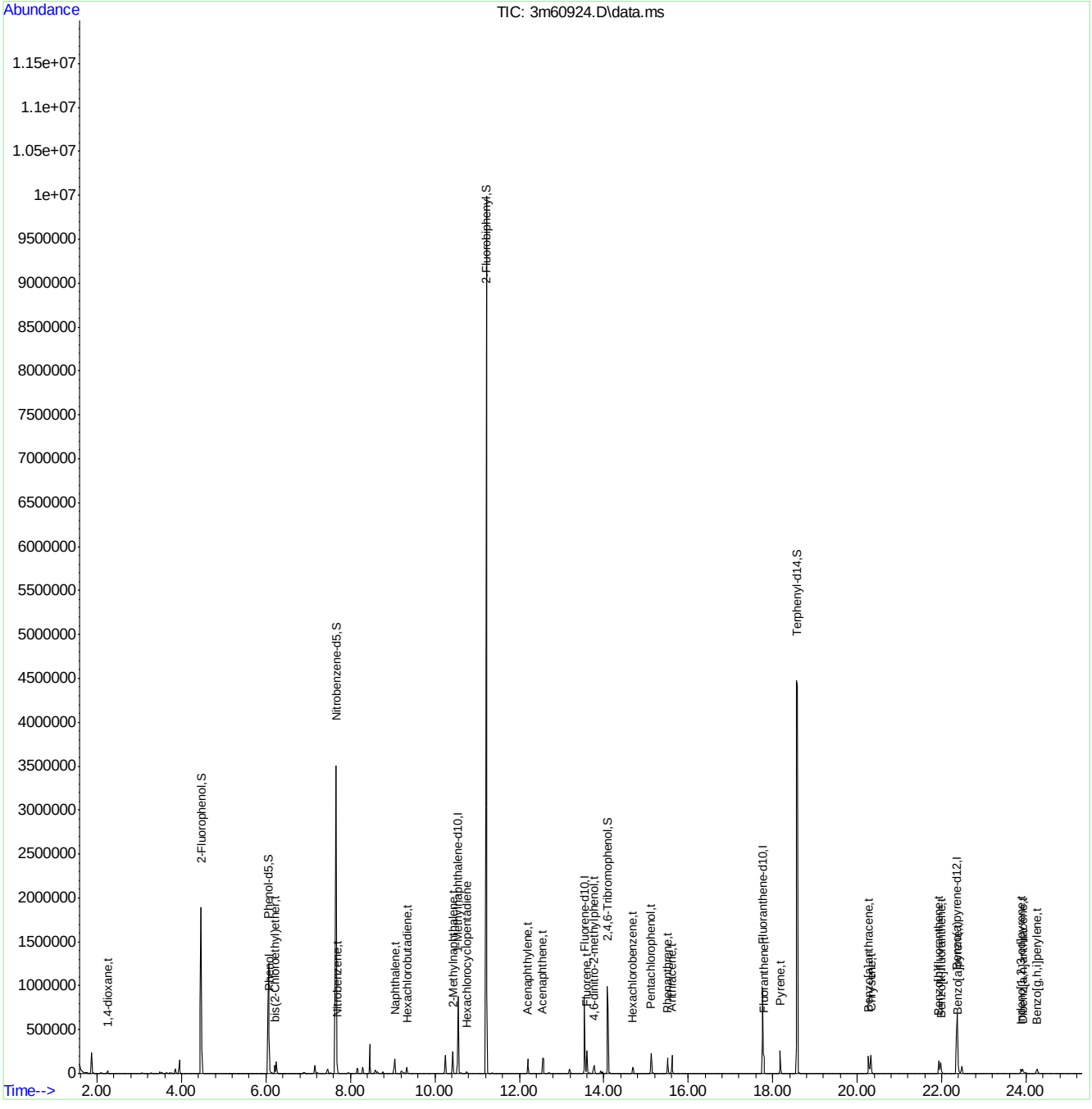
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.549	150	465160	4.00	ppm	-0.07
14) Fluorene-d10	13.543	176	651408	4.00	ppm	-0.10
21) Fluoranthene-d10	17.762	212	1060798	4.00	ppm	-0.10
31) Benzo(a)pyrene-d12	22.366	264	766448	4.00	ppm	-0.08
System Monitoring Compounds						
3) 2-Fluorophenol	4.461	112	1361495	23.39	ppm	-0.05
Spiked Amount 50.000			Recovery = 46.78%			
4) Phenol-d5	6.060	99	1493517	15.51	ppm	-0.03
Spiked Amount 50.000			Recovery = 31.02%			
7) Nitrobenzene-d5	7.662	82	3661628	40.90	ppm	-0.05
Spiked Amount 50.000			Recovery = 81.80%			
15) 2-Fluorobiphenyl	11.222	172	7653385	42.76	ppm	-0.08
Spiked Amount 50.000			Recovery = 85.52%			
20) 2,4,6-Tribromophenol	14.089	330	808554	39.66	ppm	-0.08
Spiked Amount 50.000			Recovery = 79.32%			
28) Terphenyl-d14	18.566	244	5570299	36.20	ppm	-0.10
Spiked Amount 50.000			Recovery = 72.40%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.251	88	25420	1.06	ppm #	58
5) Phenol	6.072	94	196494	1.89	ppm #	84
6) bis(2-Chloroethyl)ether	6.217	93	61637	0.79	ppm #	51
8) Nitrobenzene	7.681	77	82669	0.85	ppm #	61
9) Naphthalene	9.056	128	200764	0.78	ppm	100
10) Hexachlorobutadiene	9.338	225	38611	0.86	ppm	95
11) 2-Methylnaphthalene	10.426	141	121729	0.90	ppm	80
13) Hexachlorocyclopentadiene	10.754	237	22124	0.62	ppm	87
16) Acenaphthylene	12.196	152	180626	0.80	ppm	89
17) Acenaphthene	12.551	153	127056	0.84	ppm	78
18) 4,6-dinitro-2-methylph...	13.769	198	107751	5.06	ppm	84
19) Fluorene	13.599	166	164409	0.91	ppm	90
22) Hexachlorobenzene	14.686	284	42351	0.84	ppm	81
23) Pentachlorophenol	15.119	266	135783	3.95	ppm	97
24) Phenanthrene	15.506	178	220041	0.85	ppm #	57
25) Anthracene	15.614	178	195956	0.85	ppm	91
26) Fluoranthene	17.793	202	236245	0.72	ppm	98
27) Pyrene	18.179	202	242592	0.80	ppm	99
29) Benzo[a]anthracene	20.265	228	177765	0.61	ppm	97
30) Chrysene	20.327	228	180726	0.65	ppm	98
32) Benzo[b]fluoranthene	21.934	252	133134	0.52	ppm	96
33) Benzo[k]fluoranthene	21.980	252	126256	0.53	ppm	99
34) Benzo[a]pyrene	22.382	252	120146	0.51	ppm	98
35) Indeno[1,2,3-cd]pyrene	23.881	276	82187	0.34	ppm	93
36) Dibenz[a,h]anthracene	23.918	278	63643	0.32	ppm	100
37) Benzo[g,h,i]perylene	24.257	276	70740	0.34	ppm	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2864\
Data File : 3m60924.D
Acq On : 27 Apr 2016 8:30 pm
Operator : linseyk
Sample : op93271a-msd
Misc : op93271a,e3m2864,950
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 28 10:59:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 27 14:02:45 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60901.D
Acq On : 27 Apr 2016 1:41 am
Operator : juliusj
Sample : op93364a-ms
Misc : op93364a,e3m2863,30.7
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 27 14:03:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 26 09:22:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.550	150	369683	4.00	ppm	-0.07
14) Fluorene-d10	13.562	176	464095	4.00	ppm	-0.08
21) Fluoranthene-d10	17.762	212	776256	4.00	ppm	-0.10
31) Benzo(a)pyrene-d12	22.367	264	646775	4.00	ppm	-0.08
System Monitoring Compounds						
3) 2-Fluorophenol	4.477	112	1861235	40.24	ppm	-0.03
Spiked Amount 50.000			Recovery = 80.48%			
4) Phenol-d5	6.073	99	2999975	39.20	ppm	-0.02
Spiked Amount 50.000			Recovery = 78.40%			
7) Nitrobenzene-d5	7.663	82	2920523	41.04	ppm	-0.05
Spiked Amount 50.000			Recovery = 82.08%			
15) 2-Fluorobiphenyl	11.222	172	5837319	45.77	ppm	-0.08
Spiked Amount 50.000			Recovery = 91.54%			
20) 2,4,6-Tribromophenol	14.108	330	688769	47.42	ppm	-0.06
Spiked Amount 50.000			Recovery = 94.84%			
28) Terphenyl-d14	18.581	244	5845145	51.91	ppm	-0.08
Spiked Amount 50.000			Recovery = 103.82%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.251	88	10861	0.57	ppm	79
5) Phenol	6.085	94	323034	3.92	ppm #	89
6) bis(2-Chloroethyl)ether	6.218	93	44249	0.71	ppm	79
8) Nitrobenzene	7.700	77	58349	0.76	ppm	70
9) Naphthalene	9.056	128	165961	0.81	ppm	95
10) Hexachlorobutadiene	9.338	225	26411	0.74	ppm	92
11) 2-Methylnaphthalene	10.427	141	92175	0.86	ppm #	63
13) Hexachlorocyclopentadiene	10.775	237	17542	0.62	ppm	81
16) Acenaphthylene	12.212	152	146998	0.91	ppm	99
17) Acenaphthene	12.567	153	104140	0.97	ppm	99
18) 4,6-dinitro-2-methylph...	13.769	198	50457	3.59	ppm #	20
19) Fluorene	13.599	166	118430	0.92	ppm	96
22) Hexachlorobenzene	14.702	284	32838	0.90	ppm	99
23) Pentachlorophenol	15.119	266	95574	3.81	ppm	83
24) Phenanthrene	15.521	178	178272	0.94	ppm #	56
25) Anthracene	15.614	178	160184	0.95	ppm	87
26) Fluoranthene	17.793	202	205426	0.86	ppm	96
27) Pyrene	18.180	202	206036	0.93	ppm	93
29) Benzo[a]anthracene	20.281	228	171786	0.81	ppm	92
30) Chrysene	20.327	228	175939	0.86	ppm	90
32) Benzo[b]fluoranthene	21.950	252	175372	0.81	ppm	88
33) Benzo[k]fluoranthene	21.980	252	156449	0.79	ppm	94
34) Benzo[a]pyrene	22.398	252	157057	0.78	ppm	90
35) Indeno[1,2,3-cd]pyrene	23.881	276	169820	0.83	ppm	97
36) Dibenz[a,h]anthracene	23.919	278	137054	0.82	ppm	100
37) Benzo[g,h,i]perylene	24.257	276	146378	0.83	ppm	98

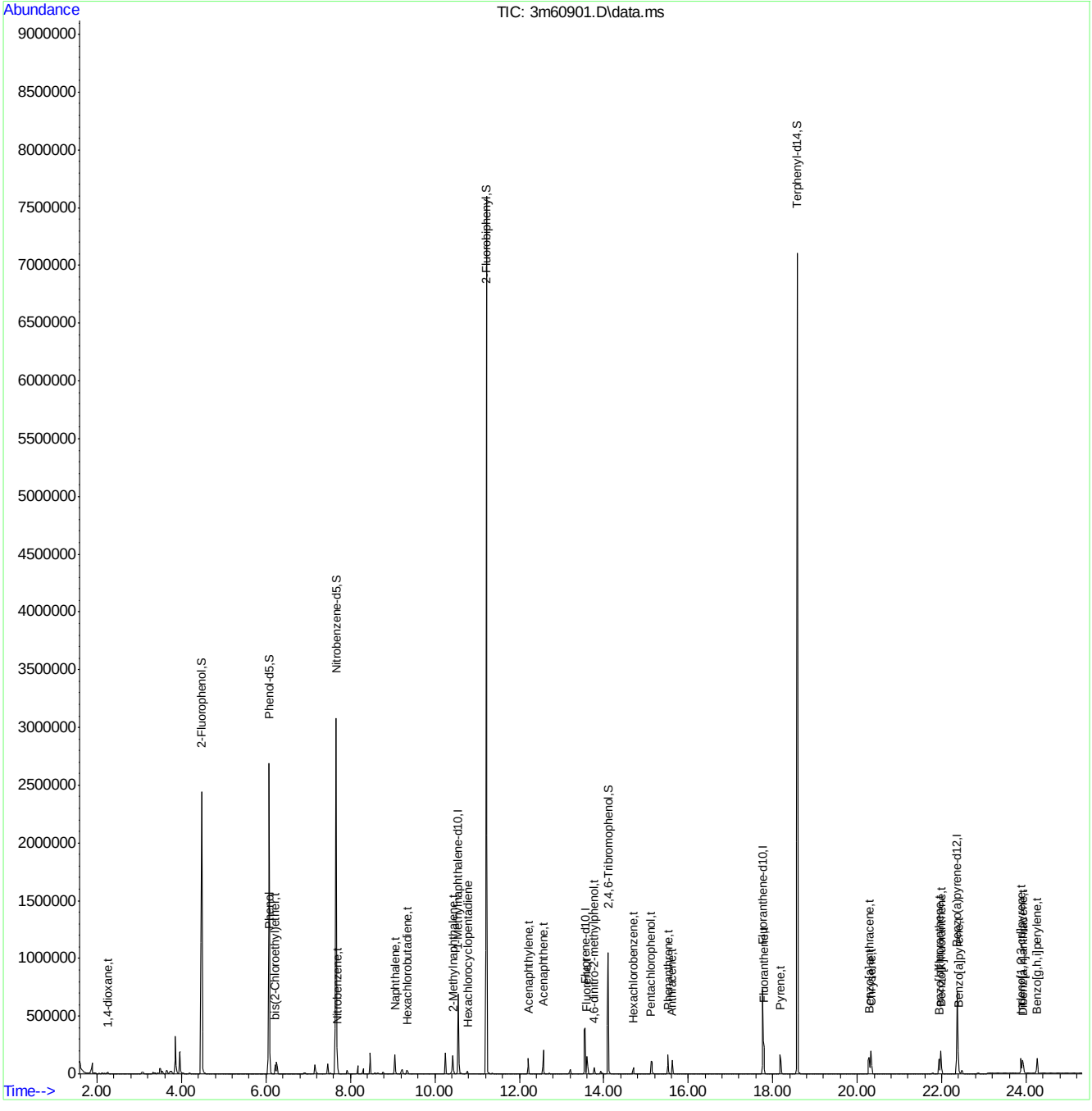
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60901.D
Acq On : 27 Apr 2016 1:41 am
Operator : juliusj
Sample : op93364a-ms
Misc : op93364a,e3m2863,30.7
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 27 14:03:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 26 09:22:28 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60902.D
Acq On : 27 Apr 2016 2:13 am
Operator : juliusj
Sample : op93364a-msd
Misc : op93364a,e3m2863,31.7
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 27 14:04:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 26 09:22:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.549	150	407478	4.00	ppm	-0.07
14) Fluorene-d10	13.562	176	523019	4.00	ppm	-0.08
21) Fluoranthene-d10	17.762	212	820573	4.00	ppm	-0.10
31) Benzo(a)pyrene-d12	22.367	264	668737	4.00	ppm	-0.08
System Monitoring Compounds						
3) 2-Fluorophenol	4.477	112	1883760	36.95	ppm	-0.03
Spiked Amount 50.000			Recovery = 73.90%			
4) Phenol-d5	6.072	99	3147702	37.32	ppm	-0.02
Spiked Amount 50.000			Recovery = 74.64%			
7) Nitrobenzene-d5	7.662	82	3100886	39.54	ppm	-0.05
Spiked Amount 50.000			Recovery = 79.08%			
15) 2-Fluorobiphenyl	11.222	172	6329419	44.04	ppm	-0.08
Spiked Amount 50.000			Recovery = 88.08%			
20) 2,4,6-Tribromophenol	14.108	330	731062	44.66	ppm	-0.06
Spiked Amount 50.000			Recovery = 89.32%			
28) Terphenyl-d14	18.581	244	6086851	51.14	ppm	-0.08
Spiked Amount 50.000			Recovery = 102.28%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.267	88	12143	0.58	ppm #	55
5) Phenol	6.085	94	341310	3.75	ppm #	90
6) bis(2-Chloroethyl)ether	6.218	93	49838	0.73	ppm #	62
8) Nitrobenzene	7.700	77	64440	0.76	ppm	68
9) Naphthalene	9.056	128	189392	0.84	ppm	94
10) Hexachlorobutadiene	9.338	225	28043	0.71	ppm	89
11) 2-Methylnaphthalene	10.426	141	100841	0.85	ppm #	63
13) Hexachlorocyclopentadiene	10.775	237	20525	0.66	ppm	82
16) Acenaphthylene	12.211	152	170278	0.94	ppm	98
17) Acenaphthene	12.567	153	116848	0.97	ppm	100
18) 4,6-dinitro-2-methylph...	13.769	198	46033	3.05	ppm #	18
19) Fluorene	13.599	166	136945	0.94	ppm	96
22) Hexachlorobenzene	14.702	284	37198	0.96	ppm	99
23) Pentachlorophenol	15.119	266	97389	3.68	ppm	82
24) Phenanthrene	15.521	178	210424	1.05	ppm #	56
25) Anthracene	15.614	178	190549	1.07	ppm	87
26) Fluoranthene	17.793	202	246392	0.98	ppm	96
27) Pyrene	18.179	202	241331	1.03	ppm	94
29) Benzo[a]anthracene	20.281	228	200764	0.89	ppm	92
30) Chrysene	20.327	228	206059	0.96	ppm	89
32) Benzo[b]fluoranthene	21.949	252	203384	0.91	ppm	87
33) Benzo[k]fluoranthene	21.980	252	183684	0.89	ppm	94
34) Benzo[a]pyrene	22.398	252	186977	0.90	ppm	90
35) Indeno[1,2,3-cd]pyrene	23.881	276	200417	0.95	ppm	97
36) Dibenz[a,h]anthracene	23.918	278	160462	0.92	ppm	100
37) Benzo[g,h,i]perylene	24.257	276	172532	0.94	ppm	99

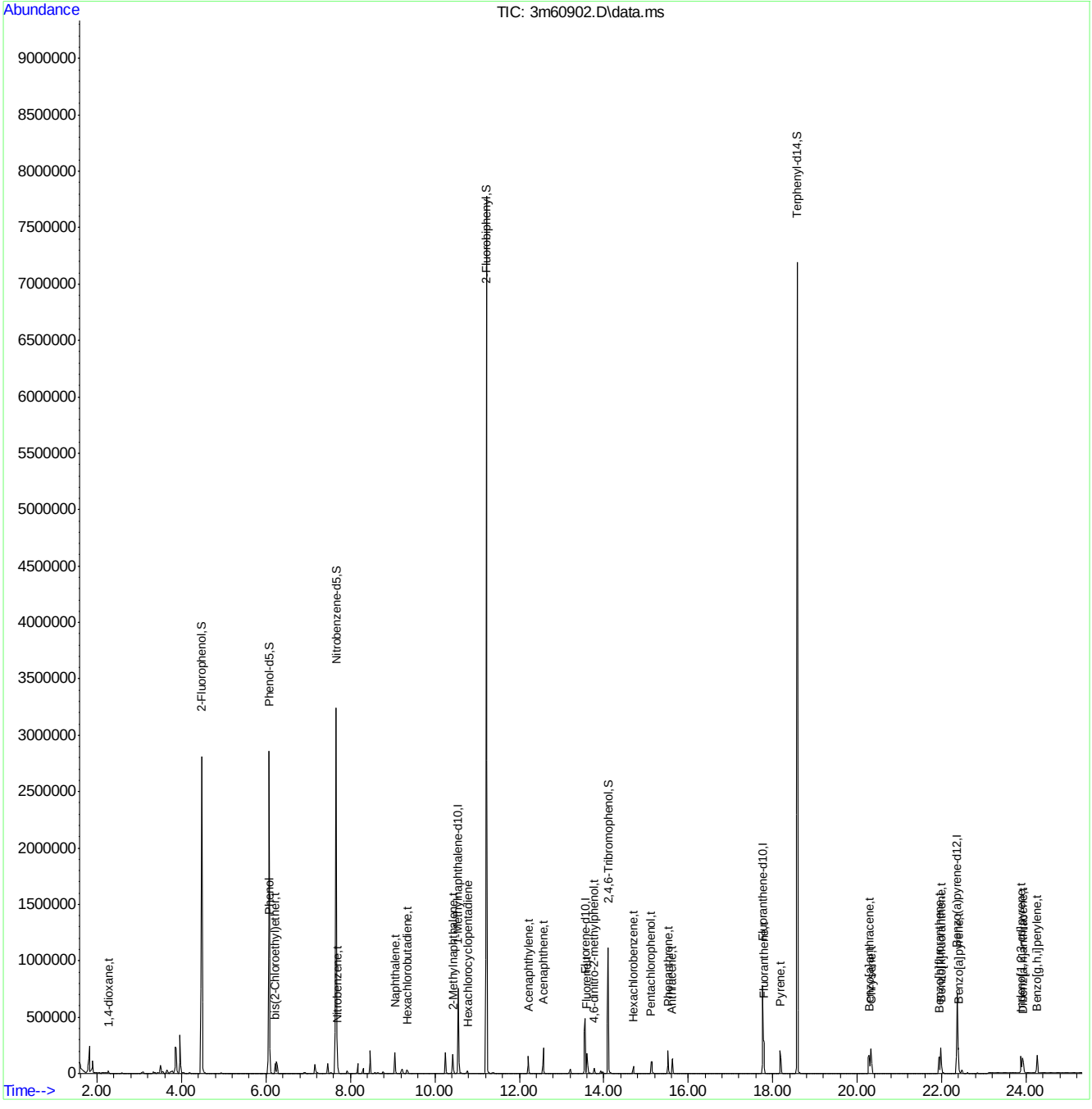
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60902.D
Acq On : 27 Apr 2016 2:13 am
Operator : juliusj
Sample : op93364a-msd
Misc : op93364a,e3m2863,31.7
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 27 14:04:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 26 09:22:28 2016
Response via : Initial Calibration



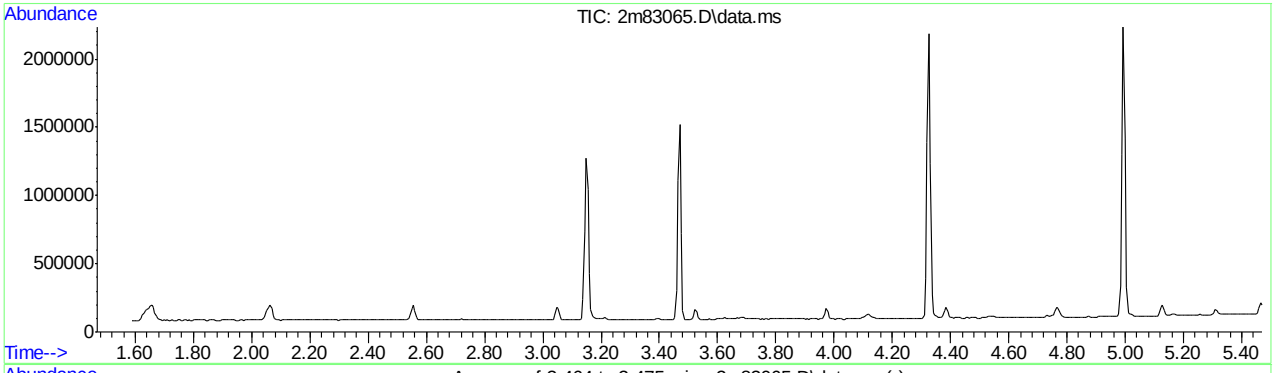
SGS ACCUTEST JC18649

DFTPP

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83065.D
Acq On : 15 Apr 2016 8:54 am
Operator : ashleyn
Sample : dftpp
Misc : op92470,e2m3649
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\dftpp2m.M
Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
Last Update : Thu Mar 24 11:54:32 2016



AutoFind: Scans 352, 353, 354; Background Corrected with Scan 347

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	31.9	37940	PASS
68	69	0.00	2	1.4	639	PASS
69	198	0.00	100	39.3	46753	PASS
70	69	0.00	2	0.3	130	PASS
127	198	40	60	56.4	66973	PASS
197	198	0.00	1	0.5	632	PASS
198	198	100	100	100.0	118837	PASS
199	198	5	9	6.7	7926	PASS
275	198	10	30	24.8	29432	PASS
365	198	1	100	3.5	4151	PASS
441	443	0.10	100	70.6	13293	PASS
442	198	40	100	81.2	96506	PASS
443	442	17	23	19.5	18829	PASS

SGS ACCUTEST JC18649

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.00	290	58.00	113	70.00	130	82.00	937
39.05	2435	59.95	52	71.05	47	82.95	909
40.00	86	61.05	504	73.05	265	85.00	530
45.00	41	62.00	585	74.05	4421	87.00	390
50.05	9741	63.10	1841	75.10	7535	88.95	136
51.05	37940	64.00	233	76.10	2806	91.00	819
52.05	2019	64.95	911	77.05	58880	92.00	995
53.00	33	65.95	15	78.05	4283	93.00	5719
55.00	79	66.95	15	79.00	3225	94.00	339
56.00	1072	68.05	639	79.95	2658	95.00	126
57.00	2566	69.00	46753	80.95	3902	95.95	361

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.90	122	108.05	2980	118.95	201	130.00	2165
98.00	4222	109.00	541	120.00	232	131.00	445
99.00	3803	110.00	34410	120.95	123	132.00	206
100.00	332	111.00	5041	122.05	1222	132.95	91
101.00	2260	112.00	551	123.00	1829	134.00	662
101.95	158	112.95	251	124.00	823	135.00	2013
102.95	701	113.95	53	125.00	854	136.00	826
104.00	1314	114.90	34	126.15	340	137.10	1083
105.00	1397	116.05	995	127.10	66973	138.00	235
105.95	393	117.00	12815	128.05	5159	138.95	163
107.00	17506	118.00	954	129.00	25263	139.95	279

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.00	3091	151.95	222	162.95	125	174.00	1247
142.05	1051	153.00	1033	163.95	164	175.05	2337
143.00	610	154.00	657	165.00	1180	176.10	735
144.00	197	155.05	1688	166.00	975	177.00	1045
145.05	178	156.10	2815	166.95	6255	178.00	356
146.00	529	157.05	505	168.00	3146	179.00	4418
147.00	1545	158.00	525	169.05	536	180.10	3138
148.00	3762	159.00	433	169.95	193	181.00	1507
149.00	652	160.00	1011	170.90	229	182.05	259
150.00	197	161.00	1315	172.00	575	182.95	141
151.00	295	162.05	407	173.00	736	184.00	336

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
185.00	2086	194.90	143	206.10	28538	216.00	617
186.10	16833	195.10	96	207.10	3611	217.00	7122
187.10	4729	196.05	3640	208.00	1001	218.05	862
188.05	504	197.10	632	209.00	262	218.90	21
189.00	1016	198.00	118837	210.10	451	219.05	61
189.90	102	199.00	7926	211.10	1005	220.10	51
190.10	39	200.00	579	211.70	85	221.05	5621
191.05	512	201.50	455	212.00	95	222.10	419
192.05	1373	203.00	799	212.95	78	223.00	1505
193.05	1496	204.10	4004	214.00	17	224.10	15262
194.00	309	205.10	6616	214.95	291	225.10	3944

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
226.10	409	237.00	539	247.95	120	259.00	623
227.10	6236	238.00	75	249.00	412	259.95	101
228.00	918	239.00	232	249.90	101	260.95	100
229.05	1352	239.95	201	251.05	140	262.90	22

230.05	166	241.00	323	252.05	155	263.90	38
231.05	528	242.10	747	253.00	252	265.00	1388
232.05	136	243.10	784	254.05	537	265.90	174
233.00	122	244.10	11661	255.10	61797	266.95	41
234.00	357	245.10	1593	256.10	9238	267.90	10
235.00	531	246.05	2189	257.05	676	269.00	28
236.00	273	247.00	437	258.05	3502	269.95	90

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
271.00	103	281.95	102	292.05	98	303.10	1036
272.00	64	283.05	225	293.05	507	304.00	290
272.15	118	283.85	75	294.00	163	308.00	117
273.05	1981	284.10	160	294.95	156	308.95	88
274.10	5162	285.05	434	296.10	7969	309.70	21
275.10	29432	286.00	89	297.05	1142	310.05	99
276.10	3996	288.00	23	297.95	82	310.90	20
277.05	2291	289.00	67	300.90	25	312.95	54
278.00	405	289.95	78	301.05	72	314.00	482
279.00	108	291.00	83	301.90	39	315.05	933
281.05	2	291.80	25	302.10	101	316.05	500

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
317.05	82	329.90	18	347.00	108	370.00	93
320.00	27	332.05	258	351.00	50	371.00	261
320.90	263	333.05	332	352.05	936	372.10	1849
321.95	151	334.10	2074	353.05	657	373.05	473
323.10	2860	335.05	542	354.05	984	374.00	32
324.05	583	336.00	69	355.05	202	377.10	35
325.00	42	339.10	33	359.00	93	383.00	497
326.00	31	341.05	346	364.00	34	383.95	142
327.05	557	342.05	101	365.00	4151	385.00	42
327.95	301	345.20	19	366.00	634	390.00	244
329.10	60	346.05	676	367.00	22	391.00	155

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

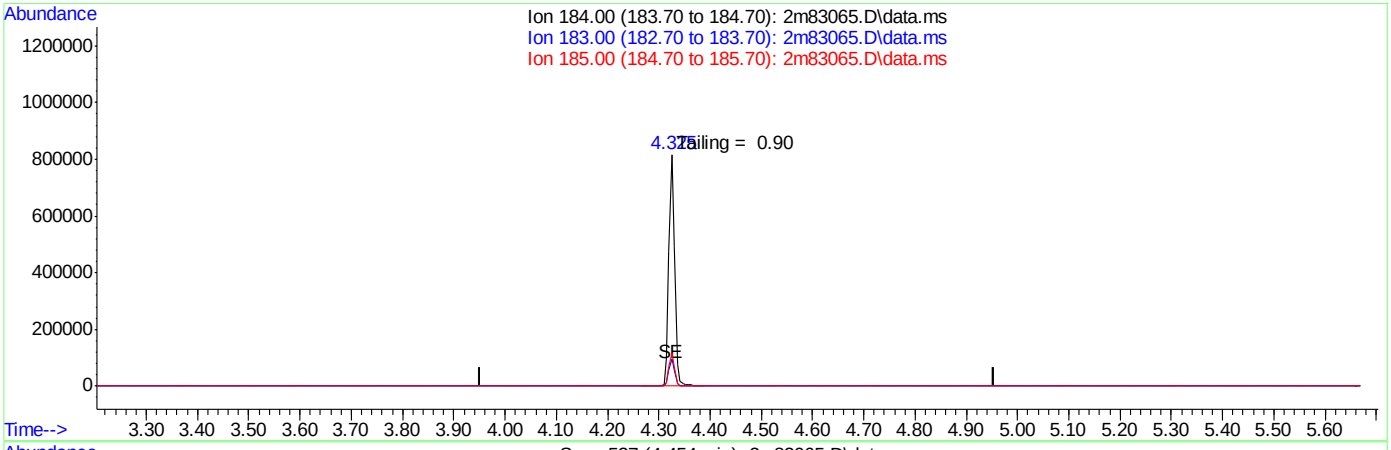
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
392.00	122	424.10	1423				
401.05	110	425.00	144				
402.00	666	429.20	17				
403.05	1101	440.20	17				
404.05	377	441.10	13293				
405.05	58	442.10	96506				
410.00	27	443.10	18829				
415.00	83	444.10	1711				
421.00	889	445.05	90				
422.10	824						
423.10	6831						

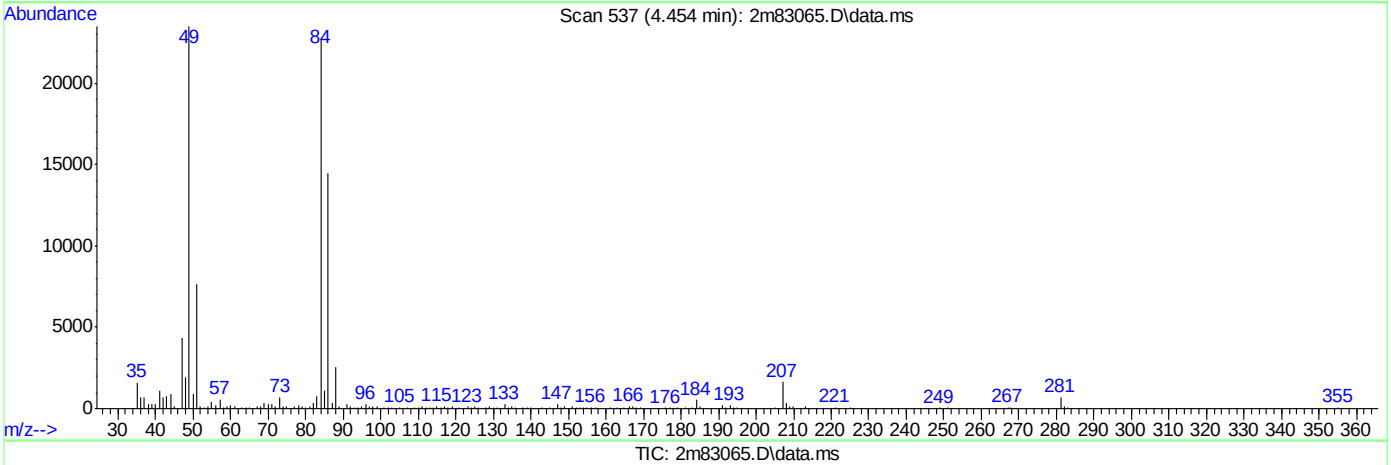
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83065.D
Acq On : 15 Apr 2016 8:54 am
Operator : ashleyn
Sample : dftpp
Misc : op92470,e2m3649
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 09:05:14 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83065.D\data.ms

(1) Benzidine

4.454min (-4.454) 0.00

response 0

Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

7.5.1.1

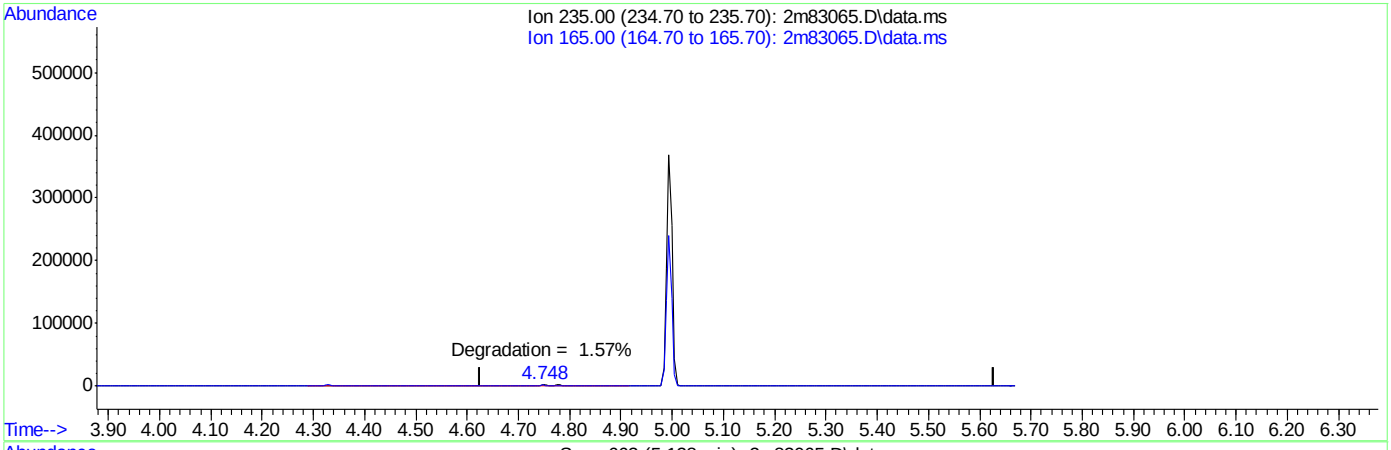
7

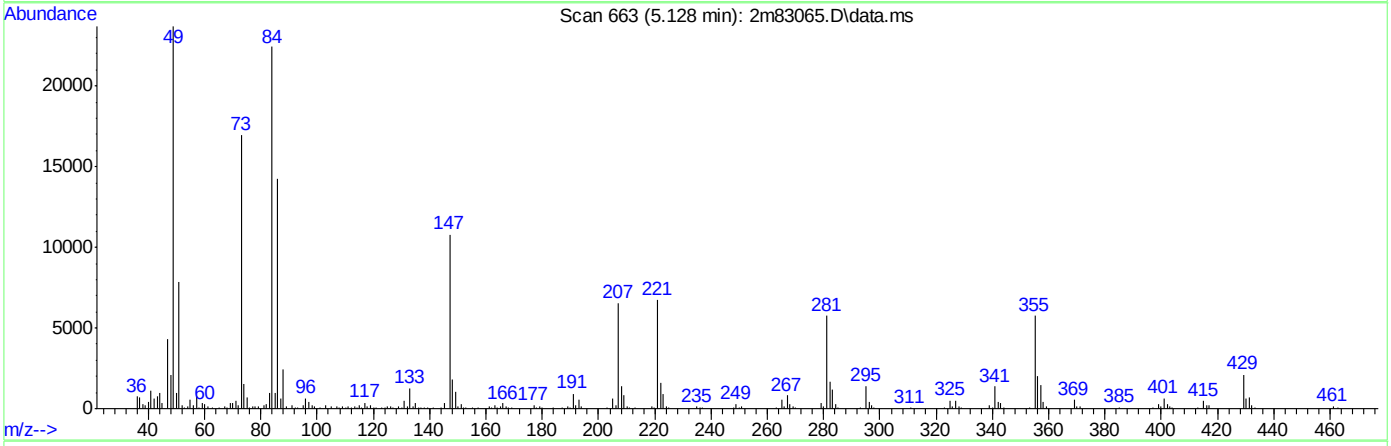
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83065.D
Acq On : 15 Apr 2016 8:54 am
Operator : ashleyn
Sample : dftpp
Misc : op92470,e2m3649
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 09:05:14 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83065.D\data.ms

(2) ddt

5.128min (-5.128) 0.00

response 0

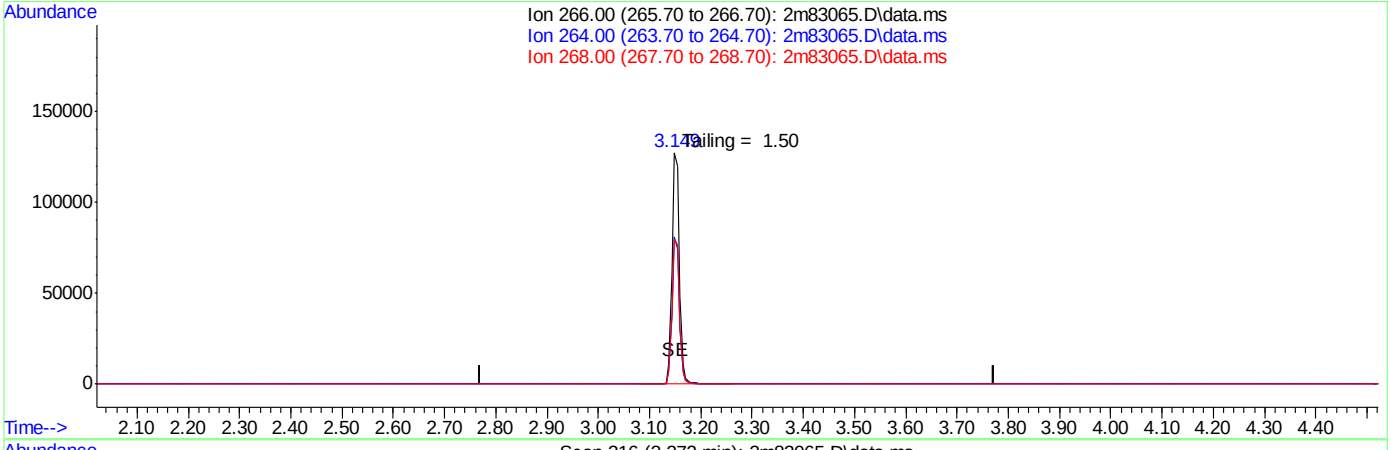
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

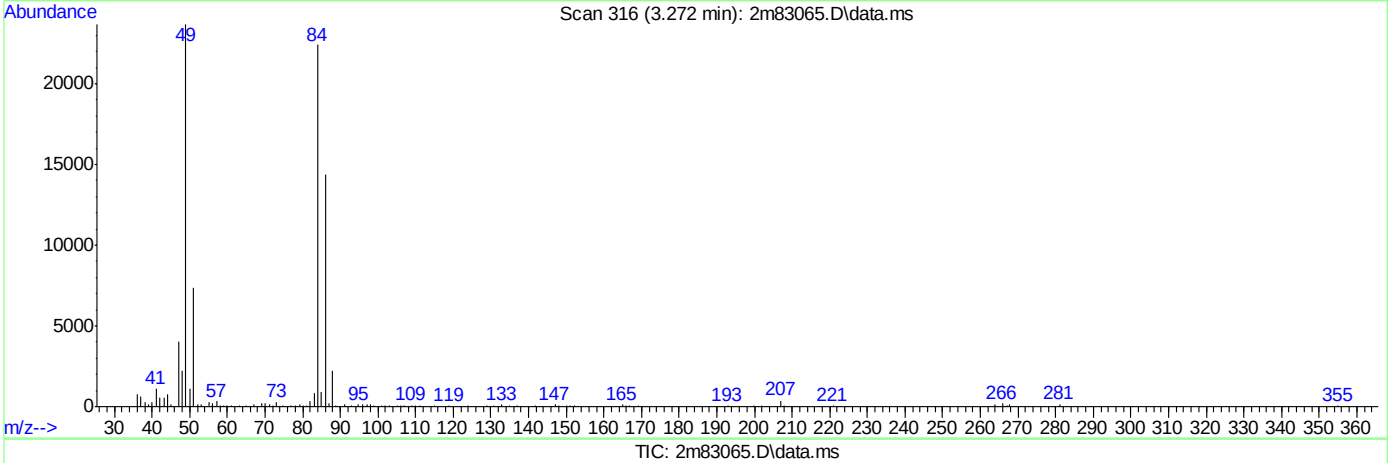
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83065.D
Acq On : 15 Apr 2016 8:54 am
Operator : ashleyn
Sample : dftpp
Misc : op92470,e2m3649
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 09:05:14 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83065.D\data.ms

(3) Pentachlorophenol

3.272min (-3.272) 0.00

response 0

Ion	Exp%	Act%
266.00	100	0.00
264.00	0.00	0.00
268.00	0.00	0.00
0.00	0.00	0.00

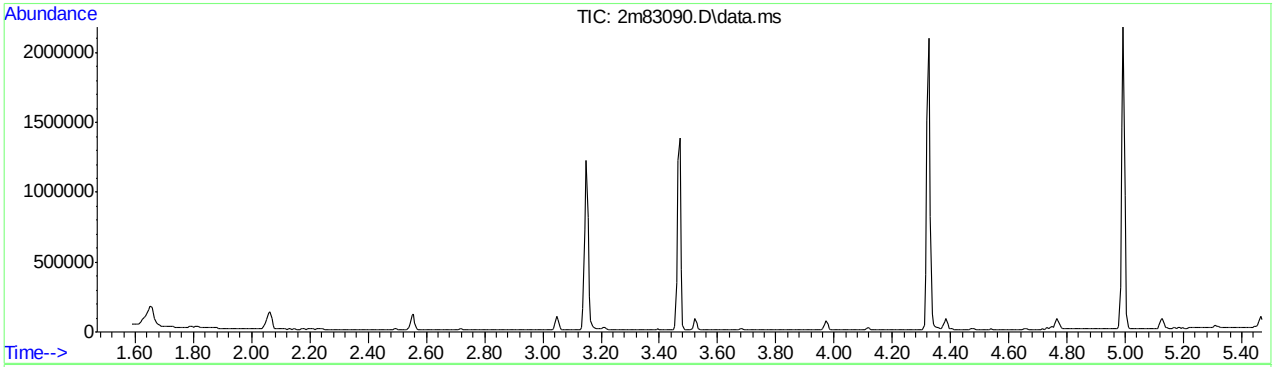
SGS ACCUTEST JC18649

DFTPP

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83090.D
Acq On : 15 Apr 2016 3:07 pm
Operator : ashleyn
Sample : dftpp
Misc : op92470,e2m3651
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\dftpp2m.M
Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
Last Update : Thu Mar 24 11:54:32 2016



AutoFind: Scans 352, 353, 354; Background Corrected with Scan 346

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.3	35073	PASS
68	69	0.00	2	1.5	641	PASS
69	198	0.00	100	36.9	42662	PASS
70	69	0.00	2	0.6	262	PASS
127	198	40	60	53.6	62040	PASS
197	198	0.00	1	0.7	757	PASS
198	198	100	100	100.0	115669	PASS
199	198	5	9	6.6	7581	PASS
275	198	10	30	25.5	29541	PASS
365	198	1	100	3.8	4378	PASS
441	443	0.10	100	71.6	14617	PASS
442	198	40	100	89.3	103277	PASS
443	442	17	23	19.8	20423	PASS

SGS ACCUTEST JC18649

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	71	54.20	22	65.10	852	76.10	2432
38.00	339	55.05	123	66.05	49	77.10	53691
39.05	2235	56.00	1133	67.00	8	78.05	3536
40.00	10	57.00	2531	68.05	641	79.00	3206
45.05	110	58.00	144	69.00	42662	80.00	2523
47.00	6	58.95	63	70.00	262	81.00	3693
47.95	10	60.05	50	70.90	19	82.00	831
50.10	8849	61.00	391	71.10	18	82.95	714
51.05	35073	62.00	513	73.00	343	85.00	687
52.10	1954	63.00	1668	74.10	4349	86.00	776
53.00	82	64.00	179	75.05	6904	86.95	455

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.95	150	100.00	334	111.00	4855	120.95	96
89.00	137	101.00	2169	112.00	529	122.00	1044
91.00	885	102.00	141	113.05	200	123.00	1697
92.00	877	103.00	636	113.80	23	124.00	751
93.00	5366	104.00	1417	114.05	50	125.00	726
94.00	439	105.00	1236	115.05	81	126.15	302
94.95	85	106.00	377	116.00	898	127.00	62040
95.95	286	107.00	16622	117.00	11872	128.00	4698
96.95	83	108.00	2691	118.00	933	129.00	23403
98.00	4146	109.00	477	119.00	149	130.00	2037
99.00	3747	110.00	31535	119.95	214	131.00	436

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
132.05	188	143.00	687	153.00	994	164.00	166
132.95	71	144.00	196	154.00	692	165.00	1107
134.00	608	144.95	148	155.05	1611	166.00	892
135.00	1853	146.00	568	156.10	2657	167.00	5716
136.00	837	147.00	1425	157.00	425	168.05	2908
137.05	1140	148.00	3301	157.95	540	169.00	548
138.00	217	149.05	785	159.00	482	170.05	191
138.90	123	150.00	216	160.00	913	171.00	252
140.00	241	151.00	342	161.00	1482	172.00	554
141.00	2993	151.50	31	162.00	320	173.05	709
142.00	911	151.90	89	163.05	97	174.05	1211

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.10	2264	185.05	1873	196.10	3284	207.05	3663
176.10	574	186.10	15800	197.10	757	208.00	826
177.00	1016	187.10	4447	198.00	115669	208.95	220
177.90	330	188.05	469	199.00	7581	210.20	401
179.00	4291	189.00	933	200.00	680	211.00	1083
180.05	2867	189.90	159	200.80	17	212.05	133
181.05	1349	191.00	341	201.60	501	213.05	59
182.00	247	192.00	1338	203.00	728	215.00	357
183.00	72	193.05	1453	204.10	3869	216.05	548
183.20	46	194.10	300	205.10	6423	217.00	7036
184.00	383	195.05	179	206.10	27478	218.00	929

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
218.95	75	230.00	164	240.00	120	251.10	81
219.60	22	231.00	481	240.95	313	251.85	87
221.10	5261	232.00	73	242.10	795	252.10	23
222.00	123	232.95	136	243.10	834	253.05	266

dftpp2m.M Fri Apr 15 17:47:56 2016 Page: 2

223.05	1585	234.00	387	244.10	11373	254.00	136
224.10	14802	235.00	412	245.10	1526	254.20	352
225.10	3895	236.00	296	246.05	2177	255.10	61197
226.00	413	237.00	482	247.00	501	256.10	8941
227.05	6022	238.05	76	248.00	122	257.05	677
228.00	805	239.00	234	249.00	469	258.05	3627
229.00	1228	239.80	63	250.00	86	259.00	615

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
259.95	125	273.05	1720	285.05	470	297.95	101
260.95	121	274.10	4914	286.05	77	300.95	104
263.00	25	275.10	29541	289.00	122	301.95	125
263.90	87	276.10	4033	290.10	88	303.10	1076
265.00	1502	277.10	2500	291.00	21	304.00	259
265.90	201	278.00	409	292.05	117	305.10	41
267.00	23	278.95	76	293.00	533	308.05	117
267.90	24	281.05	20	294.00	142	309.00	71
270.00	68	282.00	98	295.05	151	310.00	110
271.10	146	283.00	230	296.10	8184	313.00	75
272.10	166	284.05	208	297.10	1143	314.05	426

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
315.05	878	328.05	281	341.05	364	361.00	17
316.05	568	329.05	49	342.00	127	365.00	4378
317.00	126	332.00	196	346.00	657	366.00	615
320.00	21	333.00	290	346.95	105	366.90	17
321.05	302	334.10	1987	350.00	18	370.00	124
322.05	178	335.10	639	351.00	49	371.00	197
323.10	2907	335.90	17	352.10	882	372.10	1896
324.10	493	336.10	23	353.05	639	373.10	426
325.10	36	338.80	17	354.05	973	374.10	17
326.00	38	339.10	26	355.05	219	377.05	55
327.00	534	340.10	20	359.00	33	383.00	540

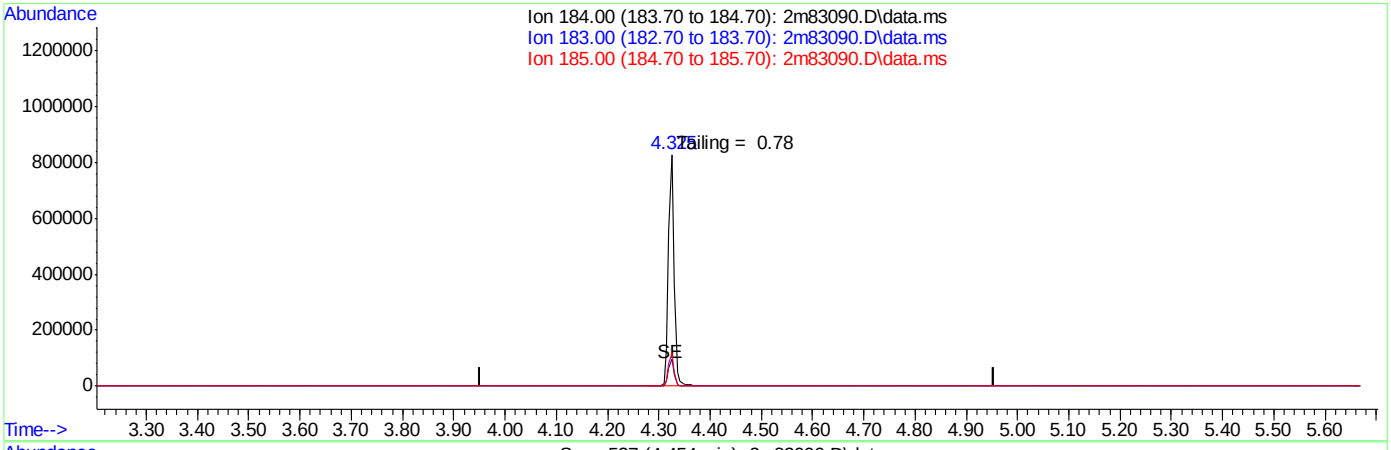
Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

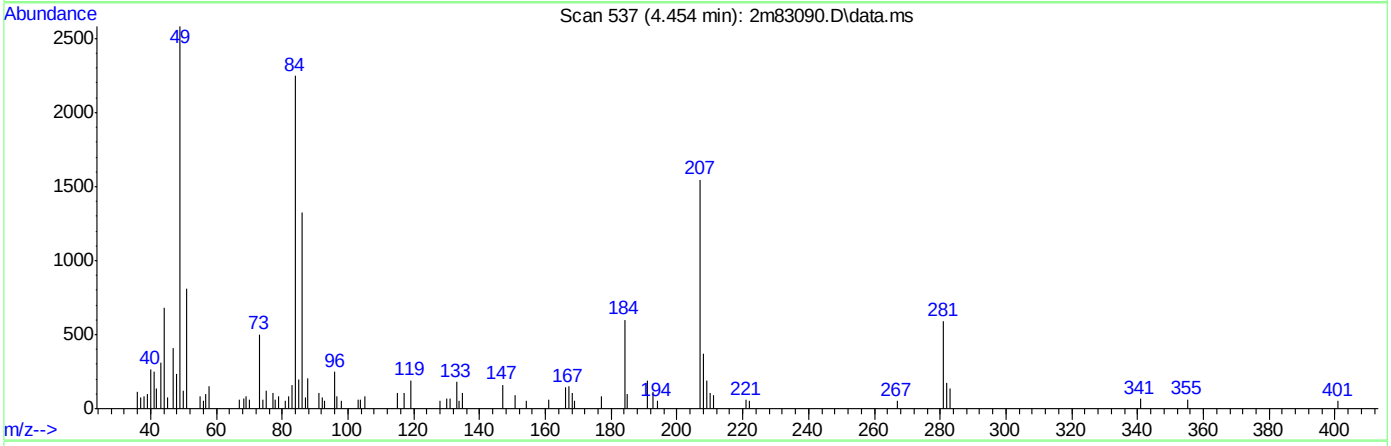
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
384.00	148	415.00	39	443.10	20423		
385.00	17	420.10	17	444.10	1940		
390.00	278	421.05	959	445.05	125		
391.10	200	422.05	876				
392.05	97	423.10	6873				
401.05	113	424.10	1567				
402.05	796	425.05	178				
403.10	1207	434.10	21				
404.00	385	434.90	17				
405.00	18	441.10	14617				
410.00	19	442.10	103277				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83090.D
Acq On : 15 Apr 2016 3:07 pm
Operator : ashleyn
Sample : dftpp
Misc : op92470,e2m3651
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 15:16:23 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83090.D\data.ms

(1) Benzidine

4.454min (-4.454) 0.00

response 0

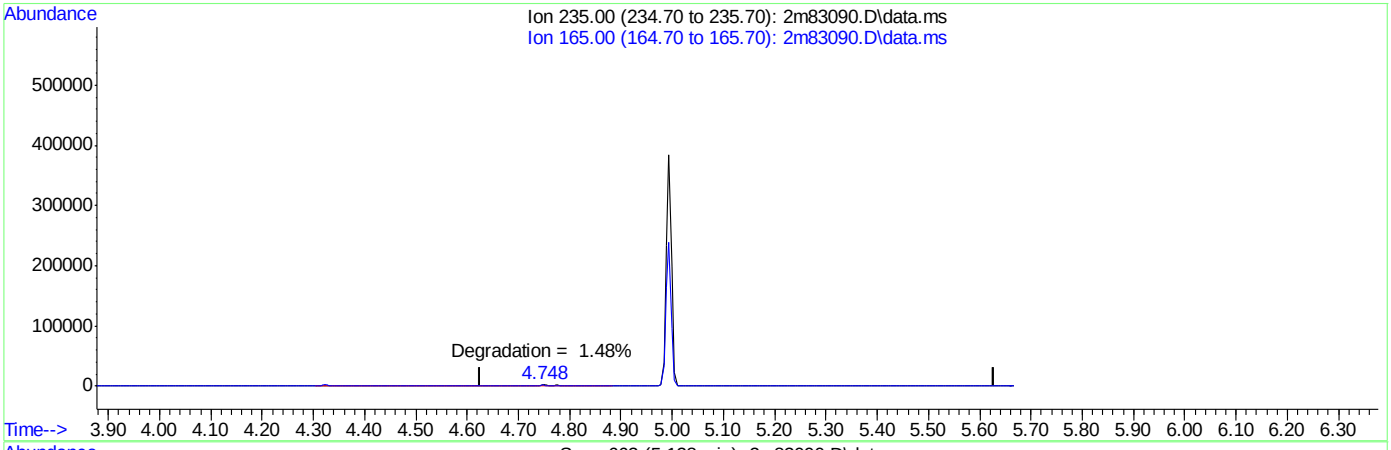
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

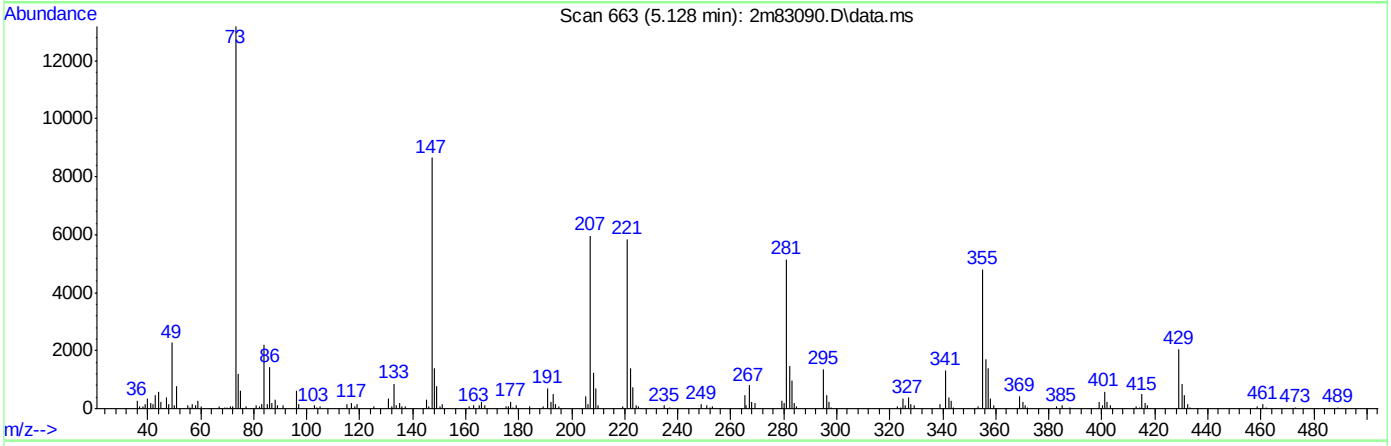
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83090.D
Acq On : 15 Apr 2016 3:07 pm
Operator : ashleyn
Sample : dftpp
Misc : op92470,e2m3651
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 15:16:23 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83090.D\data.ms

(2) ddt

5.128min (-5.128) 0.00

response 0

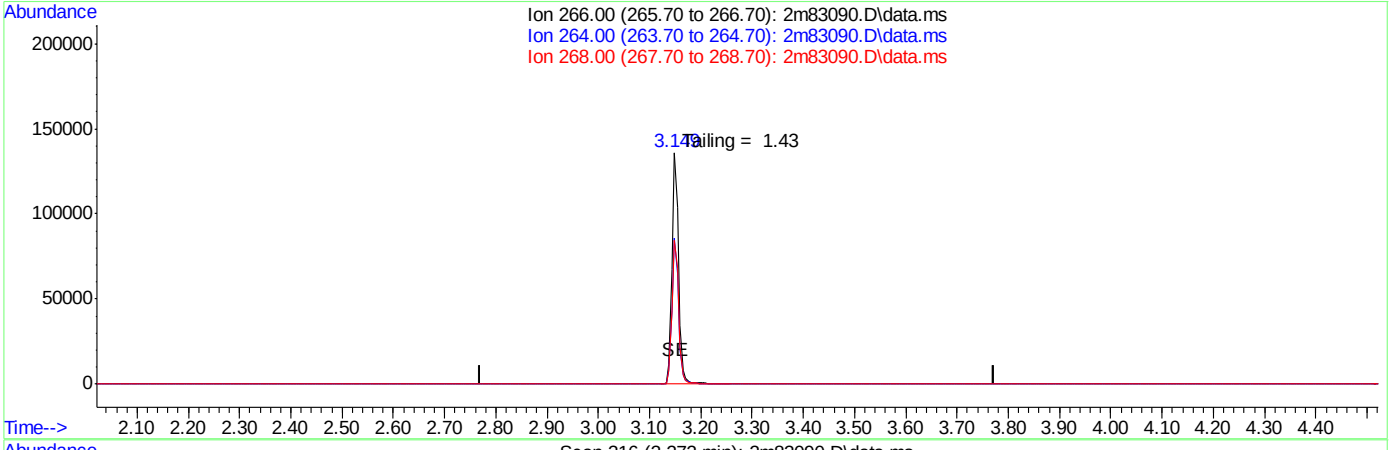
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

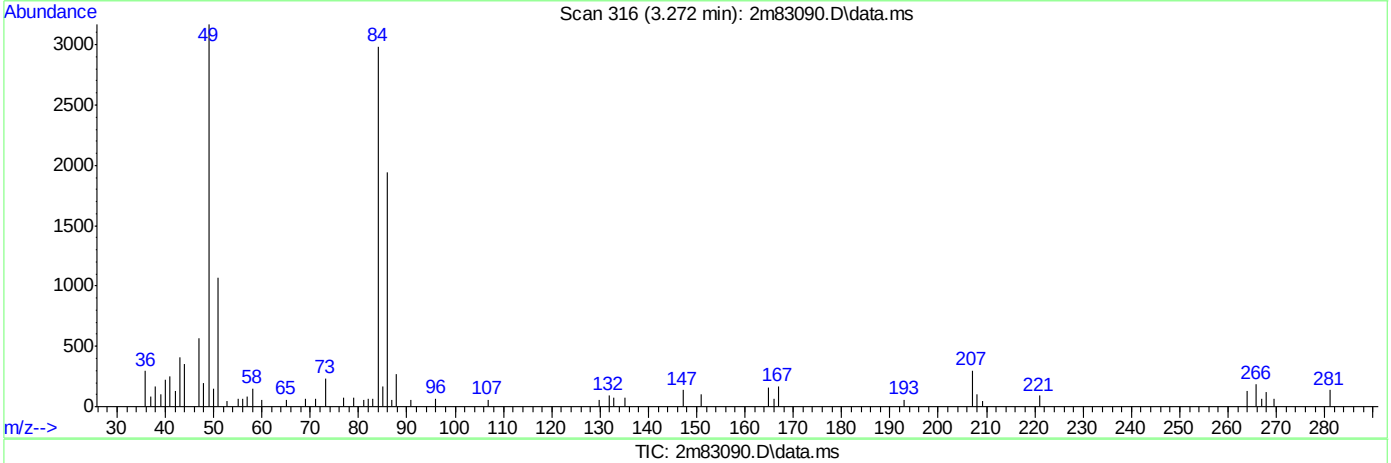
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83090.D
Acq On    : 15 Apr 2016   3:07 pm
Operator  : ashleyn
Sample    : dftpp
Misc      : op92470,e2m3651
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Apr 15 15:16:23 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title  : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration
```





TIC: 2m83090.D\data.ms

(3) Pentachlorophenol

3.272min (-3.272) 0.00

response 0

Ion	Exp%	Act%
266.00	100	0.00
264.00	0.00	0.00
268.00	0.00	0.00
0.00	0.00	0.00

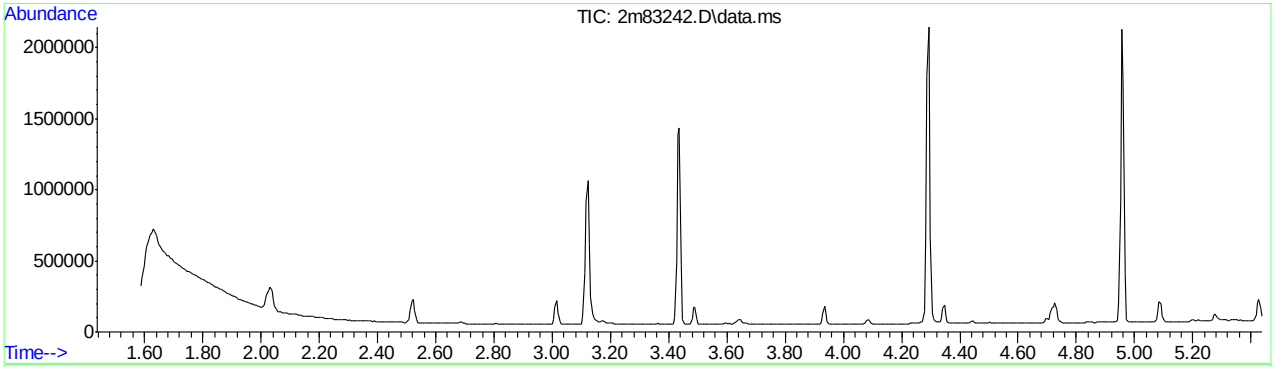
SGS ACCUTEST JC18649

DFTPP

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83242.D
Acq On : 21 Apr 2016 9:05 am
Operator : ashleyn
Sample : dftpp
Misc : op92330,e2m3657
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\dftpp2m.M
Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
Last Update : Thu Mar 24 11:54:32 2016



AutoFind: Scans 346, 347, 348; Background Corrected with Scan 338

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.0	35393	PASS
68	69	0.00	2	1.7	731	PASS
69	198	0.00	100	35.9	42359	PASS
70	69	0.00	2	0.8	344	PASS
127	198	40	60	54.6	64401	PASS
197	198	0.00	1	0.1	102	PASS
198	198	100	100	100.0	117952	PASS
199	198	5	9	6.8	8004	PASS
275	198	10	30	27.5	32409	PASS
365	198	1	100	4.1	4818	PASS
441	443	0.10	100	74.6	15617	PASS
442	198	40	100	90.7	106938	PASS
443	442	17	23	19.6	20928	PASS

SGS ACCUTEST JC18649

Average of 3.432 to 3.443 min.: 2m83242.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	108	58.00	174	70.00	344	82.00	804
38.00	337	59.00	19	72.05	114	83.05	762
39.10	2422	61.00	555	73.05	242	85.05	451
40.00	80	62.00	518	74.00	4468	86.00	145
50.05	8768	63.05	1641	75.05	6852	87.00	454
51.05	35393	64.05	252	76.05	2389	87.95	208
52.10	1787	65.05	816	77.05	53036	89.00	58
53.00	70	66.00	44	78.05	3471	91.00	775
54.00	1	67.05	4	79.00	3117	91.95	1019
56.00	907	68.00	731	80.00	2621	93.00	5155
57.05	2400	69.00	42359	81.00	3507	94.00	365

Average of 3.432 to 3.443 min.: 2m83242.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	166	106.00	538	118.00	908	129.00	24517
96.05	257	107.00	17192	119.00	111	130.00	2120
97.05	64	108.00	2551	120.00	207	131.00	444
98.00	4190	109.05	426	121.05	67	131.90	121
99.00	3515	110.00	31836	122.00	1096	132.00	57
100.00	293	111.00	4853	123.00	1677	132.90	63
101.00	2072	112.00	533	124.05	748	134.00	673
101.95	111	112.95	199	125.00	740	135.05	1961
103.00	762	114.05	51	126.10	209	136.00	806
104.00	1415	116.00	864	127.10	64401	137.00	880
105.00	1281	117.00	12337	128.05	4917	138.05	258

Average of 3.432 to 3.443 min.: 2m83242.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
139.05	171	150.05	240	161.00	1578	172.00	671
140.00	208	151.10	364	162.00	429	173.00	681
141.00	3096	152.00	167	163.10	86	174.10	1273
142.00	1094	153.00	940	163.95	181	175.10	2447
143.00	762	154.10	768	165.00	1208	176.05	778
144.05	280	155.05	1703	166.00	982	177.00	1193
145.00	189	156.10	2660	167.05	5871	178.00	443
146.00	512	157.05	444	168.00	2838	179.00	4666
147.05	1667	158.05	597	169.00	483	180.05	3077
148.00	3361	159.00	399	170.05	149	181.00	1465
149.00	691	160.00	957	171.05	282	182.05	200

Average of 3.432 to 3.443 min.: 2m83242.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
183.05	179	193.05	1472	205.05	6893	213.95	49
184.00	343	194.05	382	206.10	29615	214.20	18
185.10	2163	195.10	196	207.10	3731	215.10	377
186.10	17273	196.10	3299	208.00	1019	216.10	625
187.10	4859	197.10	102	209.00	280	217.05	7713
188.00	512	198.00	117952	210.05	485	218.05	894
189.00	1040	199.00	8004	211.05	1158	219.05	91
190.00	127	200.10	700	211.80	128	220.10	37
191.00	479	201.55	502	212.00	26	221.10	5083
191.20	121	203.05	808	212.95	8	221.80	512
192.10	1351	204.10	4051	213.20	16	222.00	562

Average of 3.432 to 3.443 min.: 2m83242.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
223.00	1647	232.70	20	243.10	950	251.00	155
224.10	16237	233.05	110	244.10	12396	252.05	164
225.10	3972	234.00	338	245.10	1631	253.05	259
226.05	455	235.05	476	246.10	2465	254.10	536

227.10	6954	236.00	266	247.00	603	255.10	68408
228.00	887	237.10	535	247.90	47	256.10	9983
229.05	1445	238.00	98	248.10	56	257.05	750
229.80	35	239.00	247	248.30	19	258.10	4131
230.05	144	240.00	230	249.00	445	259.05	588
231.10	651	241.00	387	250.10	92	260.10	112
232.05	91	242.10	875	250.30	18	261.05	99

Average of 3.432 to 3.443 min.: 2m83242.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
261.90	17	274.10	5560	286.05	102	297.90	36
263.25	48	275.10	32409	288.00	22	298.05	59
263.90	8	276.10	4534	289.00	144	299.05	44
265.05	1611	277.10	2756	290.05	94	300.95	107
265.95	259	278.05	467	291.00	55	302.05	159
267.00	33	279.00	126	292.00	125	303.10	1268
269.00	17	281.05	26	293.05	639	304.10	295
269.90	90	282.00	113	293.95	171	308.00	127
271.05	153	283.10	379	295.00	181	309.05	64
272.00	227	284.10	254	296.10	9379	310.05	118
273.10	2190	285.10	587	297.10	1147	311.10	22

Average of 3.432 to 3.443 min.: 2m83242.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
312.00	17	324.80	21	338.90	19	352.10	1018
313.00	109	325.05	73	339.10	21	353.10	793
314.10	458	326.05	52	340.00	54	354.10	1179
315.05	1092	327.00	657	341.10	434	355.10	276
316.10	608	328.00	308	341.80	19	356.00	21
317.10	96	329.10	18	342.10	140	357.20	20
320.10	43	332.10	247	343.15	40	359.10	94
321.00	348	333.00	342	346.00	819	360.10	18
321.95	158	334.10	2226	347.05	137	365.10	4818
323.10	3265	335.05	584	348.30	18	366.05	793
324.05	626	336.05	101	351.10	70	367.00	22

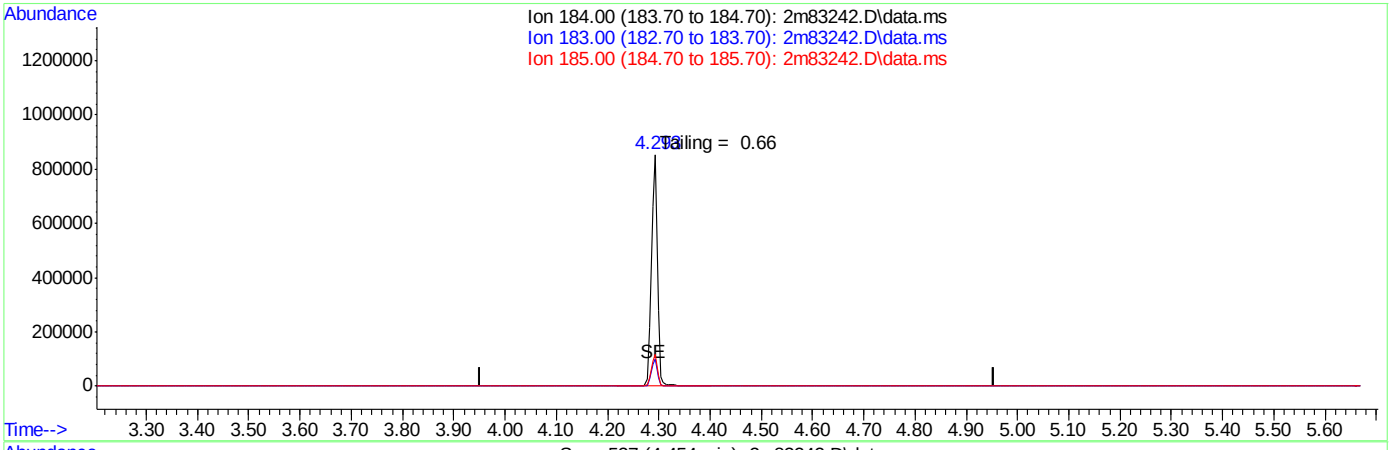
Average of 3.432 to 3.443 min.: 2m83242.D\data.ms
dftpp
Modified:subtracted

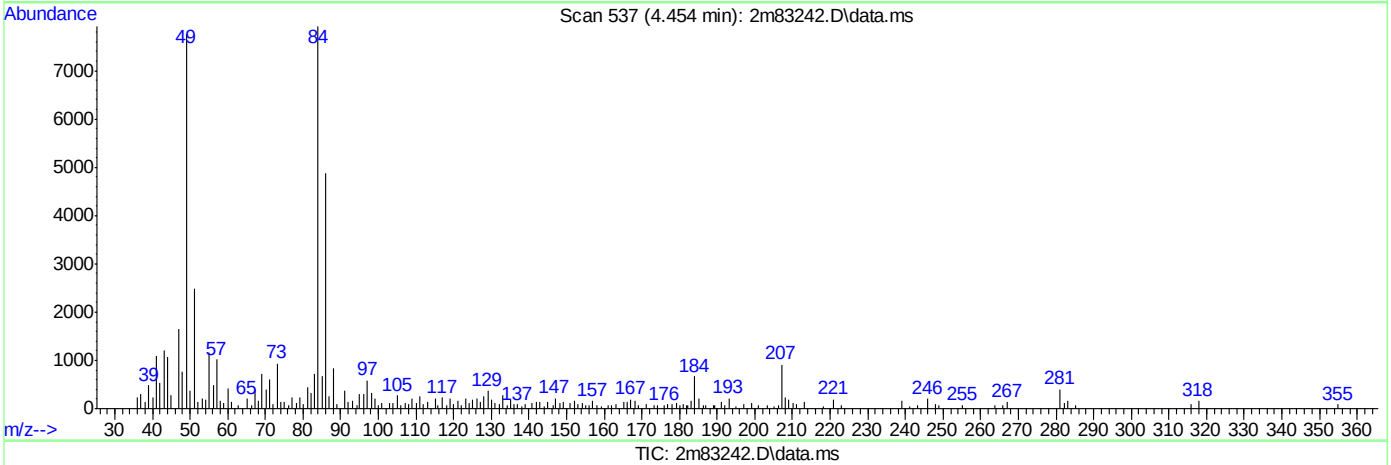
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
370.05	118	391.10	189	421.10	1069	443.20	20928
371.10	328	392.05	174	422.10	989	444.10	2116
372.10	1949	401.05	141	423.10	7586	445.10	113
373.05	419	402.05	905	424.10	1453		
374.10	27	403.10	1196	425.05	135		
377.00	33	404.05	472	433.10	20		
383.05	515	405.10	86	435.40	20		
383.90	81	410.00	19	435.90	16		
384.10	79	415.05	42	436.60	20		
385.00	30	415.40	17	441.20	15617		
390.05	363	416.00	17	442.10	106938		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83242.D
Acq On : 21 Apr 2016 9:05 am
Operator : ashleyn
Sample : dftpp
Misc : op92330,e2m3657
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 09:12:56 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83242.D\data.ms

(1) Benzidine

4.454min (-4.454) 0.00

response 0

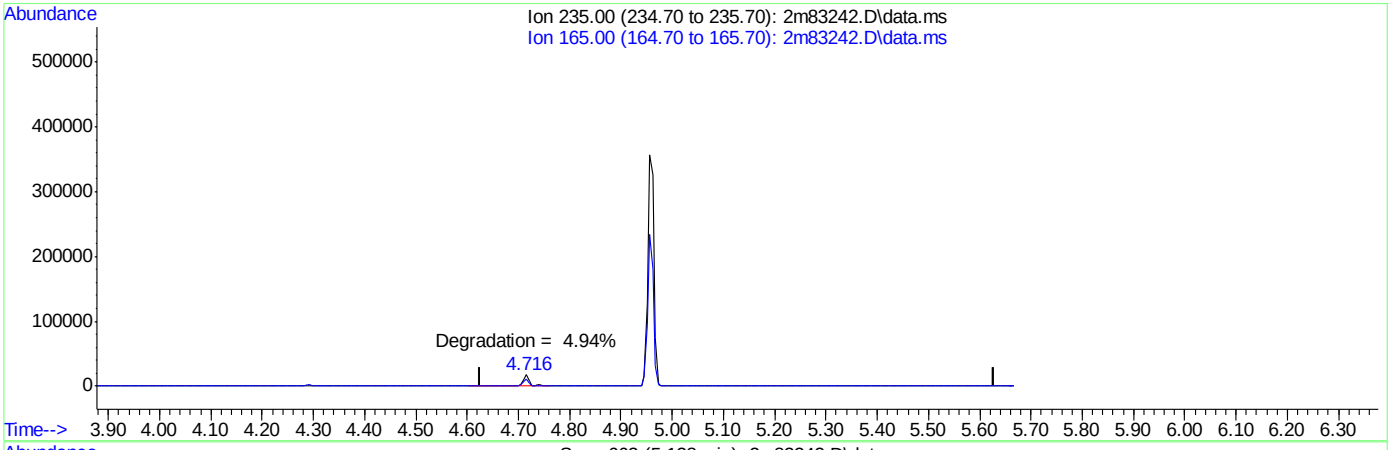
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

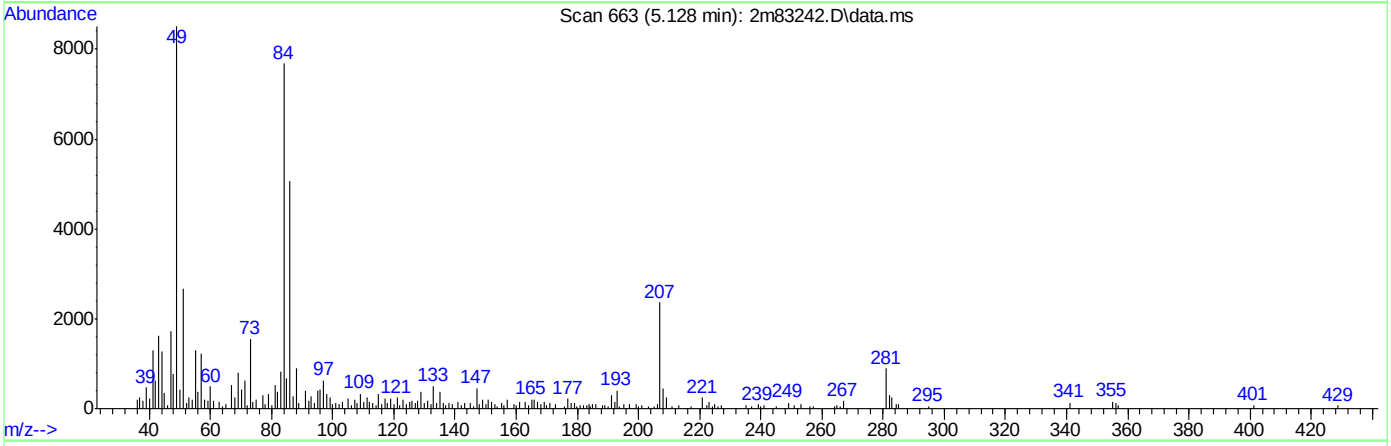
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83242.D
Acq On    : 21 Apr 2016   9:05 am
Operator  : ashleyn
Sample    : dftpp
Misc      : op92330,e2m3657
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Apr 21 09:12:56 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title  : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration
```





TIC: 2m83242.D\data.ms

(2) ddt

5.128min (-5.128) 0.00

response 0

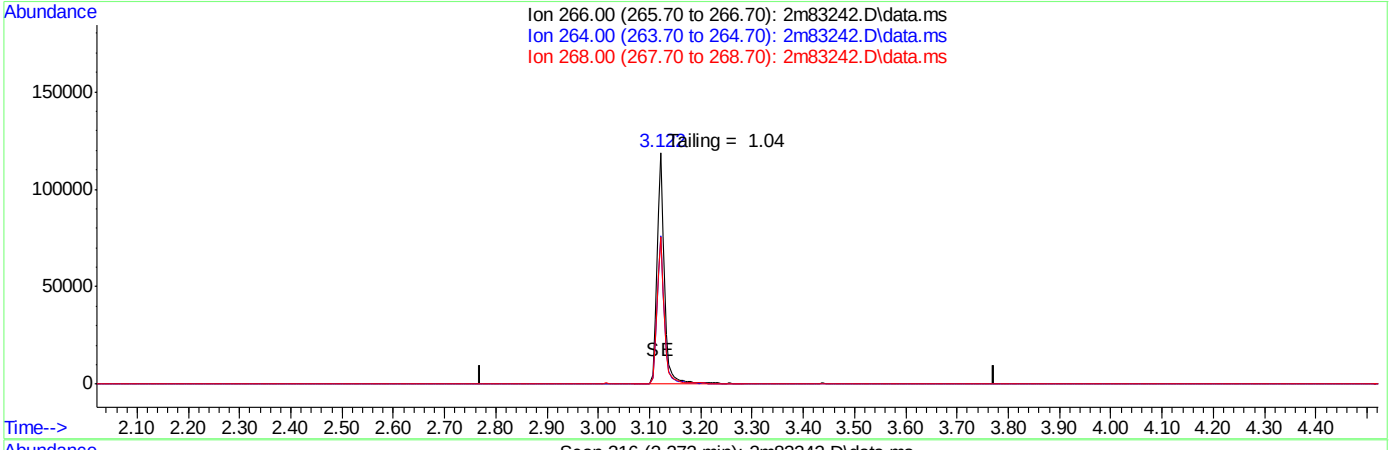
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

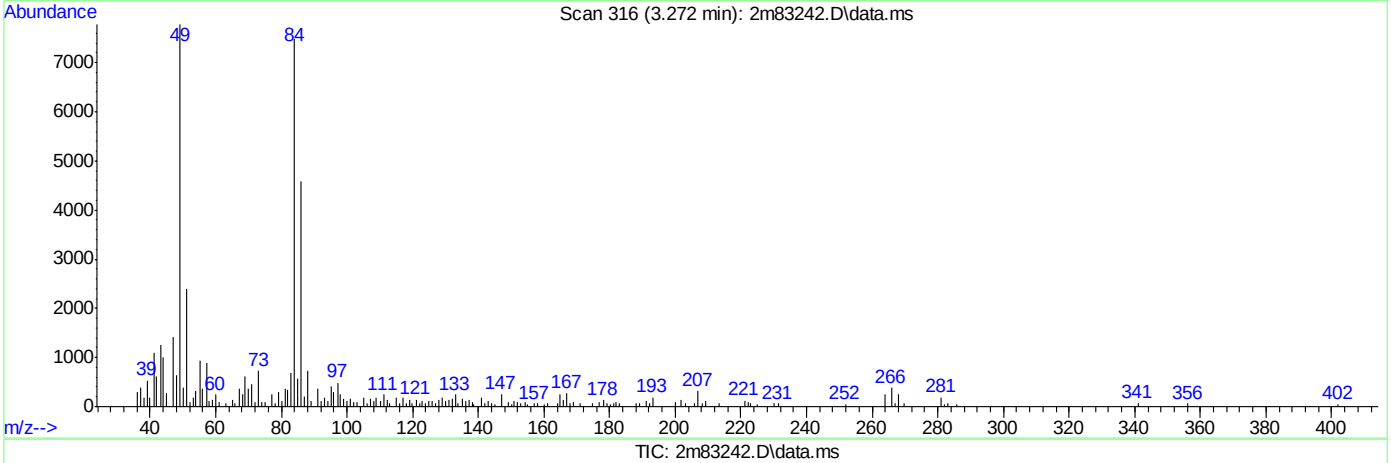
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83242.D
Acq On    : 21 Apr 2016   9:05 am
Operator  : ashleyn
Sample    : dftpp
Misc      : op92330,e2m3657
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Apr 21 09:12:56 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title  : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration
```





TIC: 2m83242.D\data.ms

(3) Pentachlorophenol

3.272min (-3.272) 0.00

response 0

Ion	Exp%	Act%
266.00	100	0.00
264.00	0.00	0.00
268.00	0.00	0.00
0.00	0.00	0.00

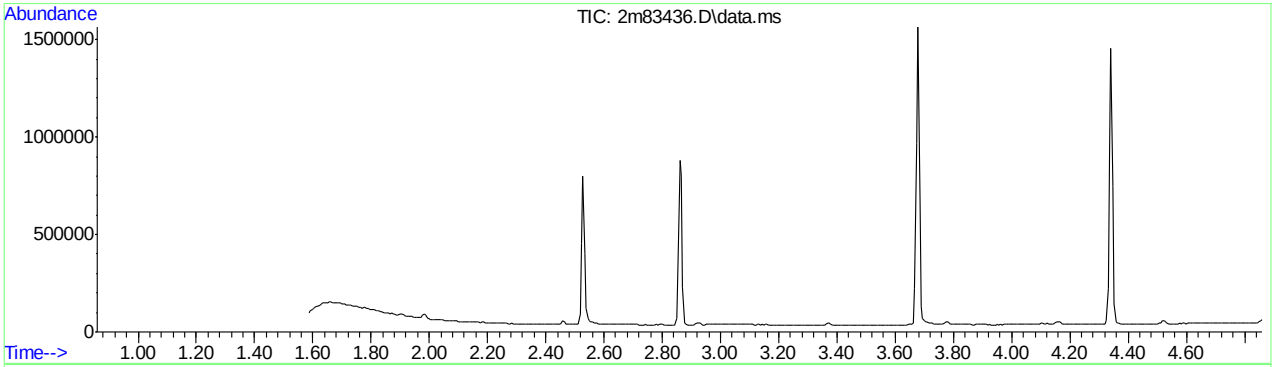
SGS ACCUTEST JC18649

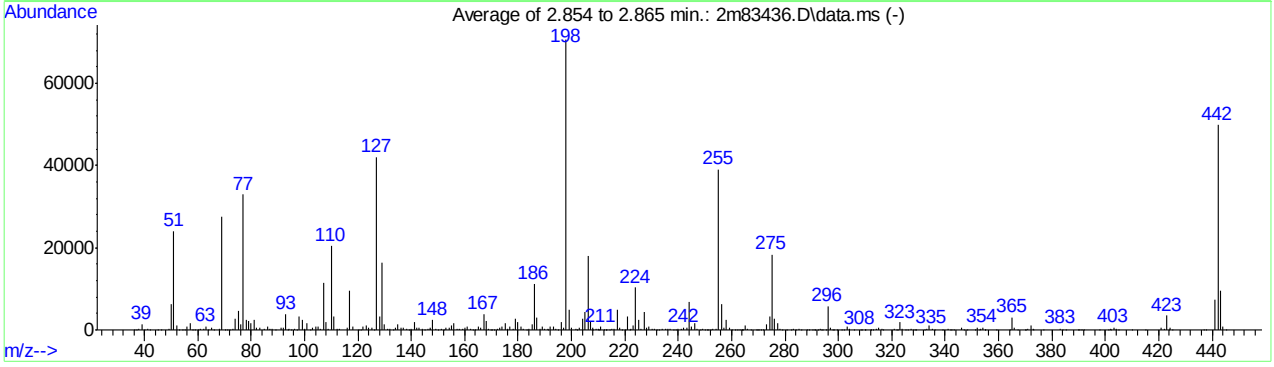
DFTPP

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83436.D
Acq On : 28 Apr 2016 10:46 am
Operator : ashleyn
Sample : dftpp
Misc : op93387,e2m3668
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\dftpp2m.M
Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
Last Update : Thu Mar 24 11:54:32 2016





AutoFind: Scans 238, 239, 240; Background Corrected with Scan 231

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.1	24071	PASS
68	69	0.00	2	1.1	316	PASS
69	198	0.00	100	38.9	27490	PASS
70	69	0.00	2	0.4	109	PASS
127	198	40	60	59.6	42135	PASS
197	198	0.00	1	0.8	554	PASS
198	198	100	100	100.0	70653	PASS
199	198	5	9	7.1	5023	PASS
275	198	10	30	26.0	18393	PASS
365	198	1	100	4.3	3027	PASS
441	443	0.10	100	76.1	7292	PASS
442	198	40	100	70.6	49911	PASS
443	442	17	23	19.2	9578	PASS

SGS ACCUTEST JC18649

Average of 2.854 to 2.865 min.: 2m83436.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	14	51.05	24071	62.05	326	73.95	2800
36.95	94	52.00	1046	63.00	925	75.05	4647
38.00	243	53.00	14	64.05	134	76.00	1481
39.10	1404	54.05	49	65.00	474	77.05	32951
39.95	59	55.05	136	65.95	99	78.00	2381
41.05	175	56.05	708	68.05	316	79.00	2080
42.00	7	57.05	1525	69.00	27490	80.00	1635
45.00	29	58.05	108	70.00	109	81.00	2460
46.10	16	58.90	26	71.00	10	82.00	571
49.00	251	59.95	33	71.95	108	83.00	532
50.05	6414	61.00	295	73.00	263	85.05	307

Average of 2.854 to 2.865 min.: 2m83436.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
86.00	852	97.10	64	108.00	1879	121.95	849
87.00	260	97.95	3299	109.00	307	123.00	1130
87.90	174	99.00	2393	110.00	20383	123.95	468
88.95	142	99.95	247	111.00	3222	125.00	471
91.00	691	101.00	1521	112.00	356	125.95	55
92.05	467	102.00	139	113.05	227	127.00	42135
93.00	3843	103.05	470	116.00	567	128.00	3287
93.80	41	104.00	813	117.00	9666	129.00	16384
94.00	168	105.00	843	118.05	854	130.00	1384
95.00	80	106.00	197	120.00	105	131.05	350
96.05	160	107.00	11381	121.00	70	132.05	199

Average of 2.854 to 2.865 min.: 2m83436.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
133.00	9	144.00	162	154.05	598	164.95	777
134.00	534	145.05	109	155.05	1144	166.05	509
135.00	1395	146.00	267	156.00	1783	167.00	3887
136.00	537	146.90	183	157.05	210	168.05	2192
137.00	542	147.00	657	157.95	307	169.00	266
138.10	151	148.00	2438	159.05	234	169.80	37
138.85	60	149.00	387	160.00	508	170.10	145
140.05	198	150.00	87	161.00	915	170.95	100
141.00	1841	151.05	228	162.05	304	172.05	383
142.00	621	151.90	98	162.90	53	173.00	423
142.90	451	153.05	672	163.95	63	173.95	856

Average of 2.854 to 2.865 min.: 2m83436.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.00	1560	186.10	11086	196.05	1954	207.10	2238
176.00	348	187.10	3086	197.15	554	207.90	97
176.95	775	188.10	220	198.00	70653	208.10	549
177.95	283	189.00	712	199.00	5023	209.05	236
179.00	2778	190.00	204	199.95	443	210.00	157
180.00	2018	190.95	154	201.50	294	210.20	129
181.00	883	191.20	55	202.00	75	210.50	67
182.00	179	192.00	821	203.05	516	211.05	704
183.05	56	193.05	854	204.05	2606	211.95	106
183.95	252	193.95	238	205.10	4402	212.80	24
185.05	1323	195.00	102	206.10	17880	213.10	18

Average of 2.854 to 2.865 min.: 2m83436.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
214.20	18	224.10	10267	235.10	238	246.00	1568
215.00	216	225.05	2397	236.05	263	246.95	289
216.00	369	226.00	276	237.05	357	248.05	111
217.05	4807	227.10	4419	238.10	35	248.95	319

218.05	668	227.95	678	239.05	137	250.05	98
218.95	11	229.00	940	239.95	148	250.90	43
220.20	48	230.05	160	241.00	309	251.20	25
221.05	3191	231.05	374	242.10	549	252.00	103
221.80	107	231.95	100	243.05	503	253.00	200
222.10	252	232.90	118	244.10	6817	254.10	332
223.05	1228	234.05	262	245.10	927	255.10	39045

Average of 2.854 to 2.865 min.: 2m83436.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
256.10	6275	265.00	985	276.10	2634	288.95	59
257.00	499	265.95	158	277.10	1677	290.10	47
258.10	2433	267.05	65	278.05	316	290.90	28
259.05	488	269.10	17	279.00	91	291.10	21
260.00	123	269.80	20	280.80	19	292.15	85
261.10	81	270.10	42	282.15	80	293.00	410
262.00	26	270.85	110	283.05	233	293.80	25
263.10	41	271.90	70	284.10	135	294.05	112
263.85	77	273.05	1256	285.10	280	295.15	127
264.00	48	274.10	3228	286.00	28	296.10	5828
264.20	29	275.10	18393	288.00	17	297.05	667

Average of 2.854 to 2.865 min.: 2m83436.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
297.90	25	310.20	32	323.10	1812	335.10	334
298.20	23	311.90	19	324.05	324	336.10	20
299.70	23	312.20	36	325.00	74	339.05	40
301.10	51	313.10	22	326.00	35	341.10	255
302.05	128	314.05	267	327.05	367	342.00	34
303.10	747	315.00	657	328.05	132	342.20	54
304.05	151	316.10	371	328.80	27	343.20	27
306.00	18	316.90	22	329.00	30	346.00	457
308.20	85	321.05	215	332.10	127	346.95	85
308.95	72	321.80	47	333.05	242	348.20	17
309.90	35	322.20	49	334.10	1179	351.00	16

Average of 2.854 to 2.865 min.: 2m83436.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
352.05	589	369.90	17	390.10	101	415.05	43
353.00	43	370.20	44	391.00	104	421.00	505
353.15	305	371.05	182	391.90	49	422.05	415
354.10	603	372.10	1153	397.90	21	423.10	3439
354.80	22	372.90	26	401.00	68	423.80	30
355.10	131	373.10	233	401.80	24	424.05	585
359.15	55	376.70	17	402.10	401	425.10	68
364.00	24	383.10	314	403.10	591	436.80	20
365.05	3027	384.00	72	404.00	228	437.80	18
365.95	431	385.05	38	405.10	25	441.10	7292
367.00	28	389.90	40	410.10	17	442.10	49911

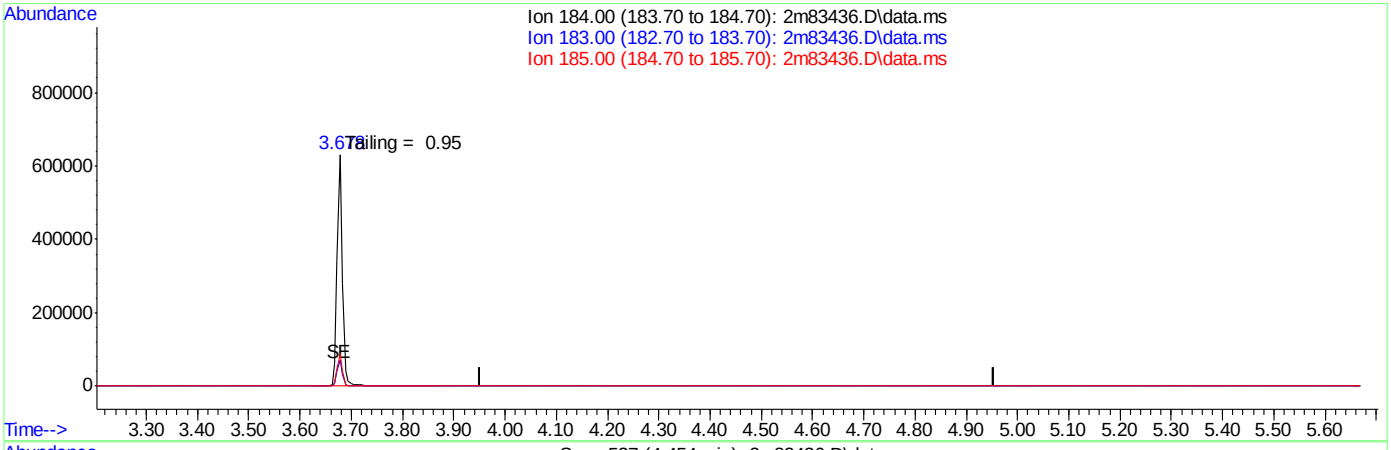
Average of 2.854 to 2.865 min.: 2m83436.D\data.ms
dftpp
Modified:subtracted

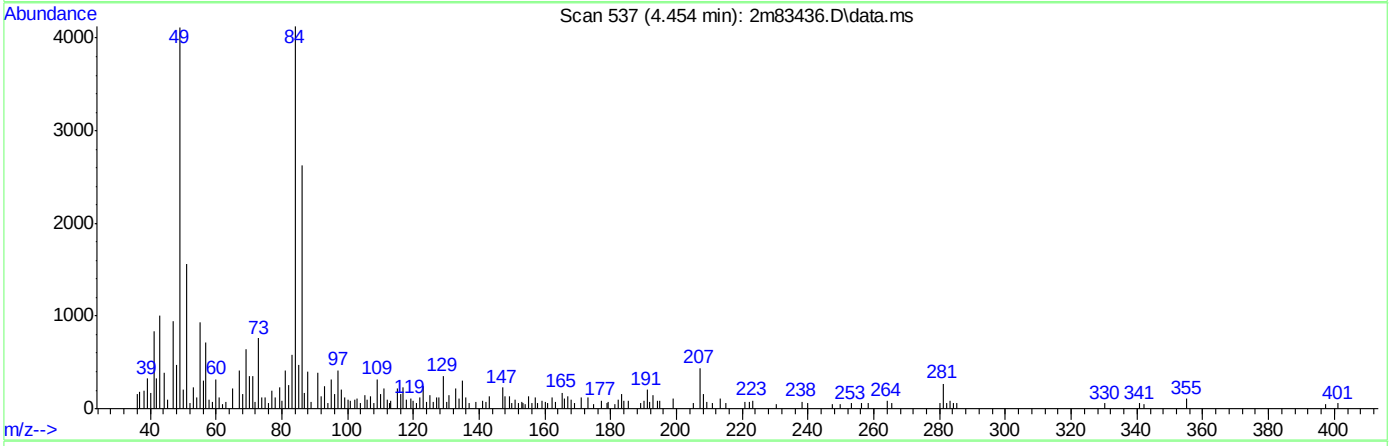
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
443.10	9578						
444.10	940						
445.10	29						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83436.D
Acq On : 28 Apr 2016 10:46 am
Operator : ashleyn
Sample : dftpp
Misc : op93387,e2m3668
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 28 10:58:41 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83436.D\data.ms

(1) Benzidine

4.454min (-4.454) 0.00

response 0

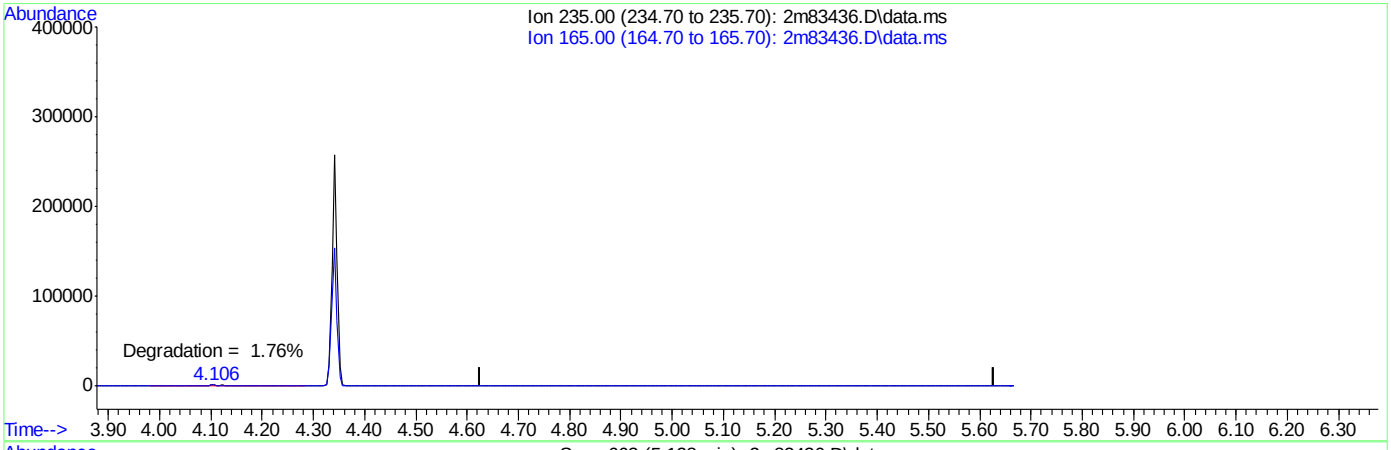
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

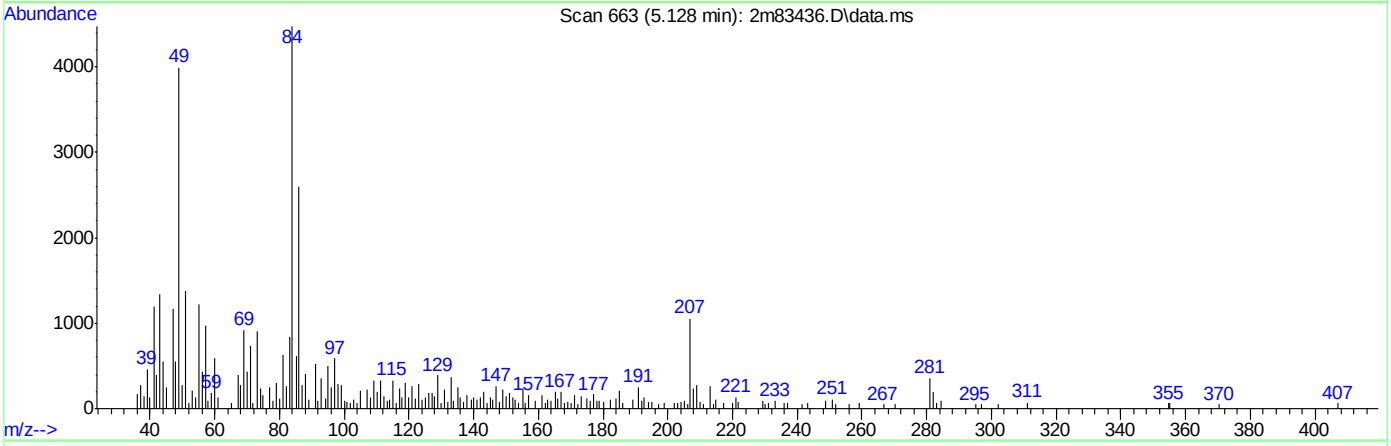
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83436.D
Acq On : 28 Apr 2016 10:46 am
Operator : ashleyn
Sample : dftpp
Misc : op93387,e2m3668
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 28 10:58:41 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83436.D\data.ms

(2) ddt

5.128min (-5.128) 0.00

response 0

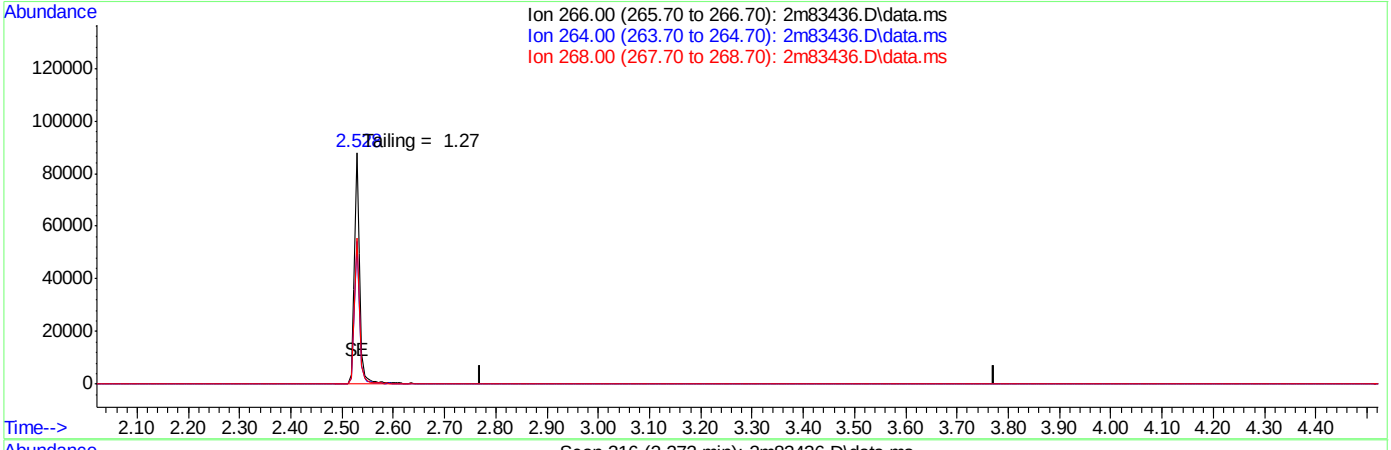
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

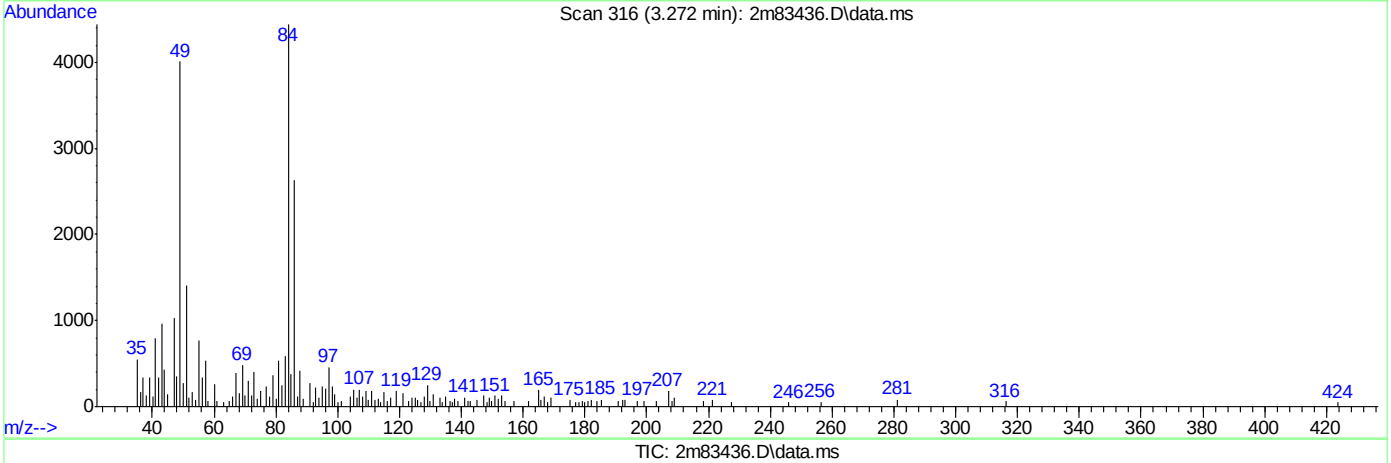
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83436.D
Acq On : 28 Apr 2016 10:46 am
Operator : ashleyn
Sample : dftpp
Misc : op93387,e2m3668
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 28 10:58:41 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83436.D\data.ms

(3) Pentachlorophenol

3.272min (-3.272) 0.00

response 0

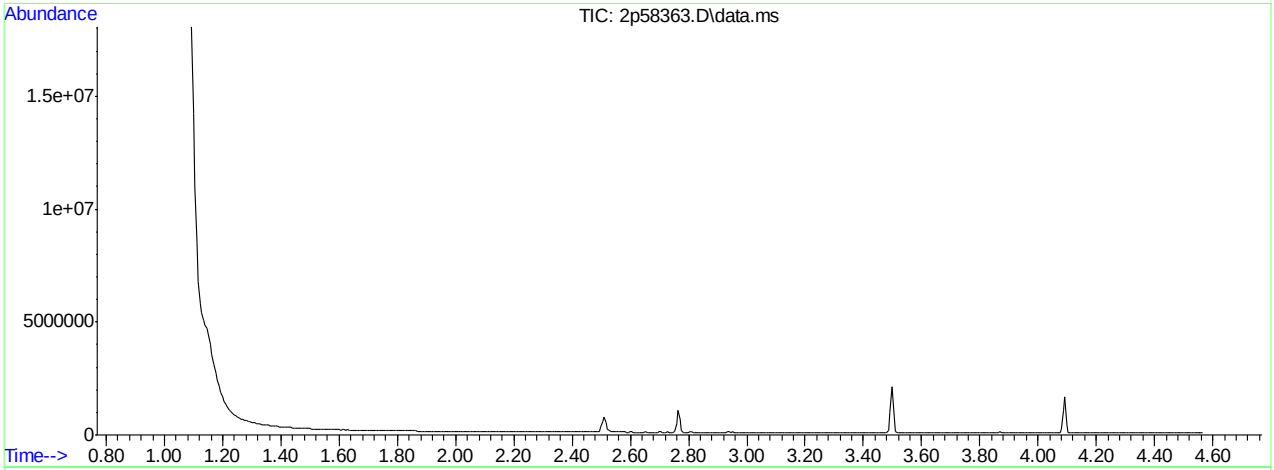
Ion	Exp%	Act%
266.00	100	0.00
264.00	0.00	0.00
268.00	0.00	0.00
0.00	0.00	0.00

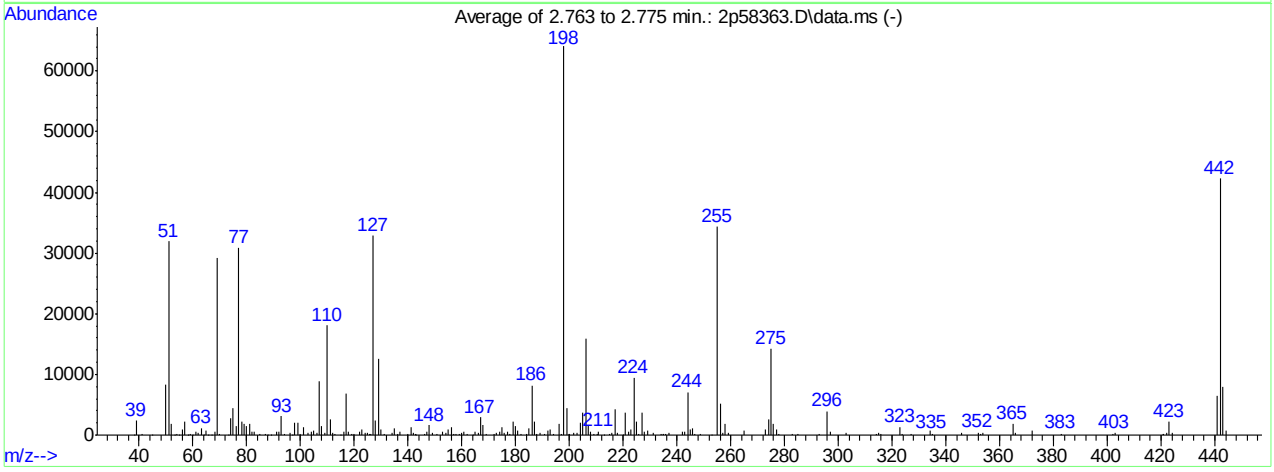
SGS ACCUTEST JC18649

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

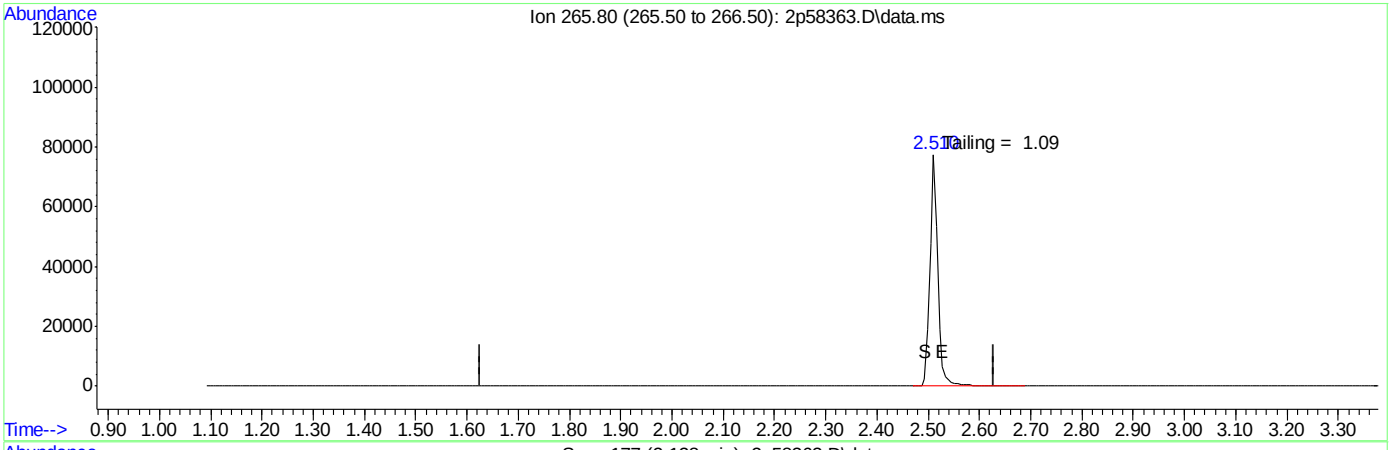
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
256.95	319	285.00	136	334.00	701	402.90	323
258.00	1945	292.90	211	334.90	197	420.80	103
258.95	306	296.00	3958	345.90	324	421.00	192
264.90	760	296.90	580	352.00	433	421.90	320

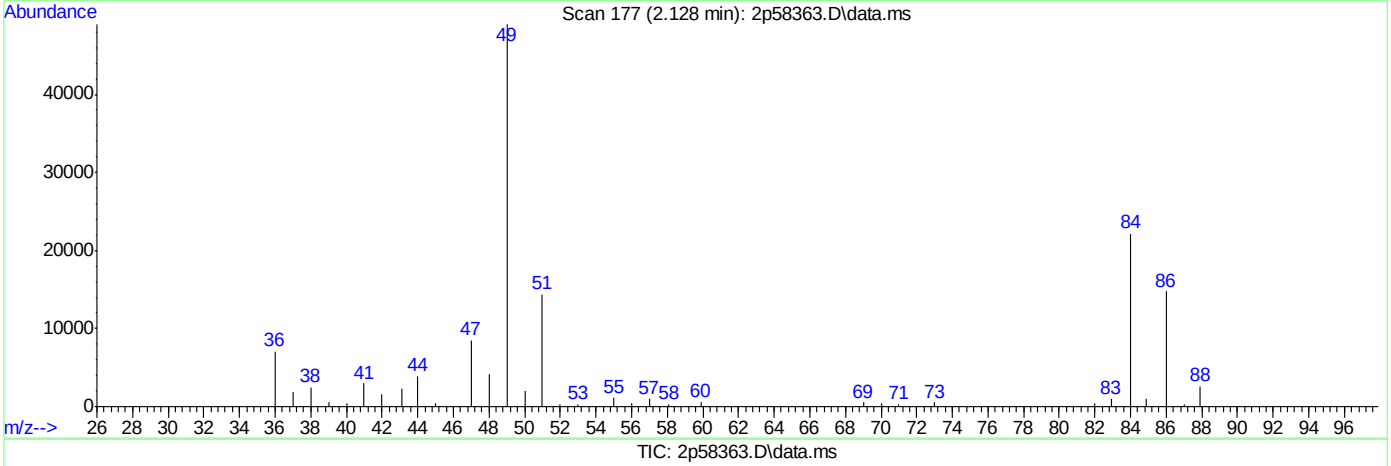
272.95	937	302.95	444	353.00	238	423.00	2169
274.00	2601	313.95	200	353.90	339	424.00	454
275.00	14145	314.85	366	364.95	1814	441.00	6462
276.00	1828	316.00	134	365.95	297	442.00	42236
277.00	974	323.00	1326	371.95	677	443.00	7923
277.90	189	323.90	205	382.85	223	444.00	714
283.00	152	326.90	245	401.90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

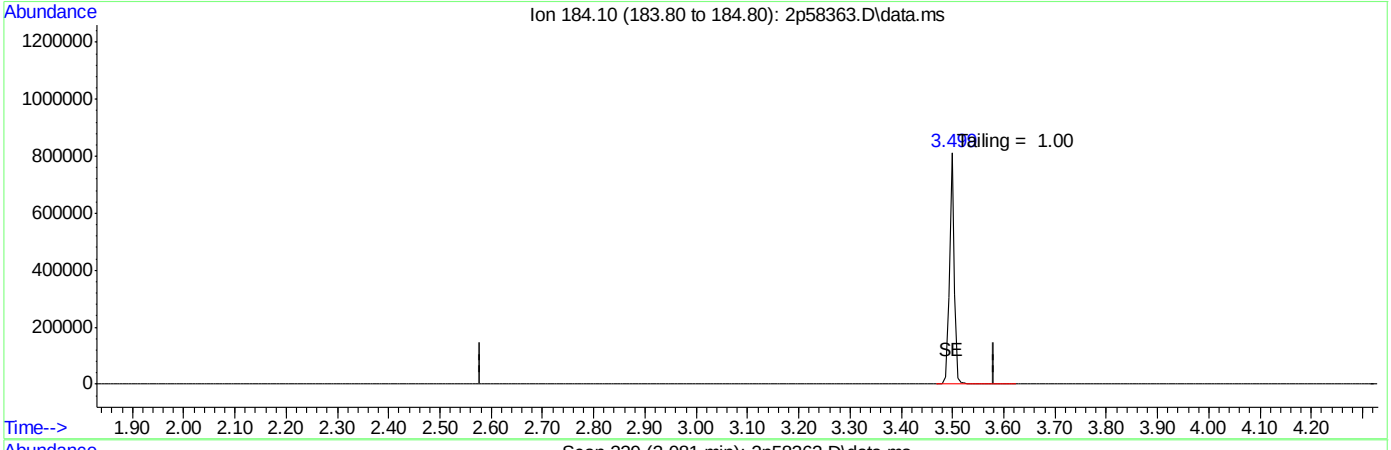
response 0

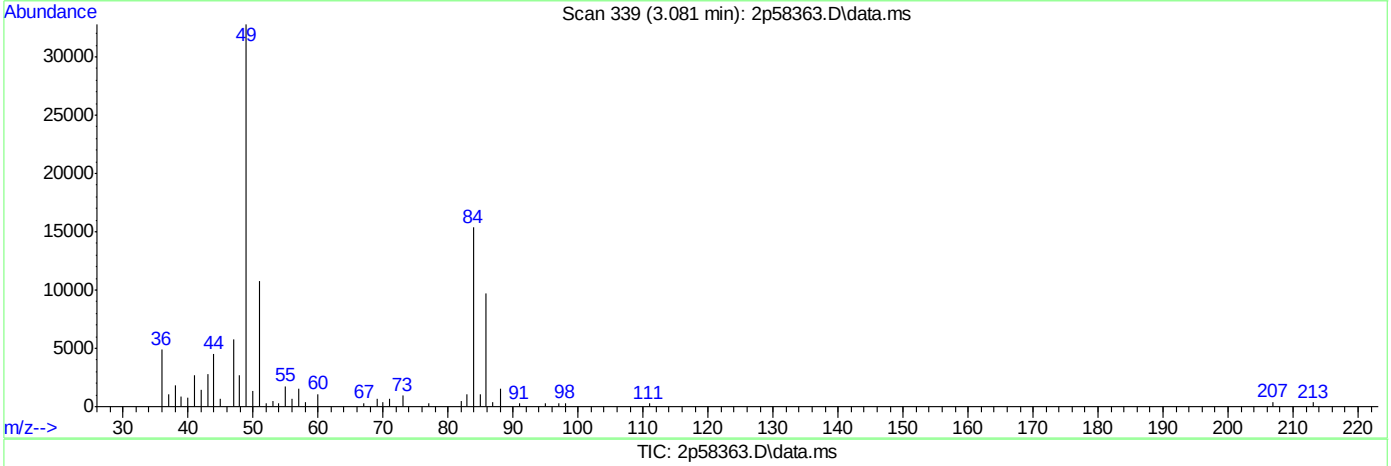
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

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

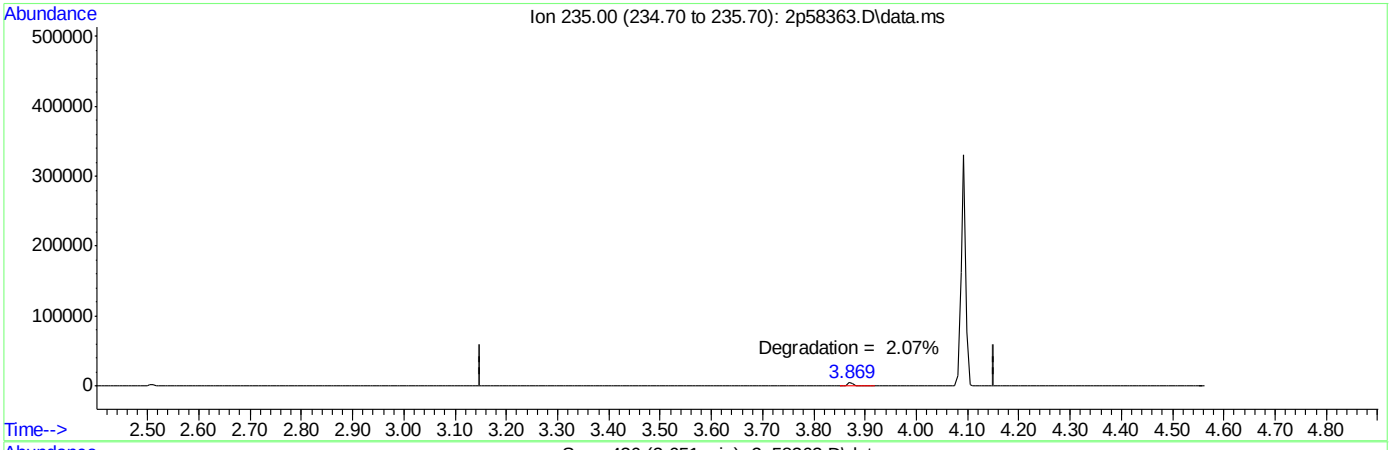
Ion	Exp%	Act%
184.10	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

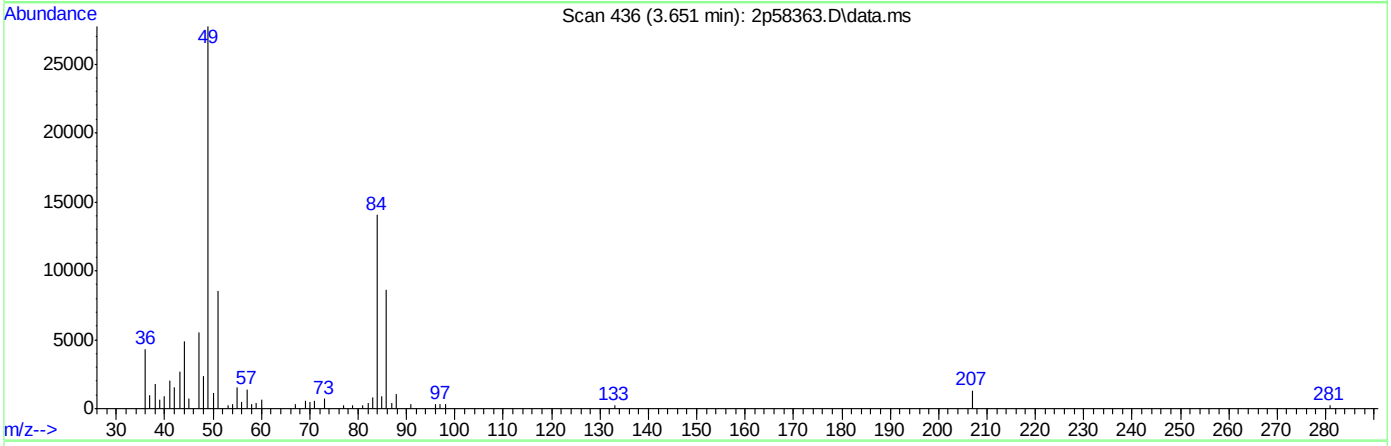
SGS ACCUTEST JC18649

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

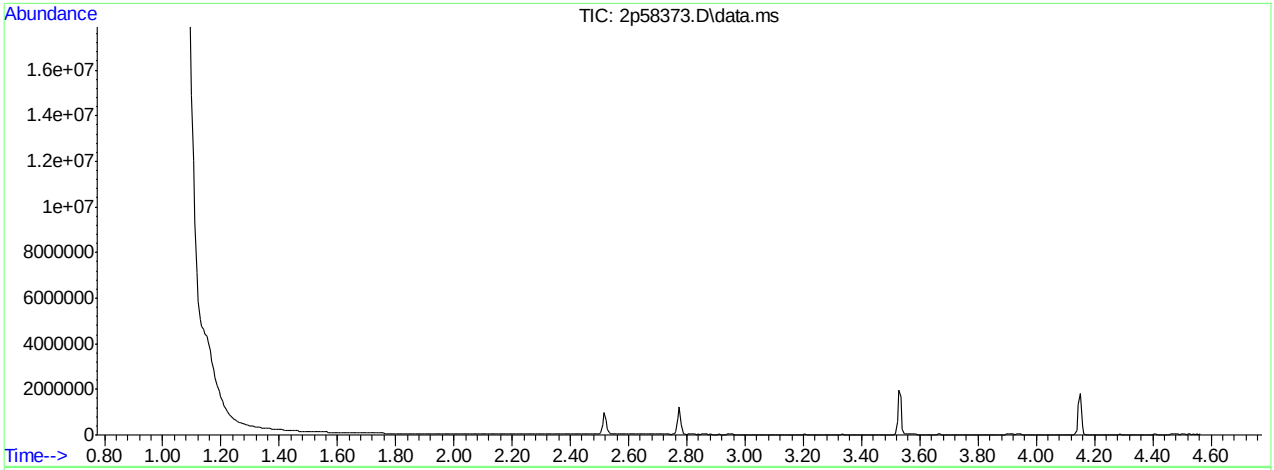
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

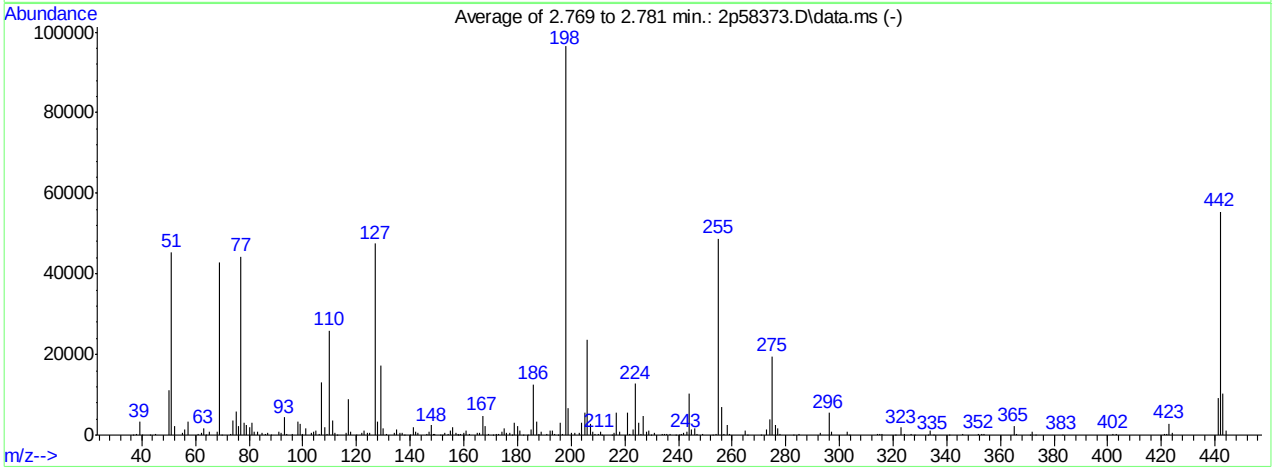
SGS ACCUTEST JC18649

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						

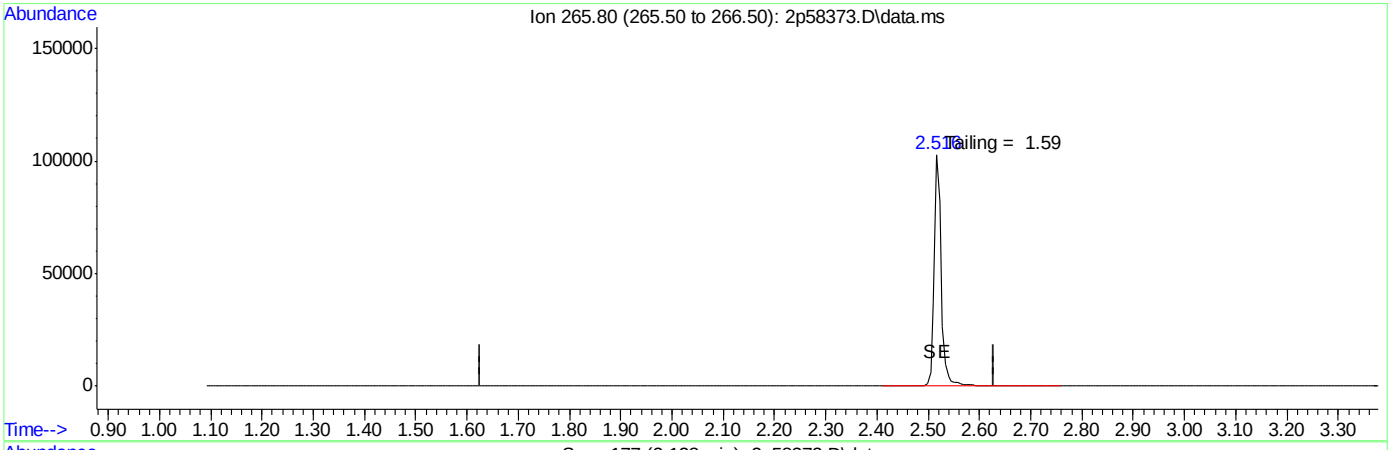
7.5.6

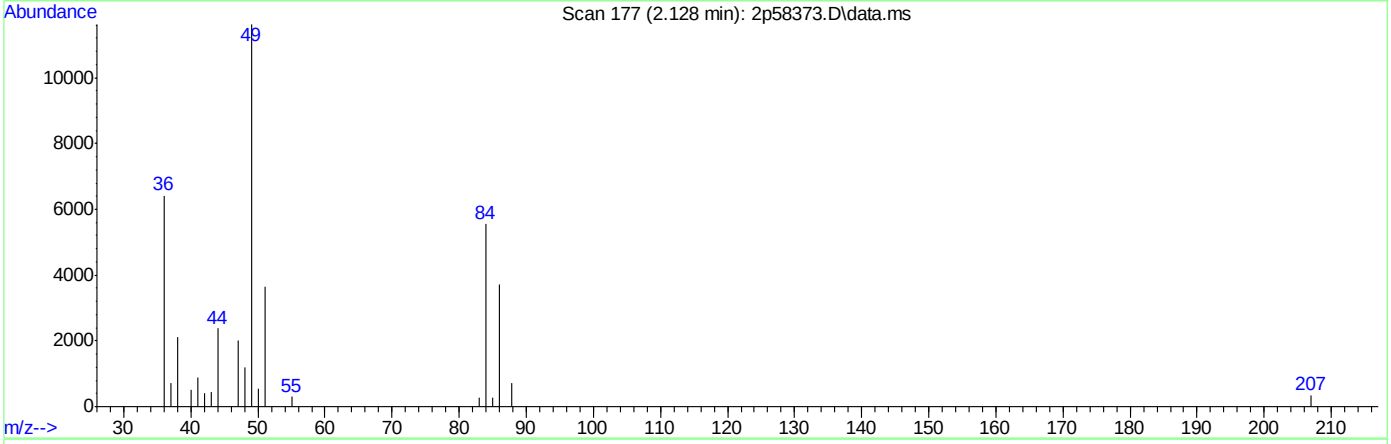
7

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

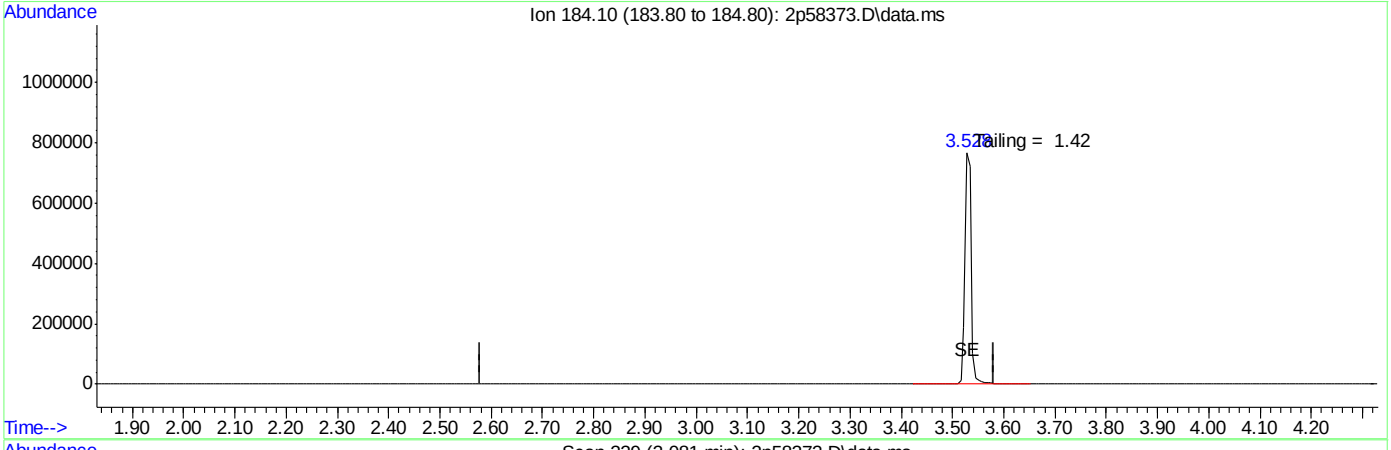
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

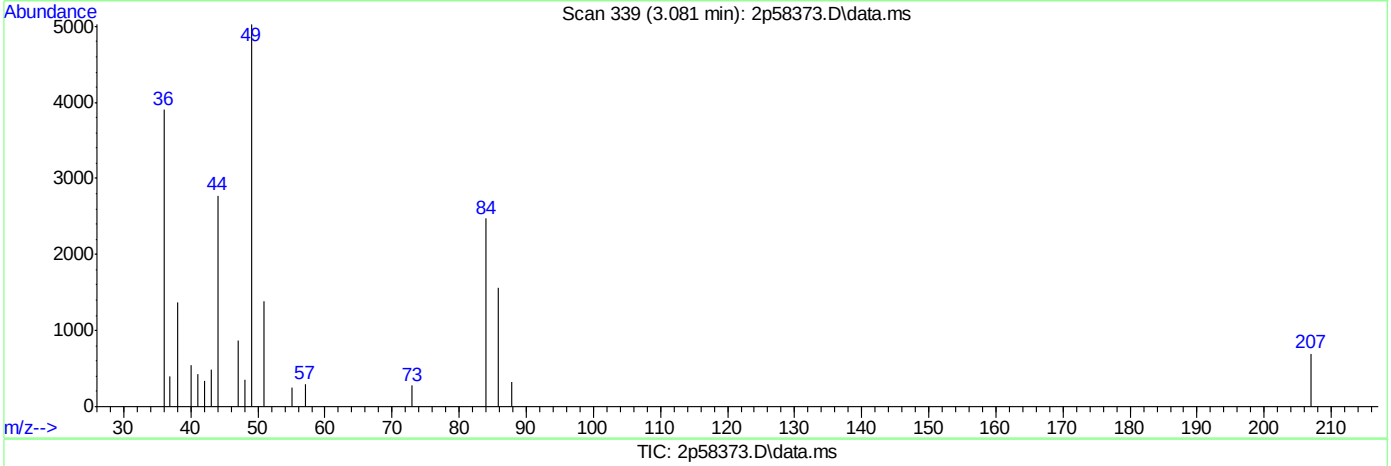
SGS ACCUTEST JC18649

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

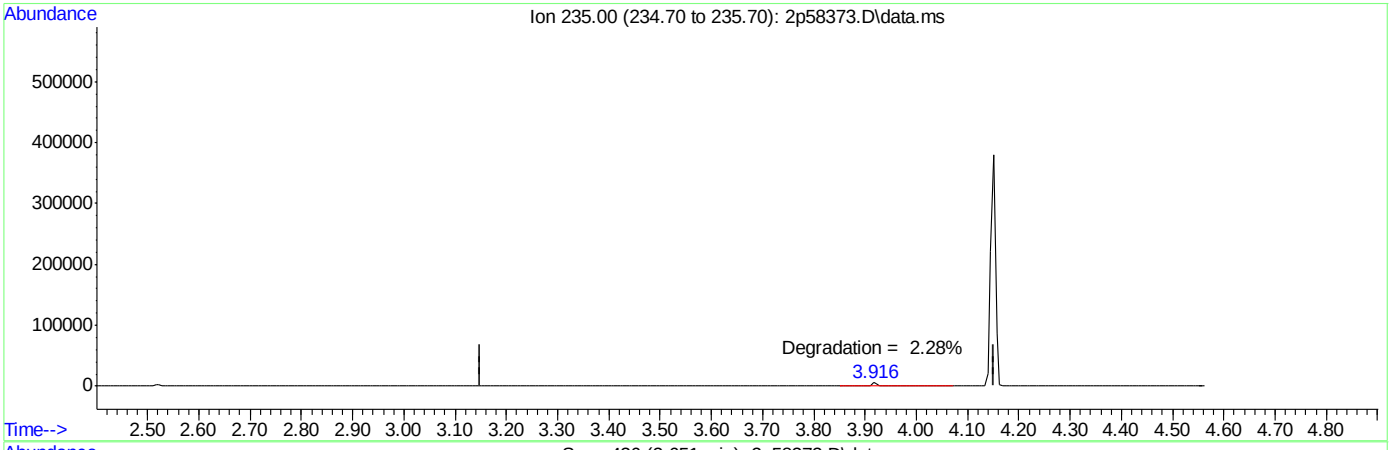
Ion	Exp%	Act%
184.10	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

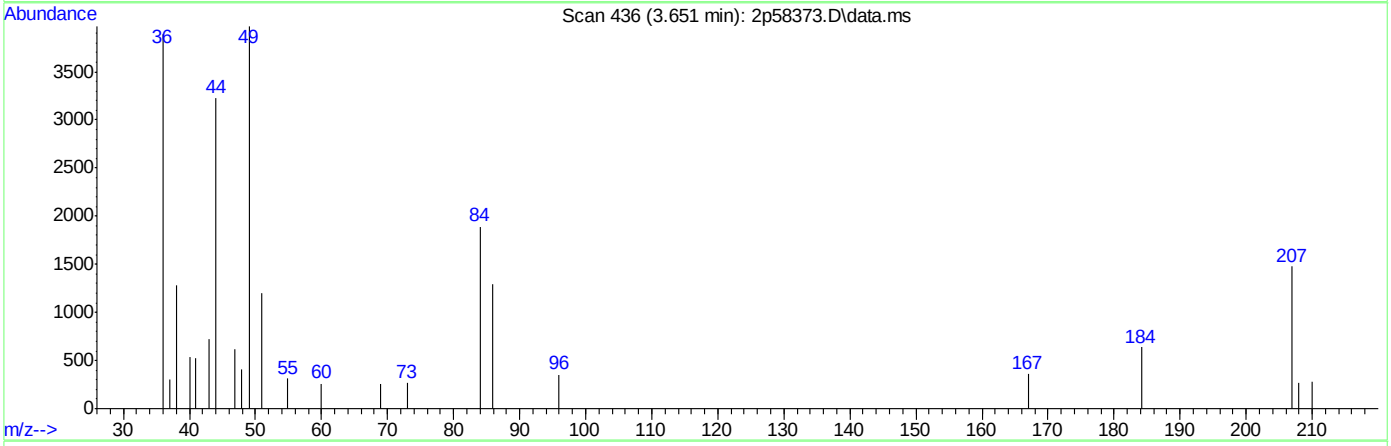
SGS ACCUTEST JC18649

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

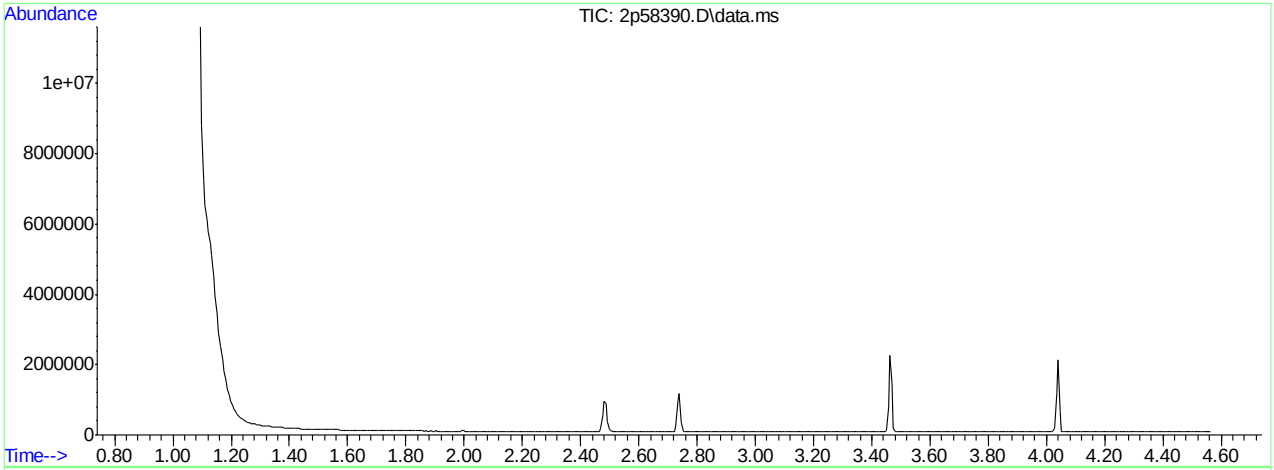
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

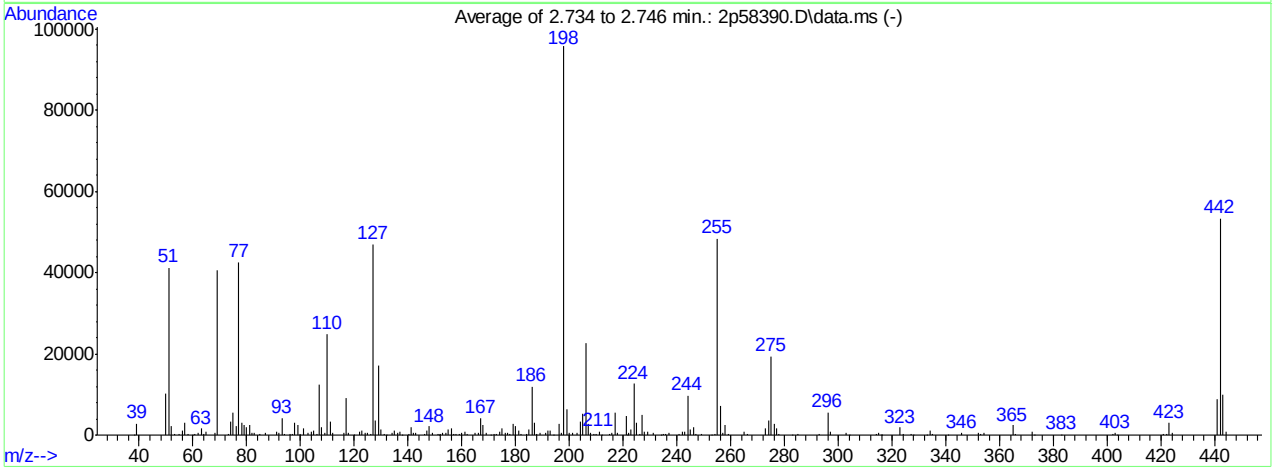
SGS ACCUTEST JC18649

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

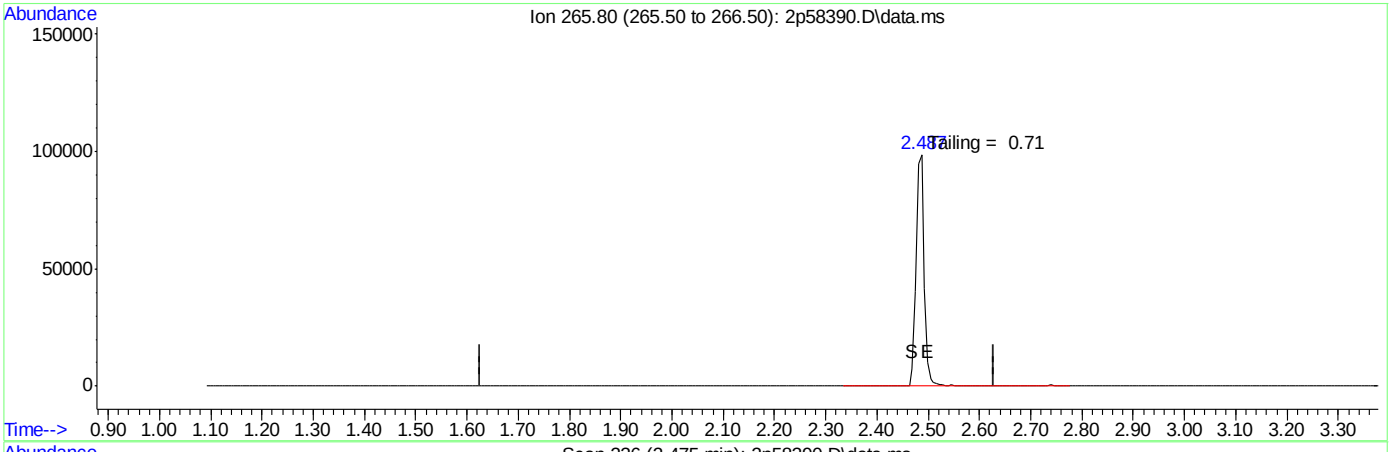
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
278.00	156	316.10	88	353.00	298	421.90	277
282.80	125	323.00	1828	354.00	589	423.00	2987
284.95	269	324.00	332	364.95	2357	423.95	635
293.00	230	326.90	165	366.00	172	441.00	8730

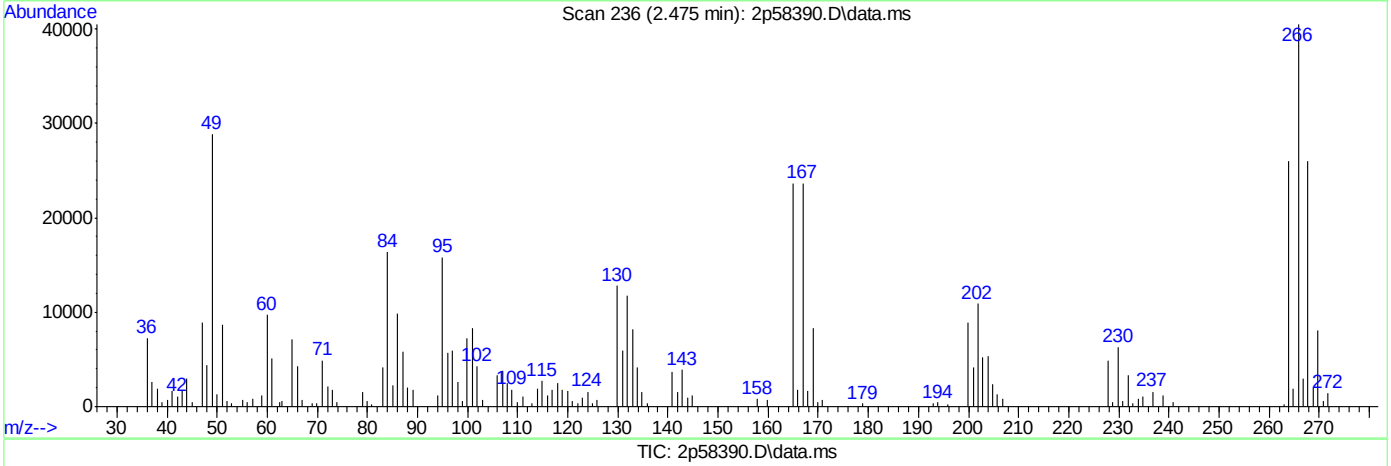
296.00	5657	327.90	101	372.00	931	442.00	53344
297.00	739	333.00	86	373.00	134	443.00	9817
302.95	688	334.00	1031	382.90	147	443.95	909
303.90	142	335.00	304	402.00	294		
314.00	229	340.90	105	402.95	530		
314.90	524	345.90	486	403.90	93		
315.90	126	351.95	478	420.90	361		

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

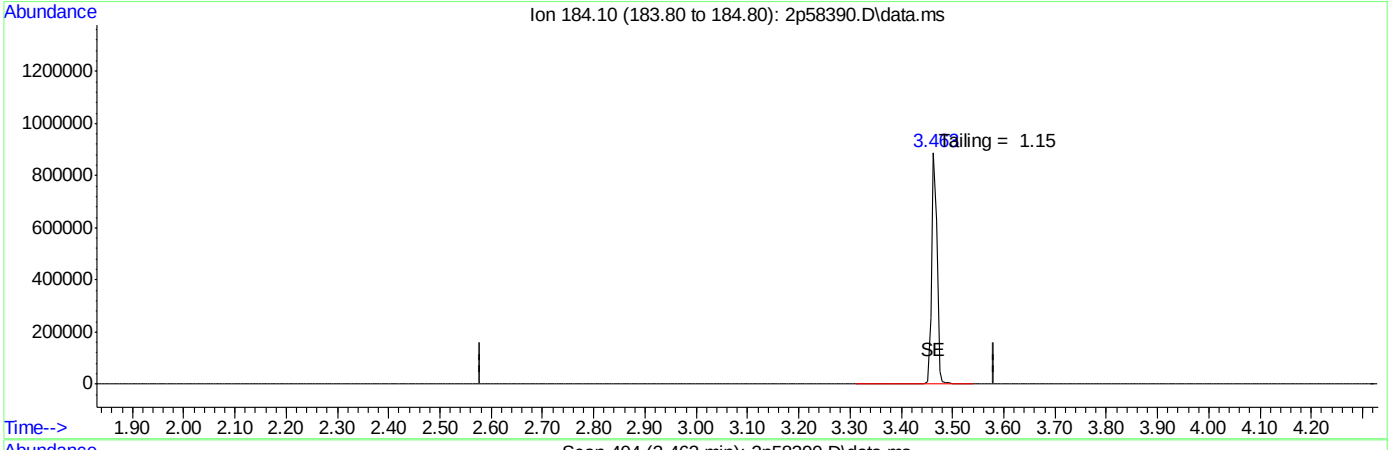
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

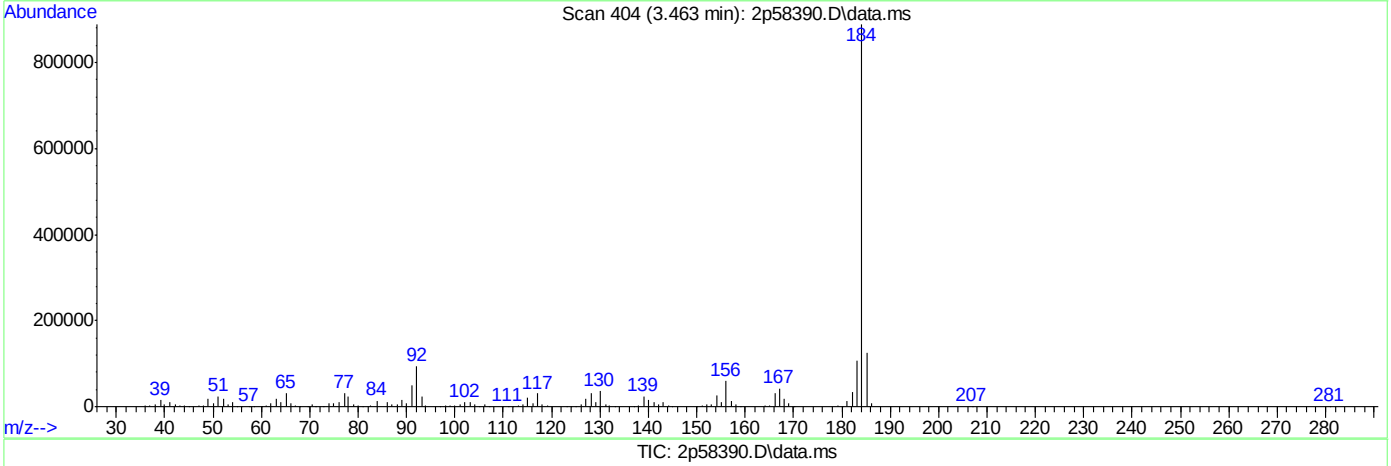
SGS ACCUTEST JC18649

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

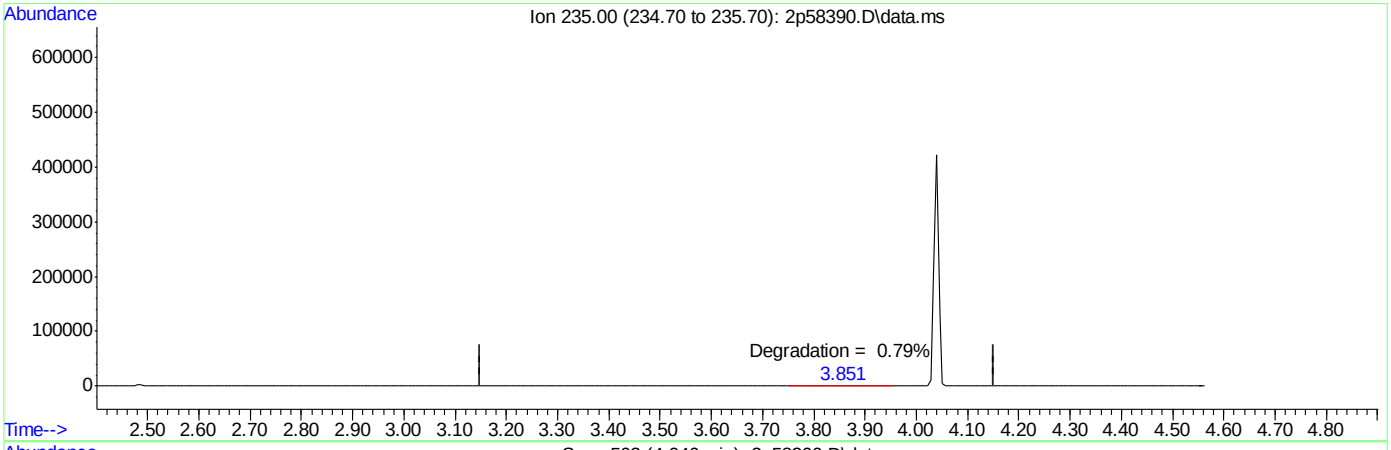
Ion	Exp%	Act%
184.10	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

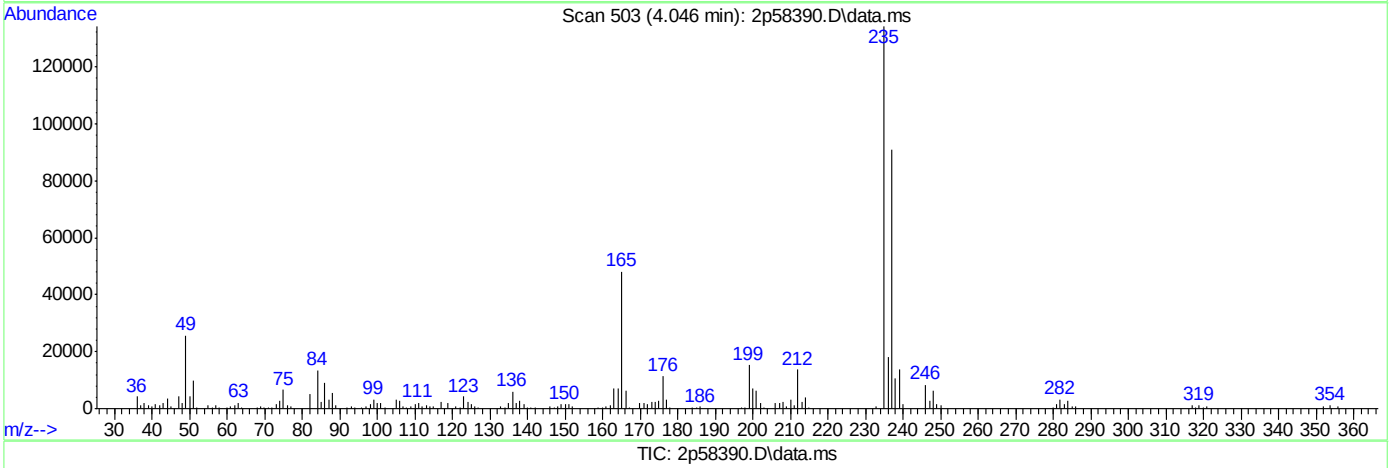
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

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

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





TIC: 2p58390.D\data.ms

(3) PP-DDT

3.651min (-3.651) 0.00ppb

response 0

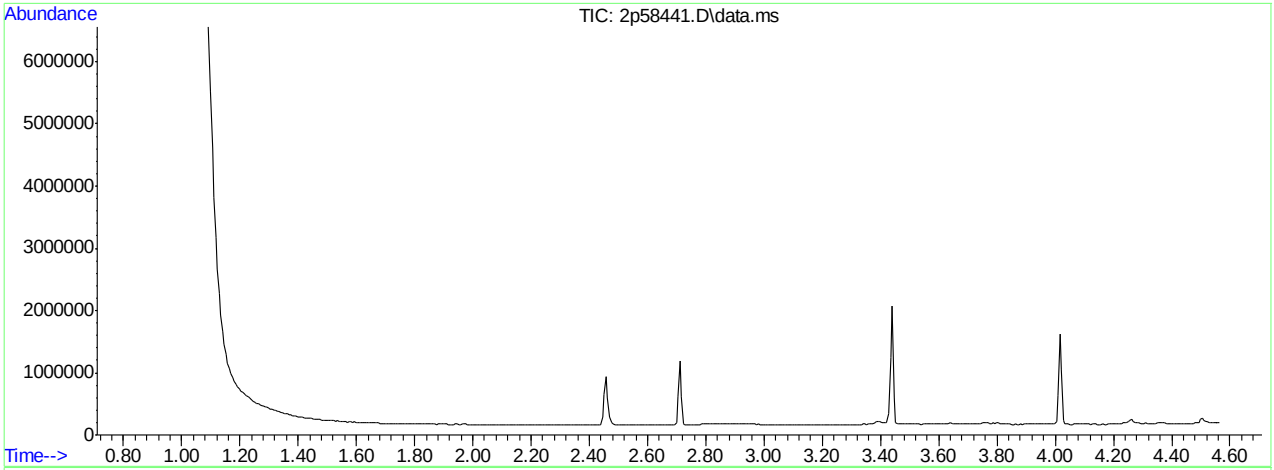
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

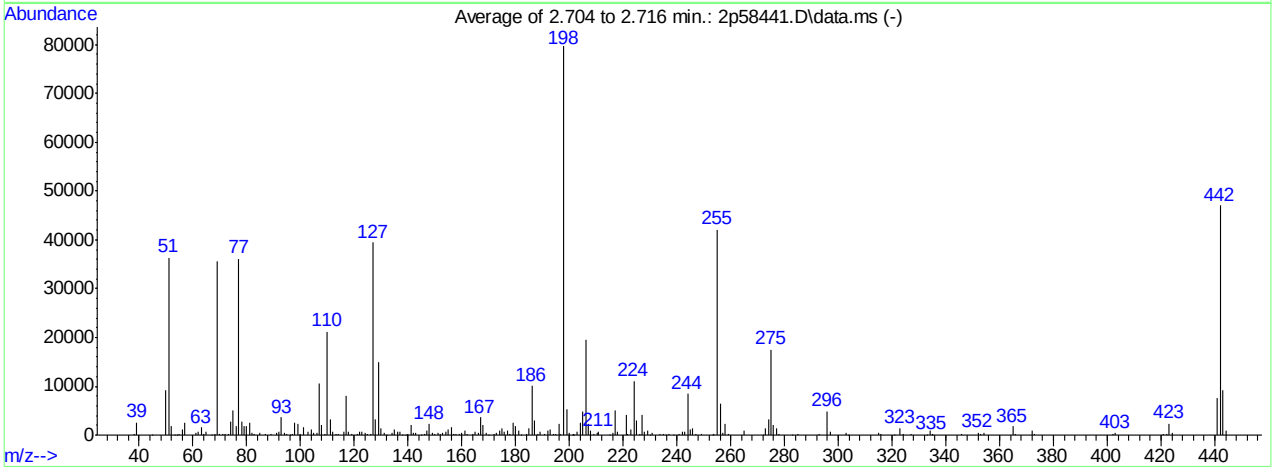
SGS ACCUTEST JC18649

DFTPP

Data File : C:\msdchem\1\DATA\2P2552\2p58441.D Vial: 1
Acq On : 21 Apr 2016 9:59 am Operator: robertl1
Sample : DFTPP Inst : MS2P
Misc : op92038,e2p2552 Multiplr: 1.00
MS Integration Params: events.e

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





AutoFind: Scans 275, 276, 277; Background Corrected with Scan 272

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.7	36397	PASS
68	69	0.00	2	0.9	331	PASS
69	198	0.00	100	44.8	35703	PASS
70	69	0.00	2	0.9	306	PASS
127	198	40	60	49.6	39469	PASS
197	198	0.00	1	0.4	286	PASS
198	198	100	100	100.0	79640	PASS
199	198	5	9	6.6	5253	PASS
275	198	10	30	21.9	17460	PASS
365	198	1	100	2.2	1768	PASS
441	443	0.01	100	84.2	7661	PASS
442	198	40	100	59.1	47054	PASS
443	442	17	23	19.3	9096	PASS

2p58441.D DFTPP2P.M Thu Apr 21 10:04:50 2016 RPT1

Average of 2.704 to 2.716 min.: 2p58441.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.00	333	60.95	423	73.00	169	85.00	385
39.05	2590	62.00	602	74.00	2747	87.00	180
45.00	5	63.00	1589	75.00	5100	89.00	136
50.00	9156	64.00	146	76.10	1754	91.00	439
51.05	36397	64.95	603	77.05	36087	91.95	675
52.00	1876	67.00	81	78.05	2747	93.00	3656
53.00	12	68.05	331	79.00	1929	94.00	441
54.00	71	69.00	35703	80.00	1840	94.95	233
55.00	266	70.00	306	81.00	2429	96.05	98
56.00	1044	71.05	234	82.00	489	97.00	126
57.00	2500	71.95	316	83.00	275	98.00	2522

Average of 2.704 to 2.716 min.: 2p58441.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
99.00	2318	111.00	3251	123.95	519	135.95	597
99.95	282	112.00	635	124.95	243	137.00	746
100.95	1603	113.05	230	126.00	250	138.00	113
102.95	608	114.00	133	127.00	39469	139.00	90
104.00	1057	116.00	615	128.00	3191	140.00	138
105.00	554	117.00	8013	129.00	14876	141.00	1978
106.05	402	117.95	647	130.00	1392	142.00	577
107.00	10524	118.95	201	130.95	450	142.95	414
108.00	1961	121.10	208	131.90	102	145.00	86
109.10	303	122.00	716	134.00	427	145.95	290
110.00	21146	123.00	748	135.00	1079	147.00	880

Average of 2.704 to 2.716 min.: 2p58441.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
147.95	2204	158.95	211	171.95	264	184.05	213
148.95	392	160.00	495	173.00	475	184.95	1447
150.00	139	161.00	964	174.00	818	186.00	10059
151.00	431	162.00	262	175.00	1482	187.00	3082
152.00	138	164.00	125	175.95	682	188.05	277
153.00	561	165.00	717	177.05	873	189.05	676
153.95	618	166.00	576	178.00	146	190.95	312
155.00	1131	166.95	3602	178.95	2604	192.00	1042
156.00	1526	168.00	2006	180.00	1891	193.00	1103
157.00	302	169.00	415	181.00	1041	193.95	236
158.00	170	170.00	88	182.00	104	195.00	128

Average of 2.704 to 2.716 min.: 2p58441.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
196.00	2361	206.00	19588	221.80	133	234.90	252
196.70	286	207.00	2399	223.00	1189	235.90	117
198.00	79640	208.00	858	224.00	11078	237.00	282
198.95	5253	208.90	130	225.00	2912	238.90	83
200.00	433	210.15	408	226.00	141	240.95	234
201.30	97	210.95	699	227.00	4177	242.00	620
201.50	185	215.00	94	227.95	718	243.05	604
201.80	85	216.00	401	228.95	898	244.00	8419
203.00	586	216.95	4964	230.00	88	245.00	1054
204.00	2523	217.95	663	230.95	441	245.95	1464
205.00	4799	221.00	4128	233.90	144	247.00	181

Average of 2.704 to 2.716 min.: 2p58441.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
249.00	175	274.00	3240	303.90	115	346.00	287
253.10	118	275.00	17460	314.95	462	352.05	497
253.80	126	275.95	2111	316.00	144	353.00	264
255.00	42069	277.00	1428	320.90	94	354.00	391

256.00	6364	277.90	135	323.00	1494	365.00	1768
257.00	514	282.90	117	323.95	262	365.90	200
257.95	2268	285.00	275	326.90	263	372.00	848
259.00	224	292.90	272	333.00	96	373.00	226
264.95	818	296.00	4839	334.00	1014	402.00	244
271.90	94	296.95	697	334.90	191	403.00	391
273.00	1291	303.05	581	335.10	103	420.95	300

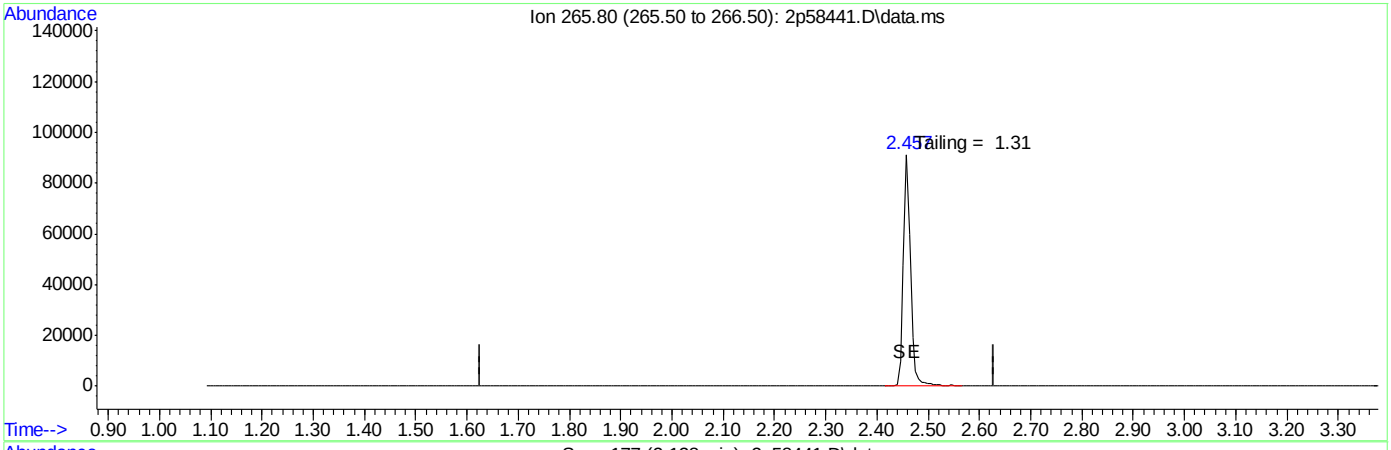
Average of 2.704 to 2.716 min.: 2p58441.D\data.ms
DFTPP
Modified:subtracted

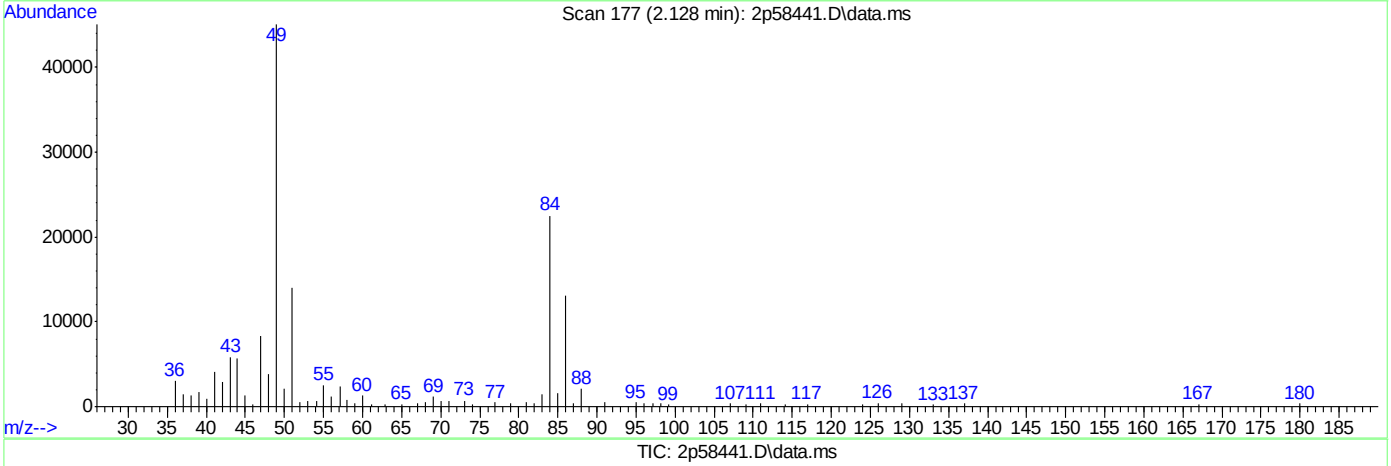
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
422.05	258						
423.00	2344						
424.00	434						
441.00	7661						
442.00	47054						
443.00	9096						
444.00	840						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58441.D
Acq On : 21 Apr 2016 9:59 am
Operator : robertl1
Sample : DFTPP
Misc : op92038,e2p2552
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 10:03:15 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: 2p58441.D\data.ms

(1) Pentacholorphenol

2.128min (-2.128) 0.00ppb

response 0

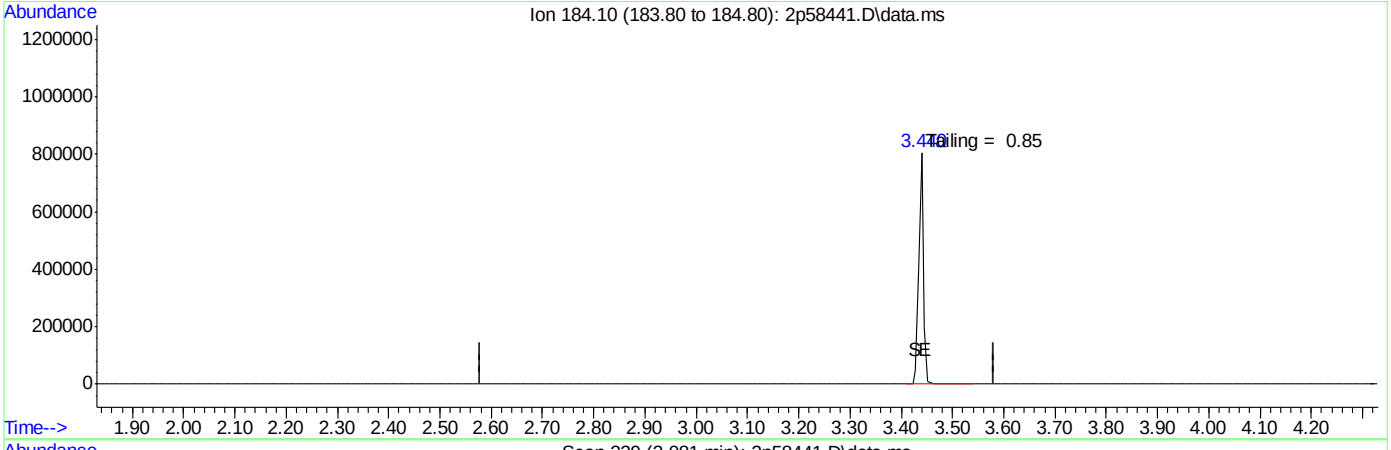
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

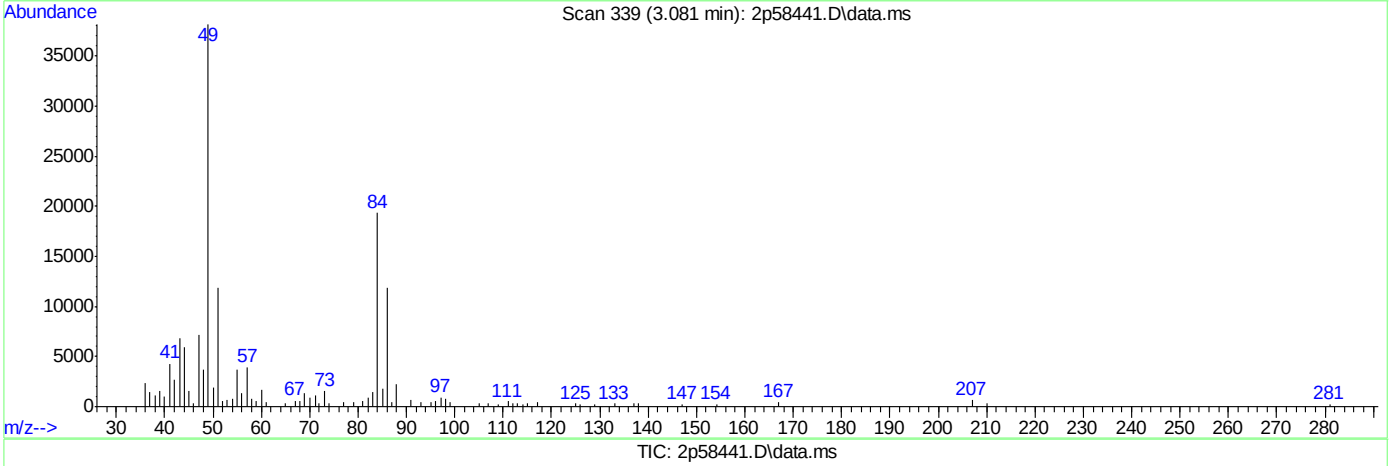
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58441.D
Acq On : 21 Apr 2016 9:59 am
Operator : robertl1
Sample : DFTPP
Misc : op92038,e2p2552
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 10:03:15 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: 2p58441.D\data.ms

(2) Benzidine

3.081min (-3.081) 0.00ppb

response 0

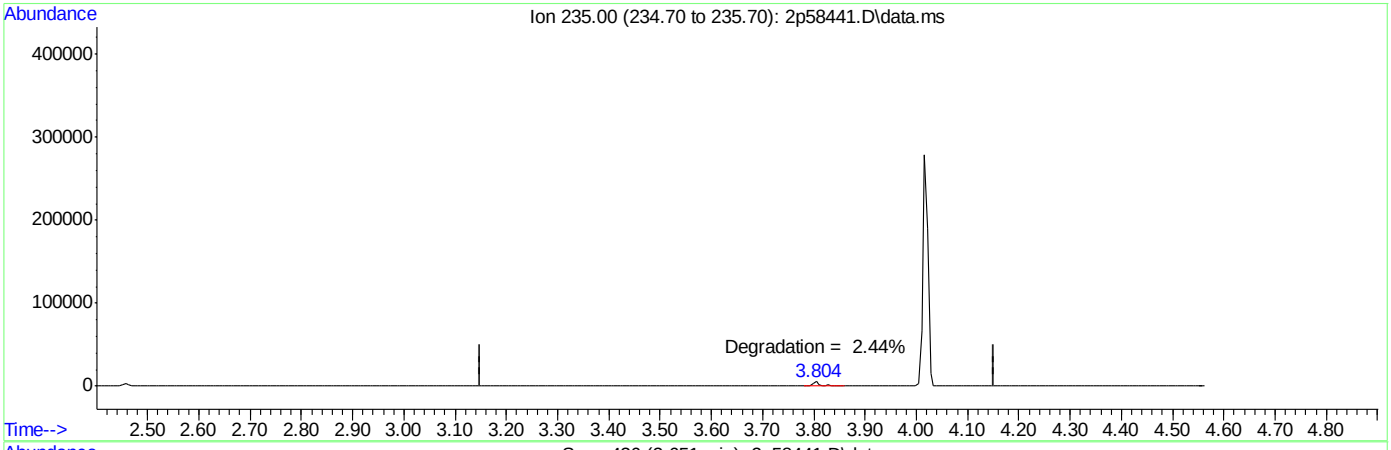
Ion	Exp%	Act%
184.10	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

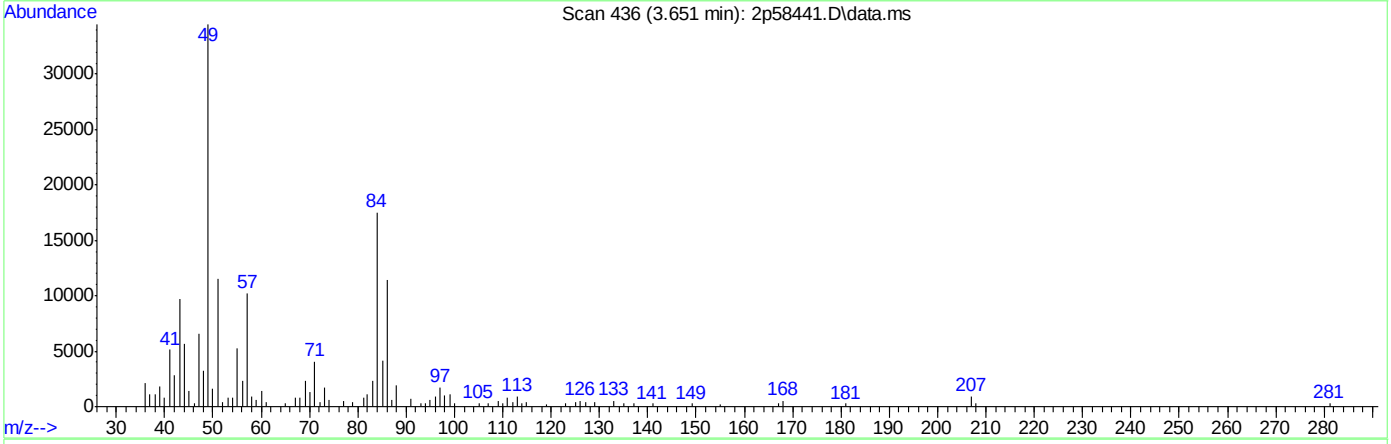
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58441.D
Acq On : 21 Apr 2016 9:59 am
Operator : robertl1
Sample : DFTPP
Misc : op92038,e2p2552
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 10:03:15 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: 2p58441.D\data.ms

(3) PP-DDT

3.651min (-3.651) 0.00ppb

response 0

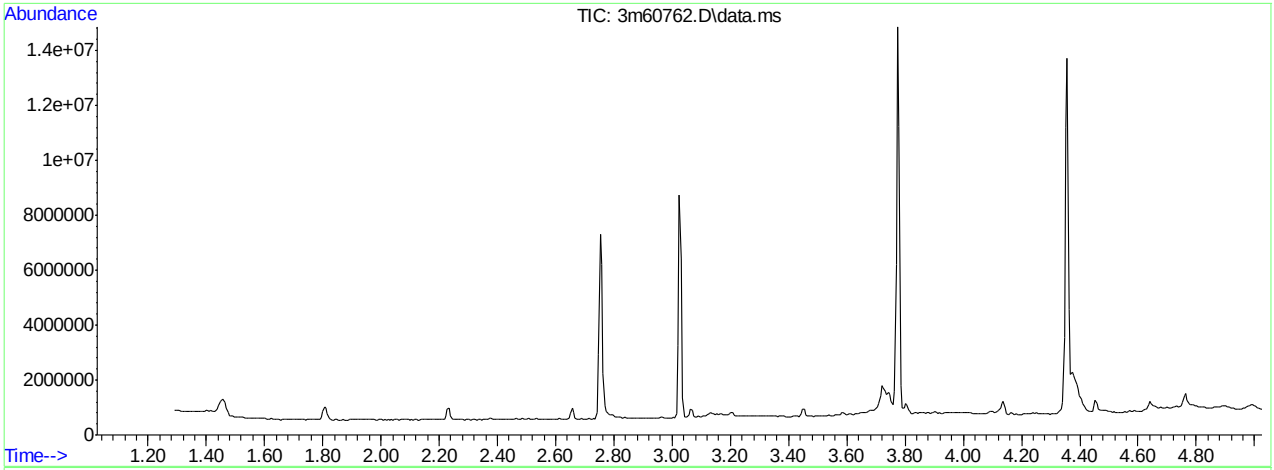
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

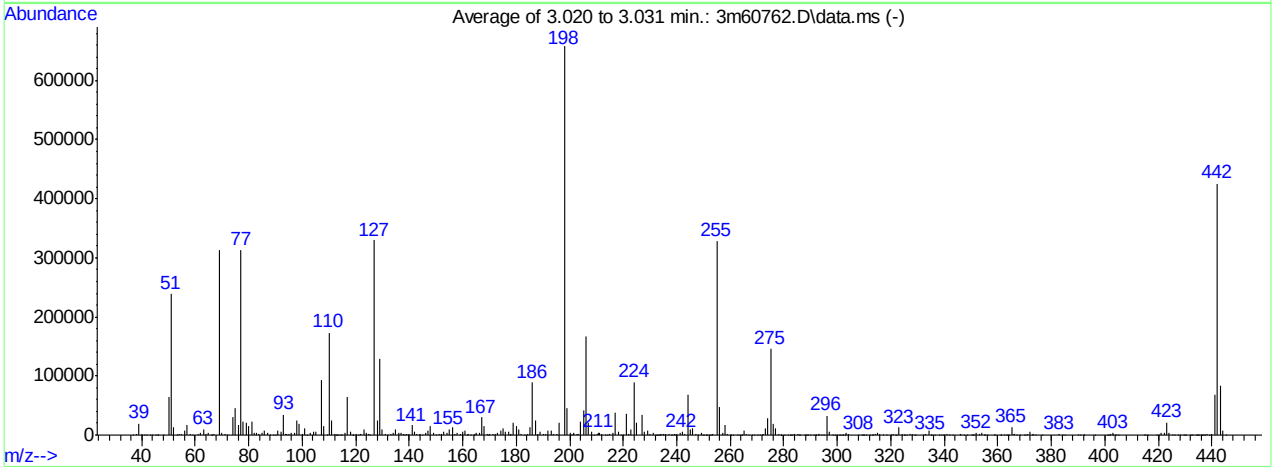
SGS ACCUTEST JC18649

DFTPP

Data File : C:\msdchem\1\DATA\E3M2855\3m60762.D Vial: 1
Acq On : 21 Apr 2016 1:31 pm Operator: linseyk
Sample : dftpp Inst : MS3M
Misc : op93052a,e3m2855 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M (RTE Integrator)
Title : DFTPP, RXI-5MS 30m x .25mm x .25um





AutoFind: Scans 324, 325, 326; Background Corrected with Scan 320

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.2	238296	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.6	313116	PASS
70	69	0.00	2	1.0	3204	PASS
127	198	40	60	50.1	329840	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	657712	PASS
199	198	5	9	6.9	45100	PASS
275	198	10	30	22.1	145467	PASS
365	198	1	100	2.2	14264	PASS
441	443	0.10	100	81.8	68134	PASS
442	198	40	100	64.7	425304	PASS
443	442	17	23	19.6	83298	PASS

3m60762.D DFTPP3M.M Fri Apr 22 08:16:22 2016 RPT1

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	661	46.20	436	58.95	251	71.05	1475
38.05	2794	48.00	244	61.00	2709	72.05	358
39.00	19760	50.00	65143	62.10	4250	74.05	29550
39.90	449	51.00	238296	63.00	10102	75.00	46243
40.00	755	52.00	12545	64.10	1997	76.10	17126
41.00	329	53.00	307	65.00	4739	77.05	313473
42.00	277	54.15	1115	65.95	419	78.00	22267
43.05	106	55.00	1105	66.20	319	79.00	21188
44.00	839	56.00	7453	66.95	1508	79.95	15917
45.10	137	57.00	17977	69.00	313116	81.00	21946
45.90	229	58.00	1593	70.05	3204	81.95	3804

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
82.95	3997	93.95	1295	104.05	6580	114.10	398
83.90	2325	94.20	1080	105.00	6653	114.80	426
85.10	3907	95.00	1155	107.00	92226	116.00	4552
85.95	7333	95.95	2921	108.00	15158	117.00	65517
87.05	3225	97.15	3059	109.10	399	117.95	5021
87.95	160	98.00	25203	110.00	173137	118.85	1004
89.00	451	99.00	19270	111.00	25260	119.10	235
90.05	395	100.00	1366	112.05	2622	120.05	1481
90.95	6840	100.95	10715	112.70	729	120.85	926
92.00	6037	101.90	978	113.00	737	121.85	2893
93.00	35134	102.95	4167	113.60	216	122.05	1962

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.00	8863	134.05	4029	143.80	49	154.05	4207
124.00	3789	134.95	9126	144.15	1336	154.95	9598
124.90	2681	136.00	4526	144.90	554	156.05	12971
125.20	659	137.05	4746	146.00	3191	157.05	2135
127.00	329840	137.80	1581	147.00	6974	158.00	2979
127.95	25688	138.05	8	147.95	15969	159.05	1815
129.00	128464	139.15	1213	149.00	3586	160.00	5213
129.95	10423	140.05	2181	149.90	649	160.90	6930
131.00	2043	141.00	16241	151.05	2905	161.80	620
131.90	739	142.05	4918	151.90	1498	162.10	1571
133.10	1078	142.95	2672	152.95	5232	162.90	286

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
164.00	491	171.95	2596	181.95	1754	193.00	6861
164.10	623	173.05	4093	182.90	780	194.05	2190
164.80	1232	174.05	6735	184.10	2113	195.05	1948
165.00	4676	175.05	10999	185.00	13065	196.00	21652
166.05	4746	176.05	4833	186.00	88408	198.00	657712
166.95	29813	176.95	6189	187.05	24010	199.00	45100
167.95	14663	177.70	742	188.10	2813	200.00	3024
169.05	2335	178.00	1490	188.90	5044	200.70	236
169.70	466	179.00	21463	190.05	1319	201.35	3553
170.15	1305	180.00	14698	191.00	2618	201.65	2514
171.10	1248	181.00	9205	191.95	7793	202.80	1702

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
203.00	2781	213.05	528	224.10	89368	233.80	461
204.10	23086	214.00	433	225.05	21868	234.10	1557
205.10	41149	215.05	1578	227.05	34358	234.80	391
206.05	167835	216.05	4006	228.00	4859	235.05	2665

207.00	21445	217.00	38342	229.00	6933	235.95	2072
208.00	6458	218.05	5162	229.85	1303	237.05	2533
209.00	896	219.20	990	231.00	3173	237.90	238
210.15	1189	220.00	429	231.90	223	238.15	279
210.75	4358	221.05	36080	232.30	136	238.95	1672
211.10	3392	221.80	1095	232.90	149	239.30	482
211.85	2397	223.00	9572	233.10	789	240.10	1273

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
241.05	3311	250.80	152	259.90	493	269.00	206
242.05	4890	251.15	707	260.20	97	270.05	831
243.10	2235	251.95	870	261.00	468	271.05	922
244.10	68677	252.40	139	262.60	86	271.70	207
245.05	9760	252.90	981	263.25	515	272.10	1838
246.00	12142	253.40	1728	264.10	501	273.05	11001
247.00	2344	255.05	329205	264.30	560	274.05	29108
248.00	837	256.00	47298	265.00	7222	275.10	145467
249.05	3015	257.15	4289	265.90	1481	276.05	18900
249.80	449	258.00	17582	266.75	355	277.00	11300
250.25	600	259.00	2516	268.20	147	278.00	1854

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
278.80	205	287.70	119	294.70	95	303.10	3964
279.15	477	288.15	310	296.05	32985	304.05	1309
280.10	279	288.60	87	297.00	5136	307.90	846
281.60	120	289.15	281	298.10	167	309.00	398
282.10	626	289.95	519	298.90	166	309.70	112
282.90	419	291.10	296	300.00	85	310.15	371
283.10	836	291.80	318	300.90	148	310.95	354
284.15	1540	292.10	662	301.15	590	312.00	87
285.15	2843	292.80	196	301.80	536	312.80	156
285.80	310	293.05	2426	302.10	353	313.10	231
286.10	133	294.10	917	302.80	384	313.95	1898

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
315.00	3718	325.20	137	336.25	305	348.30	141
316.00	2484	325.95	441	338.10	80	350.05	338
317.05	541	327.05	2247	339.00	94	350.60	76
318.20	109	328.00	1248	339.70	149	351.10	136
320.15	285	328.80	179	339.90	100	352.05	3729
321.00	1507	329.20	147	341.00	1301	353.10	2441
321.70	413	332.05	947	341.95	432	354.00	4692
322.00	251	332.95	1265	343.20	134	354.95	265
323.10	12425	334.10	8059	345.90	234	355.20	159
324.15	2124	334.90	772	346.05	2044	356.15	415
324.90	281	335.10	980	347.05	266	358.40	195

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
359.10	253	368.00	93	385.05	288	403.05	3094
360.90	94	369.90	367	390.05	558	403.80	336
361.25	176	370.40	117	391.00	594	404.05	985
362.50	298	371.05	1415	391.90	84	405.05	371
363.10	278	372.10	6694	392.20	500	414.80	78
363.40	159	372.90	577	396.30	97	415.10	95
364.00	309	373.10	1038	400.75	279	416.00	104
365.05	14264	374.00	194	401.20	249	419.25	304
365.90	1395	376.70	189	401.90	271	420.30	329
366.10	1077	382.95	1487	402.05	2235	421.05	4050
366.90	270	384.00	498	402.80	202	422.15	3505

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms

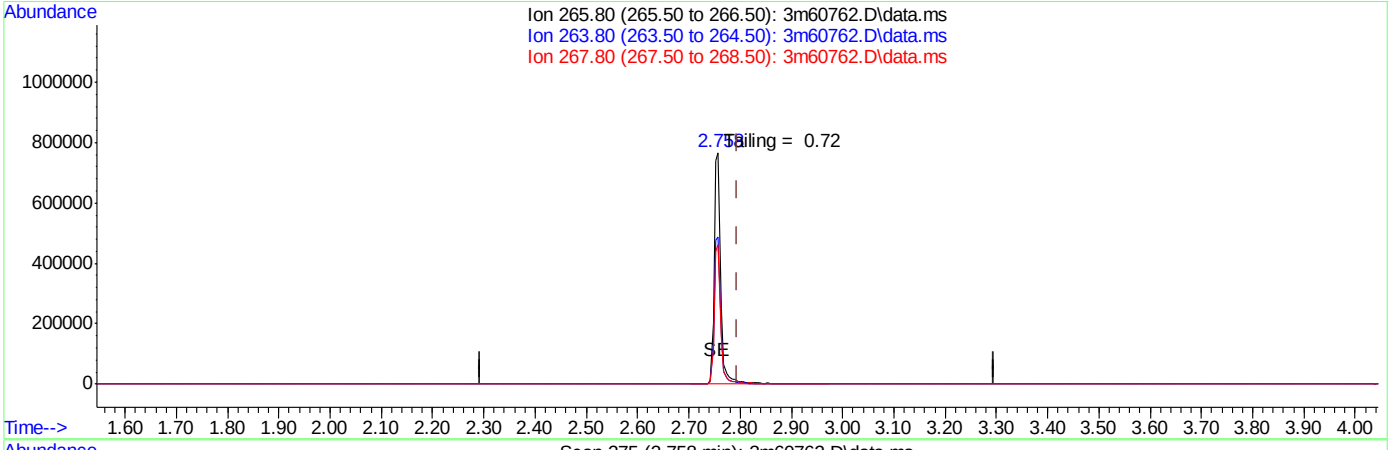
dftpp
Modified:subtracted

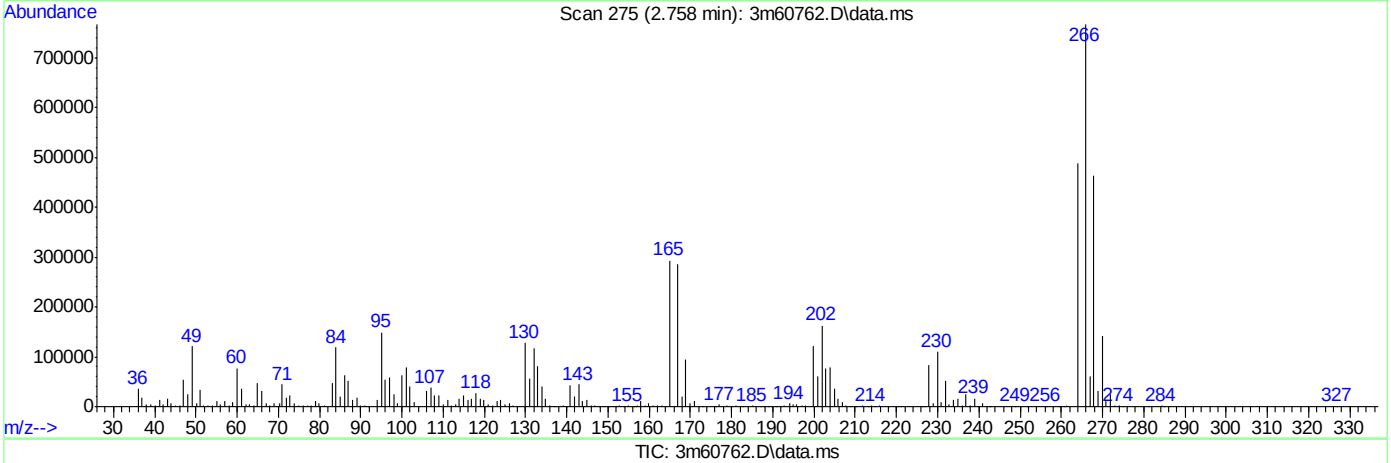
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.10	21736	432.90	494	438.80	912		
424.10	4461	433.85	400	439.90	2031		
425.00	512	434.50	189	441.10	68134		
426.10	183	434.80	226	442.10	425304		
427.20	203	435.40	731	443.10	83298		
428.30	259	435.90	455	444.10	7637		
429.50	82	436.25	476	445.10	306		
429.70	297	436.60	319				
430.25	389	436.95	928				
431.75	392	437.50	435				
432.50	347	438.30	1141				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60762.D
Acq On : 21 Apr 2016 1:31 pm
Operator : linseyk
Sample : dftpp
Misc : op93052a,e3m2855
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 13:36:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m60762.D\data.ms

(1) Pentachlorophenol (t)

2.758min (-0.037) 190.28ppb

response 701808

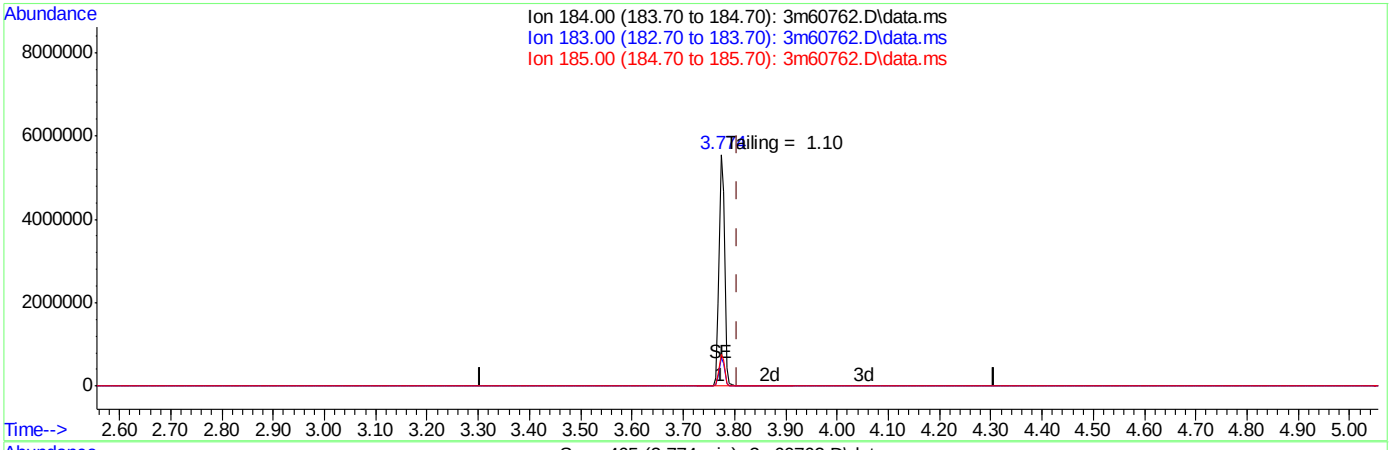
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	63.64
267.80	64.10	60.34
0.00	0.00	0.00

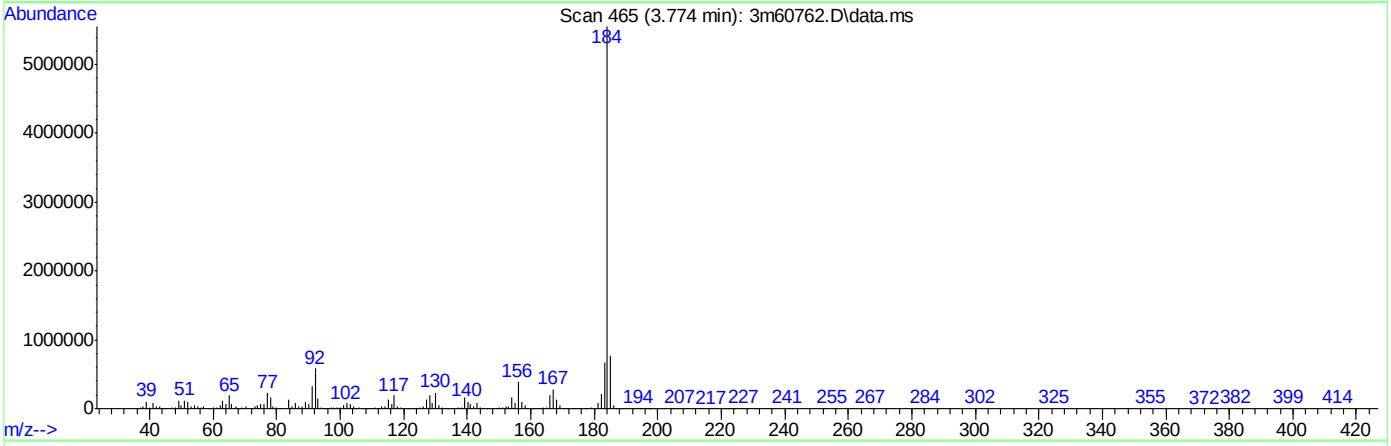
SGS ACCUTEST JC18649

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

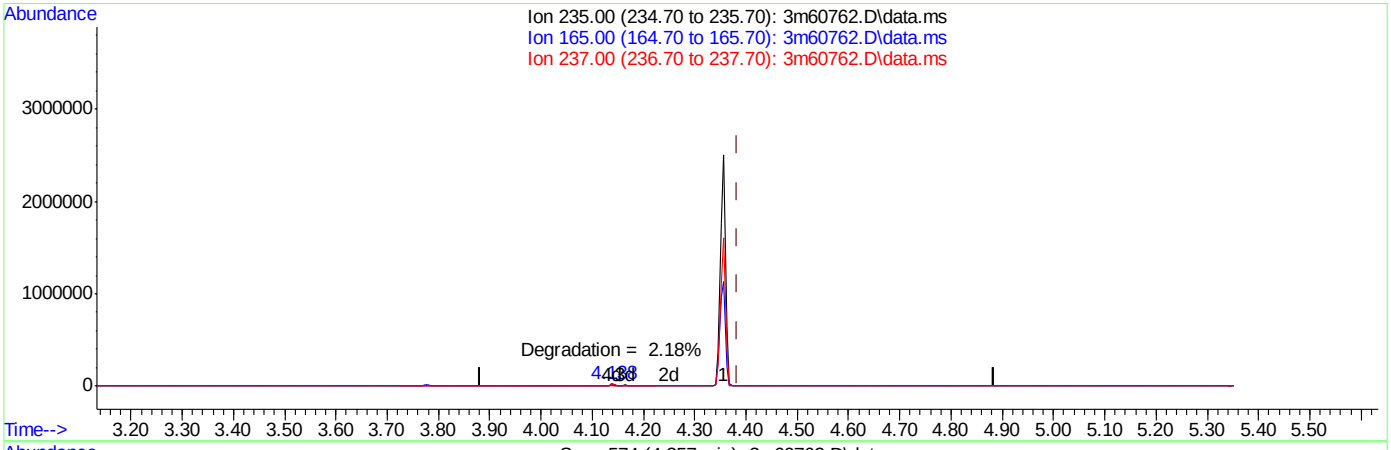
Ion	Exp%	Act%
184.00	100	100
183.00	11.50	12.07
185.00	14.40	13.67
0.00	0.00	0.00

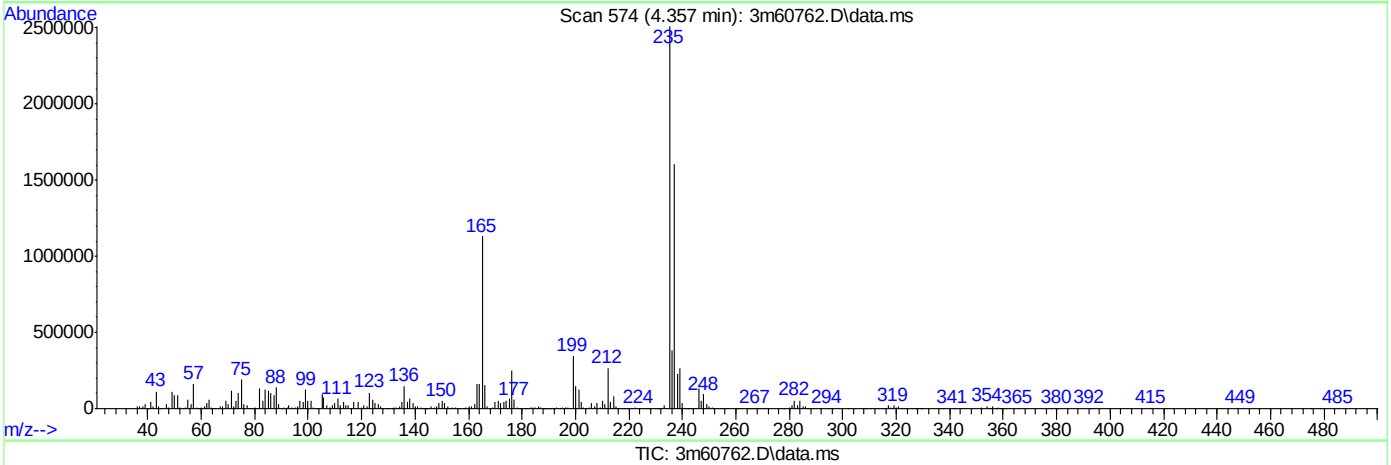
SGS ACCUTEST JC18649

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

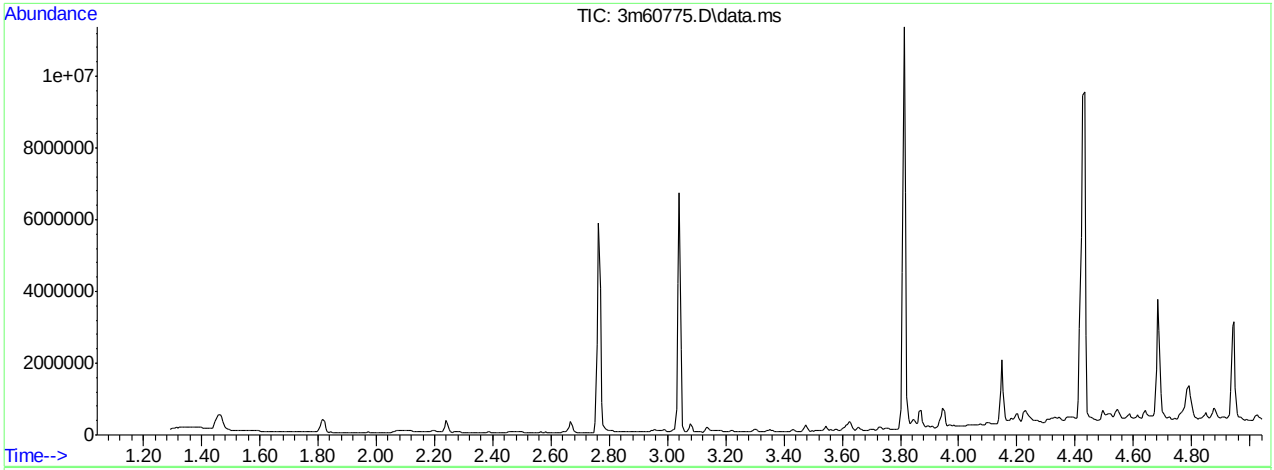
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	48.45#
237.00	0.00	63.48#
0.00	0.00	0.00

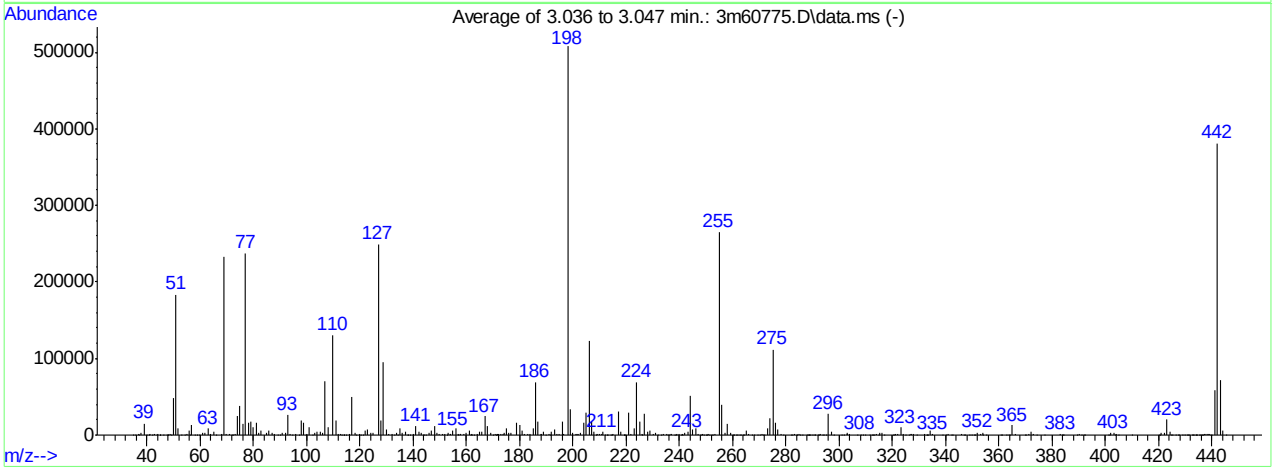
SGS ACCUTEST JC18649

DFTPP

Data File : C:\msdchem\1\DATA\E3M2856\3m60775.D Vial: 1
Acq On : 22 Apr 2016 9:08 am Operator: linseyk
Sample : dftpp Inst : MS3M
Misc : op93052a,e3m2856 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M (RTE Integrator)
Title : DFTPP, RXI-5MS 30m x .25mm x .25um





AutoFind: Scans 327, 328, 329; Background Corrected with Scan 321

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.2	183729	PASS
68	69	0.00	2	1.0	2249	PASS
69	198	0.00	100	46.0	233456	PASS
70	69	0.00	2	0.6	1335	PASS
127	198	40	60	49.2	249659	PASS
197	198	0.00	1	0.2	997	PASS
198	198	100	100	100.0	507554	PASS
199	198	5	9	6.8	34440	PASS
275	198	10	30	22.1	111976	PASS
365	198	1	100	2.5	12643	PASS
441	443	0.10	100	81.7	59008	PASS
442	198	40	100	75.1	381120	PASS
443	442	17	23	19.0	72259	PASS

3m60775.D DFTPP3M.M Fri Apr 22 12:50:59 2016 RPT1

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	399	43.90	490	51.05	183729	61.00	2464
35.85	394	44.10	800	51.95	9393	62.00	3279
36.95	864	44.90	141	53.00	547	63.05	8296
37.20	193	45.10	377	54.20	112	64.05	1443
38.00	2497	46.20	89	55.00	1535	65.05	4477
39.10	15063	47.40	128	56.00	5564	66.20	453
39.90	778	47.90	236	56.20	558	68.00	2249
41.00	256	48.05	297	57.00	13116	69.00	233456
41.20	925	48.90	828	58.05	634	70.00	1335
42.00	125	49.20	467	58.95	562	71.05	896
43.05	1063	50.00	48342	59.85	372	71.80	95

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
72.30	207	83.05	5532	94.80	481	105.00	4868
73.10	1159	85.00	3247	96.00	1169	106.10	2952
74.05	24440	85.95	5994	97.10	506	107.00	71003
75.00	37445	87.10	2471	97.95	18863	108.00	10677
76.15	14691	88.00	1090	98.95	16434	110.00	130784
77.05	237279	89.10	561	99.80	651	111.00	18746
78.10	16169	90.20	167	100.00	1157	112.00	1660
79.00	17268	91.05	3629	101.00	9914	112.85	1021
79.95	10932	91.95	3547	102.10	318	113.20	467
81.00	16656	93.00	25799	102.90	2864	113.85	322
82.00	3496	94.00	2038	104.05	5100	114.10	239

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
115.00	133	125.05	3596	136.00	2676	144.95	695
116.10	1647	127.00	249659	137.00	4276	146.05	2490
117.00	50505	128.05	19200	137.90	599	147.05	5803
118.05	3221	128.95	95365	138.15	757	148.00	11766
118.70	332	129.90	7803	138.85	440	149.10	2453
119.85	899	131.00	2090	140.05	1641	149.95	1111
120.40	131	132.10	1434	141.00	12172	151.20	1795
121.20	297	133.15	665	142.05	4224	152.00	1583
122.00	5232	133.90	2410	142.95	3447	152.80	541
123.00	6965	134.10	59	143.90	295	153.10	2604
123.95	3204	135.00	8903	144.10	680	153.95	1481

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
154.20	1121	161.90	1505	171.10	218	180.00	12646
155.00	6563	162.10	389	171.30	297	181.00	5939
156.00	9475	162.90	483	171.90	1018	181.95	1406
156.80	321	164.15	1273	172.10	1750	183.15	884
157.10	2258	164.95	4097	173.00	2190	184.00	1600
157.80	1175	166.00	4263	173.90	1969	185.00	8765
158.00	1027	167.05	24776	174.10	3306	186.00	69333
159.05	2054	168.00	11111	174.95	8978	187.00	18362
160.00	3423	169.05	2768	176.00	3109	187.90	832
161.00	5898	169.95	228	176.95	3464	188.05	1146
161.60	314	170.95	1078	179.00	16889	189.00	3800

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
189.95	572	200.00	2866	209.05	888	218.00	4249
191.00	2020	201.30	1702	209.90	1929	219.05	111
191.40	587	201.60	1511	210.80	1024	219.40	441
191.95	5055	202.15	1489	211.05	4268	219.70	178

193.00	6960	202.90	3081	212.00	684	221.00	29784
193.90	1698	204.00	16553	212.80	298	221.80	1670
195.00	1287	205.00	29163	213.05	195	223.00	8911
196.05	17171	206.10	122995	214.15	223	224.05	69189
196.70	997	207.05	17137	214.70	192	225.05	18120
198.00	507554	208.00	3819	215.05	1527	225.90	748
199.00	34440	208.80	343	217.00	31423	226.10	1288

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
227.00	28177	236.85	1393	244.10	51163	251.20	219
228.05	4539	237.10	1442	245.00	7874	251.95	545
228.95	5816	238.00	330	246.10	9214	252.50	205
230.10	1131	238.70	276	247.05	1819	253.20	1704
231.00	2756	239.05	999	247.80	343	255.00	265323
232.00	768	240.00	1399	248.20	169	256.00	39712
233.00	626	240.70	280	248.90	1170	257.15	3087
233.95	1976	241.00	1643	249.10	433	258.00	14682
235.10	1822	241.30	303	249.90	267	259.05	2596
235.80	547	242.15	3433	250.25	225	260.10	74
236.10	578	243.10	4018	250.85	916	260.50	211

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
261.15	601	270.00	527	281.85	347	288.80	199
261.90	136	271.00	1143	282.30	133	289.00	172
262.70	102	271.60	151	283.05	1221	290.05	387
263.15	304	272.00	186	284.00	246	290.70	161
263.80	285	273.05	9194	284.15	643	290.90	133
264.15	736	274.05	21979	284.95	1646	291.90	498
265.00	6565	275.05	111976	285.30	288	292.30	215
266.05	972	276.05	15696	286.15	271	293.05	2020
267.10	167	277.05	8065	287.90	303	293.85	392
268.10	325	278.00	1801	288.30	126	294.30	214
269.30	131	279.00	643	288.60	78	294.85	462

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
296.00	27243	309.95	462	320.60	167	332.10	1041
297.05	4063	311.50	79	321.10	1388	332.85	411
297.80	242	312.20	132	322.15	1107	333.10	564
301.00	556	312.55	396	323.10	9876	333.40	330
301.85	411	313.00	144	324.15	1833	334.10	6250
302.80	1221	314.05	1848	325.10	442	335.05	1438
303.10	2857	314.60	395	326.10	205	338.90	87
304.05	1467	315.10	3288	326.80	1122	340.20	149
306.70	76	316.05	2610	327.00	1116	341.05	1319
307.95	683	317.10	515	328.00	827	342.05	234
309.05	503	320.40	79	329.20	83	342.60	108

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
346.00	2069	355.05	694	372.10	5029	392.00	184
346.90	216	360.80	88	373.05	1699	392.20	180
347.30	115	361.20	107	374.05	248	401.10	235
348.80	109	362.90	102	377.10	156	401.40	94
349.90	78	363.50	106	383.10	1411	402.10	2290
350.70	101	363.95	395	383.70	118	403.05	2421
351.05	218	365.05	12643	383.90	298	403.80	201
352.00	3293	366.00	1701	384.10	112	404.10	1003
353.00	2181	369.80	186	389.50	154	405.05	211
353.90	663	370.05	247	390.10	1245	410.00	79
354.05	2840	371.00	1071	391.10	332	420.05	242

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms

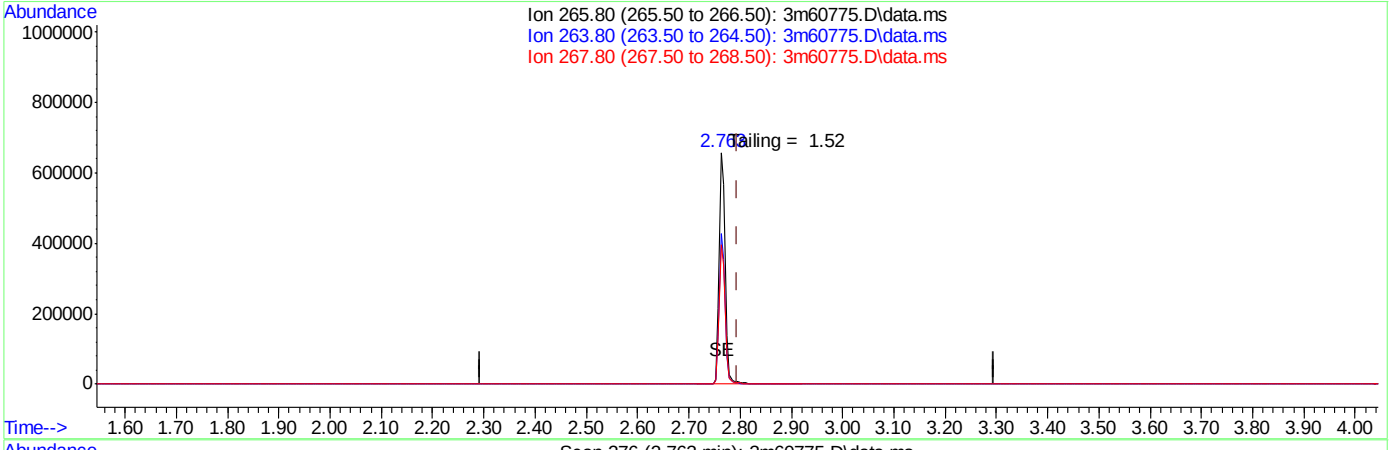
dftpp
Modified:subtracted

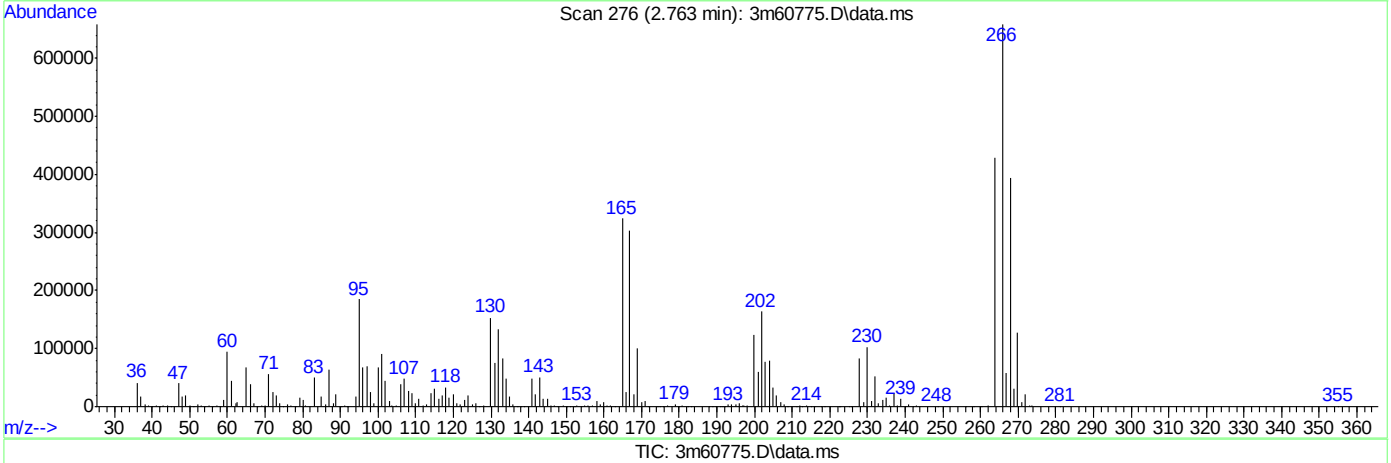
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
420.40	123	429.70	113	435.60	492	441.10	59008
421.05	2721	430.60	187	435.90	103	442.10	381120
422.15	2761	430.90	127	436.40	239	443.10	72259
423.05	19885	431.25	339	436.60	369	444.10	6149
424.10	4372	432.60	219	437.10	814	445.10	294
424.80	311	432.80	104	437.45	1190		
425.25	211	433.10	163	438.05	1621		
426.20	83	433.70	134	438.55	923		
427.00	104	433.90	638	439.15	2217		
427.40	81	434.45	734	439.40	719		
428.90	113	435.00	153	439.70	408		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60775.D
Acq On : 22 Apr 2016 9:08 am
Operator : linseyk
Sample : dftpp
Misc : op93052a,e3m2856
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 22 09:12:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





(1) Pentachlorophenol (t)

2.763min (-0.032) 144.89ppb

response 534391

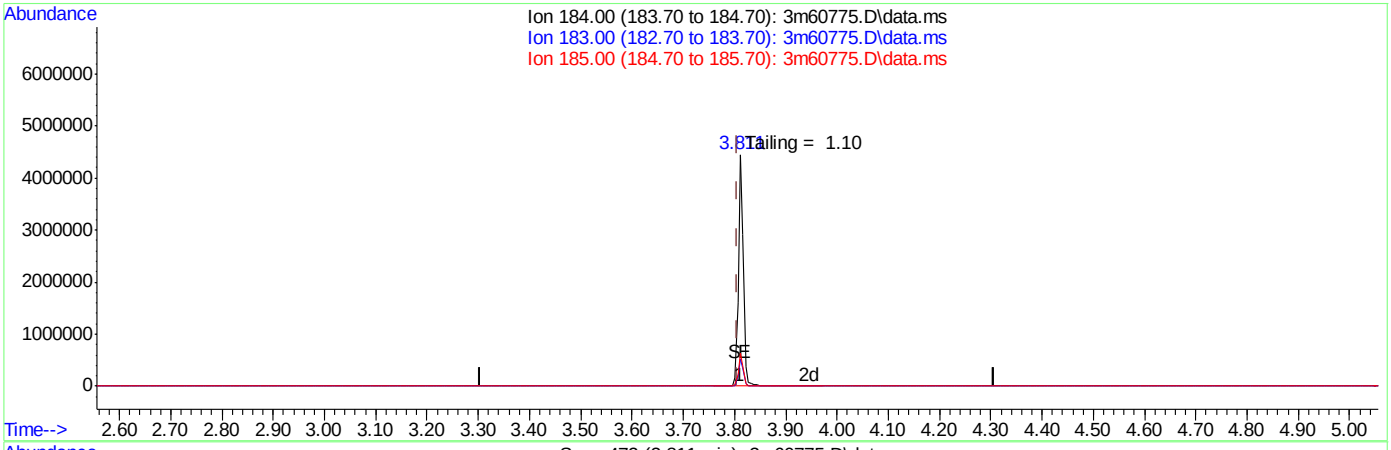
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	65.04
267.80	64.10	59.96
0.00	0.00	0.00

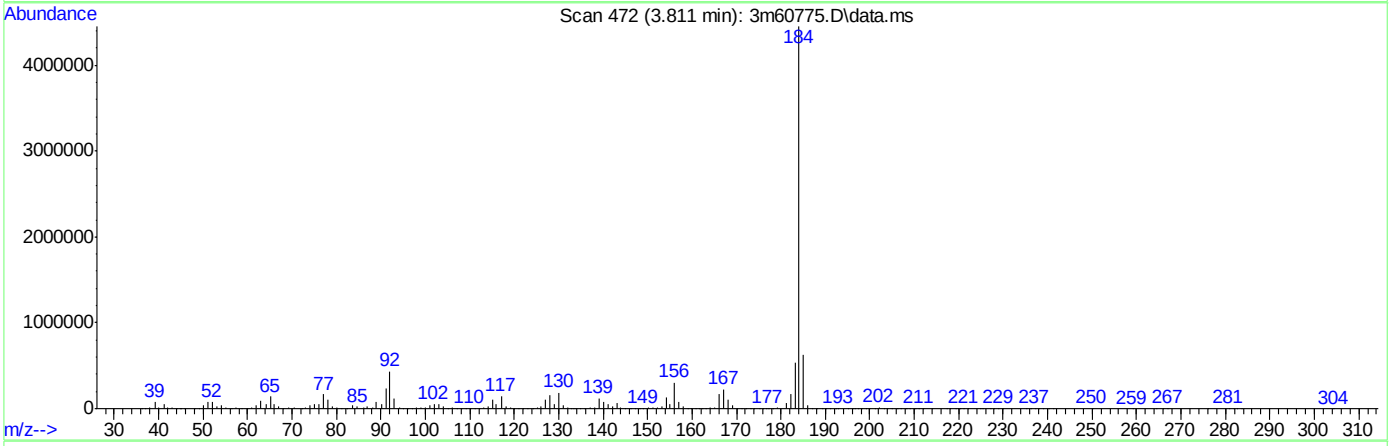
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60775.D
Acq On : 22 Apr 2016 9:08 am
Operator : linseyk
Sample : dftpp
Misc : op93052a,e3m2856
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 22 09:12:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m60775.D\data.ms

(2) Benzidine (t)

3.811min (+0.006) 172.16ppb

response 3132803

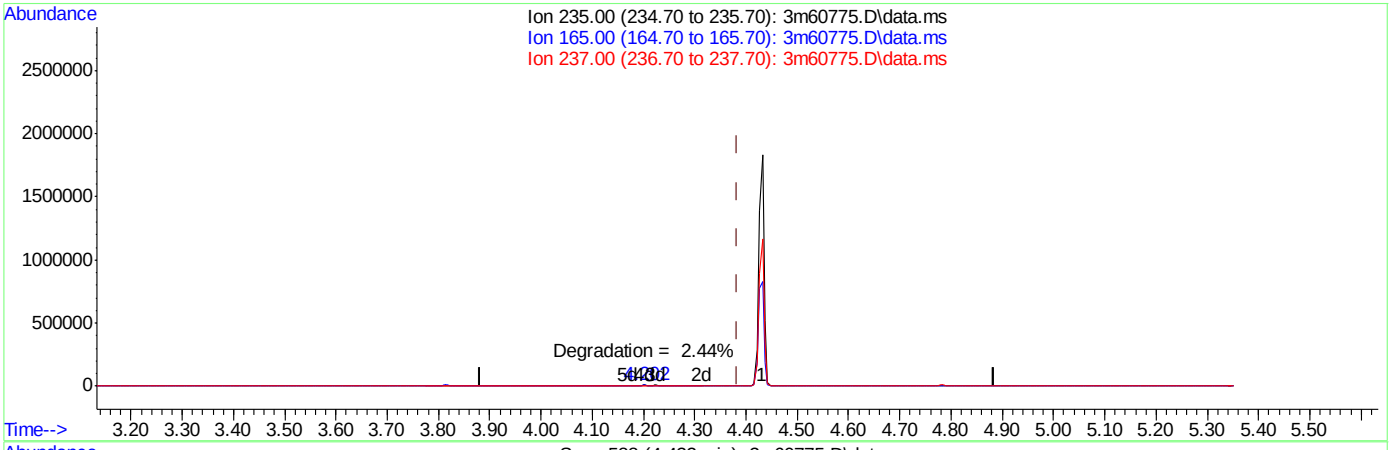
Ion	Exp%	Act%
184.00	100	100
183.00	11.50	11.89
185.00	14.40	13.96
0.00	0.00	0.00

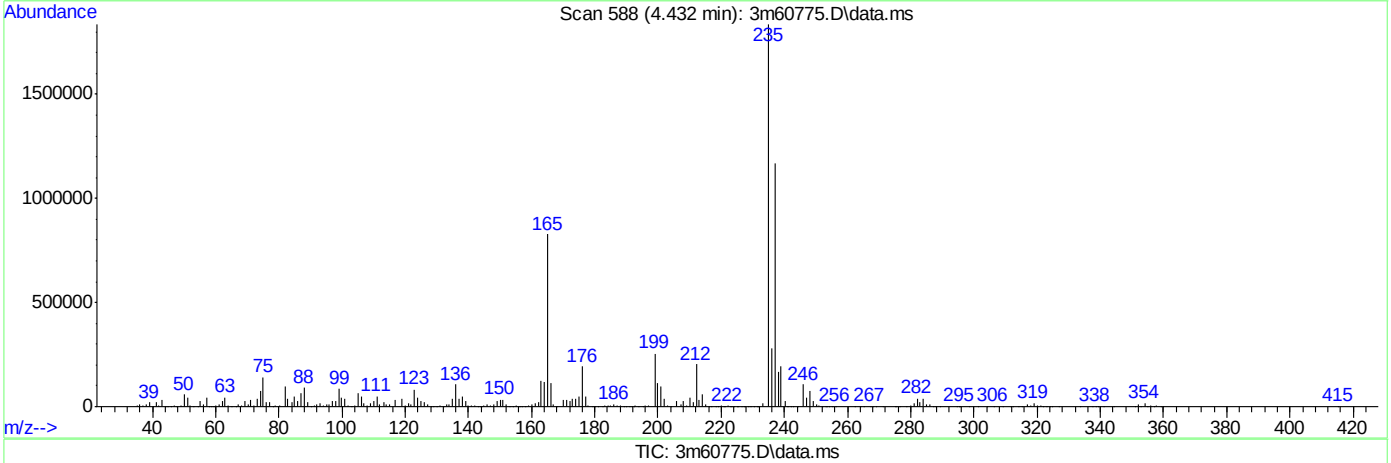
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60775.D
Acq On : 22 Apr 2016 9:08 am
Operator : linseyk
Sample : dftpp
Misc : op93052a,e3m2856
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 22 09:12:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m60775.D\data.ms

(3) PP-DDT (t)

4.432min (+0.048) 175.60ppb

response 1308024

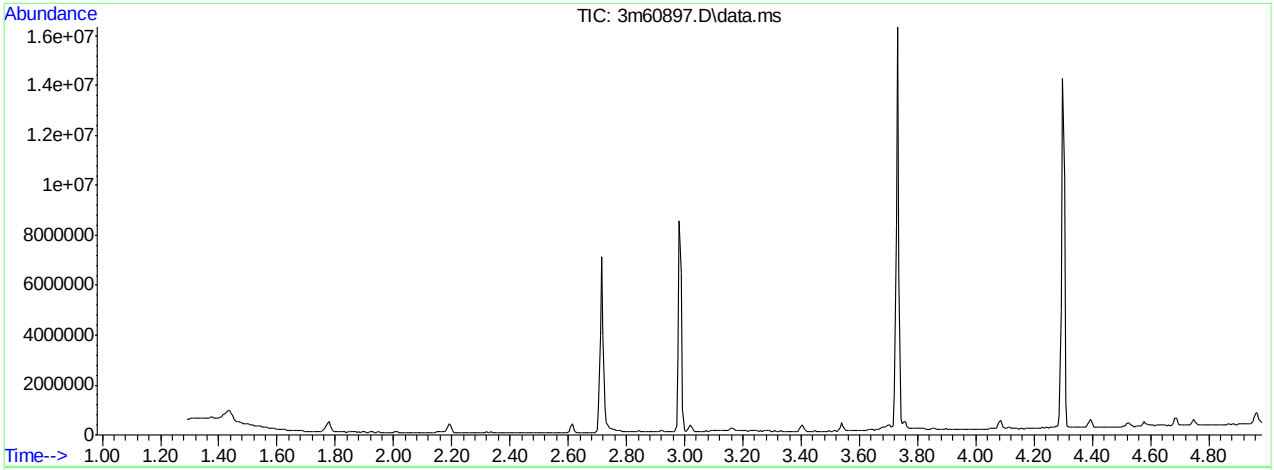
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	49.10#
237.00	0.00	63.98#
0.00	0.00	0.00

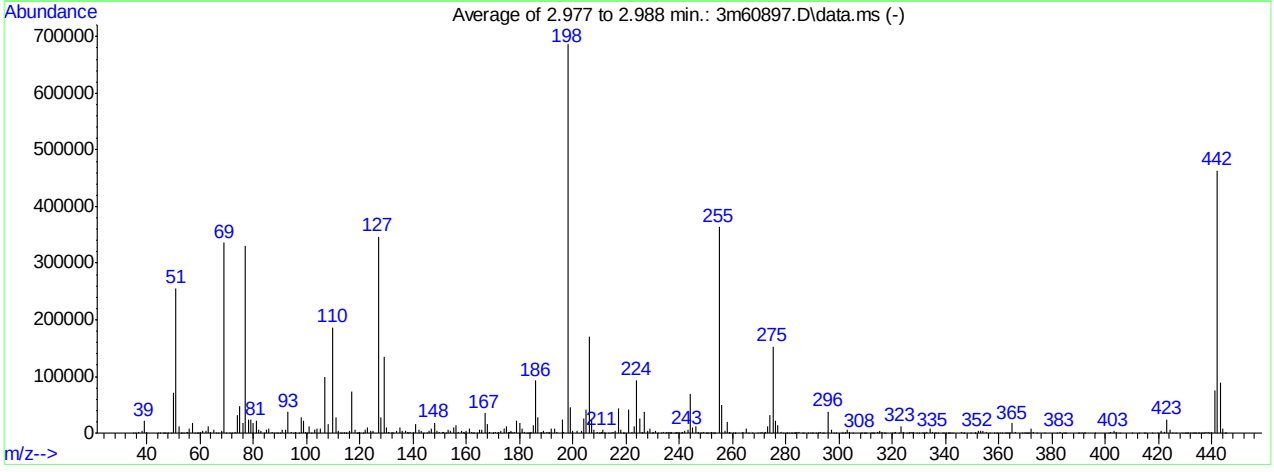
SGS ACCUTEST JC18649

DFTPP

Data File : C:\msdchem\1\DATA\E3M2863\3m60897.D Vial: 1
Acq On : 26 Apr 2016 9:52 pm Operator: juliusj
Sample : dftpp Inst : MS3M
Misc : op93292a,e3m2863 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 316, 317, 318; Background Corrected with Scan 312

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.2	255556	PASS
68	69	0.00	2	1.3	4515	PASS
69	198	0.00	100	49.0	336455	PASS
70	69	0.00	2	0.2	841	PASS
127	198	40	60	50.5	346570	PASS
197	198	0.00	1	0.2	1092	PASS
198	198	100	100	100.0	686187	PASS
199	198	5	9	6.5	44940	PASS
275	198	10	30	22.3	153112	PASS
365	198	1	100	2.6	17802	PASS
441	443	0.10	100	84.6	76119	PASS
442	198	40	100	67.6	463787	PASS
443	442	17	23	19.4	90002	PASS

3m60897.D DFTPP3M.M Wed Apr 27 13:59:10 2016 RPT1

Average of 2.977 to 2.988 min.: 3m60897.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.05	487	48.05	43	57.00	18505	67.00	593
35.85	556	49.00	673	58.00	974	68.05	4515
37.05	1818	50.05	70394	59.05	14	69.00	336455
38.05	3908	51.00	255556	59.30	440	70.00	841
39.00	20987	52.00	11982	60.10	1119	71.00	136
40.05	1399	52.90	598	60.95	3596	72.05	581
44.00	23	53.05	312	62.10	4014	73.00	2593
45.00	507	53.90	85	63.00	11282	74.05	31188
46.20	103	54.90	1571	64.05	1939	75.00	48191
46.70	224	55.00	486	65.00	5377	76.10	18625
46.95	30	56.00	8209	66.00	589	77.00	330427

Average of 2.977 to 2.988 min.: 3m60897.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
78.05	22918	88.85	134	98.95	21799	111.00	27070
78.95	23266	89.20	252	99.80	1400	111.95	3777
79.95	17293	89.90	103	100.10	750	112.90	411
81.00	22732	90.90	5785	101.05	11957	113.10	692
82.05	6186	92.05	6350	101.95	426	113.80	86
83.00	3795	93.00	37608	102.95	5145	113.95	613
84.00	599	94.05	2210	104.00	8384	114.80	365
85.00	5054	95.20	890	105.05	8313	114.95	162
86.00	8083	96.00	2110	107.00	98760	116.05	3580
87.05	2914	97.10	572	108.00	15763	116.95	72951
88.00	581	98.00	27032	109.95	186753	118.00	6431

Average of 2.977 to 2.988 min.: 3m60897.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
118.90	111	129.00	135634	139.00	1202	149.95	1839
119.20	302	130.00	10676	140.05	2354	151.05	2183
119.50	200	130.90	2032	141.00	16791	151.60	2067
119.95	1607	132.05	1543	142.00	5106	152.25	594
121.10	238	132.70	335	142.95	3957	152.95	5127
121.90	6929	133.90	3604	144.00	875	154.00	4188
122.90	9390	134.95	10879	145.00	811	155.05	9318
124.05	4550	136.05	4342	146.05	3325	156.00	13653
125.10	4443	136.95	4222	147.00	8402	157.05	2985
126.95	346570	137.80	486	147.95	17836	158.05	3154
127.95	28618	138.10	1267	149.05	3685	158.90	658

Average of 2.977 to 2.988 min.: 3m60897.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
159.05	1679	168.90	2486	176.90	3510	184.10	1449
159.95	4874	169.80	117	177.10	2430	184.95	13411
161.00	8091	169.95	1015	178.00	2714	186.00	92435
161.95	2700	170.90	2122	178.95	22351	187.00	26821
162.60	179	171.80	381	180.00	18756	187.90	442
163.00	608	172.05	2187	181.05	8144	188.05	2413
164.05	822	173.00	3706	181.95	1534	188.80	505
165.00	6271	174.05	7202	182.60	363	189.05	4831
165.95	6004	175.00	11761	183.00	907	190.00	1275
167.00	34931	175.90	1919	183.30	237	190.90	109
168.00	15135	176.15	2406	183.80	763	191.10	2890

Average of 2.977 to 2.988 min.: 3m60897.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
192.05	8534	205.05	41860	212.25	783	223.00	12262
193.00	8637	206.10	170125	213.40	323	224.05	93352
193.95	2180	206.95	23767	214.10	98	225.00	25909
196.05	24352	207.95	5636	215.05	2331	225.80	361

196.70	1092	209.00	1829	215.90	3925	226.00	1234
198.00	686187	209.90	915	217.00	42643	226.95	37440
198.95	44940	210.10	835	218.00	5961	228.00	4657
200.05	3825	210.60	875	218.80	585	228.95	7481
201.65	4224	210.80	2437	219.15	909	229.80	669
203.10	4489	211.15	5237	221.05	41546	230.10	1440
204.05	24855	211.70	723	222.10	1127	231.05	3634

Average of 2.977 to 2.988 min.: 3m60897.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
232.05	944	238.40	382	246.80	279	252.80	842
233.15	674	238.80	193	246.95	2664	253.30	301
234.00	2492	239.00	1643	247.85	335	255.00	363584
234.80	854	240.00	1215	248.10	351	256.00	49637
235.05	1540	240.70	322	249.05	2915	257.05	4399
235.70	211	241.10	2244	249.85	277	258.00	19062
235.95	1960	242.05	4797	250.20	390	258.80	257
236.40	297	243.05	6386	250.95	982	258.95	2601
236.80	371	244.10	69032	251.70	206	259.95	479
237.05	2470	245.05	9396	251.95	1305	260.70	191
238.10	321	246.00	12393	252.60	169	261.10	697

Average of 2.977 to 2.988 min.: 3m60897.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
263.30	94	274.00	31782	283.00	883	291.05	298
264.05	1067	275.00	153112	283.20	691	291.85	280
264.95	7940	276.05	22185	283.80	356	292.10	300
266.00	1047	277.05	13155	284.05	1070	292.95	2602
267.30	397	277.95	2138	285.10	2652	293.90	375
269.20	142	279.00	125	286.05	665	294.20	778
270.15	873	280.20	116	286.70	79	296.00	37639
271.15	1182	280.40	116	288.20	75	297.05	6212
271.90	160	281.10	51	289.05	442	298.05	554
272.10	1060	282.00	606	289.90	386	298.80	137
273.05	11655	282.50	202	290.10	469	301.00	714

Average of 2.977 to 2.988 min.: 3m60897.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
301.50	223	311.80	154	320.50	122	328.00	1303
302.00	221	312.20	162	320.95	1852	328.90	273
302.30	504	312.60	154	322.15	769	329.80	108
303.10	5620	313.05	591	323.05	12340	331.10	130
304.00	2035	314.15	2701	323.90	346	331.70	413
305.20	266	314.70	363	324.15	2045	331.95	782
308.00	659	315.10	4438	325.10	404	333.00	1508
308.60	90	316.10	2240	326.00	221	334.00	7636
309.10	388	316.80	328	326.20	427	335.15	2172
309.80	88	317.15	250	327.00	1540	336.00	173
310.00	552	319.80	188	327.20	978	336.20	251

Average of 2.977 to 2.988 min.: 3m60897.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
337.10	81	349.50	107	360.20	393	370.05	593
338.95	246	350.80	340	360.90	192	370.30	78
339.20	186	351.10	305	362.20	119	370.80	424
340.15	640	352.10	3722	362.70	80	371.10	594
340.90	886	353.10	3639	363.10	133	372.10	7436
341.20	710	354.05	4110	363.50	222	373.00	2009
341.90	463	355.15	1260	363.90	243	374.00	207
342.70	134	356.55	229	365.00	17802	377.00	162
345.95	2297	358.10	157	366.00	2695	381.90	110
346.60	129	358.90	225	368.70	207	382.90	1995
346.95	499	359.20	121	369.60	182	384.10	344

Average of 2.977 to 2.988 min.: 3m60897.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
384.70	120	404.15	1430	423.10	24233	433.10	283
385.00	121	405.20	112	424.05	5416	433.45	420
389.85	723	409.80	211	425.10	625	434.05	469
390.20	225	412.60	74	426.25	182	434.75	459
391.00	473	414.60	141	428.90	88	435.25	321
392.00	270	415.05	226	429.50	261	435.80	605
392.20	293	417.40	142	430.00	125	436.40	976
396.10	86	419.40	135	430.70	156	436.95	948
401.00	189	420.95	3430	430.95	386	437.80	1162
402.05	2634	422.00	1749	431.90	405	438.45	1398
403.05	3742	422.20	1781	432.45	375	439.10	991

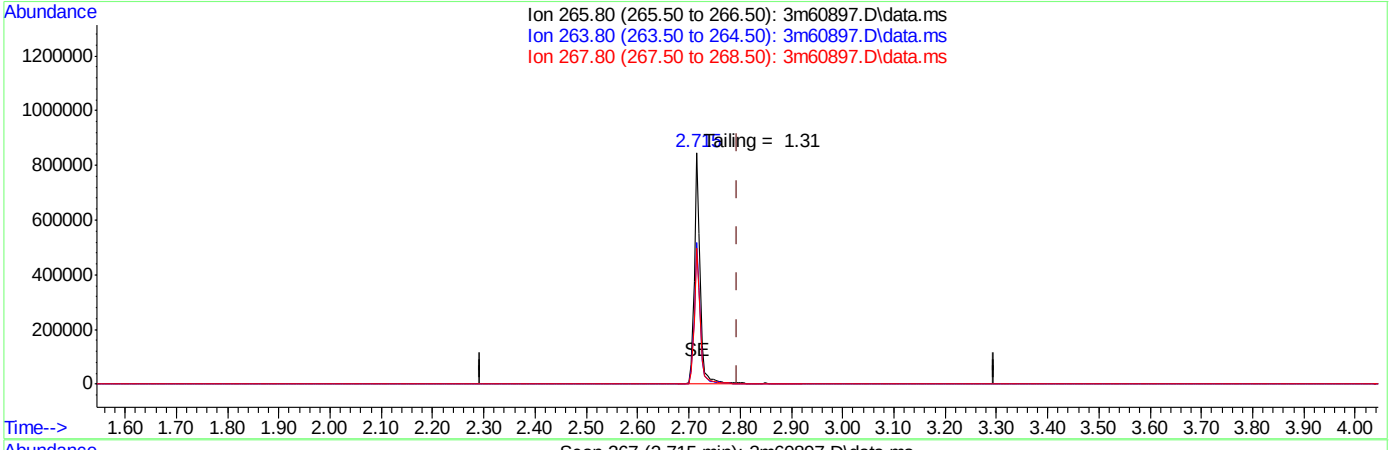
Average of 2.977 to 2.988 min.: 3m60897.D\data.ms
dftpp
Modified:subtracted

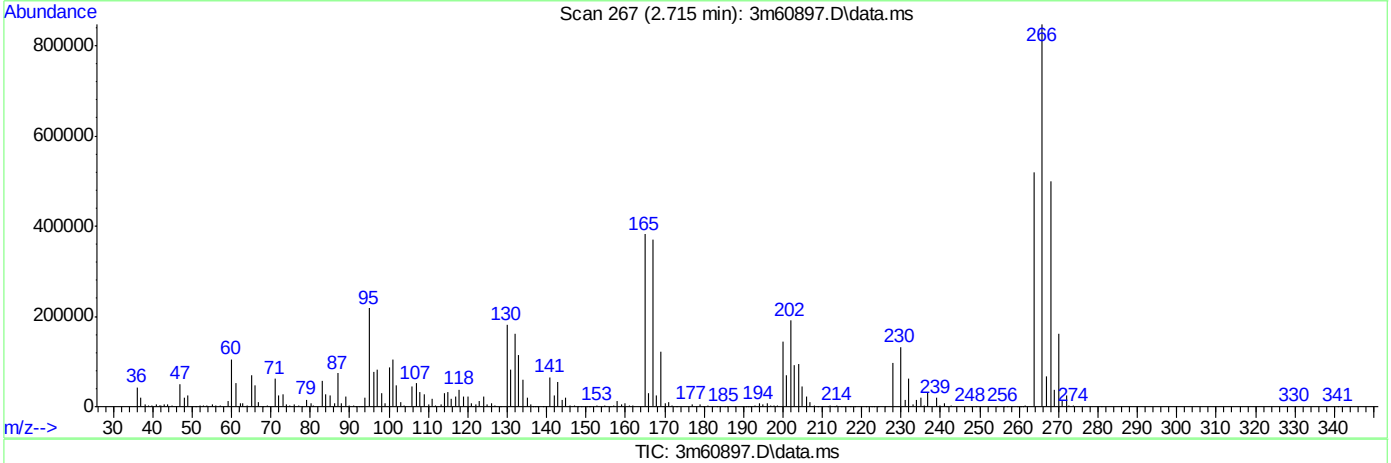
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
439.95	2371						
441.10	76119						
442.10	463787						
443.10	90002						
444.05	8091						
444.90	250						
445.10	183						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60897.D
Acq On : 26 Apr 2016 9:52 pm
Operator : juliusj
Sample : dftpp
Misc : op93292a,e3m2863
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 21:56:57 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: 3m60897.D\data.ms

(1) Pentachlorophenol (t)

2.715min (-0.080) 190.18ppb

response 701439

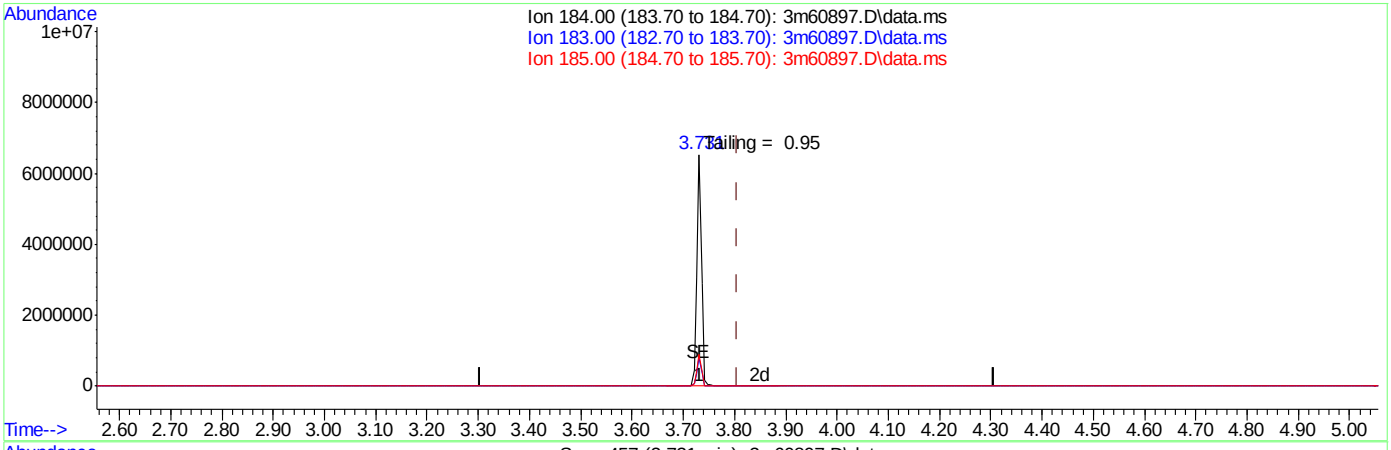
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	61.37
267.80	64.10	58.91
0.00	0.00	0.00

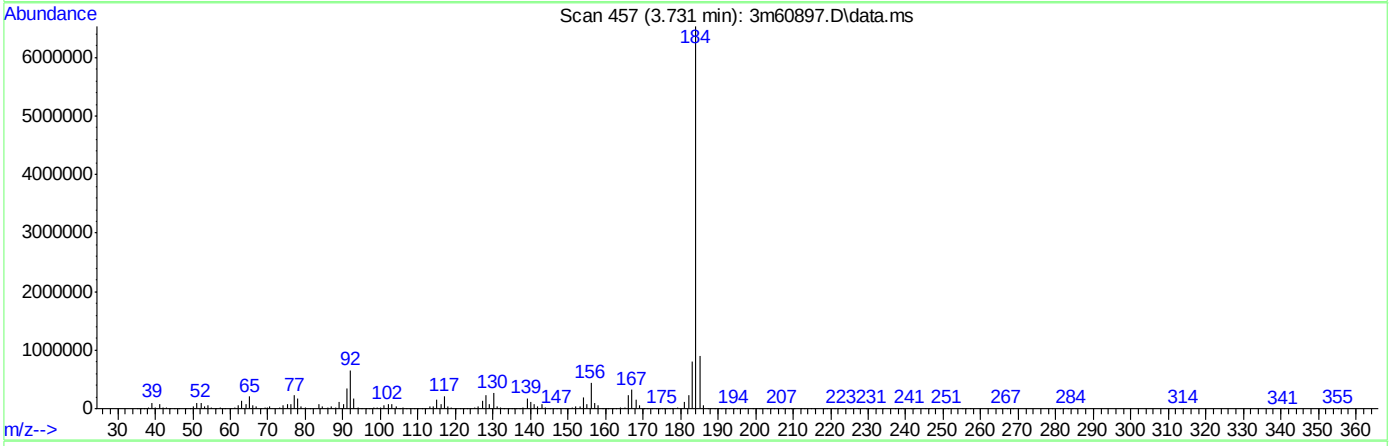
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60897.D
Acq On    : 26 Apr 2016   9:52 pm
Operator  : juliusj
Sample    : dftpp
Misc      : op93292a,e3m2863
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Apr 26 21:56:57 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: 3m60897.D\data.ms

(2) Benzidine (t)

3.731min (-0.075) 235.68ppb

response 4288624

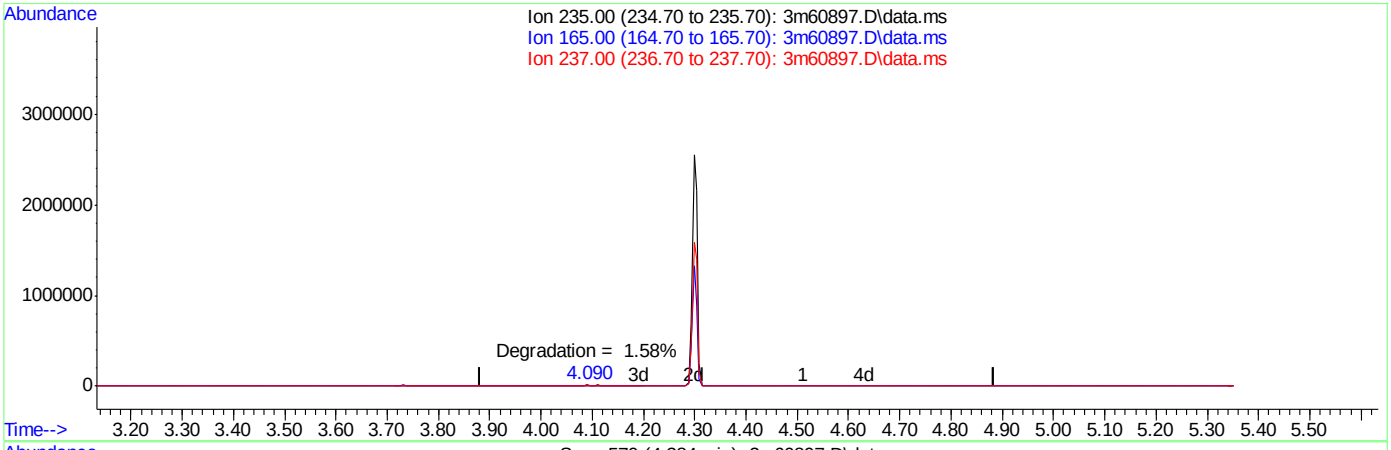
Ion	Exp%	Act%
184.00	100	100
183.00	11.50	12.30
185.00	14.40	13.78
0.00	0.00	0.00

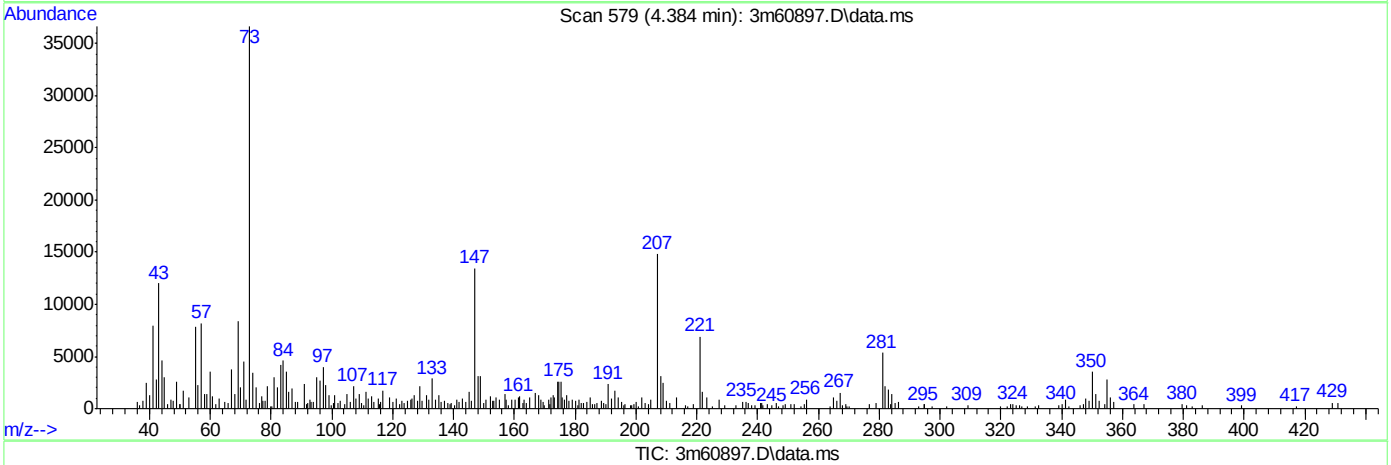
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60897.D
Acq On : 26 Apr 2016 9:52 pm
Operator : juliusj
Sample : dftpp
Misc : op93292a,e3m2863
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 21:56:57 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: 3m60897.D\data.ms

(3) PP-DDT (t)

4.384min 0.00ppb d

response 0

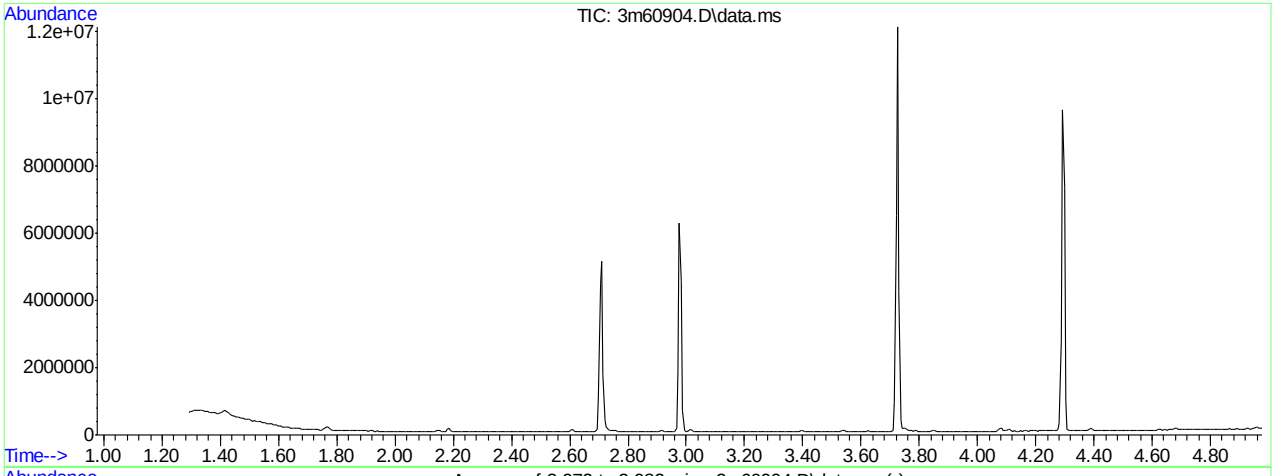
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
237.00	0.00	0.00
0.00	0.00	0.00

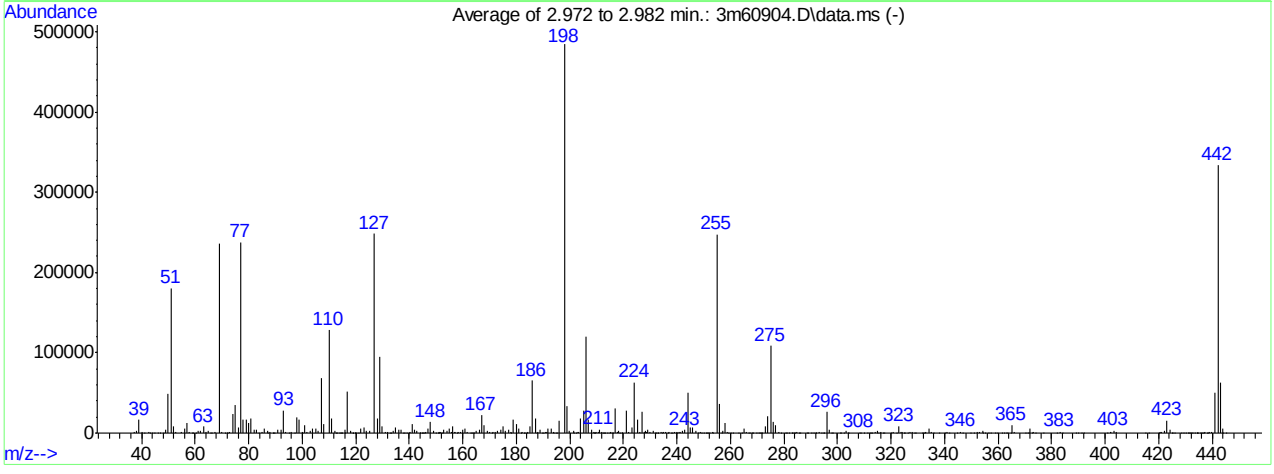
SGS ACCUTEST JC18649

DFTPP

Data File : C:\msdchem\1\DATA\E3M2864\3m60904.D Vial: 1
Acq On : 27 Apr 2016 9:07 am Operator: linseyk
Sample : dftpp Inst : MS3M
Misc : op93292a,e3m2864 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 315, 316, 317; Background Corrected with Scan 311

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.3	180377	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	48.7	235883	PASS
70	69	0.00	2	0.5	1217	PASS
127	198	40	60	51.3	248472	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	484139	PASS
199	198	5	9	6.8	33045	PASS
275	198	10	30	22.4	108315	PASS
365	198	1	100	2.1	10343	PASS
441	443	0.10	100	80.5	50802	PASS
442	198	40	100	69.1	334496	PASS
443	442	17	23	18.9	63117	PASS

3m60904.D DFTPP3M.M Thu Apr 28 10:30:40 2016 RPT1

Average of 2.972 to 2.982 min.: 3m60904.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	1369	48.00	727	59.20	129	69.95	1217
38.00	3040	49.00	4188	60.10	512	71.10	213
38.95	16395	50.00	49244	61.05	3003	71.90	95
40.00	903	51.00	180377	62.05	3369	72.10	290
41.00	57	52.10	8827	63.05	7988	73.00	1640
42.85	803	52.90	828	64.15	1330	74.00	23350
43.30	272	54.95	1797	65.00	3396	74.95	35198
43.90	154	55.95	5766	65.70	77	76.20	7403
45.00	174	57.00	13132	66.10	443	77.00	237690
45.90	357	57.95	754	67.25	800	78.05	17166
47.00	255	58.90	13	69.00	235883	79.00	16755

Average of 2.972 to 2.982 min.: 3m60904.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.00	12173	89.20	408	99.90	482	111.00	18767
81.00	18117	89.80	127	100.10	1307	112.05	2700
82.05	4491	91.00	3751	101.00	9185	112.80	309
83.00	4073	92.05	4330	101.90	771	112.90	414
83.95	620	93.00	28387	103.05	3047	113.90	106
84.95	2068	93.95	1963	104.05	5808	114.40	263
85.95	5160	95.10	202	104.95	5943	114.70	106
86.90	113	96.05	1517	106.00	2463	114.90	643
87.05	2235	96.95	737	107.00	68859	115.90	507
88.00	900	97.95	19423	108.00	10703	116.10	4241
89.00	369	99.00	16658	110.00	128476	117.00	51995

Average of 2.972 to 2.982 min.: 3m60904.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
117.90	2324	125.00	2838	136.00	3572	144.20	363
118.10	1189	127.00	248472	136.90	3571	144.80	90
118.80	208	128.05	18764	137.95	583	145.00	354
119.05	500	129.00	94853	138.20	291	145.20	452
119.60	84	129.95	8375	139.05	569	145.90	366
119.95	545	130.95	1149	139.90	291	146.05	1654
120.20	403	132.05	1154	140.15	1169	147.05	5937
120.85	531	132.80	259	140.95	11737	148.00	13651
122.00	5073	133.15	593	141.95	4013	149.00	3101
123.05	6906	134.05	2704	142.95	2608	150.05	715
123.95	3265	135.05	7726	143.85	489	150.80	151

Average of 2.972 to 2.982 min.: 3m60904.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
151.10	997	157.20	793	164.95	3002	175.05	8770
151.30	566	157.80	514	166.05	3849	176.05	3455
151.65	1001	158.10	1662	166.95	22380	177.15	3640
151.85	53	158.95	1383	168.00	10258	177.80	515
152.40	163	160.05	3608	169.05	2373	178.10	1265
153.00	3673	161.00	4956	170.10	1205	179.00	17037
154.00	3000	161.85	1618	170.80	205	180.00	11736
155.00	5900	162.85	515	171.10	1086	181.00	5749
155.90	1260	163.40	134	172.00	2083	181.80	321
156.05	8935	163.90	532	173.05	2493	182.15	806
157.00	1325	164.20	485	174.05	4788	182.80	533

Average of 2.972 to 2.982 min.: 3m60904.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
183.15	255	190.90	868	199.90	2495	208.90	872
183.95	718	191.20	1003	201.30	529	209.15	220
184.20	868	192.00	5159	201.55	2302	209.55	608
185.05	8807	192.95	6279	202.20	177	210.00	1119

185.95	65092	193.90	826	202.90	1935	210.45	1958
187.00	18303	194.10	619	203.10	2042	211.00	4847
187.80	307	194.80	610	204.05	17939	211.75	1026
188.20	1566	195.10	709	205.10	28054	212.30	138
189.05	3712	196.00	14968	206.10	120819	212.80	152
189.80	561	198.00	484139	207.05	16162	213.00	169
190.20	272	199.00	33045	207.95	4254	214.10	98

Average of 2.972 to 2.982 min.: 3m60904.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
214.80	443	221.80	1172	231.00	2806	237.80	99
215.10	1450	223.05	7002	231.80	143	238.20	409
215.60	221	224.10	63459	232.10	605	238.95	1479
216.10	361	225.10	16335	232.70	160	239.80	383
217.00	30414	226.00	1063	233.00	629	240.10	1038
217.90	752	227.00	26814	234.05	1481	240.80	825
218.10	3336	227.90	841	234.70	278	241.10	936
218.80	198	228.05	3520	235.00	2039	242.00	3395
219.30	392	228.80	916	235.95	1311	243.05	3889
219.50	104	229.00	4728	236.70	590	244.05	50121
221.05	27951	229.95	871	237.10	1925	245.10	6502

Average of 2.972 to 2.982 min.: 3m60904.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
246.00	7686	253.50	378	264.20	564	271.90	159
247.00	2278	255.00	247768	264.95	5644	273.10	8179
248.00	353	256.00	36204	266.00	764	274.05	21446
248.95	1625	256.90	382	266.90	179	275.00	108315
249.20	298	257.05	3154	267.30	273	276.05	13937
250.05	264	258.05	12512	268.00	122	277.00	9391
250.75	467	258.80	1295	268.35	442	278.05	1304
251.10	411	259.10	658	269.90	554	279.10	369
251.60	337	260.05	471	270.70	99	280.60	268
252.10	708	261.05	343	271.00	408	281.20	389
253.20	979	263.10	274	271.30	340	282.00	420

Average of 2.972 to 2.982 min.: 3m60904.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
282.90	432	291.80	214	301.20	146	312.85	283
283.10	691	292.10	141	302.20	430	314.05	1587
283.90	490	293.00	1994	303.15	3432	314.80	228
284.10	327	293.95	476	304.00	467	315.00	2890
284.95	1866	294.70	300	304.20	491	315.80	157
285.80	155	295.00	194	308.10	468	316.05	1772
286.00	259	296.05	26174	308.85	407	316.90	212
288.75	474	297.00	3656	309.95	290	317.25	185
289.10	167	297.80	212	311.30	94	319.80	122
290.05	459	298.20	132	311.80	94	321.00	896
291.10	247	301.00	276	312.40	113	321.85	542

Average of 2.972 to 2.982 min.: 3m60904.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
323.05	8486	332.10	471	346.05	2034	359.05	283
323.90	960	332.45	501	346.90	222	359.90	109
324.10	877	333.05	1064	349.90	75	361.30	73
324.80	208	334.10	5908	350.90	153	362.10	93
325.10	86	335.05	1767	352.00	1989	363.10	233
326.10	200	335.90	306	352.95	1862	363.40	260
327.05	1479	337.90	108	354.10	2933	364.90	618
328.10	832	340.10	108	354.30	185	365.05	10343
328.80	120	341.00	1070	355.10	521	365.95	1371
329.00	113	341.85	331	356.20	190	370.20	185
331.75	344	344.80	109	357.10	106	370.90	336

Average of 2.972 to 2.982 min.: 3m60904.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
371.60	130	391.05	465	420.90	786	430.80	190
372.10	5107	392.15	243	421.10	1454	431.40	95
372.70	112	400.95	511	422.05	2739	431.90	144
373.00	1182	401.90	780	423.10	15638	432.10	148
374.00	158	402.10	949	424.10	3841	432.80	249
376.90	88	403.10	2802	425.00	114	433.40	134
381.80	79	404.05	843	425.20	402	434.10	570
383.10	1465	415.00	394	425.80	84	434.40	234
384.10	176	416.10	92	428.50	86	434.70	139
388.90	132	420.00	105	429.25	153	435.50	548
390.05	576	420.20	160	430.05	264	436.10	326

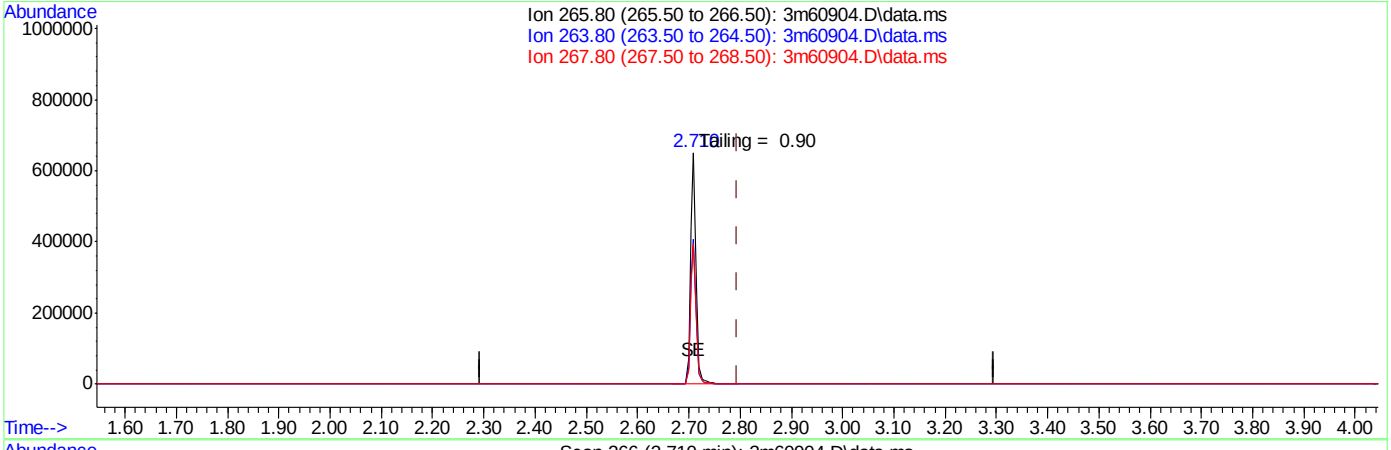
Average of 2.972 to 2.982 min.: 3m60904.D\data.ms
dftpp
Modified:subtracted

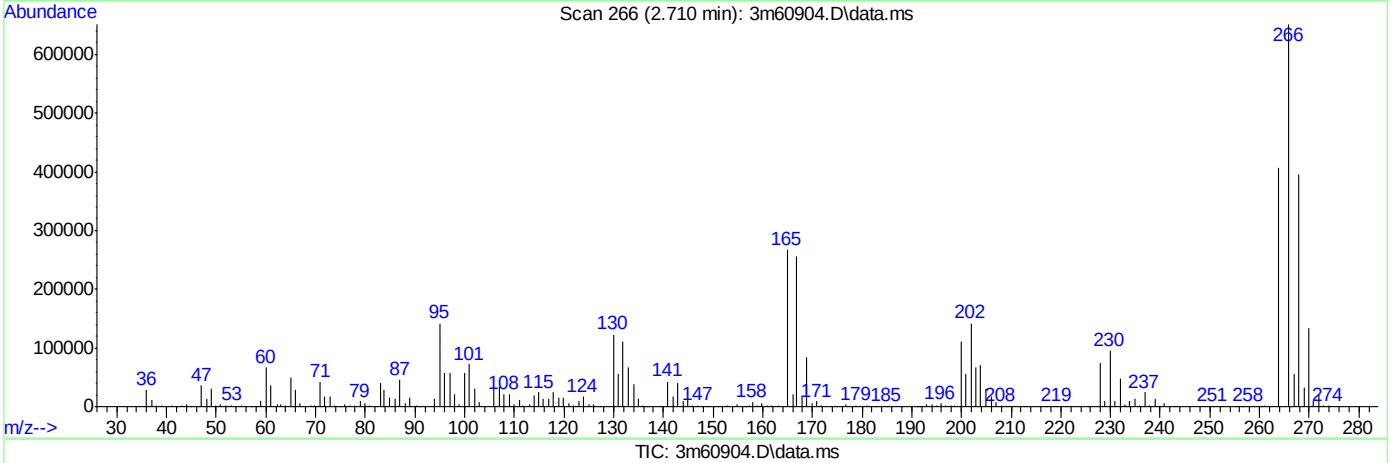
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
436.50	154	444.10	6075				
436.70	738	445.00	252				
437.35	892						
438.00	419						
438.30	579						
439.10	1018						
439.90	1097						
441.10	50802						
442.10	334496						
443.10	63117						
443.90	381						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2864\
Data File : 3m60904.D
Acq On : 27 Apr 2016 9:07 am
Operator : linseyk
Sample : dftpp
Misc : op93292a,e3m2864
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 16:51:50 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)

2.710min (-0.085) 132.12ppb

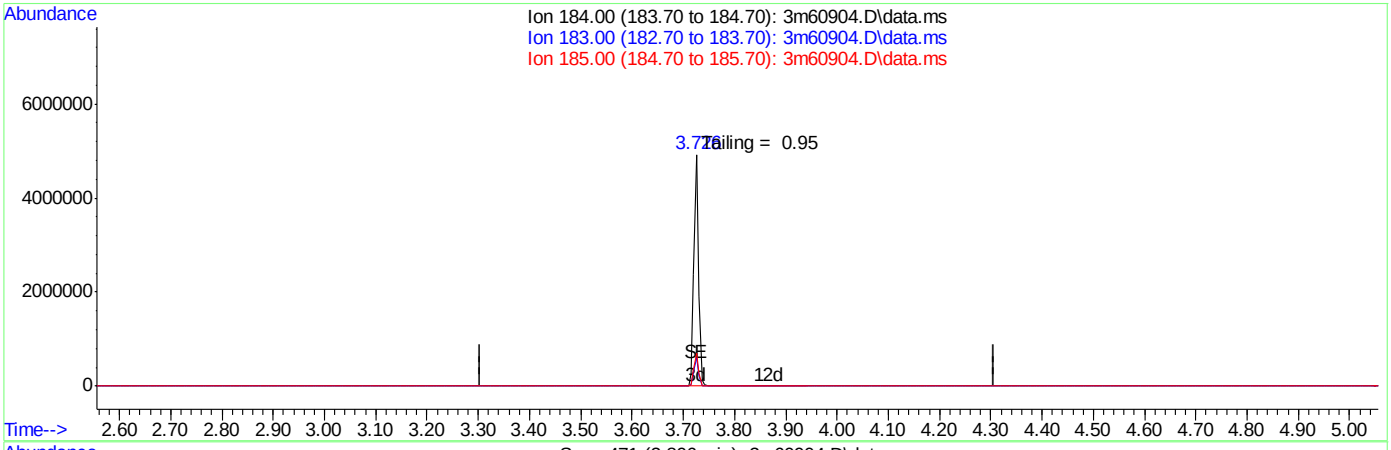
response 487309

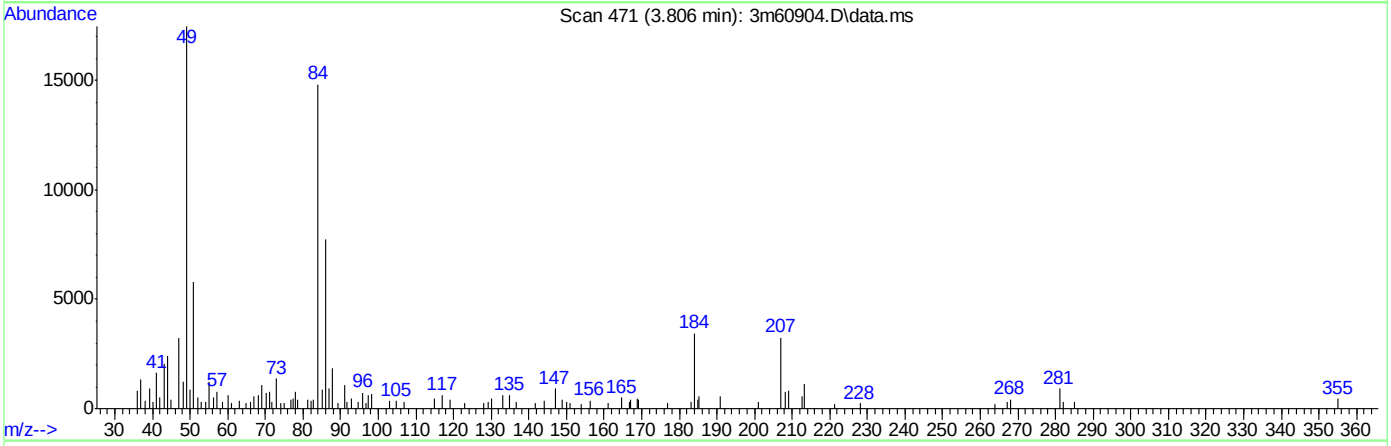
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	62.56
267.80	64.10	60.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2864\
Data File : 3m60904.D
Acq On : 27 Apr 2016 9:07 am
Operator : linseyk
Sample : dftpp
Misc : op93292a,e3m2864
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 16:51:50 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: 3m60904.D\data.ms

(2) Benzidine (t)

3.806min 0.00ppb d

response 0

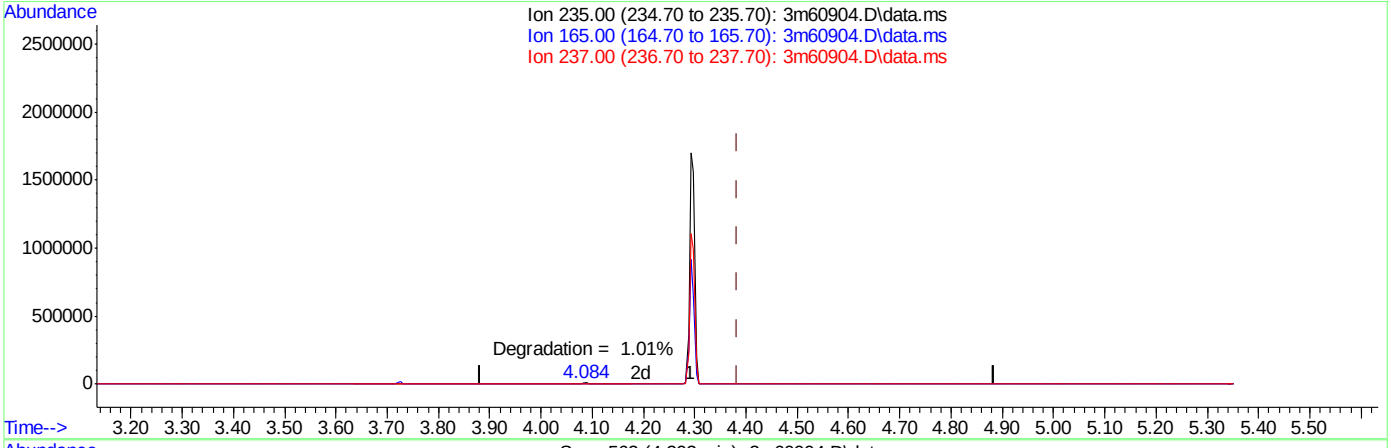
Ion	Exp%	Act%
184.00	100	0.00
183.00	11.50	0.00
185.00	14.40	0.00
0.00	0.00	0.00

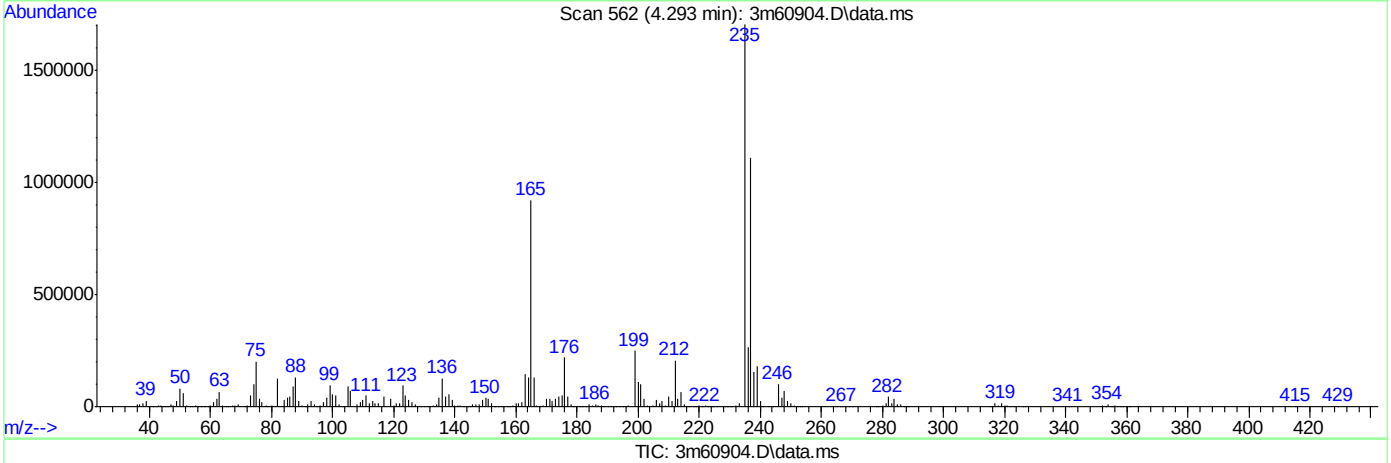
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2864\
Data File : 3m60904.D
Acq On : 27 Apr 2016 9:07 am
Operator : linseyk
Sample : dftpp
Misc : op93292a,e3m2864
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 16:51:50 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: 3m60904.D\data.ms

(3) PP-DDT (t)

4.293min (-0.091) 166.36ppb

response 1239188

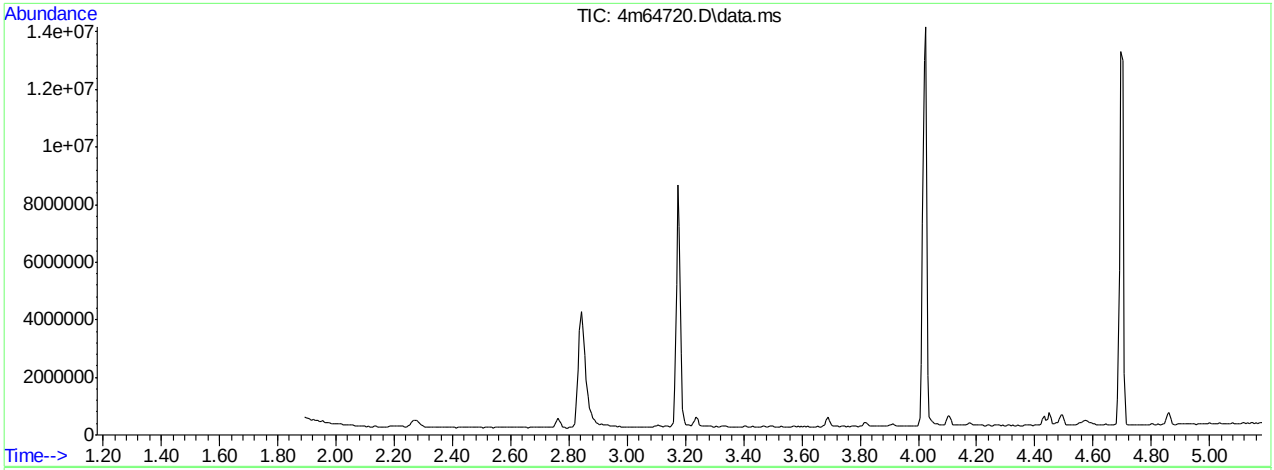
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	49.55#
237.00	0.00	64.06#
0.00	0.00	0.00

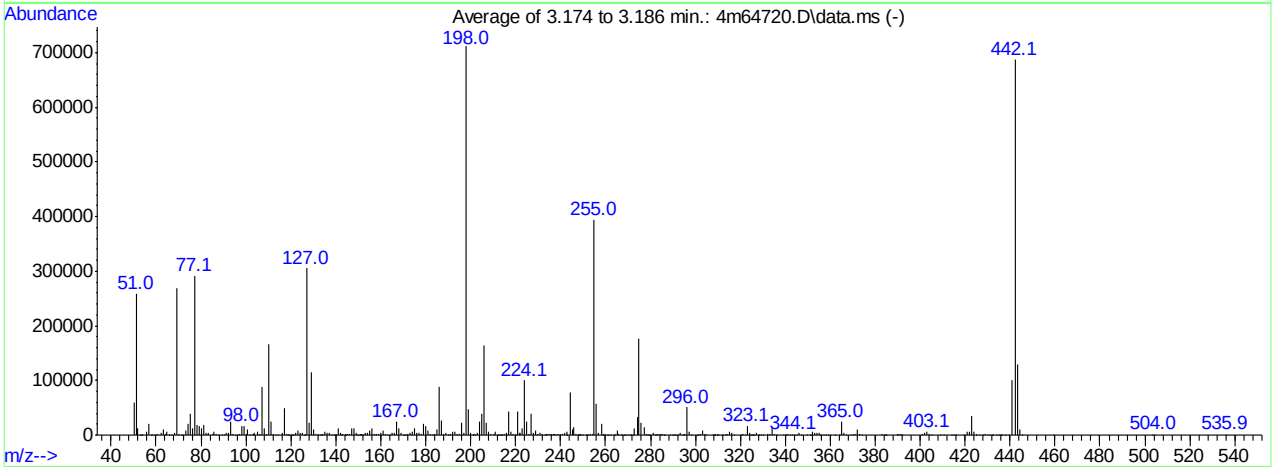
SGS ACCUTEST JC18649

DFTPP

Data File : C:\msdchem\1\DATA\E4M2881\4m64720.D Vial: 1
Acq On : 14 Apr 2016 9:05 am Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op92998a,e4m2881 Multiplr: 1.00
MS Integration Params: events3.e

Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M (ChemStation Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um





AutoFind: Scans 225, 226, 227; Background Corrected with Scan 208

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.3	258280	PASS
68	69	0.00	2	1.6	4287	PASS
69	198	0.00	100	37.8	268929	PASS
70	69	0.00	2	0.9	2537	PASS
127	198	40	60	42.9	305536	PASS
197	198	0.00	1	0.6	4427	PASS
198	198	100	100	100.0	711488	PASS
199	198	5	9	6.6	46648	PASS
275	198	10	30	24.9	177016	PASS
365	198	1	100	3.4	24255	PASS
441	443	0.01	100	77.5	100995	PASS
442	198	40	100	96.6	687531	PASS
443	442	17	23	19.0	130315	PASS

4m64720.D DFTPP4M.M Thu Apr 14 17:23:44 2016 MANAGER

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.05	59733	60.00	457	71.05	45	82.00	3891
51.05	258280	60.95	2678	71.90	622	83.00	5071
51.95	12358	62.05	3823	73.00	9177	85.00	2914
53.00	186	63.05	10823	74.00	20144	85.95	7237
53.20	923	64.05	1402	75.00	38614	86.90	2228
53.85	408	65.00	5253	76.05	12303	87.90	789
56.00	7193	66.00	478	77.10	291176	89.10	798
57.00	20601	67.00	82	78.00	19044	90.00	181
57.95	640	68.05	4287	79.00	17419	91.05	4835
58.20	383	69.00	268929	80.05	12571	92.00	3669
59.05	543	70.00	2537	81.00	18508	93.00	24515

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.05	2541	103.90	4777	116.05	3605	125.00	3741
95.00	895	105.00	5877	117.00	48560	125.95	348
95.95	779	106.00	2485	118.05	3075	126.20	636
97.15	2316	106.95	88755	118.80	620	127.00	305536
98.00	16613	108.05	12214	119.20	215	128.00	23012
99.00	16199	109.05	2422	120.05	375	129.00	114200
99.95	1254	110.00	166575	120.70	174	129.90	9530
100.90	9998	111.00	24379	121.15	456	131.05	2380
101.85	176	112.05	3159	122.00	4961	131.90	114
103.00	2632	112.90	992	123.00	7911	132.20	424
103.20	406	114.05	581	123.95	3501	132.90	482

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
133.70	311	143.00	1643	151.00	2319	158.95	2293
133.95	1878	143.85	195	151.20	262	159.95	4700
135.00	7204	144.15	596	151.70	1172	161.00	7679
136.00	4006	144.60	357	152.10	379	162.00	2024
137.05	4208	145.15	1487	153.00	4763	162.95	887
137.85	196	145.95	2061	154.00	3534	164.05	614
138.85	503	147.00	12335	155.10	7868	165.00	4310
140.05	1684	148.00	12963	156.00	12995	165.95	4544
141.00	12121	149.00	4103	157.00	2880	167.00	24350
142.00	4450	149.80	169	157.80	1810	168.00	11917
142.80	799	150.00	706	158.00	1559	169.05	3197

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
170.20	1030	180.00	15550	190.05	860	200.95	38
170.60	727	181.00	7487	190.95	2833	201.40	2324
171.00	742	182.00	1147	191.95	7105	201.80	329
172.00	2495	183.00	730	193.05	6769	202.95	4648
173.05	3867	183.50	555	194.05	1386	204.05	23832
174.05	6120	184.00	1539	195.00	1415	205.10	38998
175.00	12082	185.05	11088	196.05	22627	206.10	163456
176.00	3990	186.00	88595	197.00	4427	207.10	23332
177.00	3562	187.00	25789	198.00	711488	208.00	5882
178.05	2032	188.05	2540	199.00	46648	209.00	1628
178.95	20312	189.00	4726	199.95	4431	210.20	3008

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
211.05	7001	219.10	1376	228.00	4753	236.00	1429
211.80	264	219.70	317	229.00	7916	236.95	1291
212.50	118	220.10	811	229.90	1145	237.20	1406
213.10	343	221.10	43960	231.05	4425	238.00	703

M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER Page: 0

213.50	160	221.80	3763	232.00	1293	238.90	1387
214.10	203	222.05	3811	232.80	756	240.00	1127
215.00	1974	223.00	11574	233.20	189	241.00	2142
215.80	726	224.05	100086	233.90	1180	242.05	4545
216.10	3291	225.10	24836	234.10	1520	242.80	559
217.00	42592	226.05	2623	235.00	3019	243.05	5893
218.00	6216	227.00	39165	235.70	174	244.10	77501

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
245.10	10548	252.10	944	261.15	295	271.00	706
246.00	13587	253.15	1948	262.10	97	271.30	600
247.00	2554	254.10	1469	263.90	841	272.10	1096
247.60	95	255.00	393813	264.10	85	273.00	12304
247.90	655	256.00	58016	265.05	8314	274.05	32919
248.15	385	257.00	4804	265.95	1264	275.00	177016
248.70	1297	258.05	20468	266.90	170	276.00	21876
248.95	397	258.80	334	267.30	236	277.05	13725
249.90	937	259.10	3164	268.20	135	278.05	1847
251.15	1085	259.85	844	268.90	160	278.80	508
251.60	120	261.00	398	269.95	781	279.10	487

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
279.90	97	289.65	492	298.00	371	308.90	180
281.15	3645	290.05	414	300.70	209	309.50	68
282.00	571	290.80	189	301.05	509	309.80	136
282.20	320	291.05	458	302.00	1242	310.00	228
283.00	3052	292.05	1119	303.05	7446	311.50	189
284.10	1574	293.05	3652	303.95	1659	312.30	438
284.70	625	294.00	550	304.90	120	313.05	655
285.05	2194	294.80	223	307.60	77	314.05	3006
286.00	243	295.10	1890	307.95	828	315.00	5281
286.20	82	296.00	50648	308.20	185	316.05	3288
288.95	296	297.10	6591	308.60	117	317.00	557

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
319.90	249	328.20	555	340.95	2487	353.00	4422
321.00	1400	328.90	433	342.10	910	354.10	5044
322.05	1021	330.00	185	343.00	381	355.05	4717
323.10	17235	332.05	1488	344.05	473	355.80	350
324.10	3221	333.05	1447	345.00	91	356.10	958
324.80	308	334.10	13095	346.00	4050	357.00	1042
325.15	381	335.05	2912	347.10	989	358.15	194
325.60	169	336.00	564	349.80	109	359.10	315
326.00	204	339.05	501	350.90	148	359.90	75
327.10	3992	339.90	84	351.20	323	361.90	82
327.95	875	340.05	154	352.20	5622	363.80	101

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
365.00	24255	384.30	311	404.10	2425	424.05	6189
366.00	3411	384.70	108	405.05	334	424.90	213
367.00	289	385.00	105	409.15	192	425.05	410
369.20	430	389.80	374	410.20	74	426.40	190
370.05	894	390.05	1404	414.10	70	428.00	89
371.00	1350	391.05	1482	414.95	322	429.05	1531
372.10	11350	391.70	321	416.10	70	430.05	705
373.20	2681	392.15	272	419.60	100	431.05	478
374.10	120	401.05	1198	421.00	5303	431.80	78
383.05	2662	402.00	4961	422.10	6085	432.40	297
383.90	339	403.10	6080	423.10	34179	433.90	84

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms

M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER Page: 1

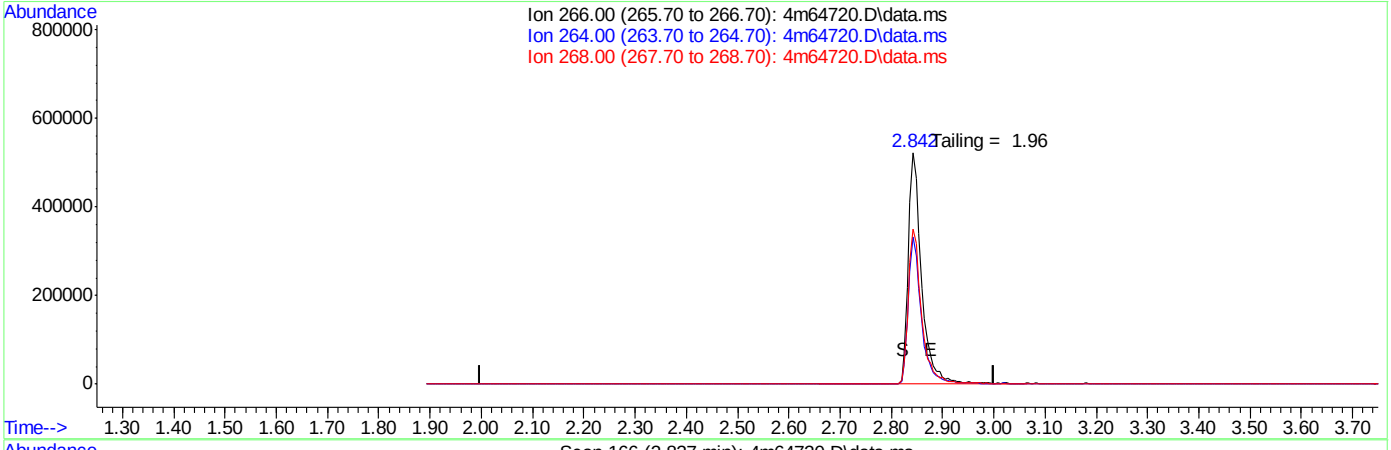
dftpp
Modified:subtracted

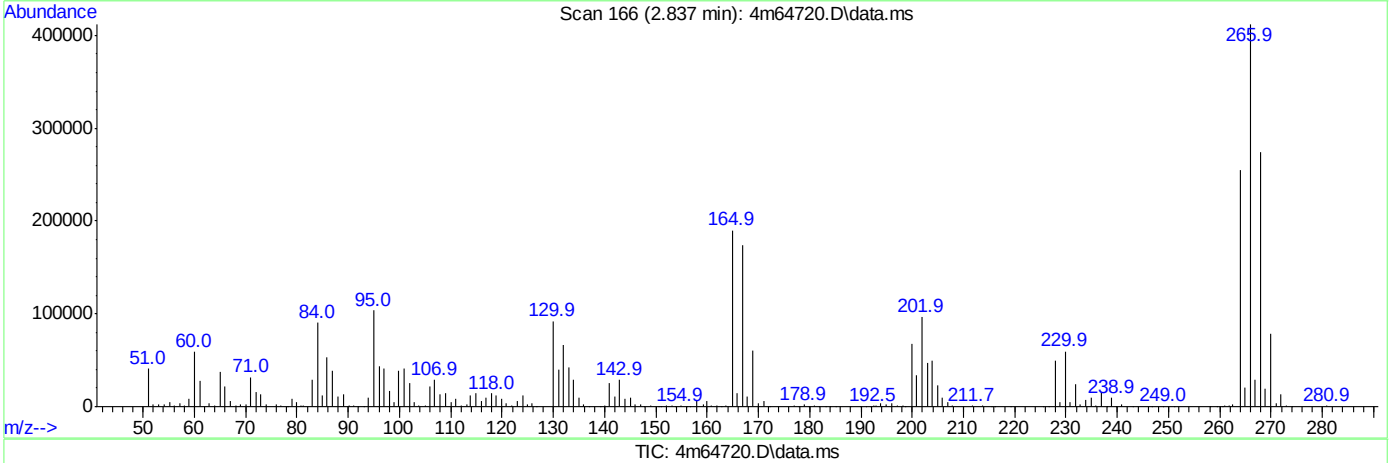
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
434.90	128	459.15	493				
435.30	158	503.00	77				
435.95	261	504.00	208				
436.40	88	535.90	70				
438.00	91						
439.15	323						
441.10	100995						
442.10	687531						
443.10	130315						
444.10	11143						
445.10	553						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64720.D
Acq On : 14 Apr 2016 9:05 am
Operator : linseyk
Sample : dftpp
Misc : op92998a,e4m2881
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 09:11:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m64720.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

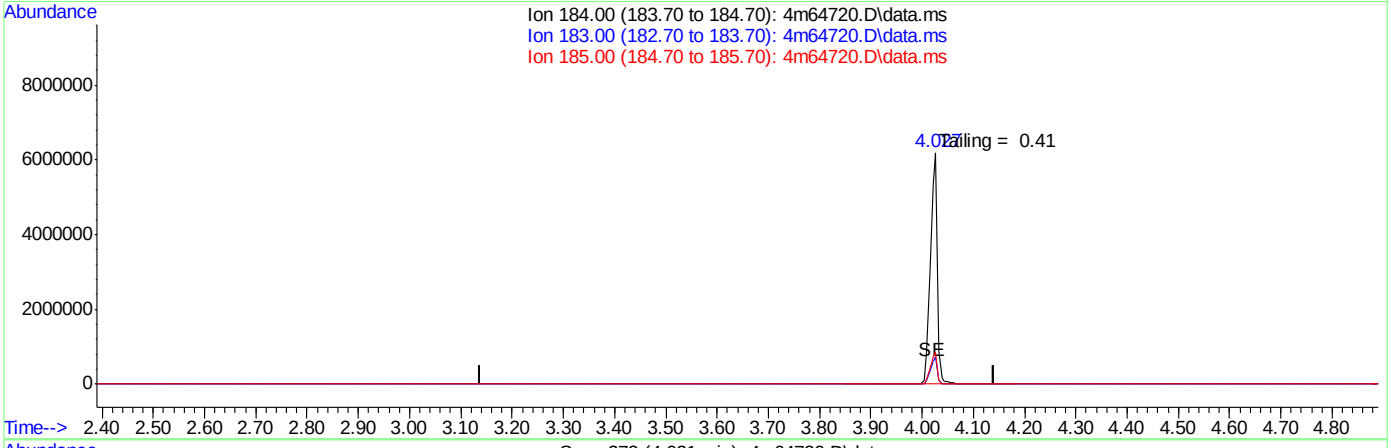
response 0

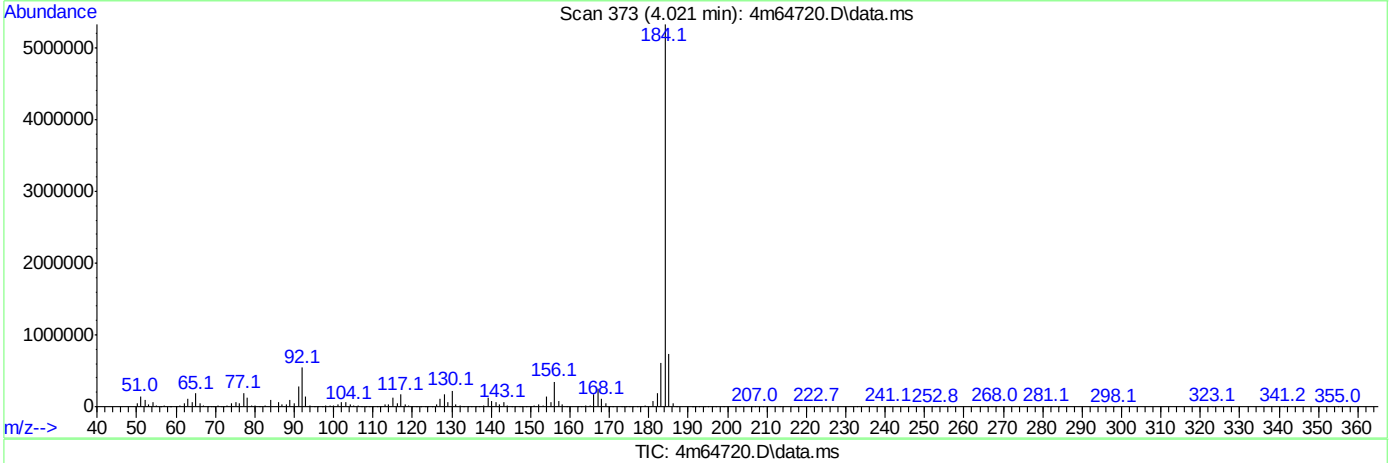
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64720.D
Acq On : 14 Apr 2016 9:05 am
Operator : linseyk
Sample : dftpp
Misc : op92998a,e4m2881
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 09:11:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





(2) benzidine (t)

3.640min (-3.640) 0.00ppb

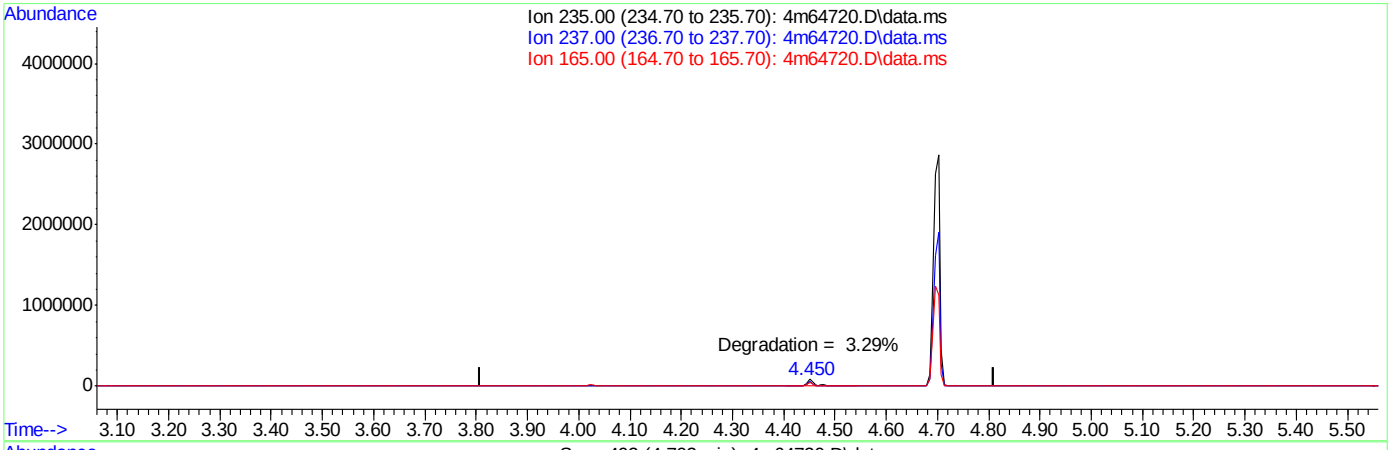
response 0

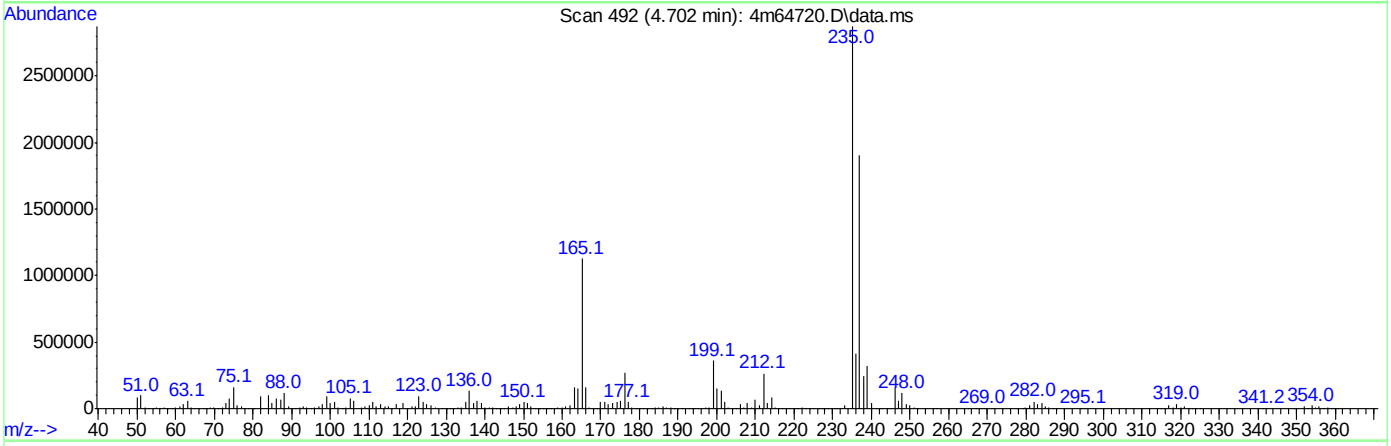
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64720.D
Acq On : 14 Apr 2016 9:05 am
Operator : linseyk
Sample : dftpp
Misc : op92998a,e4m2881
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 09:11:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m64720.D\data.ms

(3) ddt (t)

4.310min (-4.310) 0.00ppb

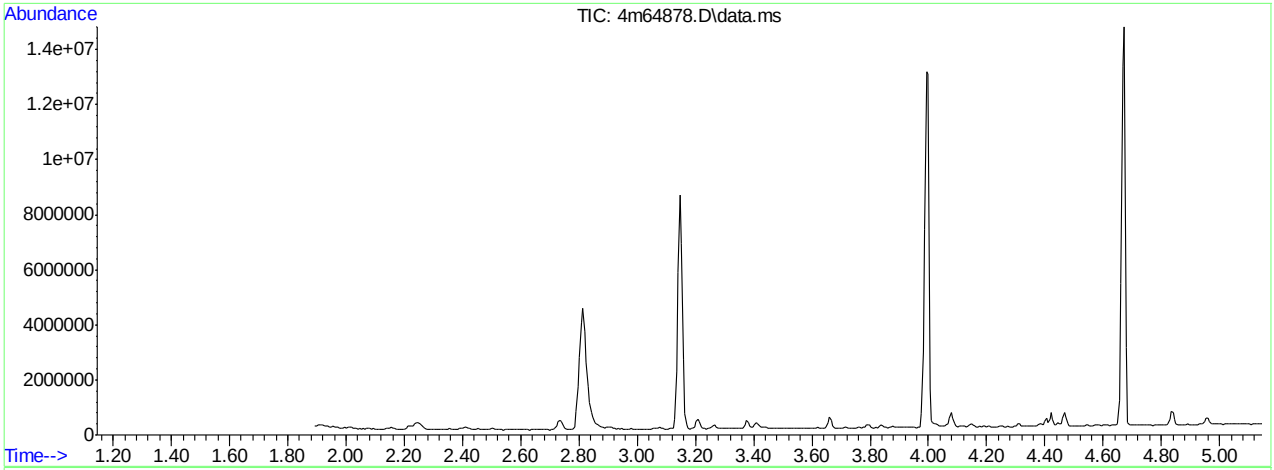
response 0

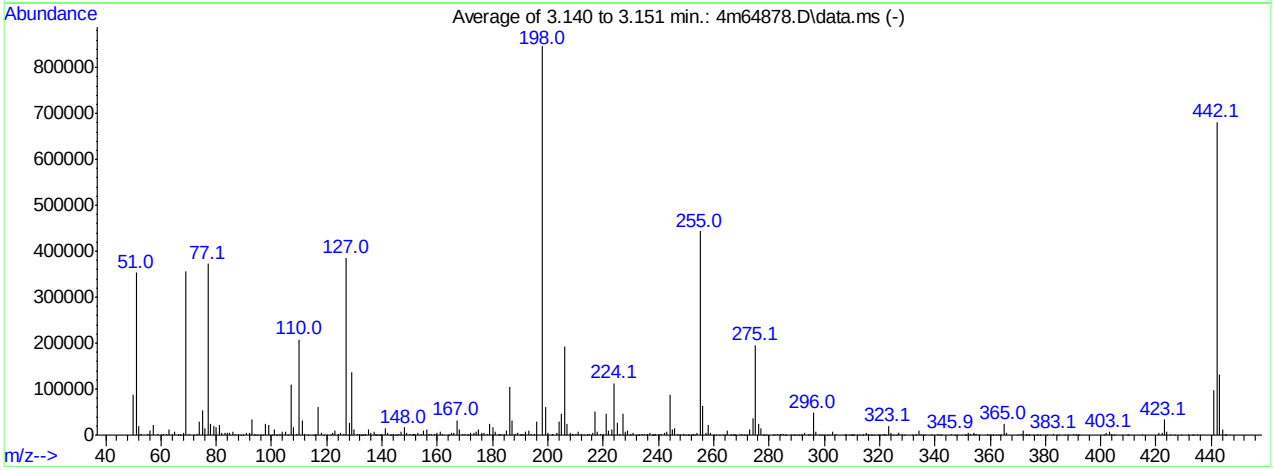
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\E4M2889\4m64878.D Vial: 1
Acq On : 21 Apr 2016 10:09 am Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op90303a,e4m2889 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 219, 220, 221; Background Corrected with Scan 203

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.8	353340	PASS
68	69	0.00	2	1.4	5062	PASS
69	198	0.00	100	42.0	355113	PASS
70	69	0.00	2	0.4	1418	PASS
127	198	40	60	45.5	385033	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	845803	PASS
199	198	5	9	7.1	60293	PASS
275	198	10	30	23.2	196203	PASS
365	198	1	100	2.9	24203	PASS
441	443	0.01	100	74.4	98229	PASS
442	198	40	100	80.5	681152	PASS
443	442	17	23	19.4	131976	PASS

4m64878.D DFTPP4M.M Thu Apr 21 13:28:23 2016 MANAGER

Average of 3.140 to 3.151 min.: 4m64878.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	87365	63.05	12595	73.00	3676	84.00	5616
51.00	353340	64.00	1957	74.00	29772	84.95	4780
52.00	18633	65.05	8159	74.95	53200	85.95	8109
52.95	1385	65.95	447	76.05	15874	87.00	3169
55.00	2377	66.20	504	77.10	372913	87.95	2170
56.05	9185	66.80	492	78.05	25225	89.05	406
57.05	22754	67.05	431	79.00	19307	89.85	298
58.90	1372	68.05	5062	80.00	17124	91.00	4404
59.95	1162	68.95	355113	81.00	23221	92.05	5198
61.05	3549	70.00	1418	82.00	6174	93.00	34894
62.05	3672	71.95	123	83.00	5298	93.90	798

Average of 3.140 to 3.151 min.: 4m64878.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.00	947	104.00	8477	116.05	3617	127.00	385033
95.05	1174	105.00	8123	117.00	61724	128.00	28101
96.00	1278	106.00	1307	118.05	4030	129.00	137393
97.00	735	107.00	109791	119.00	1178	130.00	11279
97.95	24711	108.00	16149	119.95	1226	130.90	2376
99.00	21709	109.05	2436	121.15	888	131.95	1424
100.05	897	110.00	207931	122.00	5695	132.20	685
101.00	13019	111.00	31523	123.00	9807	132.60	477
101.80	389	111.90	2727	124.00	3676	132.90	524
102.00	536	113.00	1113	125.05	4763	133.90	2633
103.00	3183	115.30	400	126.00	2183	134.05	243

Average of 3.140 to 3.151 min.: 4m64878.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
135.05	11632	142.75	864	151.15	2365	161.05	7293
135.95	4996	143.05	1262	151.70	728	161.95	3014
137.05	6258	144.10	1522	151.90	1379	163.95	483
137.70	240	144.80	899	152.95	4420	164.15	343
138.00	1259	145.10	214	154.00	3293	165.00	4232
138.20	486	146.05	2275	155.05	10256	165.90	4585
138.95	665	147.00	7829	156.05	13291	167.00	32670
139.20	221	148.00	16089	157.05	2720	168.00	12754
139.95	1479	148.95	4835	157.90	3685	169.05	3297
141.00	14335	150.05	1582	159.00	2902	170.15	1531
142.00	4308	150.80	139	159.95	5209	170.80	415

Average of 3.140 to 3.151 min.: 4m64878.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
171.05	899	182.10	736	190.85	1744	201.75	849
171.95	4185	182.30	793	191.10	1198	203.05	4706
173.05	4663	183.00	1652	192.00	7052	204.05	29088
174.05	6868	184.00	2051	193.00	9239	205.05	47216
175.00	11873	185.05	11035	194.05	2514	206.10	192619
176.00	4595	186.05	104298	195.10	2040	207.05	24344
177.00	6123	187.05	31467	195.95	28581	208.00	5267
178.05	2417	188.05	2911	198.00	845803	208.80	526
179.00	24202	189.05	4794	199.00	60293	209.10	2168
180.05	18188	190.00	784	200.05	4596	210.10	3374
181.00	7888	190.20	817	201.45	3004	211.05	8356

Average of 3.140 to 3.151 min.: 4m64878.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
211.60	521	219.70	73	230.05	1374	238.05	319
212.00	1345	220.00	834	231.00	4117	238.30	281
212.20	203	220.95	46554	232.05	929	238.70	364
213.05	1120	221.80	8937	232.80	491	239.05	2002

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214.00	387	223.05	11879	233.00	472	240.10	1356
214.30	226	224.05	112907	234.00	3166	241.05	2774
215.00	2759	225.05	27011	235.00	3699	242.15	5486
216.05	4517	226.05	3598	235.85	1253	243.05	7398
217.00	51168	227.00	47512	236.10	1823	244.05	88264
218.00	6673	228.00	6205	237.05	4153	245.10	11324
219.00	1347	228.95	9626	237.70	132	246.00	15098

Average of 3.140 to 3.151 min.: 4m64878.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
246.95	2269	253.10	859	263.95	201	273.05	12853
247.70	133	254.00	4229	265.05	9468	274.05	37360
248.00	828	255.00	443456	265.90	104	275.05	196203
248.90	1548	256.05	64693	266.10	1038	276.05	25051
249.10	1121	257.05	5296	267.05	1	277.05	15835
249.85	1038	258.05	22248	267.30	196	277.90	1077
250.80	655	258.95	3932	267.70	296	278.10	705
251.10	358	260.00	1019	269.50	84	279.10	916
251.80	252	260.90	626	270.00	1412	281.70	456
252.15	1038	261.90	175	271.00	577	281.95	97
252.90	1358	263.10	334	271.85	981	283.05	2014

Average of 3.140 to 3.151 min.: 4m64878.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
283.90	328	292.05	722	303.05	7679	312.85	402
284.20	1433	292.95	4163	304.10	1397	313.85	1178
285.05	3170	294.05	1284	307.30	87	314.10	567
285.85	440	295.05	1700	307.60	85	315.00	5459
286.15	673	296.00	48429	307.95	782	316.10	3467
287.90	85	297.05	7115	309.05	235	316.90	732
288.80	92	297.95	811	309.70	143	317.15	649
289.10	843	298.90	99	310.00	686	318.15	191
289.95	869	299.95	364	310.20	212	319.10	344
290.95	966	301.05	801	310.90	108	319.70	102
291.80	139	301.95	914	311.95	208	320.10	88

Average of 3.140 to 3.151 min.: 4m64878.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
321.10	1851	332.85	743	347.10	326	359.00	345
321.75	614	333.20	1237	348.10	96	359.15	418
322.10	602	334.10	10978	350.85	282	359.80	110
323.10	20242	335.10	3446	351.10	104	360.15	233
324.10	4349	335.90	259	352.10	5751	360.90	194
325.10	594	336.20	92	353.05	3000	361.10	205
326.00	28	338.80	92	354.00	1483	362.15	248
326.95	3922	341.15	2203	354.15	4169	363.20	174
328.05	2227	341.95	220	355.10	1502	363.70	112
329.05	223	342.20	195	355.80	77	365.00	24203
331.95	1262	345.95	3489	356.20	149	366.05	3913

Average of 3.140 to 3.151 min.: 4m64878.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
370.05	653	380.40	68	401.00	786	424.05	6498
371.00	1895	383.05	3741	402.10	4242	425.05	612
372.05	10259	384.00	740	403.05	6554	426.80	223
373.00	1625	384.90	349	404.10	2422	429.20	85
373.20	1015	387.10	95	405.00	265	431.40	340
373.90	157	388.00	245	409.70	124	433.10	81
374.10	168	390.05	1685	410.20	115	433.50	89
375.80	74	390.90	172	415.00	119	434.80	377
376.90	174	391.05	1113	421.10	5834	436.00	168
377.30	120	391.75	491	422.05	4623	441.10	98229
378.00	82	392.20	114	423.05	34125	442.10	681152

Average of 3.140 to 3.151 min.: 4m64878.D\data.ms

M4M2881SIM.M Thu Apr 21 13:26:00 2016 MANAGER Page: 1

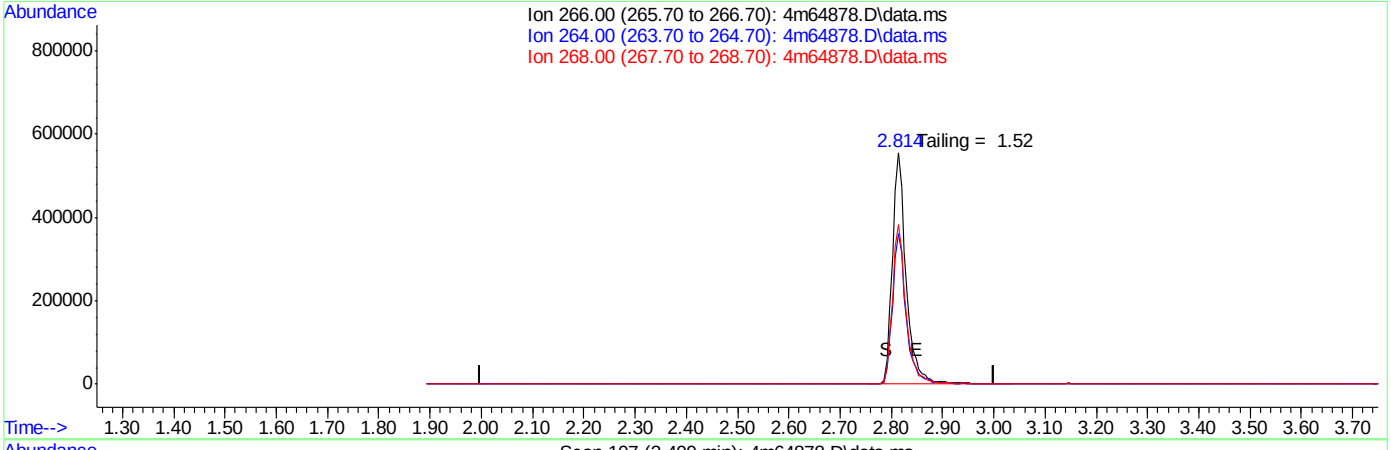
dftpp
Modified:subtracted

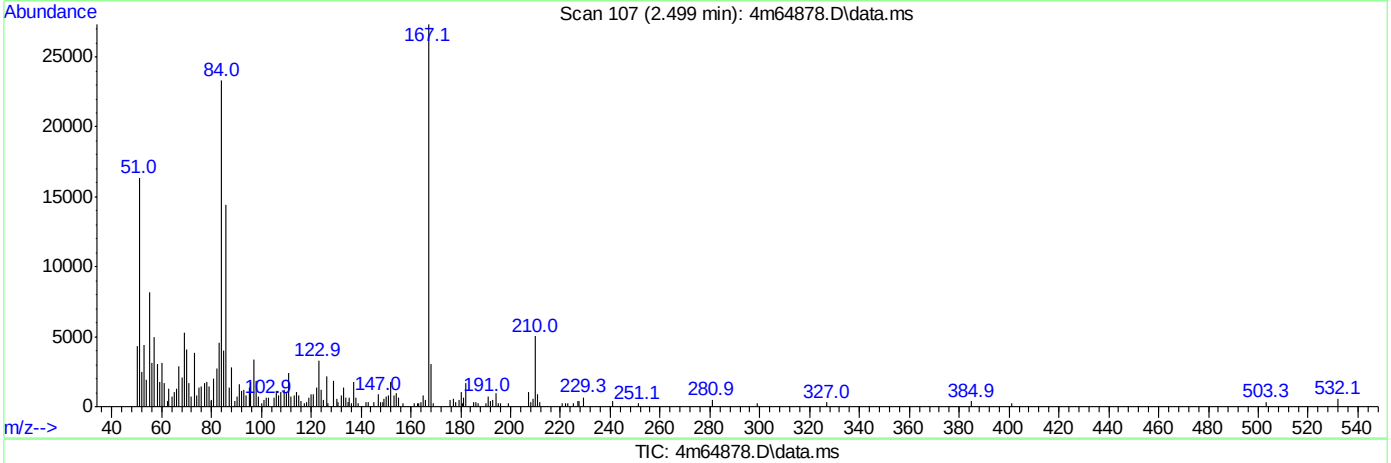
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
443.10	131976						
444.05	11187						
444.95	458						
445.20	312						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64878.D
Acq On : 21 Apr 2016 10:09 am
Operator : linseyk
Sample : dftpp
Misc : op90303a,e4m2889
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 10:15:19 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: 4m64878.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

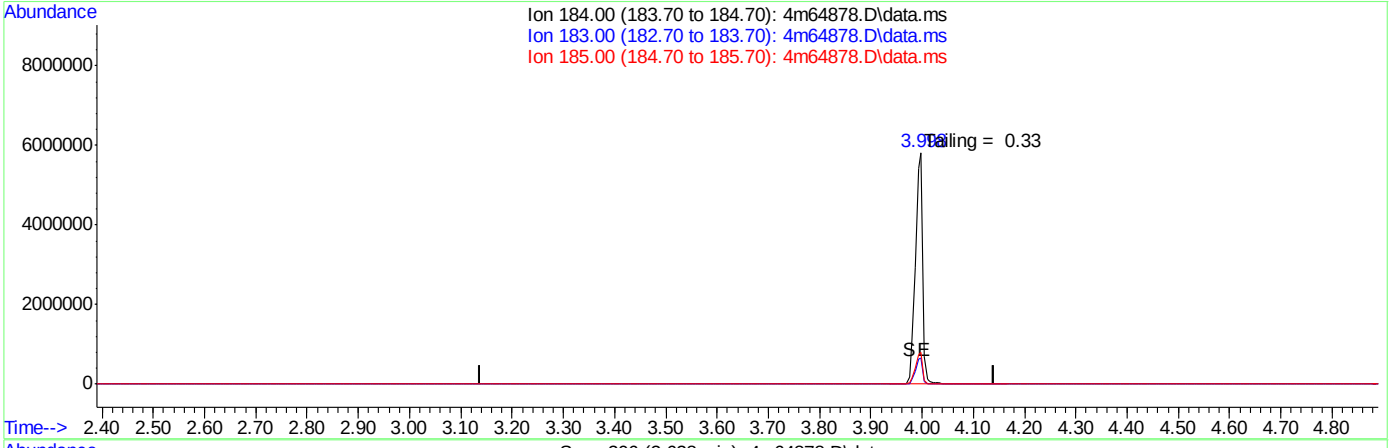
response 0

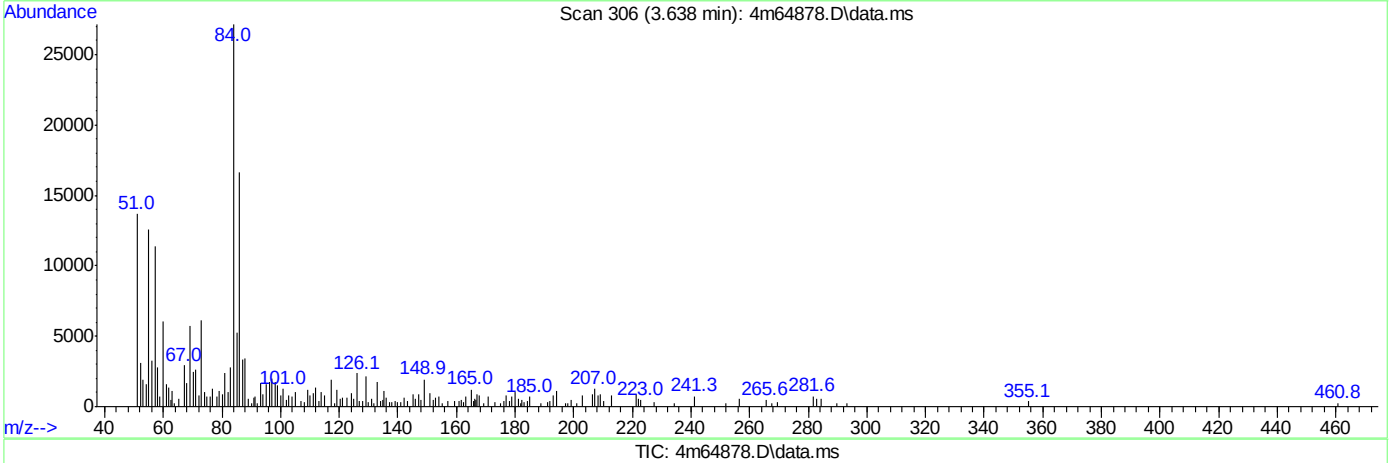
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64878.D
Acq On : 21 Apr 2016 10:09 am
Operator : linseyk
Sample : dftpp
Misc : op90303a,e4m2889
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 10:15:19 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: 4m64878.D\data.ms

(2) benzidine (t)

3.640min (-3.640) 0.00ppb

response 0

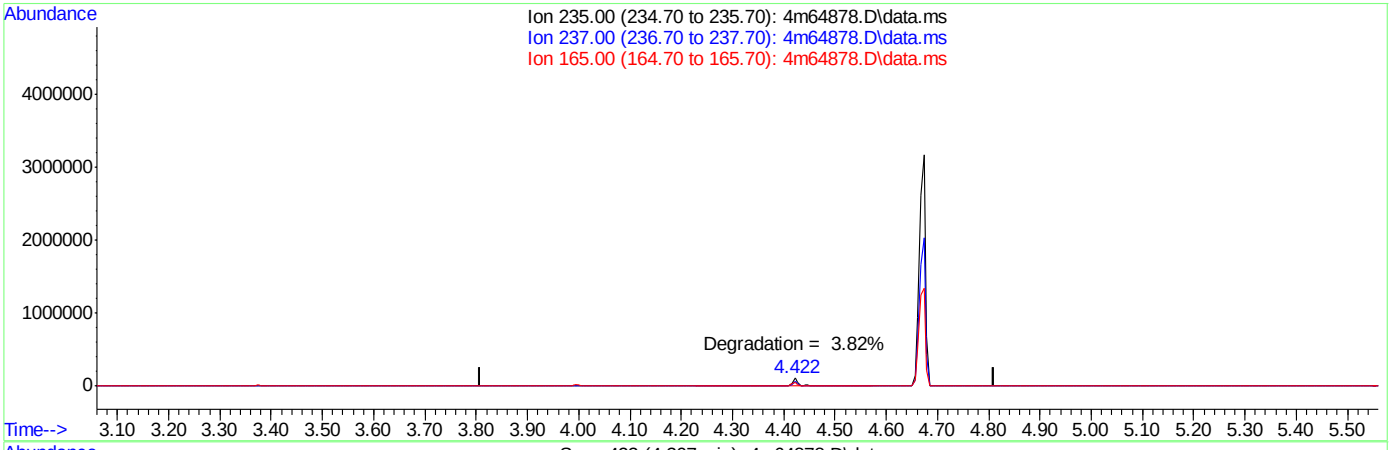
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

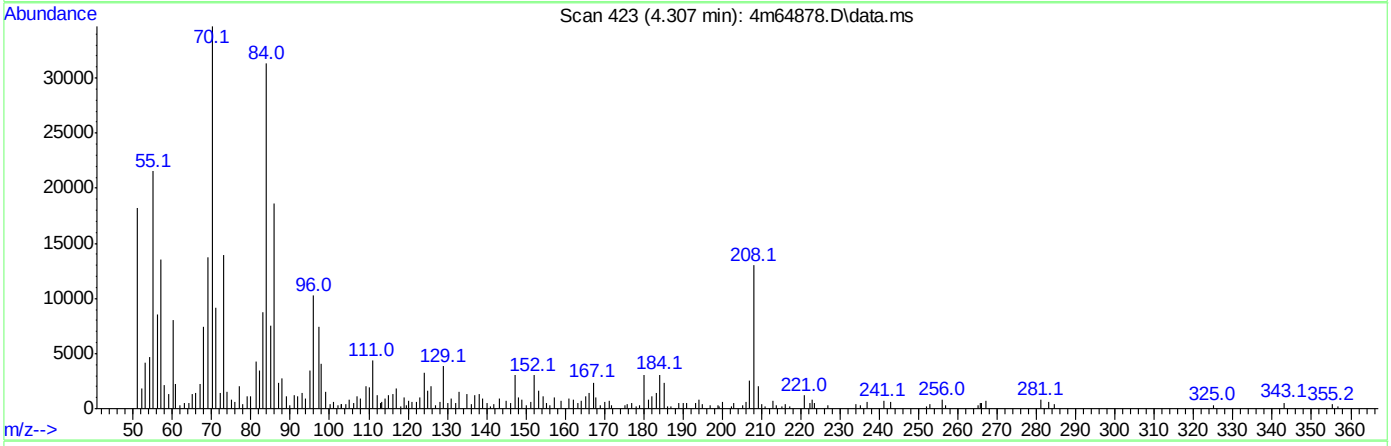
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64878.D
Acq On : 21 Apr 2016 10:09 am
Operator : linseyk
Sample : dftpp
Misc : op90303a,e4m2889
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 10:15:19 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: 4m64878.D\data.ms

(3) ddt (t)

4.310min (-4.310) 0.00ppb

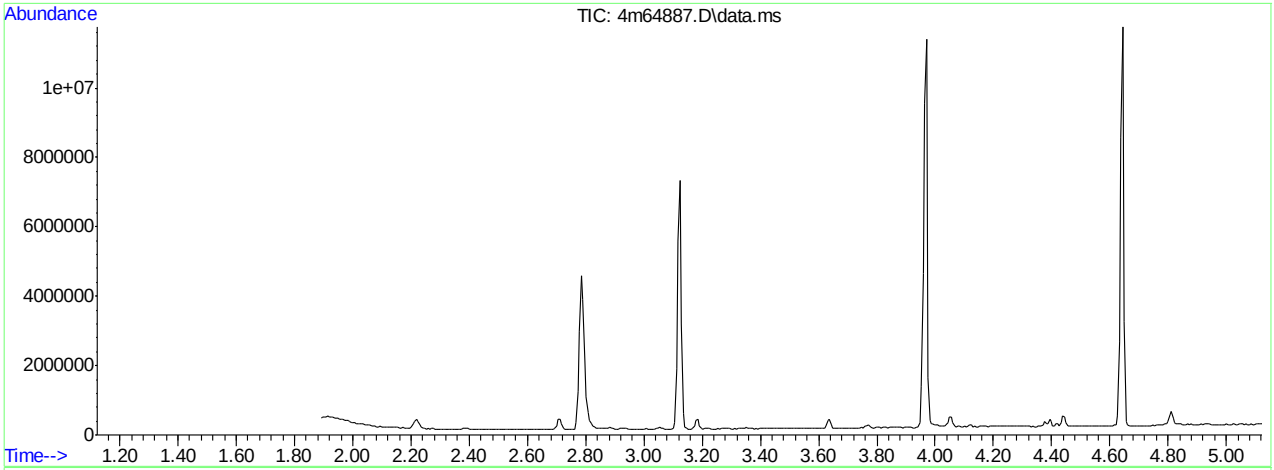
response 0

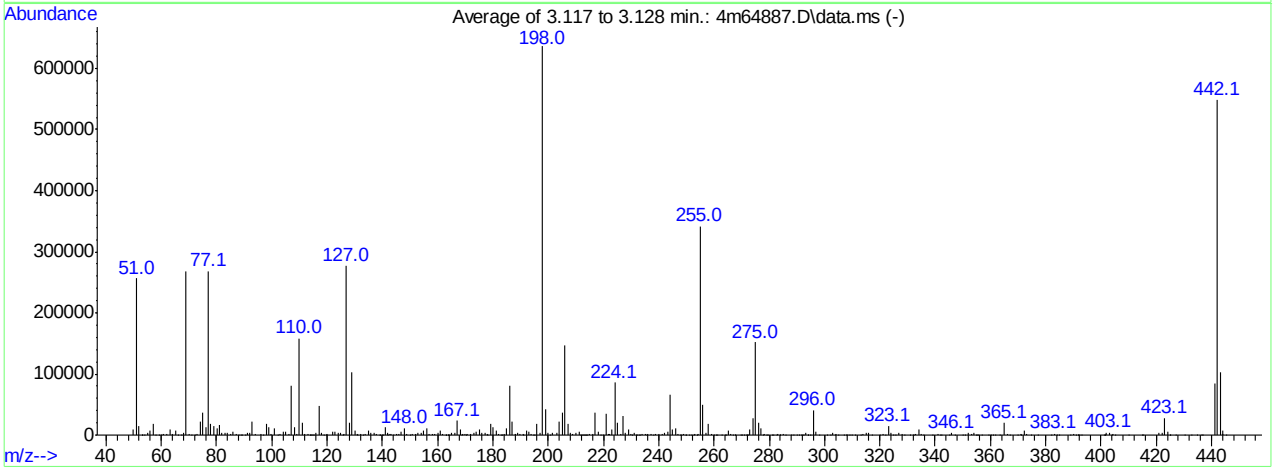
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\E4M2890\4m64887.D Vial: 1
Acq On : 21 Apr 2016 2:58 pm Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op93236a,e4m2890 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 215, 216, 217; 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	40.3	256155	PASS
68	69	0.00	2	1.3	3415	PASS
69	198	0.00	100	42.2	268089	PASS
70	69	0.00	2	0.7	1867	PASS
127	198	40	60	43.5	276603	PASS
197	198	0.00	1	0.5	2935	PASS
198	198	100	100	100.0	636011	PASS
199	198	5	9	6.6	42144	PASS
275	198	10	30	23.8	151512	PASS
365	198	1	100	3.1	19928	PASS
441	443	0.01	100	81.7	83555	PASS
442	198	40	100	86.2	548544	PASS
443	442	17	23	18.6	102213	PASS

4m64887.D DFTPP4M.M Thu Apr 21 17:26:43 2016 MANAGER

Average of 3.117 to 3.128 min.: 4m64887.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.00	9016	60.00	523	71.00	8	81.95	4236
51.05	256155	60.95	2610	72.00	508	83.00	4497
52.00	14013	62.00	2628	73.10	1902	83.95	3496
52.90	429	63.05	9579	74.00	21485	85.00	2192
53.10	123	64.10	1134	75.00	37606	86.00	5680
54.00	90	65.10	6689	76.05	12022	86.95	2683
55.00	3214	65.95	254	77.10	268327	87.95	817
56.00	7361	67.10	310	78.00	17850	88.80	200
57.00	17588	68.10	3415	79.00	14897	89.05	331
57.95	20	69.00	268089	80.05	10445	90.30	79
59.10	355	70.05	1867	81.00	15973	91.05	4266

Average of 3.117 to 3.128 min.: 4m64887.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
91.95	4524	104.00	5669	114.10	277	123.00	6458
93.00	22069	105.00	4971	114.40	186	124.05	2865
93.95	1168	106.00	2116	114.60	173	125.00	3016
96.05	2422	107.00	79958	115.30	248	125.70	281
96.90	469	108.05	13281	116.00	4310	126.15	1438
98.00	17547	109.00	1555	117.00	47657	127.00	276603
99.00	13009	110.00	158140	117.95	3990	128.00	20713
99.90	1560	111.00	20080	118.90	775	129.00	102867
101.00	10460	112.00	1831	119.70	355	130.00	7916
102.05	513	113.05	1006	120.05	1199	130.80	274
103.00	2350	113.80	161	122.00	4851	131.05	1459

Average of 3.117 to 3.128 min.: 4m64887.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
132.00	1002	141.00	12001	150.05	806	161.00	6536
133.00	589	141.90	3601	151.00	1468	161.90	2450
133.90	2198	142.05	156	151.95	1245	162.80	117
135.00	7354	142.80	1492	153.00	2860	163.15	513
136.00	3207	143.10	1027	154.00	3003	163.60	135
137.00	3680	144.00	206	155.00	7491	163.85	431
137.95	1336	144.95	1302	156.10	10187	164.10	164
138.90	380	146.00	2649	157.00	2039	165.00	3801
139.20	140	146.95	4709	157.95	1760	166.10	3510
139.85	814	148.00	11833	159.05	1953	167.05	23642
140.10	473	148.95	2592	160.00	3699	168.05	9194

Average of 3.117 to 3.128 min.: 4m64887.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
168.80	168	177.90	1363	187.00	22342	194.90	495
169.15	1865	178.10	168	187.95	1477	196.00	18576
169.95	1405	179.00	18597	188.15	1037	197.00	2935
170.30	377	180.00	12972	189.00	4269	198.00	636011
170.85	1350	181.05	6650	189.85	1043	199.00	42144
172.00	2798	182.00	1389	190.80	483	200.00	3547
173.05	3086	182.70	182	191.00	1349	200.80	204
174.00	6319	183.15	873	192.00	6853	201.65	3321
175.05	10010	184.05	1410	193.00	6227	203.00	3366
176.05	3521	185.05	10857	194.00	1535	204.00	22267
177.00	4467	186.00	80773	194.70	513	205.00	36291

Average of 3.117 to 3.128 min.: 4m64887.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
206.10	146661	213.80	131	223.05	8890	232.10	597
207.00	18974	214.00	329	224.05	86069	232.90	314
208.00	4337	215.00	1368	225.00	21033	233.20	310
209.00	1402	215.95	2557	226.05	2724	234.05	2496

M4M2881SIM.M Thu Apr 21 17:18:30 2016 MANAGER Page: 0

210.20	2864	217.00	36597	227.00	32045	235.00	2202
211.05	6130	218.05	5501	228.00	4563	235.70	174
211.70	369	219.00	651	229.00	8496	235.95	1689
212.20	167	219.80	395	230.05	1445	237.05	2585
212.60	104	221.00	34744	230.40	170	238.05	520
212.85	269	221.70	1502	231.00	3452	238.90	995
213.10	226	222.10	1491	231.80	116	240.00	1372

Average of 3.117 to 3.128 min.: 4m64887.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
241.05	1119	249.90	469	259.00	1954	267.80	306
242.00	4183	250.90	545	259.95	442	269.50	81
243.10	5734	251.95	930	260.80	180	270.00	160
244.05	65741	252.50	119	261.15	412	271.05	858
245.00	8479	253.00	2334	262.70	125	271.60	89
246.00	10511	253.80	988	264.00	354	271.90	910
246.95	2267	254.05	2439	264.30	144	272.10	481
247.80	93	255.00	342037	265.05	6616	272.95	9878
248.05	740	256.00	48872	265.95	1530	274.00	26832
248.95	2289	257.00	4654	267.00	211	275.00	151512
249.70	216	258.00	18087	267.50	72	276.05	20736

Average of 3.117 to 3.128 min.: 4m64887.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
277.00	11523	285.00	2450	294.00	654	307.15	319
277.80	696	286.00	504	294.85	515	307.70	183
278.10	1807	287.80	79	296.00	40576	308.00	204
278.95	490	288.85	688	297.00	5352	309.10	396
279.20	215	289.90	584	298.00	477	309.95	461
281.00	197	290.90	208	300.80	582	311.10	124
281.60	200	291.60	160	302.00	604	313.05	424
282.70	484	291.90	329	303.05	4357	314.05	2586
283.05	1844	292.30	166	303.90	429	315.00	4009
283.80	197	293.05	2891	304.10	1012	316.05	3235
283.95	841	293.80	113	305.10	73	317.10	559

Average of 3.117 to 3.128 min.: 4m64887.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
319.75	252	331.90	722	346.05	2980	359.15	218
321.00	1856	332.10	384	346.95	414	360.00	81
321.90	920	332.95	1451	349.80	87	360.70	107
323.10	15298	334.10	8838	350.85	371	361.85	250
324.05	3093	335.05	2408	352.10	4359	363.30	75
324.85	238	335.70	208	353.00	2613	365.05	19928
325.75	199	339.00	95	354.05	4264	366.00	2531
327.00	2841	341.05	1694	355.00	764	367.00	343
327.95	1264	341.75	571	355.20	254	370.00	266
329.05	238	342.20	180	355.75	312	370.90	348
331.00	82	345.00	120	357.00	104	371.10	1407

Average of 3.117 to 3.128 min.: 4m64887.D\data.ms
dftpp
Modified:subtracted

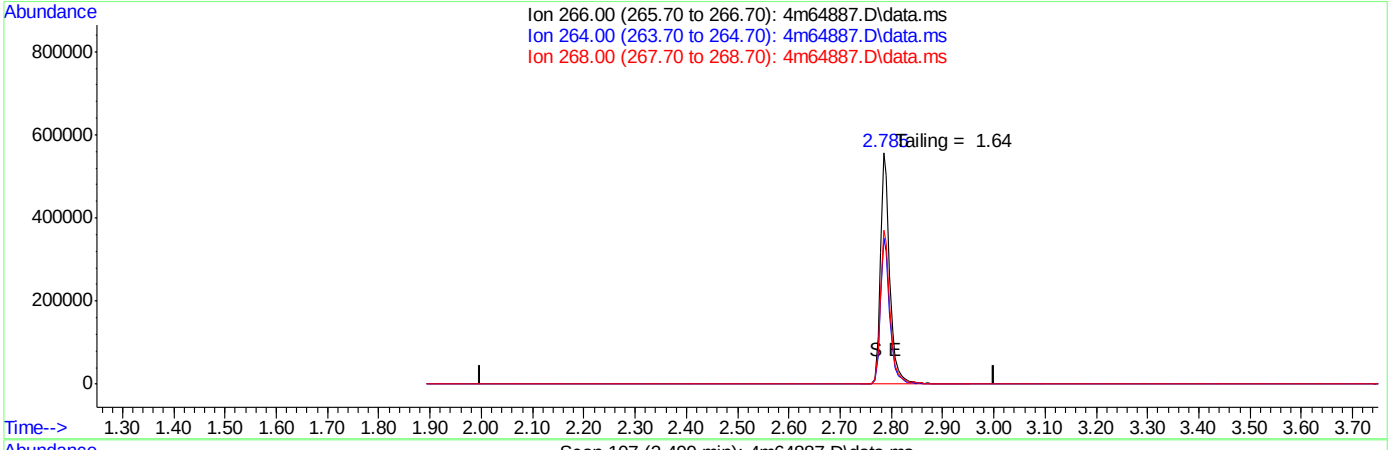
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
372.10	8107	391.70	263	405.20	98	430.20	71
373.05	1856	391.90	153	410.00	70	432.70	104
374.50	143	392.10	132	414.80	105	434.60	136
377.05	404	392.90	101	415.15	238	436.30	473
381.90	146	401.00	349	421.05	4395	436.70	76
383.10	2761	401.30	107	422.05	3587	441.10	83555
383.95	606	401.60	355	423.05	28155	442.10	548544
384.80	82	402.05	3080	424.10	6473	443.10	102213
388.90	184	403.05	3828	424.90	244	443.90	2598
390.05	1218	403.90	260	425.15	479	444.10	8055
390.95	986	404.15	1324	426.85	224	445.10	577

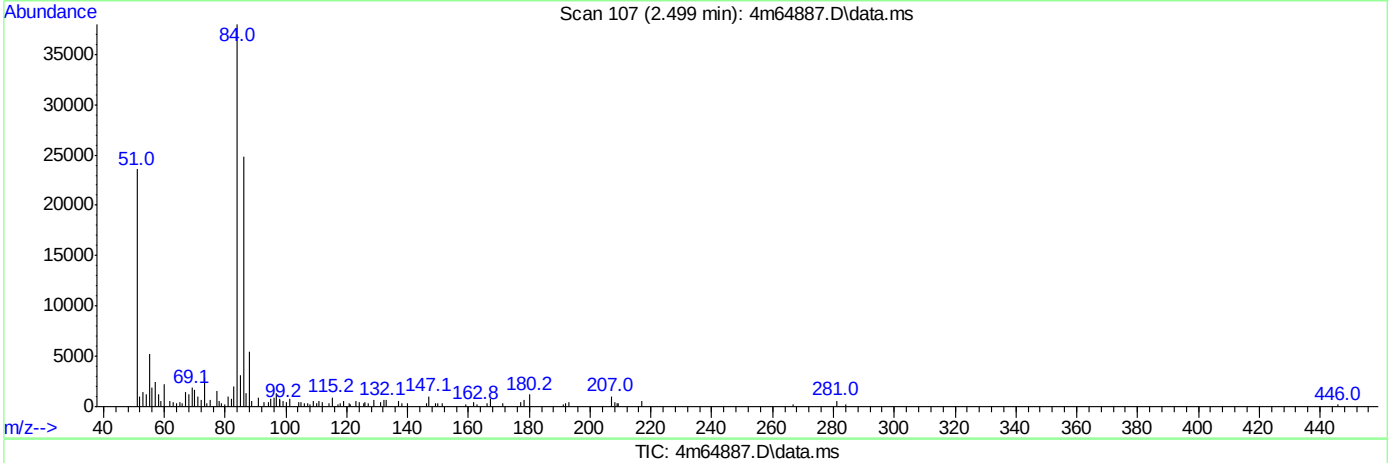
M4M2881SIM.M Thu Apr 21 17:18:30 2016 MANAGER Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2890\
Data File : 4m64887.D
Acq On : 21 Apr 2016 2:58 pm
Operator : linseyk
Sample : dftpp
Misc : op93236a,e4m2890
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 15:04:06 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: 4m64887.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

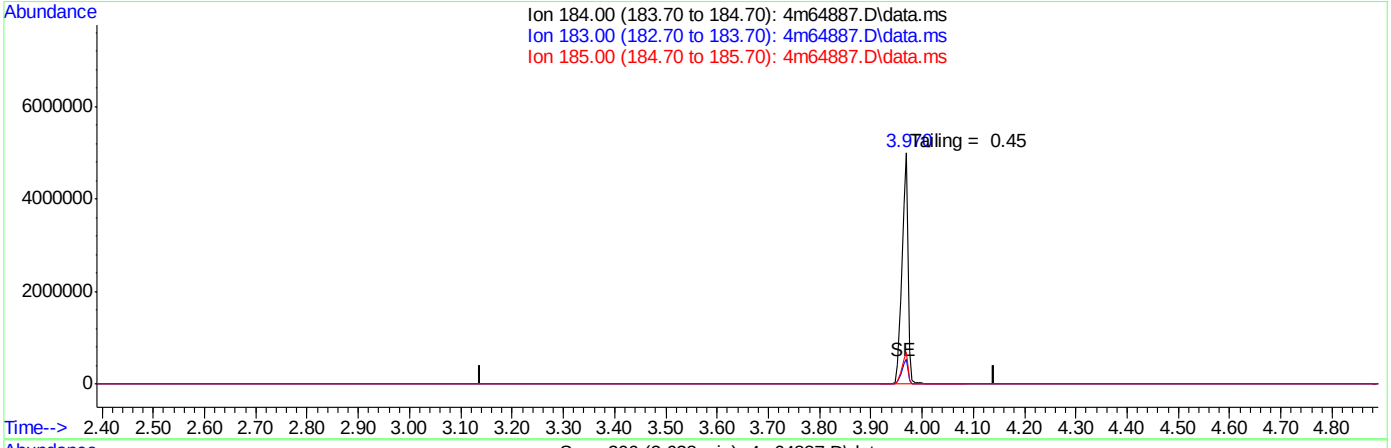
response 0

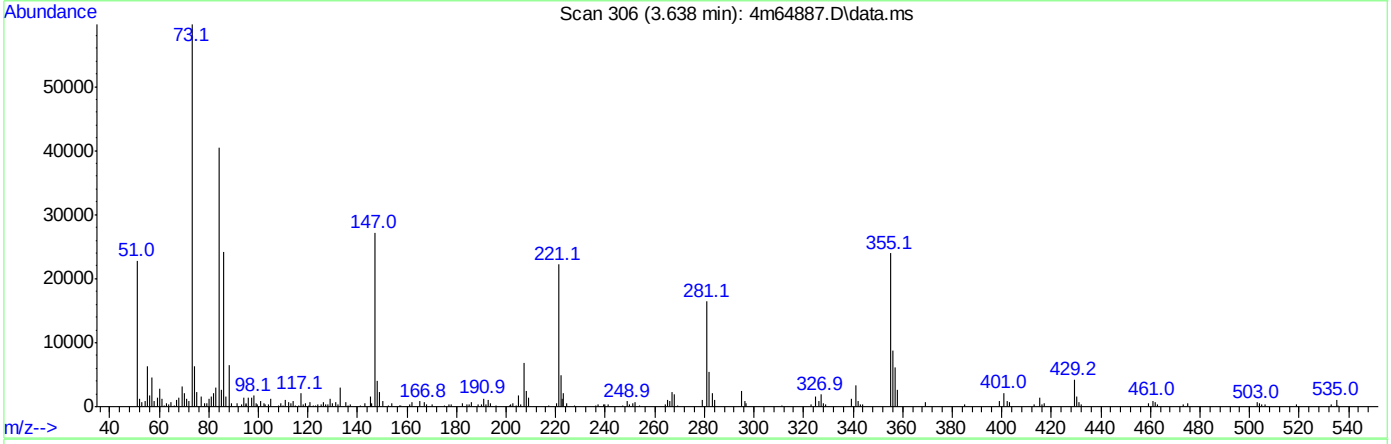
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2890\
Data File : 4m64887.D
Acq On : 21 Apr 2016 2:58 pm
Operator : linseyk
Sample : dftpp
Misc : op93236a,e4m2890
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 15:04:06 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: 4m64887.D\data.ms

(2) benzidine (t)

3.640min (-3.640) 0.00ppb

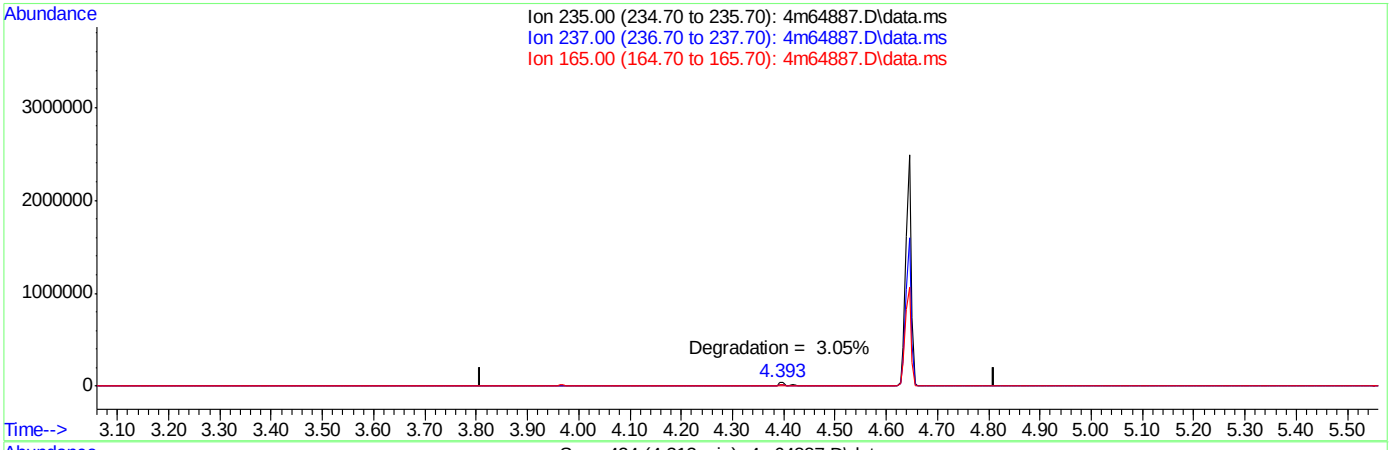
response 0

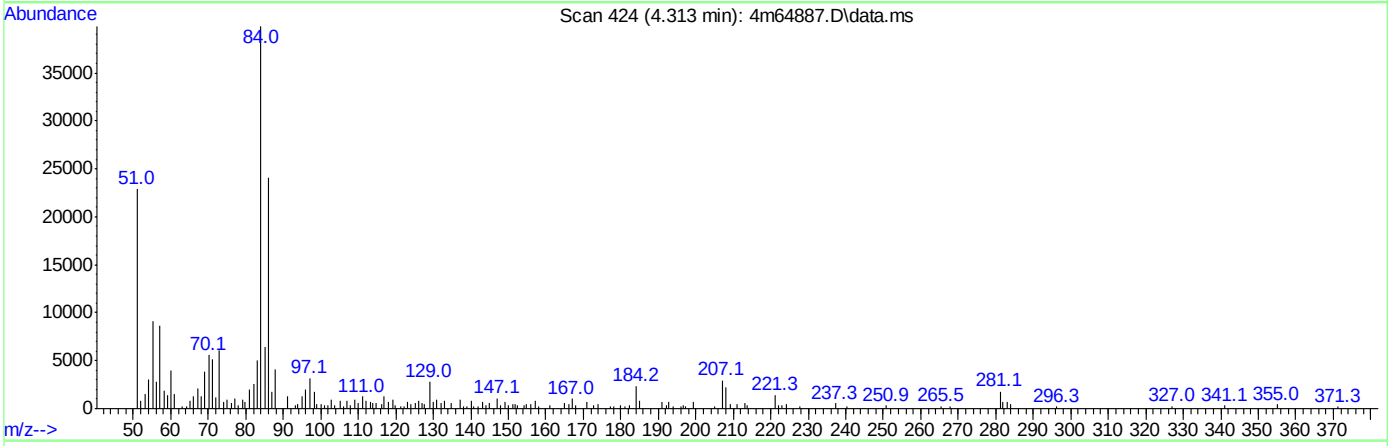
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2890\
Data File : 4m64887.D
Acq On : 21 Apr 2016 2:58 pm
Operator : linseyk
Sample : dftpp
Misc : op93236a,e4m2890
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 15:04:06 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: 4m64887.D\data.ms

(3) ddt (t)

4.310min (-4.310) 0.00ppb

response 0

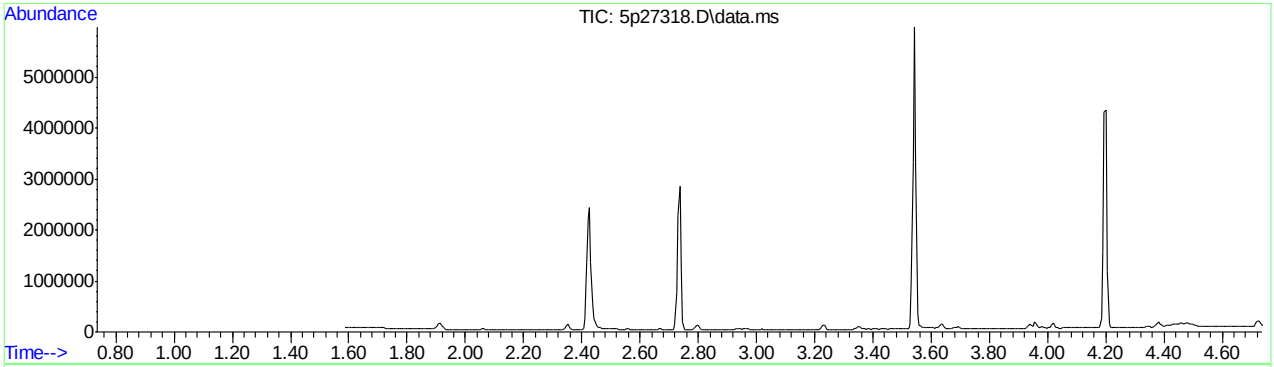
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

DFTPPR

Data Path : C:\msdchem\1\DATA\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 JC18649

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

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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						

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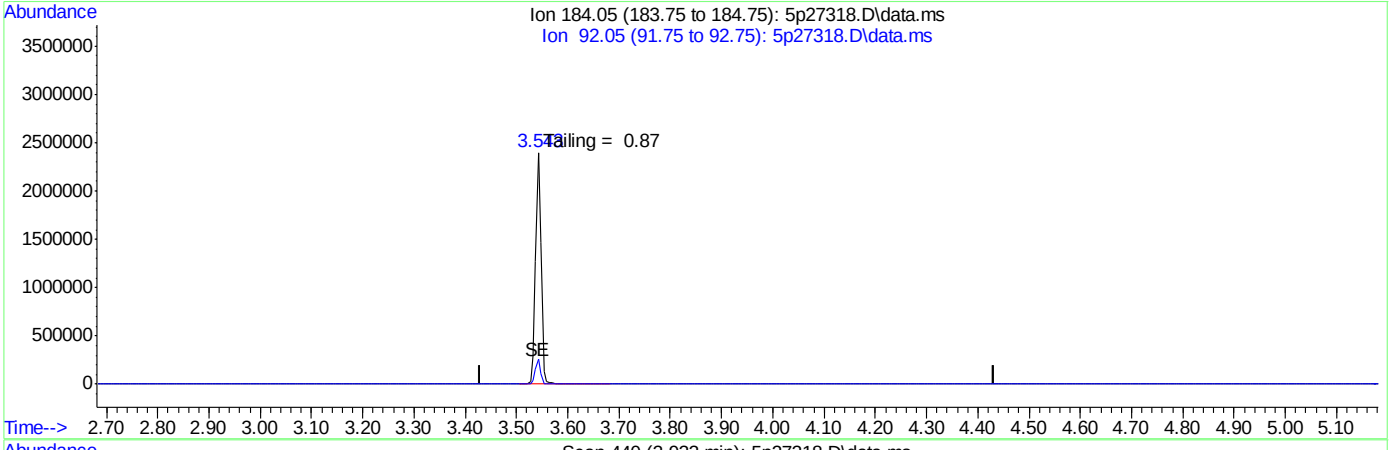
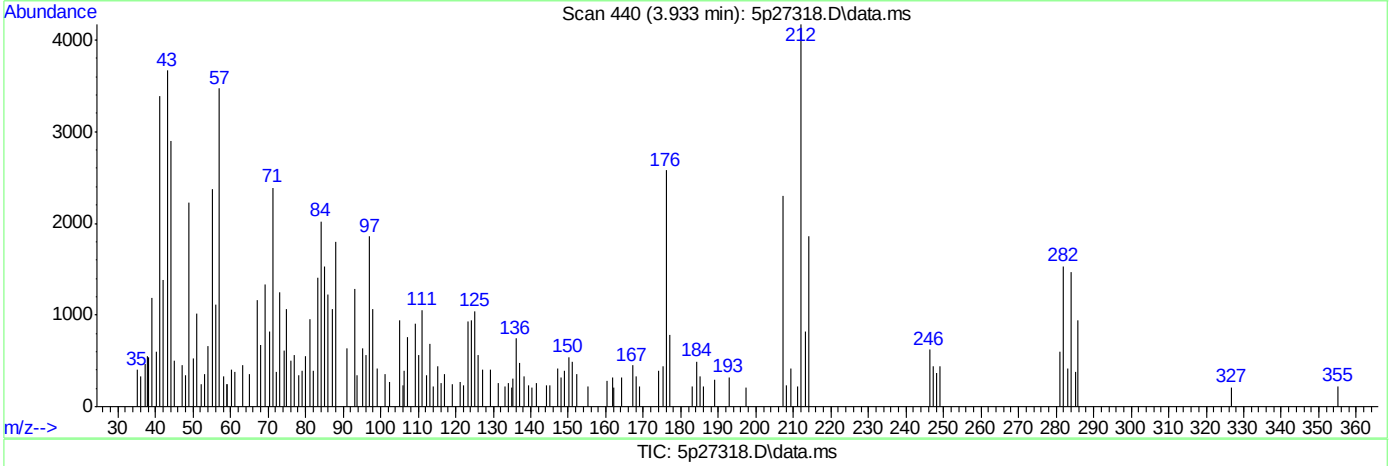
Quantitation Report (Qedit)

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





(2) Benzidine (M)

3.931min (-3.931) 0.00ng

response 0

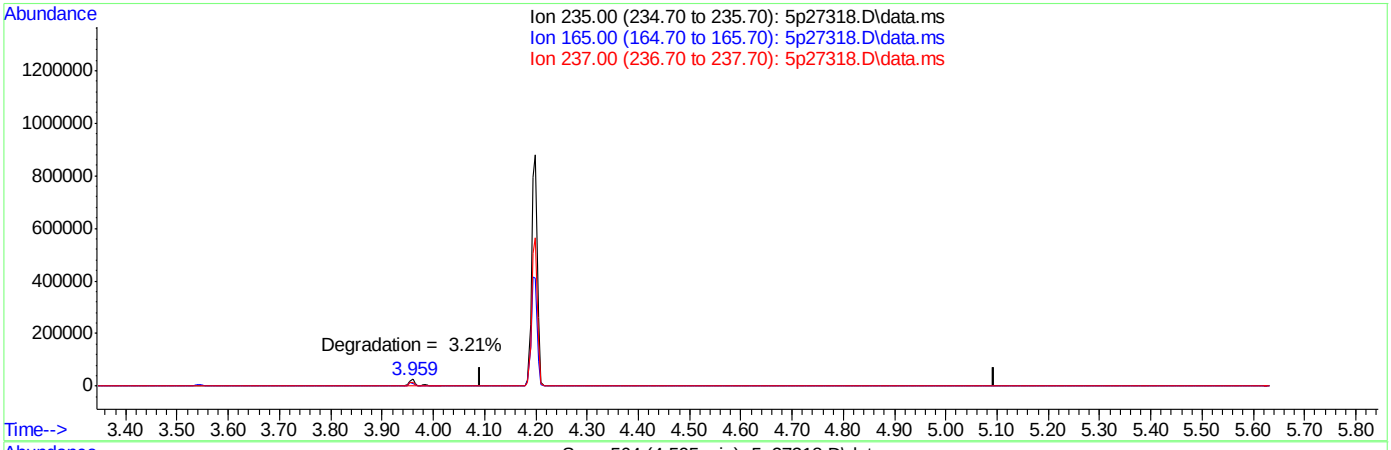
Ion	Exp%	Act%
184.05	100	0.00
92.05	11.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

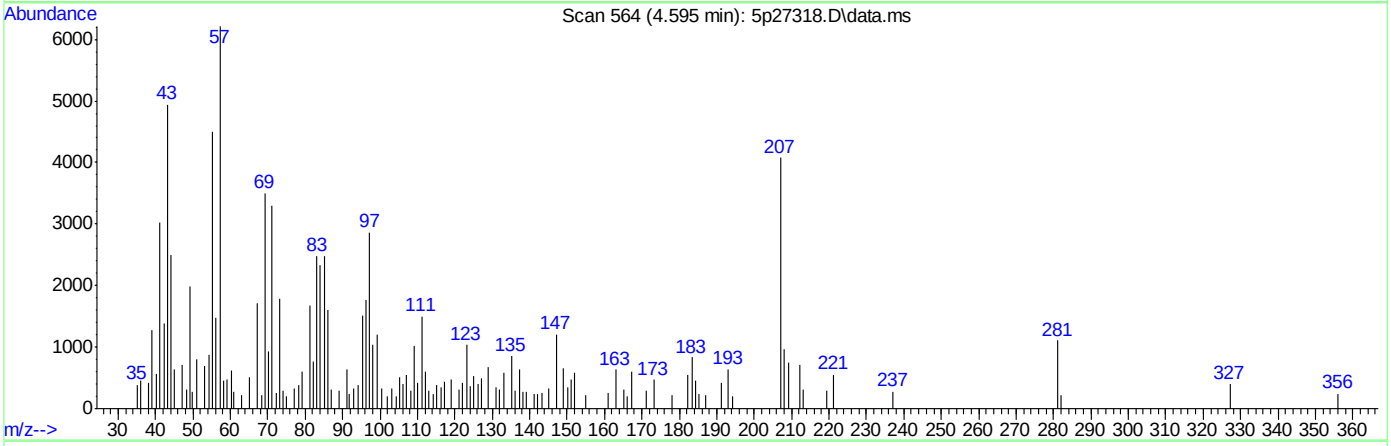
SGS ACCUTEST JC18649

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

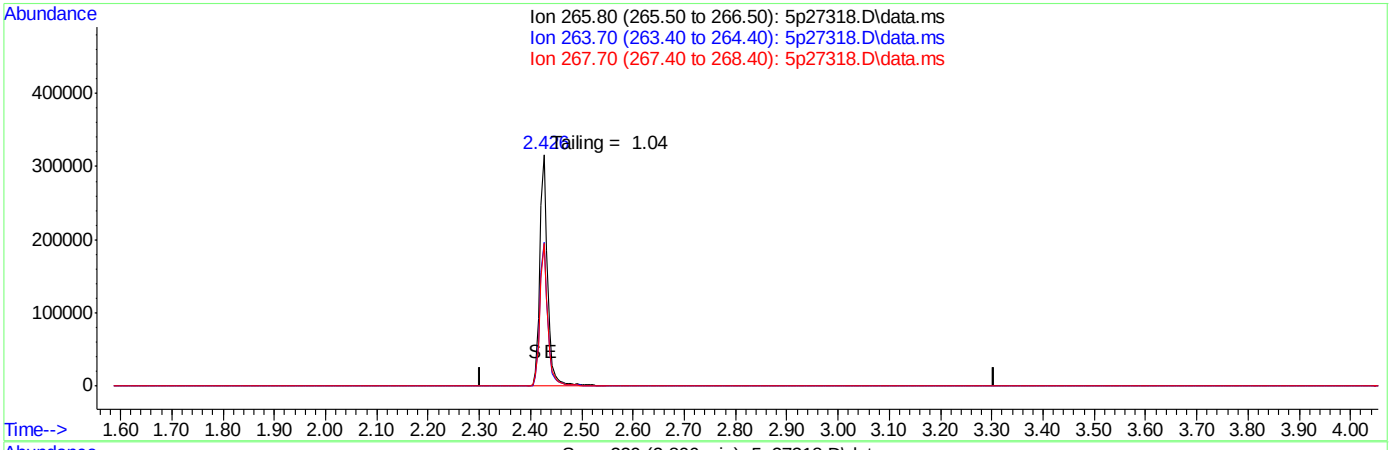
response 0

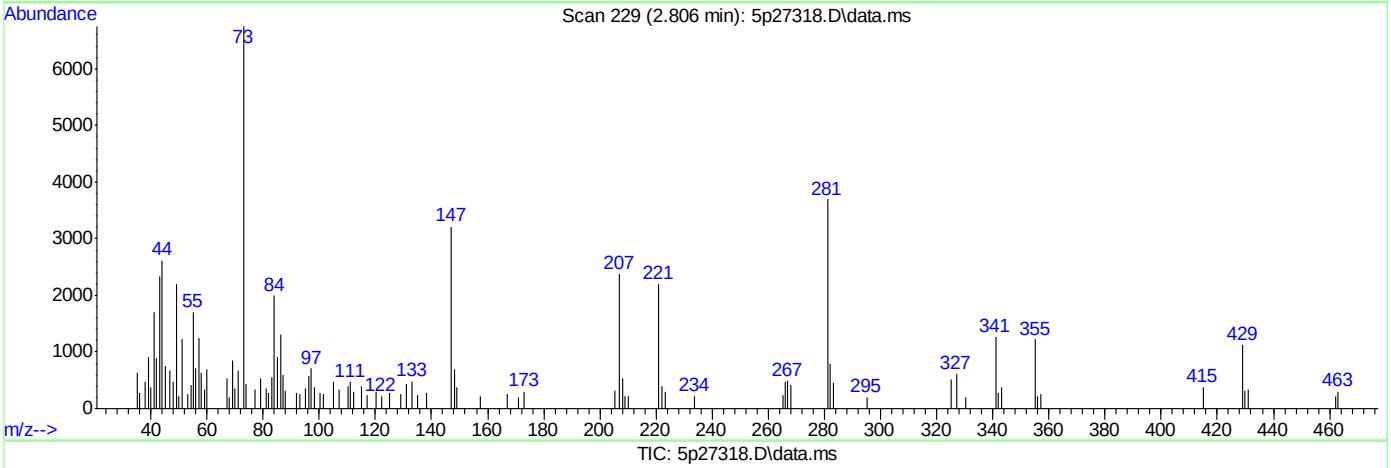
Ion	Exp%	Act%
235.00	100	0.00
165.00	58.00	0.00#
237.00	62.20	0.00#
0.00	0.00	0.00

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

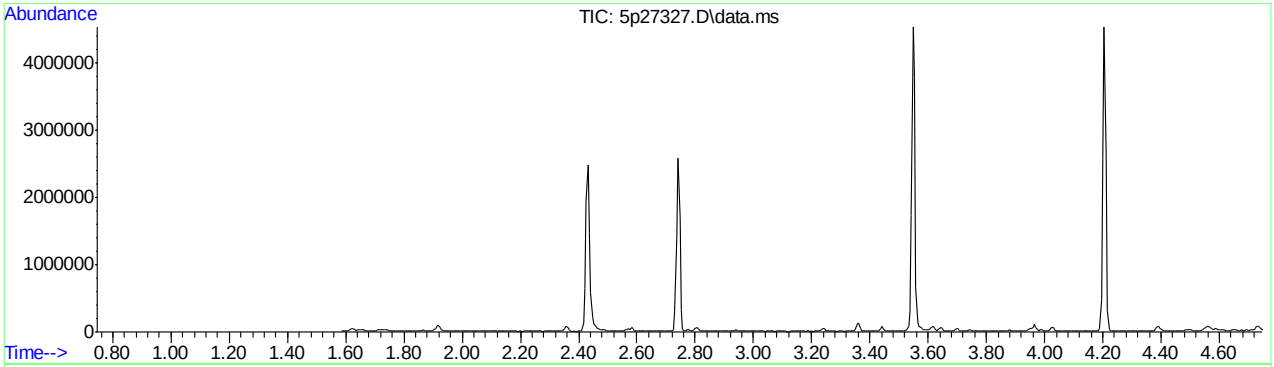
Ion	Exp%	Act%
265.80	100	0.00
263.70	64.70	0.00#
267.70	64.60	0.00#
0.00	0.00	0.00

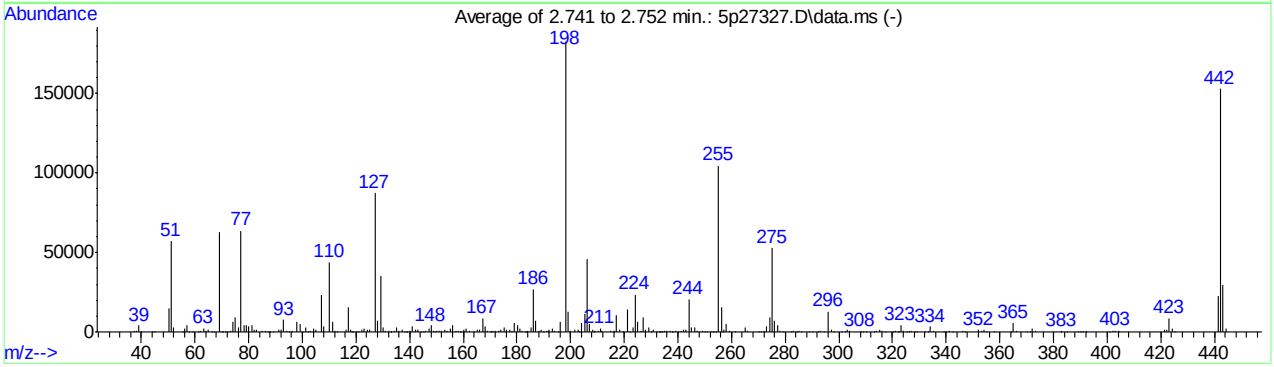
DFTPPR

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

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

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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						

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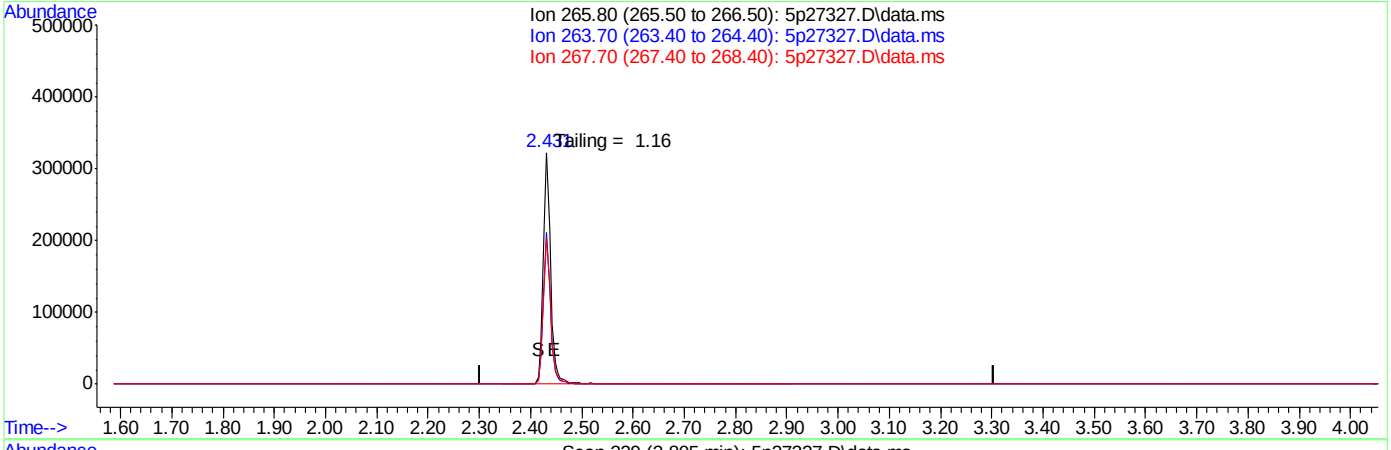
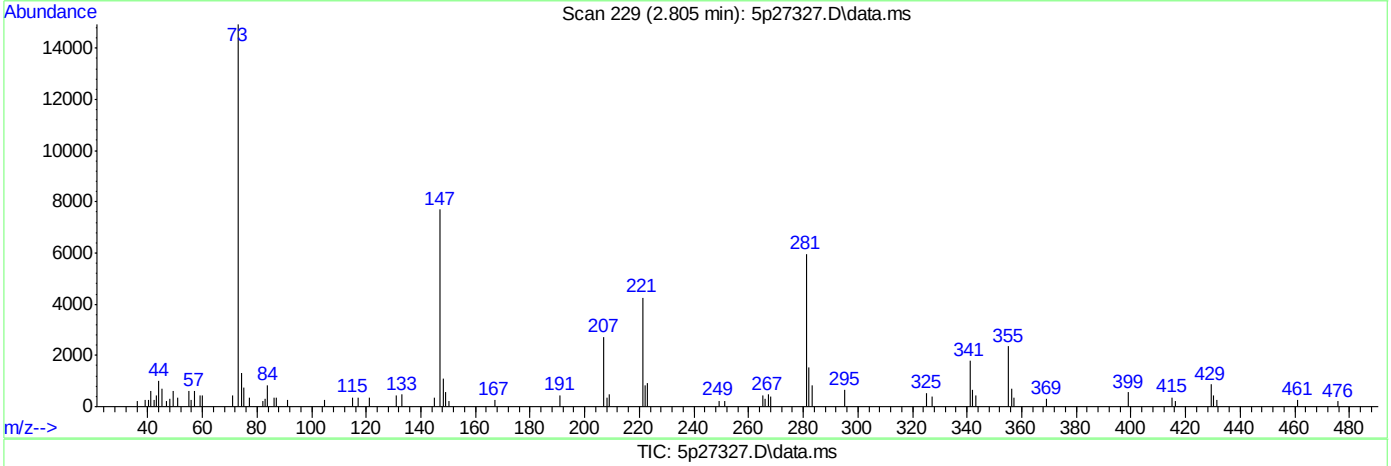
Quantitation Report (Qedit)

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

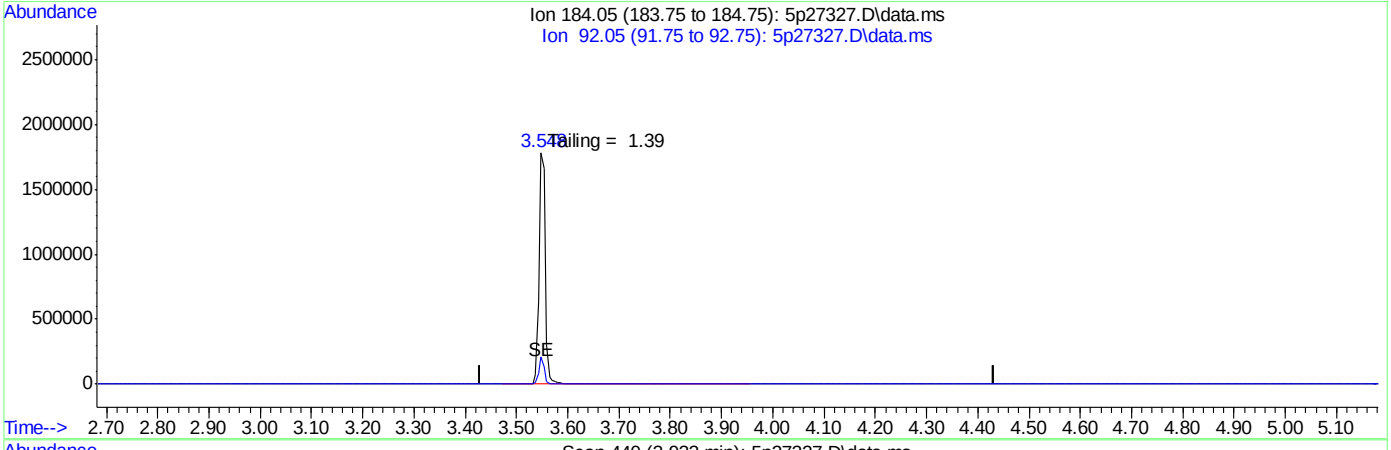
response 0

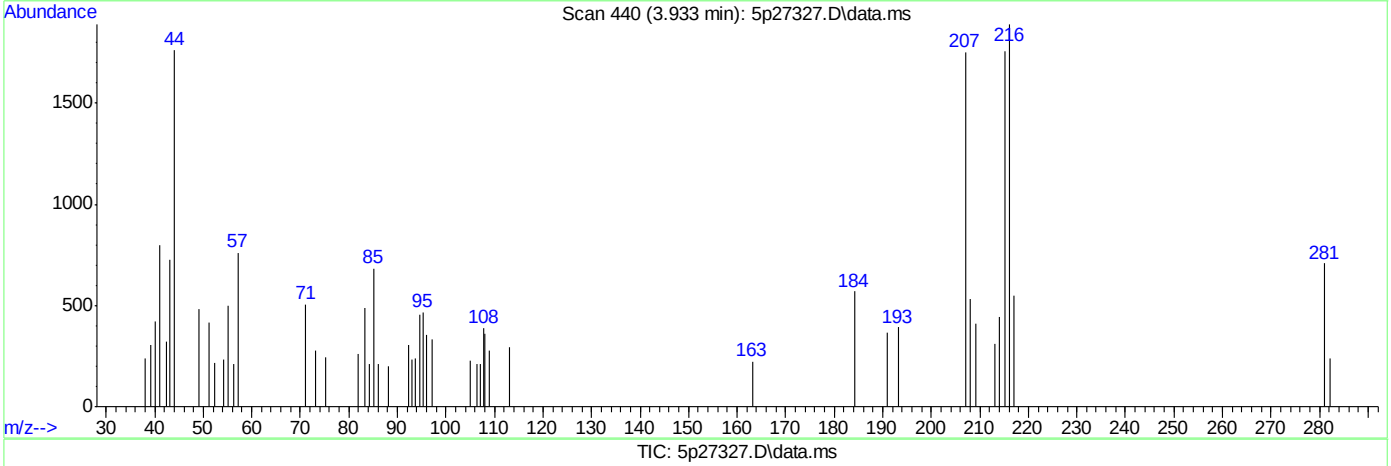
Ion	Exp%	Act%
265.80	100	0.00
263.70	64.70	0.00#
267.70	64.60	0.00#
0.00	0.00	0.00

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

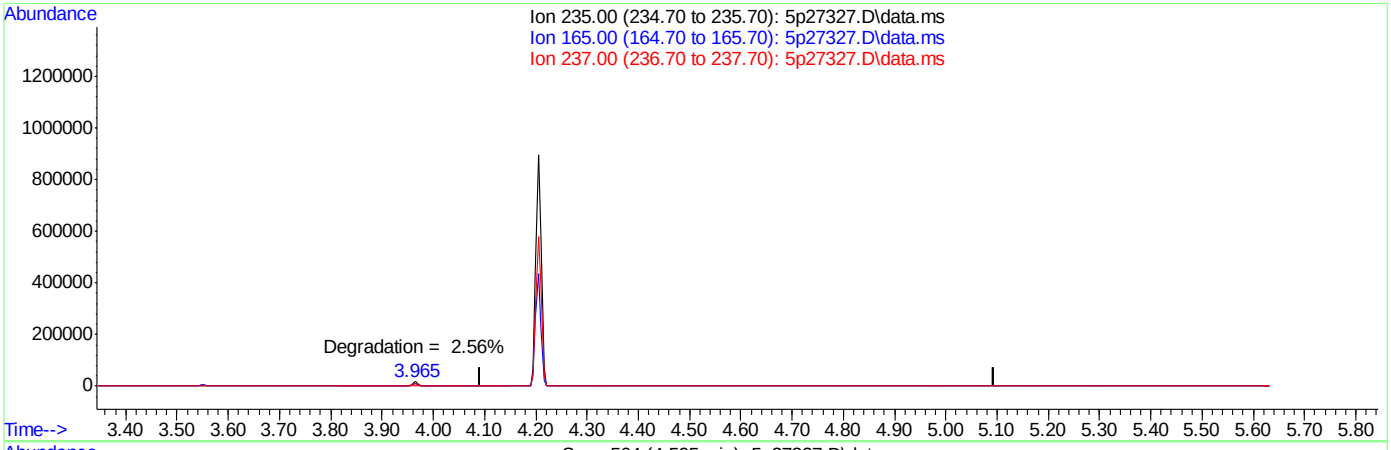
Ion	Exp%	Act%
184.05	100	0.00
92.05	11.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

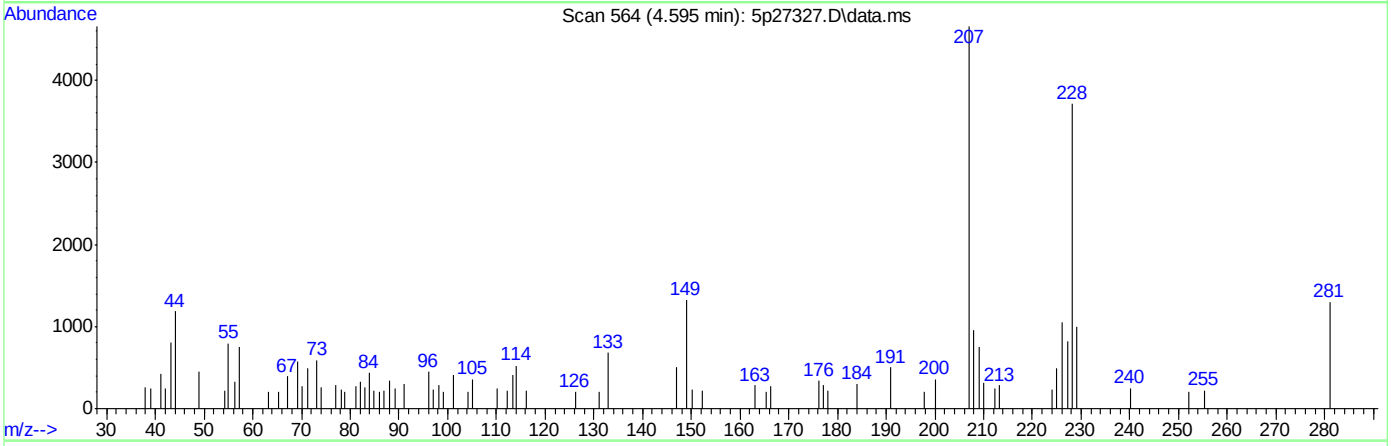
SGS ACCUTEST JC18649

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

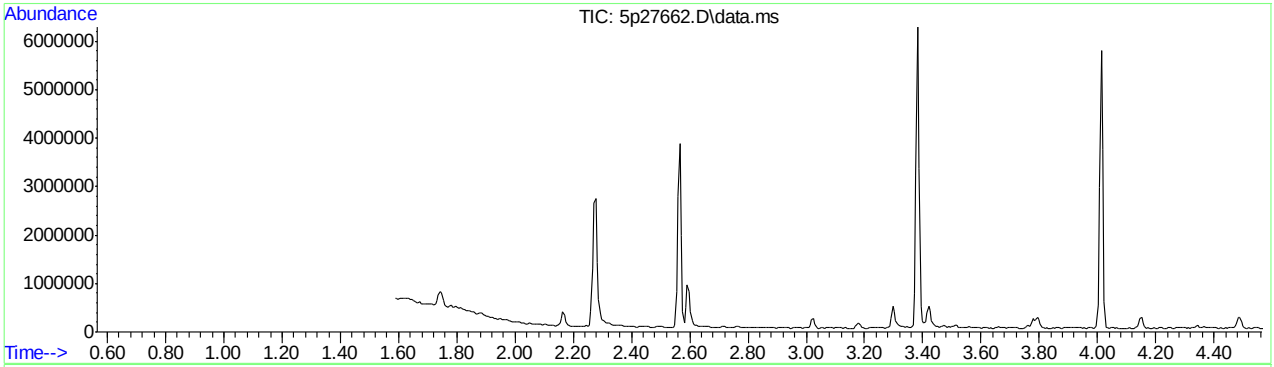
SGS ACCUTEST JC18649

DFTPPR

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27662.D
Acq On : 20 Apr 2016 8:53 pm
Operator : juliusj
Sample : dftpp
Misc : op92466,e5p1400
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 183, 184, 185; Background Corrected with Scan 169
AUTOFIND via AUTOINTEGRATE

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.3	145759	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	33.9	109129	PASS
70	69	0.00	2	0.1	113	PASS
127	198	40	60	51.0	163920	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	321556	PASS
199	198	5	9	7.0	22351	PASS
275	198	10	30	27.4	88103	PASS
365	198	1	100	2.7	8563	PASS
441	443	0.10	100	83.0	44117	PASS
442	198	40	100	87.2	280298	PASS
443	442	17	23	19.0	53122	PASS

SGS ACCUTEST JC18649

Average of 2.560 to 2.570 min.: 5p27662.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	802	47.50	87	59.70	95	69.00	109129
37.15	1111	50.15	42482	61.05	2260	70.05	113
38.10	2599	51.05	145759	62.05	1936	71.05	752
39.15	10415	52.10	6817	63.05	4202	72.15	643
40.10	687	53.05	96	63.90	329	73.00	2559
41.15	1389	54.00	214	64.20	439	74.05	9982
41.80	236	55.20	1588	64.40	147	75.00	15639
42.40	377	56.00	4203	65.05	2133	77.10	107906
44.05	461	57.10	10586	66.10	172	78.10	7435
46.00	99	58.40	123	66.40	337	79.00	8561
47.00	63	58.80	119	67.10	678	80.00	5815

Average of 2.560 to 2.570 min.: 5p27662.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.10	9337	92.05	2290	101.05	4664	113.70	120
82.05	1694	93.05	13846	103.05	2037	114.00	78
83.10	758	94.10	1054	104.05	3825	114.20	92
83.90	246	94.90	349	105.05	3163	115.00	119
85.00	1082	95.40	191	107.10	45818	115.20	258
86.00	2205	96.05	1155	108.05	6191	116.10	2904
87.05	1385	96.50	147	110.10	89207	117.05	33309
88.10	716	97.10	1306	111.05	12879	117.80	1122
89.05	626	98.05	10681	112.10	1802	118.05	1629
89.90	71	99.00	8872	112.60	193	119.00	583
91.10	2147	100.05	1278	113.05	108	120.15	515

Average of 2.560 to 2.570 min.: 5p27662.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
120.70	141	132.25	790	140.10	365	150.00	224
121.10	177	133.05	505	140.30	269	151.05	1446
122.00	4732	134.05	1088	141.05	7991	151.95	598
123.05	4687	135.05	5552	142.10	3083	153.10	2513
124.00	2439	136.05	2962	143.10	2085	154.05	2700
125.00	3010	137.05	2537	143.90	735	155.00	4763
127.10	163920	137.70	159	145.00	609	156.10	6458
128.05	15913	138.05	660	146.05	1061	157.05	1030
129.05	65341	138.60	154	147.05	3645	158.10	1532
130.05	5820	139.30	163	148.00	8640	159.15	1084
131.05	1116	139.60	168	149.00	1302	160.05	2749

Average of 2.560 to 2.570 min.: 5p27662.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
161.10	3662	169.70	89	178.00	379	187.10	12630
162.10	1079	170.15	217	179.05	10819	188.10	1711
162.70	167	170.70	141	180.05	7592	189.05	2305
163.10	507	171.05	606	181.10	3277	189.80	193
164.10	817	172.10	2050	182.10	84	190.05	33
165.00	2556	173.15	2199	182.30	204	191.00	1715
166.00	936	174.10	3555	183.00	264	192.05	3485
167.10	14574	175.10	6785	183.10	226	193.05	3981
168.05	5208	176.00	767	184.00	995	194.10	384
168.90	436	176.20	1525	185.15	5339	194.30	273
169.10	929	177.05	2943	186.10	47344	195.10	395

Average of 2.560 to 2.570 min.: 5p27662.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
196.10	11487	206.10	76981	215.00	393	224.10	41114
198.00	321556	207.10	8083	215.15	798	225.10	9478
199.05	22351	208.10	2989	216.15	2020	225.85	727
200.15	1790	209.10	60	217.05	16283	227.10	15406

DFTPP5P.M Thu Apr 21 09:02:55 2016 RPT1 Page: 2

201.30	298	210.00	1169	217.85	1915	228.00	1573
201.65	1390	210.20	467	218.20	627	229.10	3317
201.95	419	210.60	803	219.10	207	229.95	264
202.20	163	211.05	3300	219.50	253	231.10	1479
203.15	3069	211.85	330	219.90	389	232.00	418
204.10	10999	212.90	81	221.10	21787	233.00	161
205.10	18021	214.30	72	223.15	3575	233.20	305

Average of 2.560 to 2.570 min.: 5p27662.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
233.95	981	243.10	3031	252.15	567	262.10	176
234.20	146	244.10	35024	252.70	259	262.70	86
235.05	1267	245.15	4919	253.15	932	263.90	986
236.05	1203	246.05	6293	255.10	171330	264.40	179
236.80	186	247.10	1391	256.10	26821	265.05	4021
237.10	1184	248.00	306	257.05	2335	267.05	341
239.05	466	248.20	173	258.10	9064	267.50	249
239.85	355	249.15	1372	259.05	1054	268.25	194
240.15	254	250.15	255	260.05	394	269.20	321
241.05	916	250.80	485	260.90	299	270.05	498
242.05	2693	251.10	209	261.20	115	270.90	78

Average of 2.560 to 2.570 min.: 5p27662.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
271.30	218	283.80	180	292.40	164	304.15	910
272.10	509	285.10	1325	292.60	328	304.90	96
273.15	5799	286.00	179	293.00	1276	307.90	194
274.10	14852	286.30	316	294.05	277	308.15	282
275.10	88103	287.10	105	295.20	400	309.70	123
276.10	12318	287.30	95	296.05	20677	310.10	330
277.10	6243	289.00	90	297.05	2667	311.80	107
278.20	1205	289.30	396	298.10	343	313.05	308
282.05	522	290.10	188	301.00	202	314.00	693
282.40	70	291.60	69	302.10	179	314.20	580
283.10	234	292.15	393	303.15	2621	314.95	2178

Average of 2.560 to 2.570 min.: 5p27662.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
315.90	319	325.00	139	336.10	178	352.10	1511
316.15	1349	326.10	113	336.50	109	352.30	558
316.80	67	327.00	1261	339.30	179	353.10	1643
317.10	282	327.90	173	341.05	1047	354.10	2909
318.30	138	328.05	644	343.20	167	355.15	531
320.05	226	329.00	211	346.00	1243	355.80	85
320.40	74	329.20	75	346.20	434	357.50	122
321.15	1016	332.10	346	347.05	310	359.15	241
322.15	728	333.15	1117	347.90	76	362.95	237
323.10	7929	334.10	6416	349.70	84	363.80	120
324.10	1736	335.25	1425	351.10	153	365.05	8563

Average of 2.560 to 2.570 min.: 5p27662.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
366.10	1463	381.90	69	402.15	1357	423.10	19241
366.90	119	382.20	72	403.15	3486	424.05	3129
370.10	143	383.05	1056	404.15	1300	425.10	444
370.30	112	385.00	143	405.10	295	425.90	70
371.00	733	385.90	81	410.20	95	426.50	89
372.10	4205	389.80	233	414.70	138	435.50	96
373.10	591	390.10	808	415.30	110	437.90	105
373.30	325	391.10	569	416.20	112	438.30	70
374.00	159	392.10	287	417.10	148	438.60	99
376.85	219	401.05	237	421.05	1829	439.20	110
377.30	86	401.90	332	422.25	2496	439.40	131

Average of 2.560 to 2.570 min.: 5p27662.D\data.ms

DFTPP5P.M Thu Apr 21 09:02:55 2016 RPT1 Page: 3

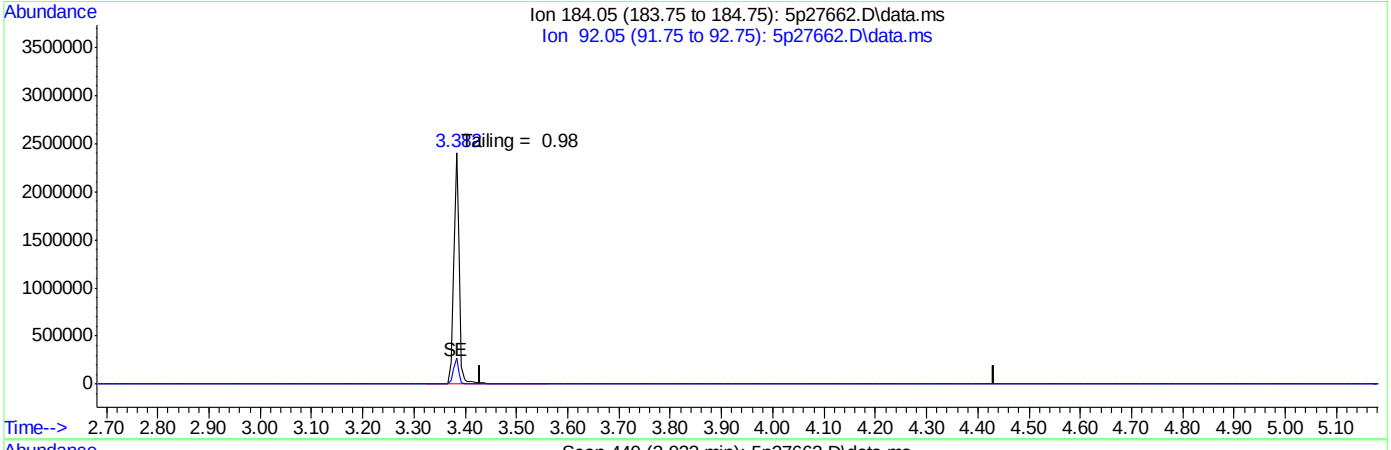
dftpp
Modified:subtracted

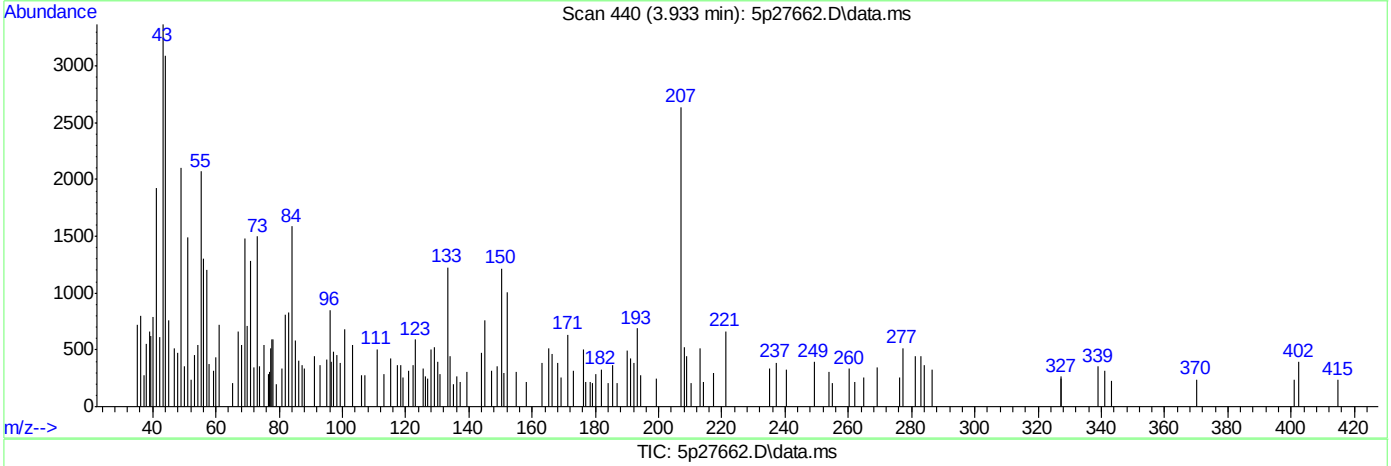
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
440.00	652						
441.15	44117						
442.10	280298						
443.10	53122						
444.10	4711						
445.05	420						
445.70	93						
469.00	105						
497.40	119						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27662.D
Acq On : 20 Apr 2016 8:53 pm
Operator : juliusj
Sample : dftpp
Misc : op92466,e5p1400
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 20 20:58:56 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: 5p27662.D\data.ms

(2) Benzidine (M)

3.931min (-3.931) 0.00ng

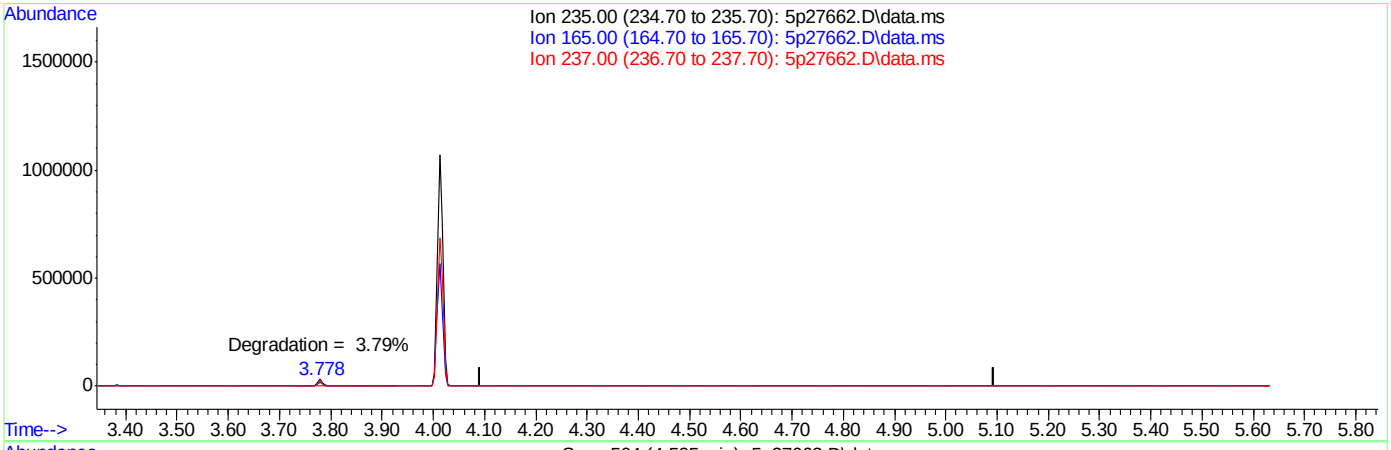
response 0

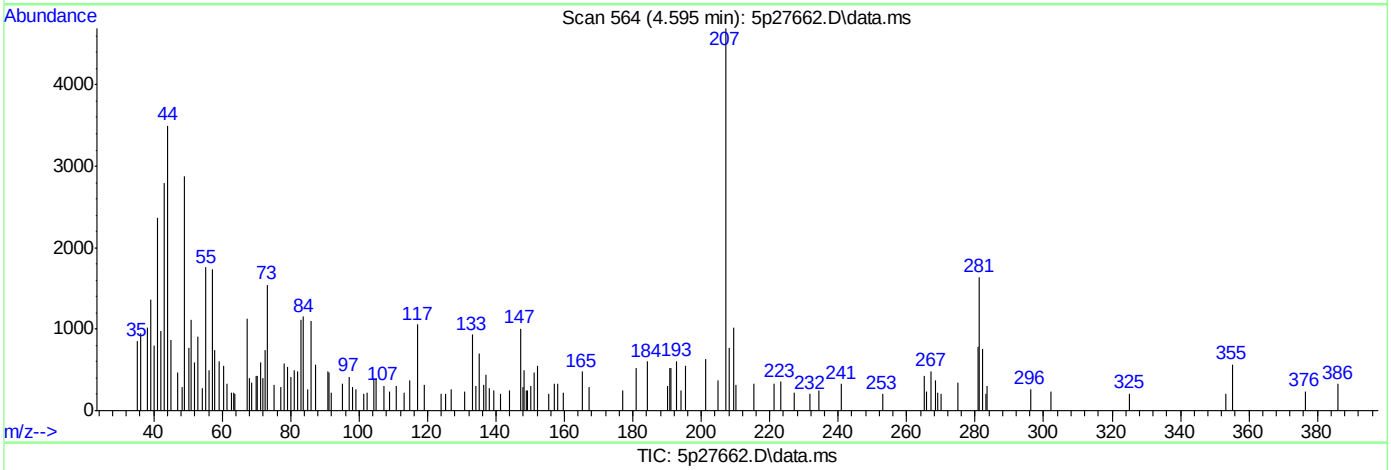
Ion	Exp%	Act%
184.05	100	0.00
92.05	11.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27662.D
Acq On : 20 Apr 2016 8:53 pm
Operator : juliusj
Sample : dftpp
Misc : op92466,e5p1400
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 20 20:58:56 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





(3) PP-DDT (MC)

4.594min (-4.594) 0.00ppb

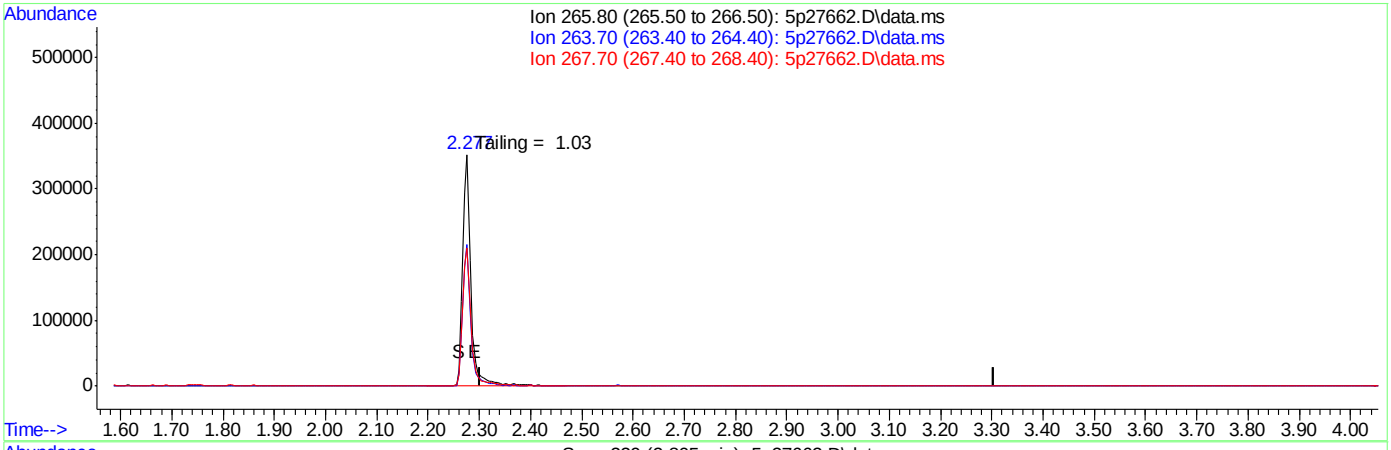
response 0

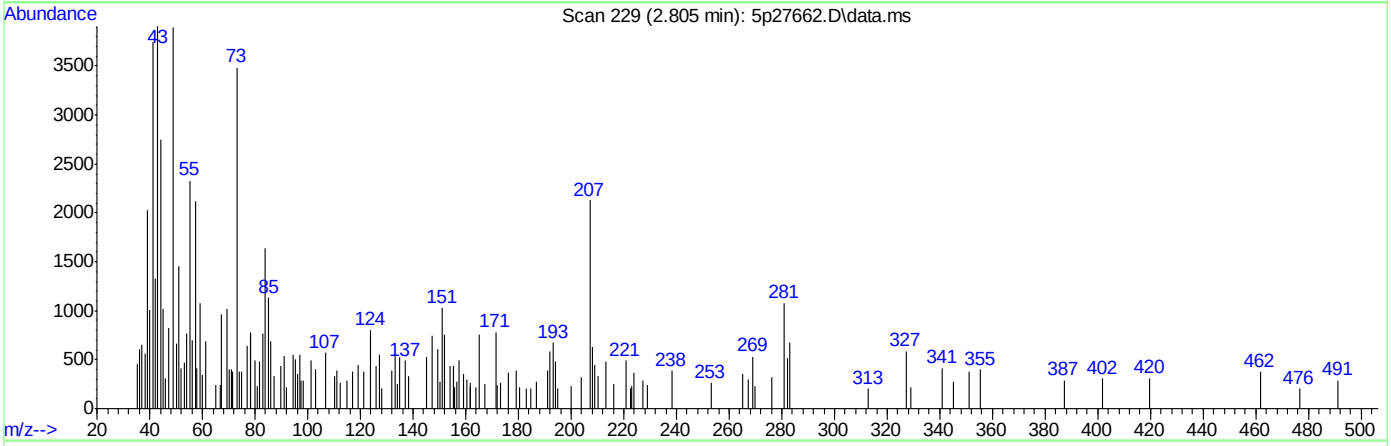
Ion	Exp%	Act%
235.00	100	0.00
165.00	58.00	0.00#
237.00	62.20	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27662.D
Acq On : 20 Apr 2016 8:53 pm
Operator : juliusj
Sample : dftpp
Misc : op92466,e5p1400
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 20 20:58:56 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: 5p27662.D\data.ms

(1) Pentachlorophenol (MC)

2.804min (-2.804) 0.00ng

response 0

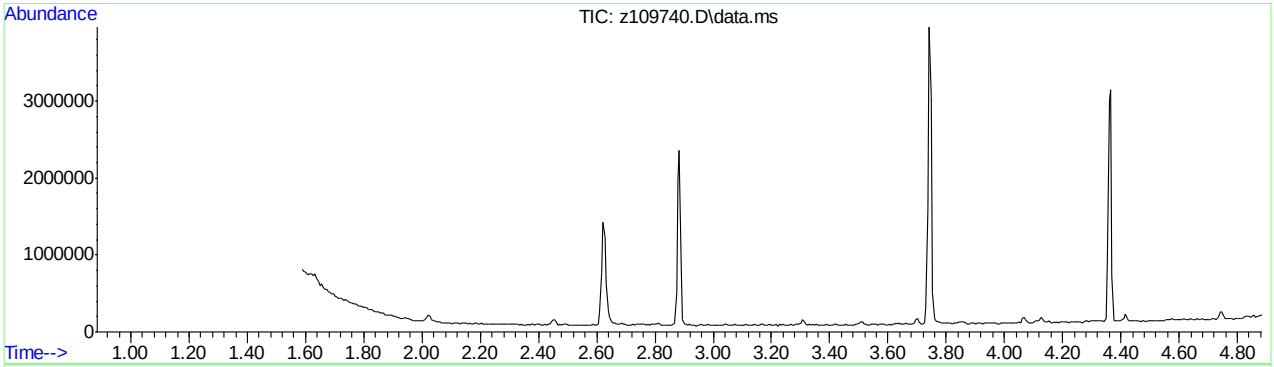
Ion	Exp%	Act%
265.80	100	0.00
263.70	64.70	0.00#
267.70	64.60	0.00#
0.00	0.00	0.00

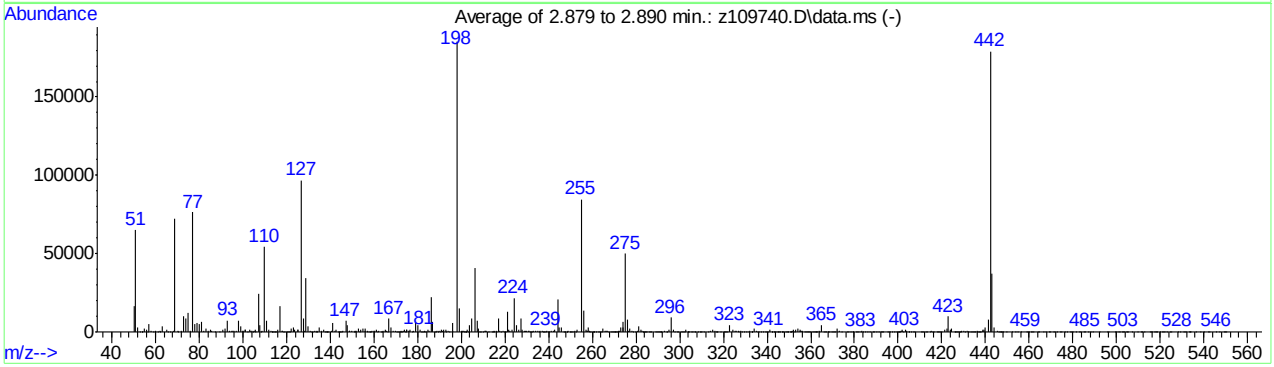
DFTPP

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109740.D
Acq On : 13 Apr 2016 9:20 pm
Operator : sarad
Sample : dftpp
Misc : op92825,ez5485
ALS Vial : 1 Sample Multiplier: 1

Integration File: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Title : column rtx-5msi 30mx0.25mmx0.25um
Last Update : Thu Sep 10 14:02:56 2015





AutoFind: Scans 227, 228, 229; Background Corrected with Scan 221

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.0	64844	PASS
68	69	0.00	2	1.5	1086	PASS
69	198	0.00	100	39.2	72648	PASS
70	69	0.00	2	0.9	687	PASS
127	198	40	60	52.1	96690	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	185434	PASS
199	198	5	9	8.3	15348	PASS
275	198	10	30	26.9	49861	PASS
365	198	1	100	2.5	4651	PASS
441	443	0.01	100	21.7	8077	PASS
442	198	40	100	96.6	179106	PASS
443	442	17	23	20.8	37293	PASS

DFTPPZ.M Thu Apr 14 15:04:59 2016 RTE

Page: 1

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	16760	58.95	53	70.10	687	81.05	6219
51.05	64844	60.10	448	70.40	193	82.00	434
52.00	3172	61.00	211	71.85	534	83.00	1897
52.70	306	61.95	648	73.05	10132	84.00	606
53.80	52	62.20	69	74.05	8408	85.05	1460
54.05	367	63.10	3256	75.00	12495	85.85	1032
55.05	1970	65.05	1810	76.00	484	87.15	355
56.00	1481	65.90	217	77.10	76578	89.10	159
56.30	307	66.90	352	78.05	5056	91.00	1669
56.95	4765	68.20	1086	78.95	5693	92.10	1862
57.85	528	69.00	72648	80.00	4730	93.00	7324

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.05	388	101.95	313	109.05	670	115.90	1400
94.95	755	102.95	1294	110.00	54393	116.95	16659
95.70	484	103.90	1049	111.00	7000	118.00	666
95.95	651	104.10	1099	111.95	1149	118.20	391
97.10	522	104.90	175	112.85	384	118.80	159
97.95	7533	105.10	942	113.20	87	119.10	228
99.00	3855	105.70	139	113.60	48	120.00	78
99.85	522	105.95	1326	114.10	57	120.60	118
100.15	433	107.05	24083	114.60	261	120.90	282
100.95	1590	108.00	4192	114.90	142	121.40	310
101.20	1619	108.20	160	115.10	210	122.10	1918

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.00	2849	132.05	280	138.80	311	146.00	1101
123.90	1279	133.10	914	139.10	274	147.05	6825
125.00	1613	133.40	213	140.40	553	147.95	4137
125.30	1214	133.90	242	141.00	5532	148.80	605
126.95	96690	134.20	406	142.05	1035	149.05	429
128.00	8331	135.05	2958	142.90	1348	150.05	802
128.20	696	136.15	783	143.80	67	150.90	83
129.00	34554	137.05	1510	144.10	169	151.30	622
129.95	3439	137.70	15	144.30	290	151.55	194
130.95	623	138.20	227	144.85	20	152.00	671
131.30	141	138.60	176	145.20	91	152.95	1831

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
153.40	339	160.00	842	165.75	1065	172.40	189
154.05	1384	160.20	588	166.30	98	173.10	338
155.05	2349	160.90	859	167.00	8295	173.30	431
155.80	484	161.20	1215	168.05	2906	174.00	1666
156.05	2252	161.50	105	168.95	809	174.30	237
156.85	375	162.05	491	170.10	642	174.60	330
157.30	492	163.05	243	170.40	219	174.90	1472
157.90	376	163.90	90	171.00	105	175.10	1453
158.10	333	164.20	561	171.35	277	175.80	408
158.50	55	165.10	1198	171.90	354	176.10	571
159.15	710	165.50	801	172.20	599	176.80	1677

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
177.70	96	184.95	1594	191.30	593	200.20	163
178.10	669	185.20	750	192.05	1723	200.80	417
179.05	6022	186.10	22575	192.80	258	201.00	427
180.05	4533	187.05	6613	193.05	1536	201.30	122

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181.00	1564	187.95	11	194.10	661	201.75	282
181.70	77	188.30	205	194.60	263	202.10	301
182.10	182	189.00	944	195.80	1014	202.40	324
182.80	296	189.25	113	196.10	5759	202.90	1418
183.10	303	189.90	486	198.00	185434	203.20	236
183.30	426	190.20	227	199.00	15348	204.00	4614
183.80	189	191.05	1163	200.00	744	205.00	8882

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
206.10	40733	214.35	179	220.30	350	229.20	735
207.10	6842	215.00	58	221.05	13144	230.05	613
207.95	1842	215.15	747	221.70	1220	230.70	450
208.60	297	216.00	291	222.10	466	231.05	520
208.95	280	216.20	452	223.05	1583	231.40	163
210.10	59	217.00	8640	224.10	21539	232.10	90
210.70	991	217.85	1045	225.05	4615	232.40	210
211.00	516	218.20	289	226.10	1105	233.05	386
211.45	1047	219.20	387	227.10	8855	234.05	465
212.70	34	219.50	221	228.05	1758	234.90	607
214.10	225	220.10	162	228.80	789	235.75	370

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
236.10	698	242.90	1317	250.10	56	258.00	2948
237.00	692	244.05	20557	250.30	148	258.40	268
237.60	85	245.00	2536	250.95	346	258.90	750
237.80	48	246.00	2975	251.80	661	259.40	137
238.20	26	246.90	356	252.45	216	260.00	218
238.40	75	247.15	2	253.10	1517	260.60	27
239.00	1001	247.50	163	255.00	84600	260.90	127
239.80	125	248.20	36	256.05	13722	261.60	22
240.05	264	248.40	49	257.05	1808	262.90	65
241.00	787	248.90	902	257.50	394	263.20	263
242.00	952	249.90	133	257.70	425	263.70	172

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
264.50	79	270.40	55	277.05	2125	284.10	139
264.95	2147	271.10	270	278.05	722	284.40	369
265.90	414	271.30	279	278.85	275	284.85	40
266.25	441	272.05	500	279.45	204	285.95	116
267.10	501	272.70	831	280.60	414	286.30	63
267.30	214	273.15	2859	281.05	3435	286.70	206
268.25	213	274.00	2538	282.05	1266	288.80	54
268.85	314	274.15	6187	282.80	623	289.25	182
269.20	97	275.10	49861	283.10	358	290.10	27
269.75	60	276.00	8050	283.30	166	290.40	73
270.20	260	276.80	656	283.90	186	290.90	118

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
291.40	125	300.75	209	307.10	57	317.00	60
291.70	65	301.10	80	308.30	236	317.40	45
292.90	635	301.90	124	309.25	191	318.60	26
293.90	131	302.20	105	309.70	74	320.35	302
294.20	238	303.00	1596	310.20	182	320.85	361
295.10	1173	303.70	131	310.80	57	321.20	248
296.05	9131	304.00	366	312.80	216	321.60	325
297.00	1698	304.30	209	313.95	557	323.00	4641
297.90	272	305.10	47	315.15	1540	324.15	1163
298.90	114	306.10	104	316.00	853	325.20	399
299.10	78	306.90	29	316.80	53	326.10	556

Average of 2.879 to 2.890 min.: z109740.D\data.ms

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dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
326.80	178	334.10	2135	342.30	38	348.40	80
327.10	823	335.05	852	343.10	93	349.10	89
327.85	504	335.40	117	343.40	132	349.30	76
328.30	139	336.20	139	343.90	22	349.70	21
329.60	56	337.40	118	344.90	175	350.50	104
330.30	156	338.20	173	345.10	19	350.80	119
331.40	79	339.00	84	345.60	195	351.20	100
332.05	764	339.60	146	346.00	270	351.70	398
332.80	246	340.10	107	346.70	45	352.05	1409
333.10	371	341.05	1420	347.00	171	352.60	123
333.30	298	342.10	321	347.60	30	353.00	1137

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
354.20	1856	361.00	71	367.05	149	376.80	118
355.00	1158	361.50	67	367.70	58	377.20	109
355.20	819	361.80	95	368.00	241	378.40	159
355.50	474	362.10	75	368.70	84	379.10	50
356.10	821	362.40	29	369.40	29	379.45	100
357.05	168	363.00	46	370.10	281	380.55	122
357.80	53	363.60	64	370.40	75	381.30	87
358.05	185	363.80	495	371.00	299	381.70	67
358.80	53	365.00	4651	372.10	2342	382.70	54
359.25	205	365.95	375	373.15	849	383.10	486
359.90	86	366.60	44	374.00	96	384.10	28

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
384.90	168	395.90	283	401.95	1152	411.70	33
385.95	233	396.20	32	402.50	155	412.50	31
387.00	34	397.20	20	403.10	1216	413.35	204
388.50	89	398.40	56	403.75	480	414.80	172
388.90	103	399.20	211	404.80	69	415.05	453
390.20	321	399.60	75	405.10	46	415.70	116
391.05	187	400.20	60	406.10	79	416.40	69
392.05	310	400.50	52	406.70	25	417.50	99
392.55	88	400.90	23	407.35	173	418.30	40
393.20	44	401.05	491	410.40	25	418.80	18
395.00	116	401.80	432	411.05	51	419.40	150

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
419.90	229	428.00	169	434.20	105	439.20	1302
421.10	1683	428.30	67	434.90	149	439.60	2725
422.15	2229	428.65	86	435.15	182	441.10	8077
423.05	9966	429.15	1065	436.10	26	442.10	179106
424.00	1268	430.10	638	436.35	515	443.10	37293
424.15	1882	430.35	6	436.80	258	444.00	3188
425.70	41	431.45	389	437.10	233	445.30	593
425.95	119	432.00	70	437.40	217	445.70	24
426.50	120	432.20	63	437.90	217	446.35	288
427.00	229	432.90	22	438.70	751	446.80	95
427.70	85	433.80	150	439.00	1375	447.00	115

Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
447.30	47	461.10	97	474.00	54	485.55	158
448.10	145	461.95	113	474.90	129	486.80	32
449.50	43	463.85	82	476.10	38	488.20	53
452.30	207	464.60	48	477.20	29	489.30	32
453.85	170	466.50	26	478.70	48	492.20	47

454.75	74	467.60	22	479.40	51	495.70	44
456.25	101	469.00	19	479.70	100	496.40	20
458.70	279	469.70	91	481.10	109	499.40	19
459.40	37	471.30	61	482.90	41	500.05	64
459.90	51	471.60	150	483.60	98	500.70	32
460.60	58	472.70	26	485.10	51	501.20	49

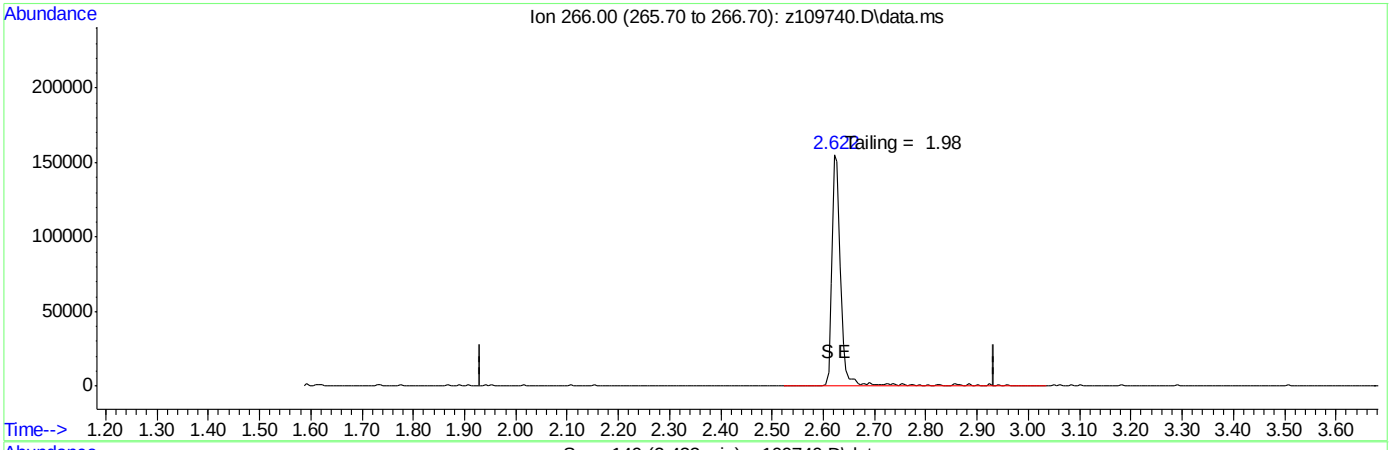
Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

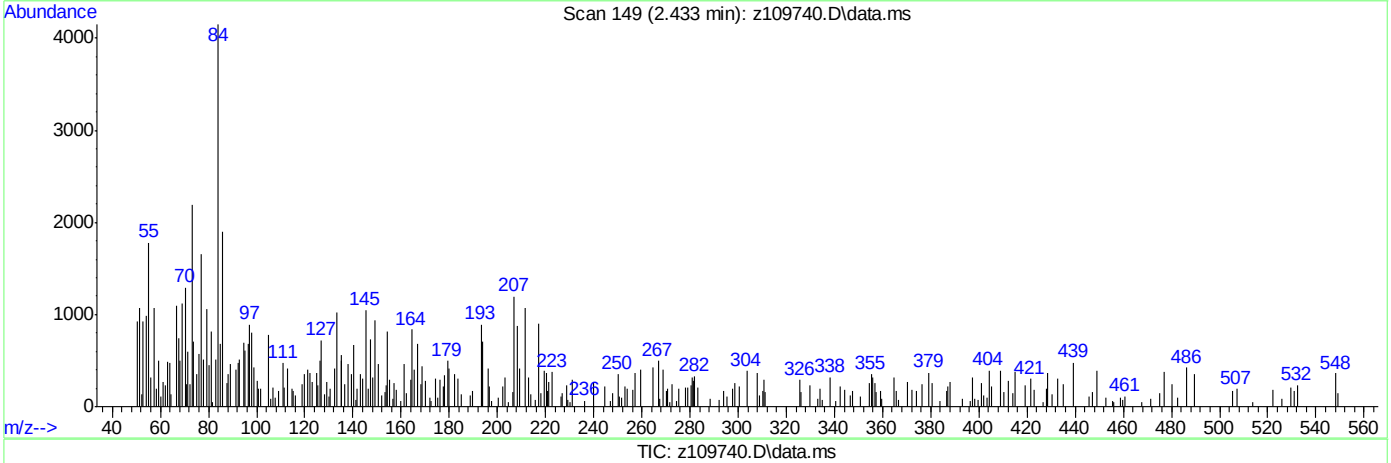
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
502.40	30	515.05	50	522.80	55	536.30	22
502.70	62	515.90	19	524.30	63	538.30	46
503.30	381	516.30	31	524.80	35	539.60	28
504.35	104	517.10	36	527.90	90	541.70	105
504.90	31	517.70	25	528.90	77	542.50	37
505.15	125	518.20	26	530.40	39	545.70	221
507.20	25	518.40	54	530.90	53	547.10	81
509.75	72	519.90	17	531.70	28	549.10	35
511.00	25	520.70	51	533.20	144	549.70	50
511.70	36	521.20	67	533.50	38	549.90	54
512.80	119	522.00	30	533.90	83		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109740.D
Acq On : 13 Apr 2016 9:20 pm
Operator : sarad
Sample : dftpp
Misc : op92825,ez5485
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 21:26:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: z109740.D\data.ms

(1) Pentachlorophenol

2.433min (-2.433) 0.00

response 0

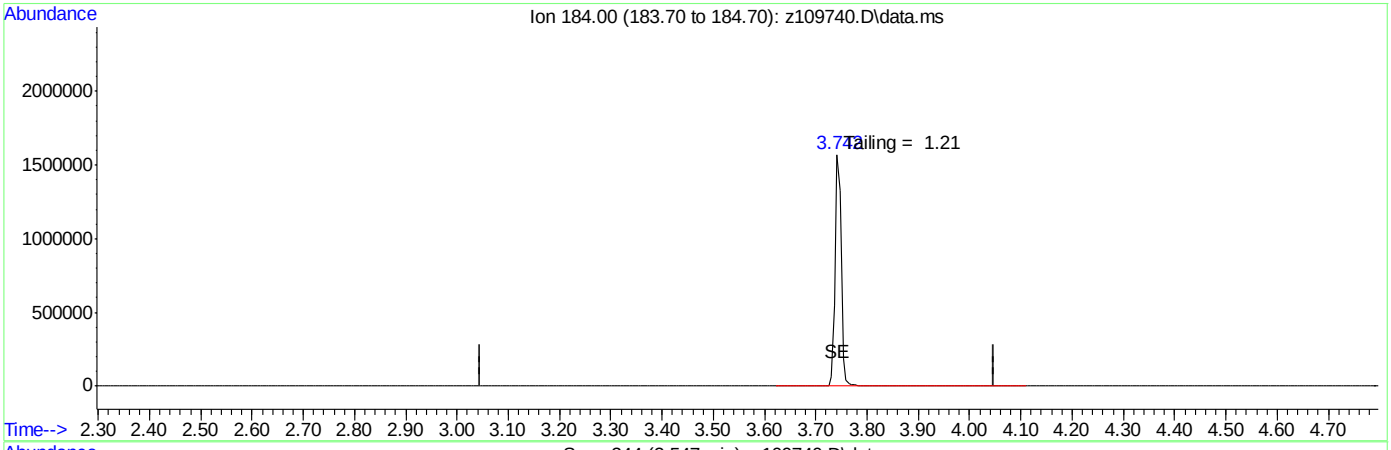
Ion	Exp%	Act%
266.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

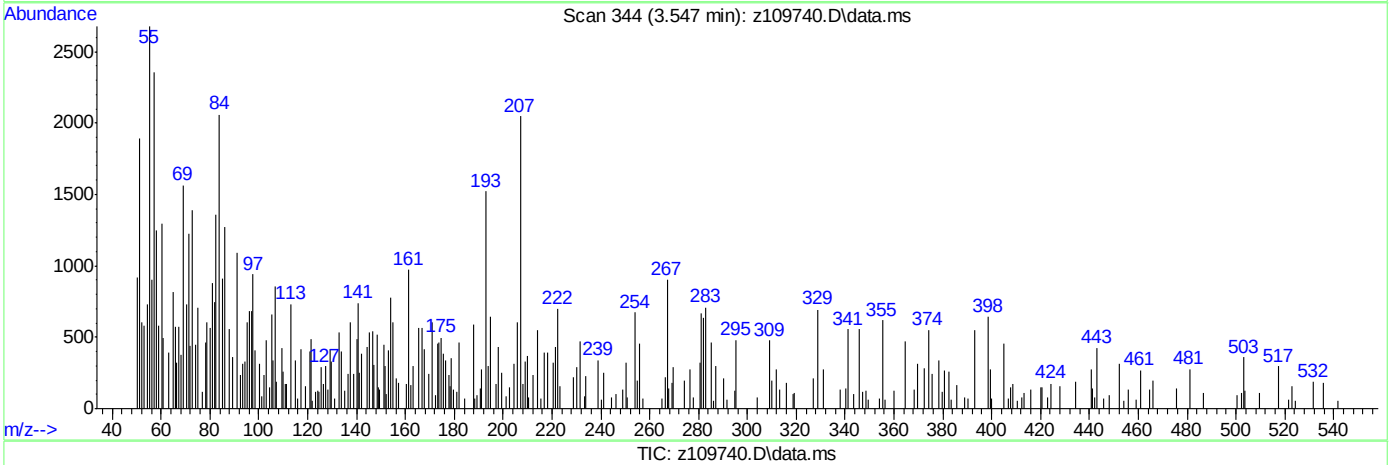
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109740.D
Acq On : 13 Apr 2016 9:20 pm
Operator : sarad
Sample : dftpp
Misc : op92825,ez5485
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 21:26:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: z109740.D\data.ms

(2) Benzidine

3.547min (-3.547) 0.00

response 0

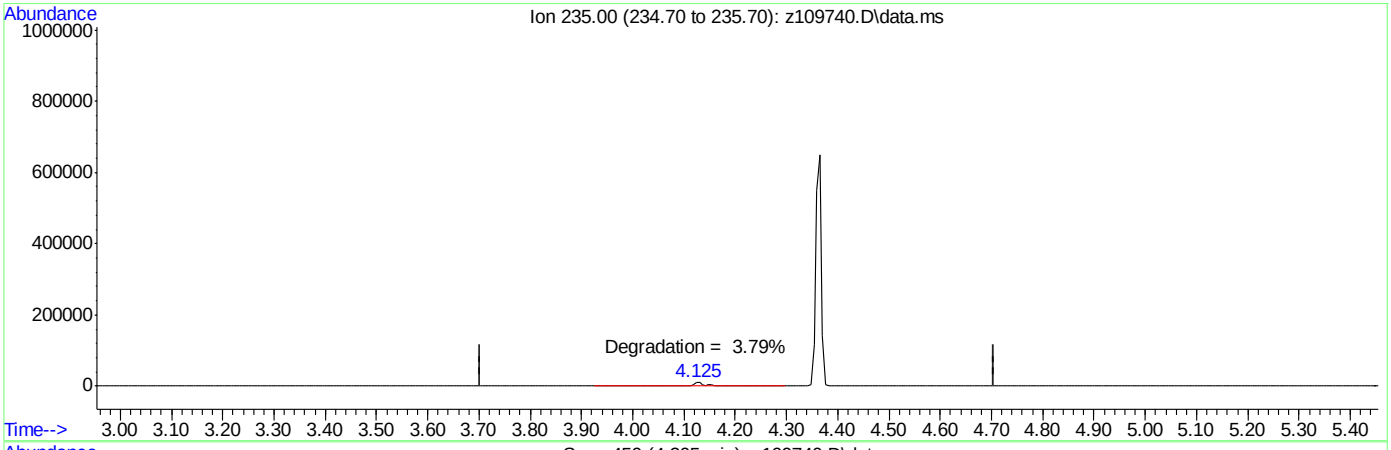
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

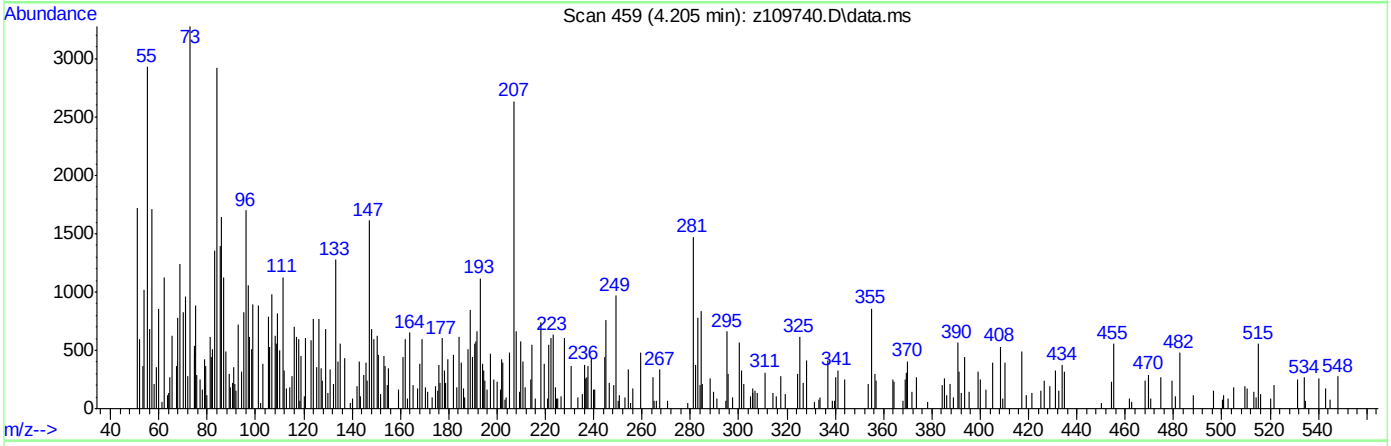
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109740.D
Acq On : 13 Apr 2016 9:20 pm
Operator : sarad
Sample : dftpp
Misc : op92825,ez5485
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 21:26:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: z109740.D\data.ms

(3) PP-DDT

4.205min (-4.205) 0.00

response 0

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

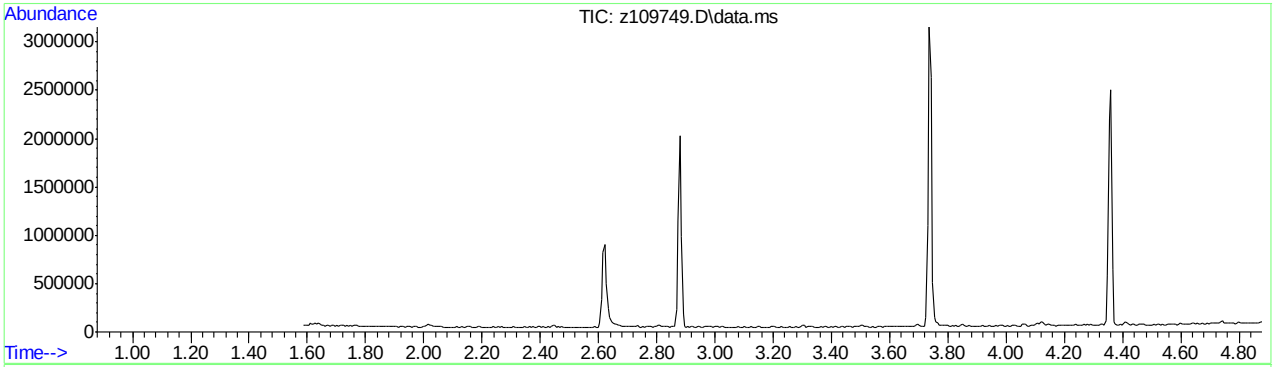
SGS ACCUTEST JC18649

DFTPP

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109749.D
Acq On : 14 Apr 2016 1:39 am
Operator : sarad
Sample : dftpp
Misc : op92825,ez5486
ALS Vial : 1 Sample Multiplier: 1

Integration File: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Title : column rtx-5msi 30mx0.25mmx0.25um
Last Update : Thu Sep 10 14:02:56 2015



AutoFind: Scans 226, 227, 228; Background Corrected with Scan 223

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.3	55293	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.2	56725	PASS
70	69	0.00	2	0.5	306	PASS
127	198	40	60	51.1	77761	PASS
197	198	0.00	1	0.9	1351	PASS
198	198	100	100	100.0	152306	PASS
199	198	5	9	7.4	11277	PASS
275	198	10	30	25.1	38268	PASS
365	198	1	100	3.3	4988	PASS
441	443	0.01	100	99.3	25892	PASS
442	198	40	100	89.5	136274	PASS
443	442	17	23	19.1	26080	PASS

DFTPPZ.M Thu Apr 14 09:33:45 2016 RTE

SGS ACCUTEST JC18649

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	14743	63.00	2297	71.00	324	81.00	4326
51.10	55293	64.05	238	72.10	91	82.05	868
52.05	3733	64.50	366	72.90	92	83.00	691
53.00	288	65.05	1695	73.15	2976	83.30	506
55.00	902	65.90	56	74.05	5967	85.05	1423
56.10	2243	66.05	155	75.05	8930	86.15	1194
57.05	4171	67.00	219	76.20	897	86.80	211
57.90	87	67.40	465	77.05	58640	87.15	525
59.25	172	68.95	56725	78.05	4288	87.70	83
61.10	702	69.85	121	78.95	4586	88.00	270
62.10	1336	70.30	306	80.00	2964	88.50	124

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
89.15	487	96.30	248	103.15	1384	111.00	5925
90.60	236	97.00	486	103.40	624	111.85	165
90.90	249	98.00	4833	104.00	1010	112.10	246
91.15	554	98.25	557	104.30	456	113.40	2
91.95	1008	99.00	5535	104.70	142	113.80	61
92.30	1139	99.95	692	105.10	1272	115.15	529
93.10	7521	100.80	426	105.85	169	115.85	78
94.15	715	101.05	1428	107.00	18870	116.20	864
95.30	473	101.70	254	108.05	3213	117.00	12926
95.85	330	101.90	126	108.85	365	117.80	320
96.05	34	102.45	70	109.95	43779	118.10	409

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
118.95	51	129.95	3330	138.30	88	146.10	210
119.30	32	131.00	569	138.70	89	147.10	2453
120.05	86	131.90	438	140.10	829	148.00	4618
120.90	316	132.45	350	140.40	204	149.10	1354
122.00	1374	133.00	174	141.00	4312	149.80	43
123.05	1698	133.90	865	142.10	1454	150.00	40
123.95	866	135.00	1911	142.90	472	150.80	145
125.05	1229	135.40	704	143.20	369	151.35	427
126.95	77761	135.90	1588	144.00	592	151.85	762
128.05	7808	137.05	1592	144.70	47	152.85	665
129.00	29240	137.90	125	145.80	445	153.80	561

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
154.10	444	160.10	739	165.75	655	172.80	1135
154.30	634	161.00	2611	166.00	547	173.20	474
155.00	2259	161.80	404	167.05	6730	174.05	1694
155.90	1769	162.10	116	168.10	3196	175.00	2803
156.10	2097	162.40	166	169.10	313	176.05	1374
156.80	67	162.70	235	169.40	11	177.00	1911
157.10	407	163.00	166	170.40	189	177.80	205
158.05	400	163.70	174	170.95	631	178.20	191
158.30	113	164.20	501	171.20	102	178.85	530
159.15	562	164.70	120	171.90	330	179.05	3141
159.90	629	165.15	1227	172.10	400	180.05	3912

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
181.05	1675	187.80	165	195.90	907	206.05	30000
181.95	673	188.05	304	196.15	4613	206.95	4682
182.55	577	189.00	1356	196.80	1351	208.05	1614
182.90	231	189.70	194	198.00	152306	209.10	773

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183.50	258	190.00	121	199.00	11277	210.15	582
183.70	221	190.95	1273	200.50	85	210.80	989
183.95	373	192.15	1347	200.80	391	211.15	1162
184.80	412	193.00	1559	201.50	1017	211.50	493
185.25	2625	193.80	163	203.10	1597	212.05	385
185.95	18698	194.10	295	204.05	5901	212.75	268
187.05	5743	194.40	196	205.05	8004	213.20	66

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
214.10	136	223.30	1837	231.50	48	239.20	365
215.15	211	224.10	18917	231.90	92	239.95	342
215.95	996	225.05	5319	233.15	340	240.30	80
216.20	719	226.10	211	234.20	551	240.60	158
217.00	6511	227.00	6560	235.00	892	241.00	687
218.00	1517	228.00	1285	235.80	129	242.10	1024
219.00	206	228.95	888	236.00	462	242.90	610
219.90	179	229.20	373	236.60	115	243.15	245
221.10	8285	230.05	283	237.35	152	244.10	17026
222.00	818	230.80	100	238.20	141	245.05	1582
223.10	1513	231.00	302	238.70	125	246.00	1785

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
246.20	789	253.30	923	263.65	140	272.00	87
246.70	161	255.00	71501	264.20	9	272.15	548
247.00	475	256.00	9628	265.05	1600	273.15	3077
247.60	49	256.95	884	266.10	271	274.05	7344
248.00	176	257.20	326	266.70	56	275.05	38268
249.00	934	258.10	3677	268.55	161	275.90	1453
249.50	80	259.15	869	269.05	126	276.05	4419
251.00	111	260.20	253	269.75	224	277.00	2561
251.30	64	260.70	27	270.50	131	278.00	165
252.40	453	261.00	37	270.70	71	278.25	409
252.95	461	262.80	43	271.40	293	279.10	150

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
279.60	40	289.20	100	298.60	140	309.00	17
281.05	658	290.15	226	299.00	102	309.20	18
282.50	132	290.70	81	300.50	173	311.00	56
282.90	198	292.10	309	301.05	518	312.60	67
283.90	353	292.30	70	302.10	531	312.90	25
284.20	212	293.10	1104	302.70	69	313.60	95
284.70	340	293.80	109	303.00	1653	314.00	373
284.95	328	294.10	129	303.50	61	314.60	90
285.90	54	295.20	397	303.95	238	315.05	1675
286.40	29	296.05	9174	304.20	215	316.05	884
288.70	140	297.70	159	307.95	157	317.40	171

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
318.35	97	325.00	396	332.35	286	339.70	44
318.80	34	326.00	483	332.70	101	340.20	132
319.15	269	327.00	566	333.30	229	340.50	40
319.80	56	327.70	121	334.00	2919	340.90	149
320.60	35	327.90	150	335.20	846	341.25	521
321.00	340	328.10	126	336.00	107	342.10	403
321.70	37	329.30	107	337.35	114	342.95	178
322.00	328	329.60	92	338.00	25	343.20	60
323.05	4178	331.00	31	338.40	51	343.90	35
324.10	361	331.20	127	339.15	274	344.70	81
324.30	149	331.90	284	339.40	86	345.80	301

Average of 2.873 to 2.884 min.: z109749.D\data.ms

DFTPPZ.M Thu Apr 14 09:33:45 2016 RTE Page: 3

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
346.10	714	351.70	142	357.85	259	365.80	317
346.70	114	352.00	735	358.70	57	366.10	399
347.00	32	352.35	382	359.00	130	366.60	111
347.15	167	353.05	1204	359.65	153	367.15	279
347.80	59	354.05	1966	360.30	180	369.05	117
348.40	63	354.70	290	360.80	25	370.00	180
348.90	103	355.00	118	362.50	201	370.90	298
349.40	76	355.20	98	362.70	29	371.20	165
350.00	116	356.15	209	363.70	25	372.05	3137
350.40	20	356.90	176	364.30	224	373.05	950
350.80	360	357.10	80	364.90	4988	373.60	193

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
373.90	75	385.55	188	393.15	144	401.95	742
374.30	62	386.80	24	394.60	70	402.30	194
377.20	298	387.30	218	395.55	59	403.15	1548
378.05	170	388.50	164	396.30	18	403.80	150
378.70	18	389.40	95	397.20	104	404.20	353
380.00	53	389.80	161	398.30	45	404.50	242
381.80	45	390.30	197	398.70	166	405.60	137
382.20	56	390.80	37	399.30	67	406.70	144
383.10	408	391.10	117	399.60	184	407.60	75
383.90	146	391.40	156	401.00	226	408.40	59
384.15	513	392.20	273	401.70	343	408.60	148

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
410.95	18	420.00	42	425.60	48	432.70	86
411.40	49	420.20	201	425.90	97	433.50	254
412.00	184	420.60	438	426.25	144	434.40	137
412.40	122	421.10	1003	426.80	44	434.80	252
413.00	20	422.00	343	427.50	126	435.40	93
415.10	308	422.25	1829	429.15	517	435.60	120
415.85	108	423.05	7353	429.95	95	436.20	499
416.90	35	423.90	370	431.00	134	436.70	526
417.10	147	424.15	1687	431.35	192	437.10	380
418.20	146	424.70	122	432.20	137	437.60	800
419.35	72	425.20	129	432.50	164	438.10	507

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
438.50	653	447.20	18	458.50	81	468.50	19
439.00	541	447.50	33	459.80	25	470.70	27
439.60	1868	449.40	39	460.10	18	471.90	149
441.15	25892	449.90	42	461.90	84	472.40	98
442.10	136274	450.20	161	462.90	65	477.30	80
443.10	26080	450.80	74	464.10	20	479.50	95
443.80	1412	454.00	27	464.60	46	480.90	21
444.15	1496	455.80	36	465.95	130	481.90	42
445.25	302	456.00	21	467.00	71	483.30	16
446.00	256	457.50	38	467.30	71	484.20	25
447.00	106	457.90	56	467.60	88	487.20	50

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
489.10	119	503.20	84	521.40	159	533.10	28
490.30	66	504.00	240	523.00	19	535.05	62
491.65	146	506.60	150	524.40	120	537.50	40
494.10	20	507.20	61	525.10	92	537.80	62
494.60	69	510.50	43	526.10	162	539.30	59

496.80	42	511.00	43	527.60	31	540.20	18
499.50	20	512.10	38	528.20	76	541.20	114
501.10	19	512.30	54	528.50	129	542.70	106
501.90	89	514.20	183	529.10	30	543.10	74
502.20	33	518.00	64	529.80	19	545.50	76
502.90	112	519.50	39	530.40	18	546.10	166

Average of 2.873 to 2.884 min.: z109749.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
548.10	35						
548.90	16						
549.45	132						

7.5.20

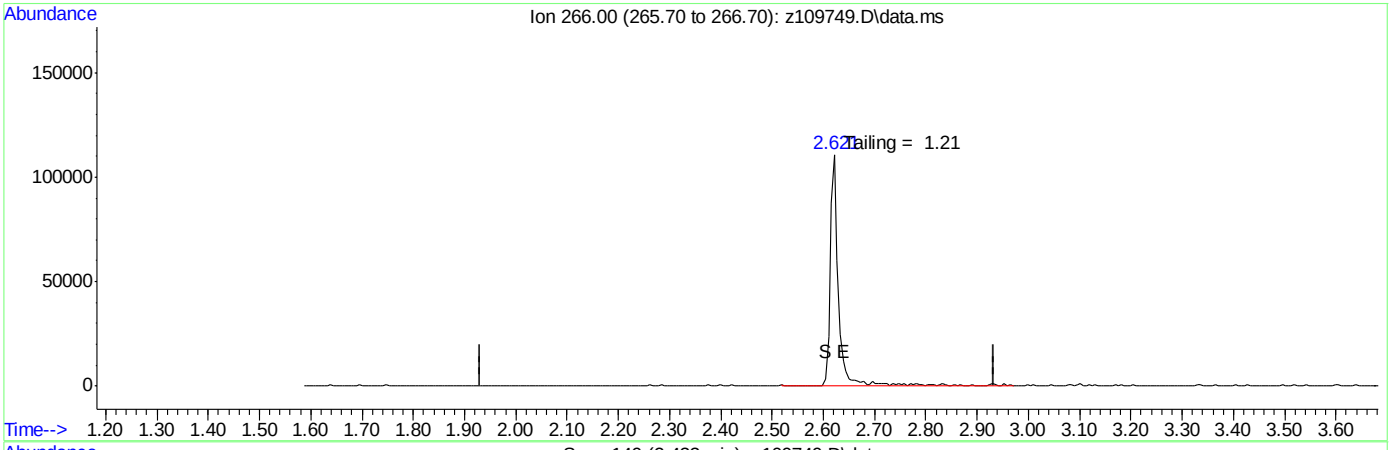
7

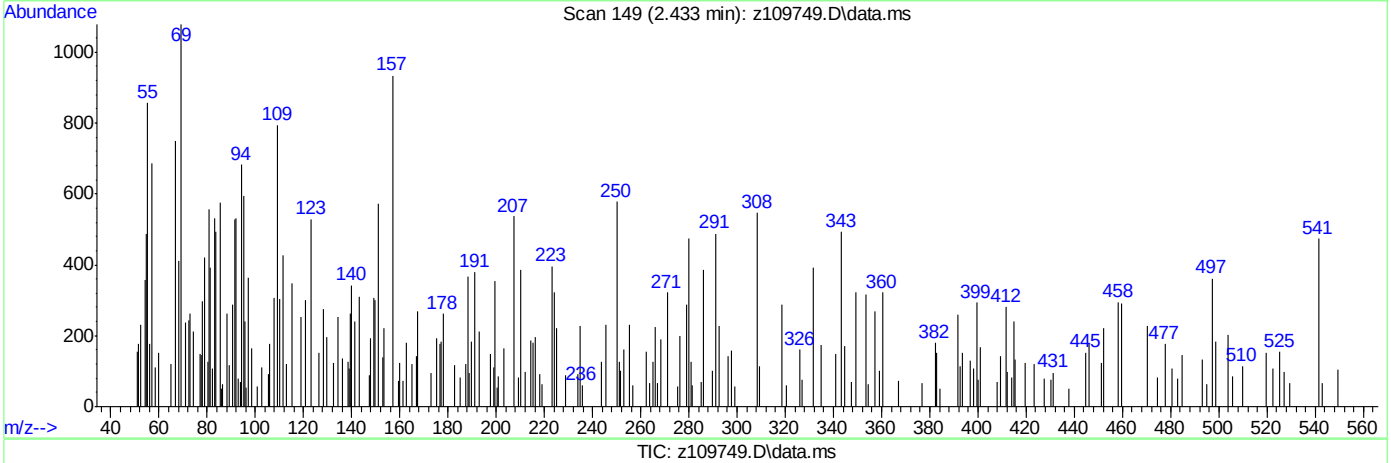
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109749.D
Acq On : 14 Apr 2016 1:39 am
Operator : sarad
Sample : dftpp
Misc : op92825,ez5486
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 01:45:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: z109749.D\data.ms

(1) Pentachlorophenol

2.433min (-2.433) 0.00

response 0

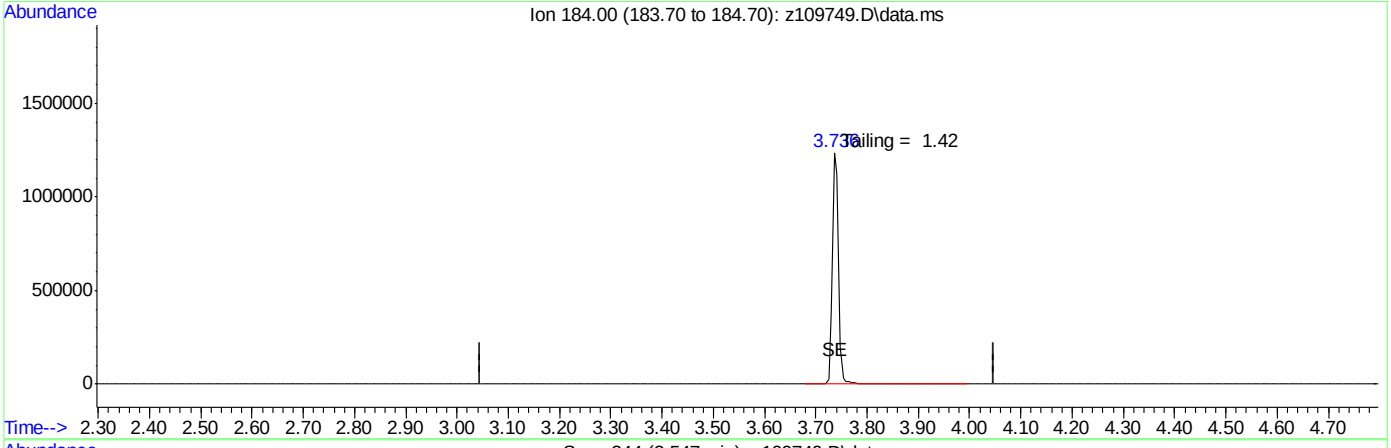
Ion	Exp%	Act%
266.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

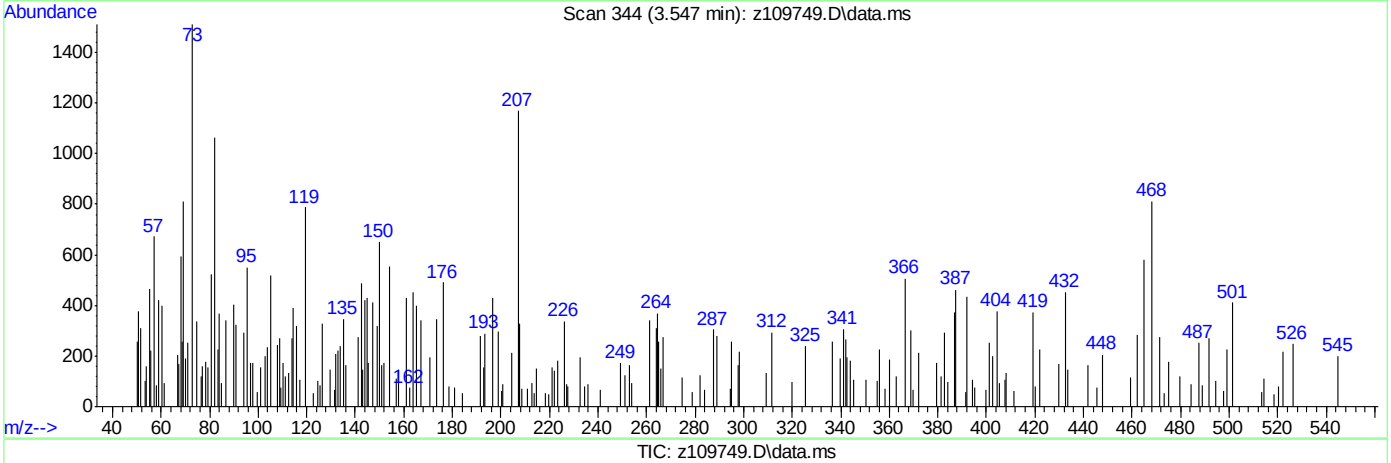
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109749.D
Acq On : 14 Apr 2016 1:39 am
Operator : sarad
Sample : dftpp
Misc : op92825,ez5486
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 01:45:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: z109749.D\data.ms

(2) Benzidine

3.547min (-3.547) 0.00

response 0

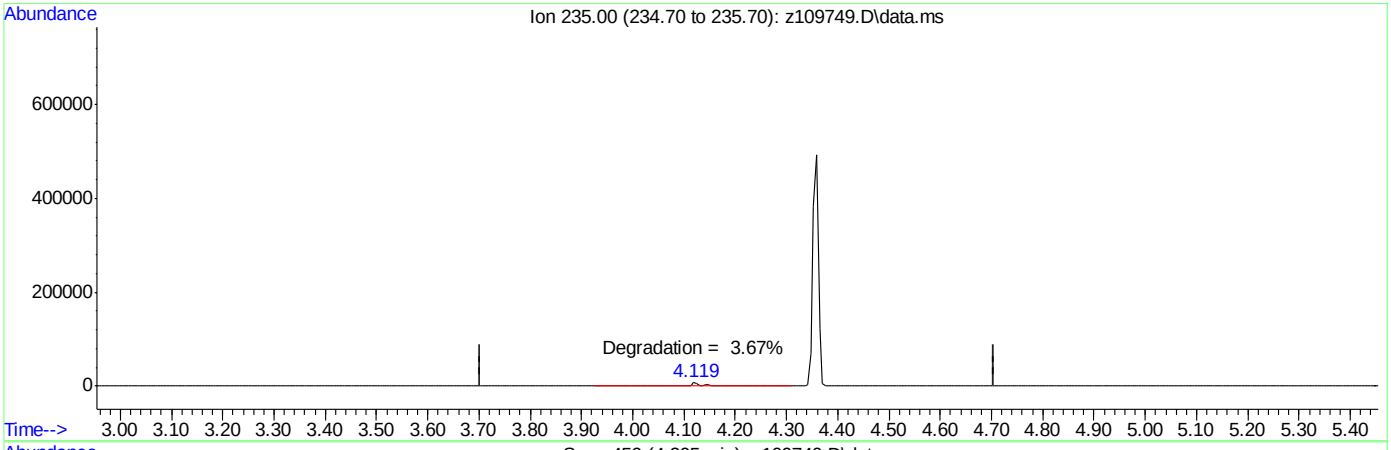
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

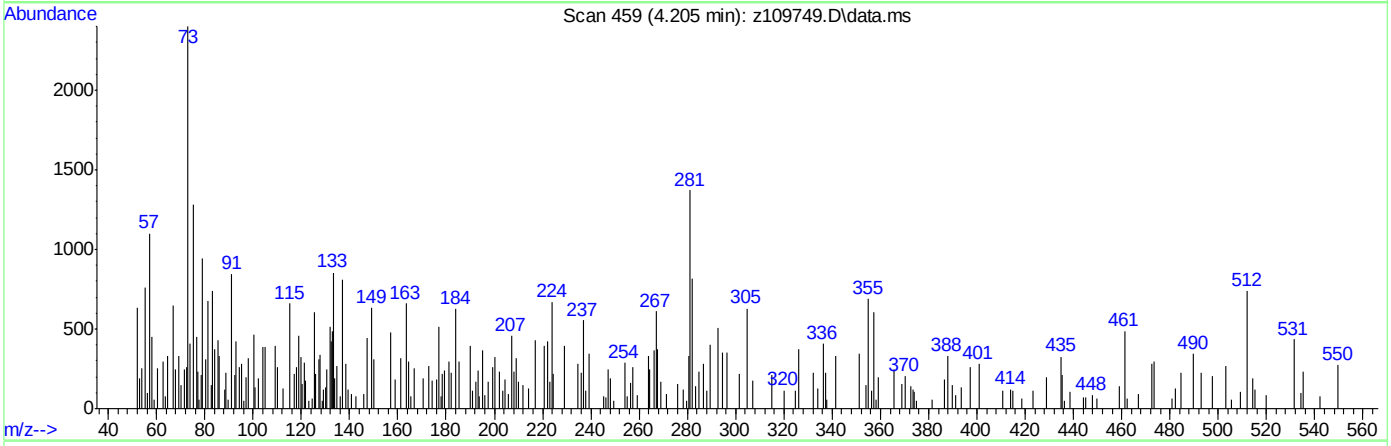
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109749.D
Acq On : 14 Apr 2016 1:39 am
Operator : sarad
Sample : dftpp
Misc : op92825,ez5486
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 01:45:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: z109749.D\data.ms

(3) PP-DDT

4.205min (-4.205) 0.00

response 0

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

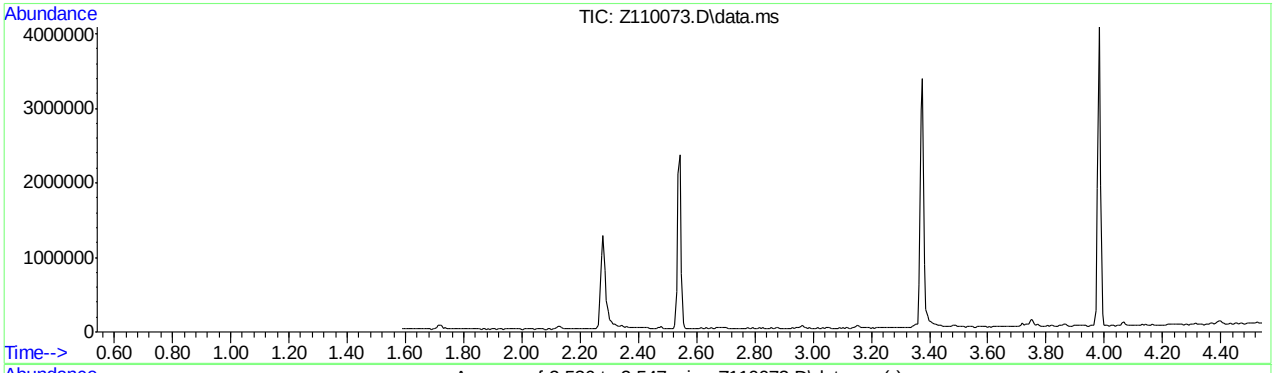
SGS ACCUTEST JC18649

DFTPP

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110073.D
Acq On : 26 Apr 2016 12:03 pm
Operator : ariellec
Sample : dftpp
Misc : op93086,ez5500
ALS Vial : 1 Sample Multiplier: 1

Integration File: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Title : column rtx-5msi 30mx0.25mmx0.25um
Last Update : Thu Sep 10 14:02:56 2015



AutoFind: Scans 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	32.2	62512	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.9	75380	PASS
70	69	0.00	2	0.5	413	PASS
127	198	40	60	46.8	90792	PASS
197	198	0.00	1	0.2	431	PASS
198	198	100	100	100.0	193858	PASS
199	198	5	9	6.7	13047	PASS
275	198	10	30	28.7	55578	PASS
365	198	1	100	4.1	7937	PASS
441	443	0.01	100	46.6	12250	PASS
442	198	40	100	68.6	133061	PASS
443	442	17	23	19.8	26285	PASS

SGS ACCUTEST JC18649

Average of 2.536 to 2.547 min.: Z110073.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.15	18871	60.15	852	66.60	199	74.05	8330
51.10	62512	60.90	321	67.30	586	75.10	12507
52.05	3683	61.10	453	67.60	416	76.00	3074
52.90	237	61.90	374	69.10	75380	77.05	77421
53.20	443	62.20	509	70.05	413	78.15	3239
54.10	95	63.10	2055	70.60	66	79.10	8706
54.40	312	63.80	149	71.10	81	80.05	4184
56.00	2480	64.30	344	71.30	106	81.05	4031
57.05	4392	64.50	127	71.65	157	82.00	1784
58.15	537	65.00	591	72.40	383	82.30	330
59.05	487	65.80	184	73.10	7641	83.05	525

Average of 2.536 to 2.547 min.: Z110073.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
83.40	600	91.05	1508	99.05	5743	105.75	47
84.10	683	91.80	158	99.80	335	106.20	132
85.10	1270	92.15	2398	100.00	295	107.10	25488
85.70	107	93.05	11431	100.35	194	108.10	4189
85.95	2249	93.50	36	101.10	3878	108.30	462
86.20	136	94.10	892	102.10	533	110.10	45470
87.15	1171	95.15	237	103.10	1936	111.00	6160
87.95	159	95.40	217	103.70	368	111.80	537
88.75	229	96.05	332	103.95	2580	112.00	293
89.25	186	97.15	403	105.00	1061	112.90	289
90.80	131	98.05	9289	105.20	1203	113.30	52

Average of 2.536 to 2.547 min.: Z110073.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
113.70	92	120.60	76	129.05	33806	136.90	168
114.30	51	121.15	258	130.10	2003	137.10	1461
114.50	57	122.10	2041	130.90	12	137.60	422
115.10	245	122.30	278	131.15	754	138.20	192
115.40	200	123.05	2417	132.10	281	139.30	149
116.30	402	124.05	1574	133.05	239	139.95	845
117.10	26643	124.50	306	133.30	81	141.05	5059
118.10	1297	125.10	1105	133.95	715	142.05	1299
119.10	304	125.80	483	135.10	2957	143.00	942
120.05	372	127.10	90792	135.70	85	144.80	183
120.40	187	128.00	8247	136.10	858	145.15	413

Average of 2.536 to 2.547 min.: Z110073.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
145.90	423	153.05	275	159.30	572	166.15	545
146.15	1438	153.95	1257	159.50	281	167.10	12580
147.05	4480	154.80	199	160.00	1168	168.05	4390
148.05	7327	155.10	2852	161.10	2360	169.10	741
148.90	1698	155.30	101	162.05	375	169.90	274
149.30	236	156.10	3360	162.50	119	170.80	209
150.05	626	156.95	931	163.10	228	171.10	203
151.00	705	157.20	508	163.50	438	171.75	514
152.00	39	157.45	543	164.90	450	172.00	303
152.20	430	158.00	857	165.10	1052	172.30	419
152.85	646	158.85	382	166.00	494	172.60	375

Average of 2.536 to 2.547 min.: Z110073.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
172.95	1224	181.60	197	189.10	1473	198.00	193858
174.10	3011	182.30	629	189.30	576	199.00	13047
174.85	906	183.00	559	190.25	533	199.70	236
175.10	2350	183.80	18	191.00	1199	200.15	448

DFTPPZ.M Tue Apr 26 12:16:49 2016 RTE Page: 2

176.10	1469	184.15	473	192.05	1899	201.45	1220
176.95	1825	185.30	3958	193.00	2420	201.80	127
177.80	410	186.10	28507	194.20	204	202.80	97
178.10	320	187.10	9303	194.90	610	203.15	1517
179.05	7437	187.70	37	195.30	238	204.15	5609
180.05	4575	187.95	752	195.95	7604	205.05	12164
181.15	2729	188.50	391	196.70	431	206.10	49814

Average of 2.536 to 2.547 min.: Z110073.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
207.00	7346	212.70	56	221.70	1763	229.20	550
208.00	1865	215.00	1112	222.10	1407	229.85	247
209.05	509	215.80	216	223.00	3243	230.95	855
209.30	442	216.10	814	223.20	693	231.70	147
210.10	41	217.05	13309	224.10	27996	232.10	54
210.40	482	217.80	254	225.15	7516	232.50	141
210.60	851	218.10	1819	226.00	218	232.70	57
211.05	2141	218.70	52	227.05	15633	233.25	511
211.50	241	219.05	175	227.95	1494	233.80	458
212.10	510	219.40	71	228.60	754	234.25	520
212.35	156	221.05	13371	228.90	2050	235.05	1467

Average of 2.536 to 2.547 min.: Z110073.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
235.95	807	243.10	2312	252.10	195	260.20	258
236.60	250	244.10	23425	252.40	118	260.80	141
236.95	537	245.10	2712	252.90	116	261.90	64
237.60	149	246.05	4601	253.75	1195	262.90	258
238.20	79	247.05	910	255.10	116933	264.20	467
238.85	903	247.60	104	256.05	19429	264.95	2773
239.20	155	248.85	557	256.90	1276	265.80	245
240.00	552	249.15	283	258.05	7245	266.00	304
240.90	203	250.00	394	258.95	666	266.70	376
241.15	329	250.90	265	259.20	319	267.60	127
242.00	1035	251.20	228	260.00	73	269.15	477

Average of 2.536 to 2.547 min.: Z110073.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
269.60	158	275.05	55578	283.80	40	292.10	302
270.40	86	276.00	7524	284.20	440	293.00	882
270.70	152	277.05	4828	284.70	173	294.15	400
271.15	136	278.05	1054	285.20	418	296.05	15945
271.40	112	279.00	111	285.90	37	297.05	2553
271.80	173	279.30	151	287.20	42	298.00	17
272.10	274	281.15	1787	287.50	197	298.40	105
272.55	967	282.05	382	288.85	262	298.80	70
272.95	2001	282.70	435	289.90	124	300.10	41
273.20	1864	283.00	194	290.20	141	300.80	40
274.00	11579	283.25	468	291.00	404	301.40	114

Average of 2.536 to 2.547 min.: Z110073.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
302.05	695	308.70	54	316.00	294	325.00	245
302.40	256	310.10	200	316.20	322	325.95	133
303.05	1636	310.40	129	317.00	201	326.80	196
303.50	253	311.25	391	317.60	71	327.10	861
303.80	235	312.20	65	318.90	104	328.10	95
304.05	427	312.90	31	320.10	32	328.50	121
304.30	235	313.85	243	321.15	321	328.80	210
304.90	63	314.10	579	322.80	1644	329.90	38
305.30	45	314.90	434	323.15	2929	330.10	34
307.20	36	315.10	1325	324.10	1031	330.90	185
308.30	117	315.50	418	324.70	44	332.10	185

Average of 2.536 to 2.547 min.: Z110073.D\data.ms

DFTPPZ.M Tue Apr 26 12:16:49 2016 RTE Page: 3

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
332.80	35	342.00	270	350.20	143	355.10	174
333.15	532	342.20	89	350.40	219	355.60	112
334.05	2662	342.90	156	350.90	32	356.35	352
334.30	539	343.90	140	351.10	36	356.95	179
335.20	1049	344.30	140	351.80	229	357.25	140
335.95	407	345.80	147	352.05	1307	358.20	86
336.70	18	346.00	961	352.30	104	358.90	253
337.20	26	346.90	198	352.95	1029	359.35	42
339.10	63	347.90	19	353.15	962	359.80	45
340.95	420	348.30	133	354.20	1281	360.45	97
341.20	520	349.80	81	354.90	378	360.70	31

Average of 2.536 to 2.547 min.: Z110073.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
361.10	54	372.10	2147	384.15	671	394.40	112
362.10	57	373.05	1060	384.70	75	395.90	19
362.70	132	374.20	117	385.40	29	396.40	53
363.60	61	375.60	33	388.50	72	396.80	110
365.00	7937	376.60	56	389.20	232	397.30	123
365.95	831	377.10	79	390.15	562	398.20	35
366.60	86	378.20	33	390.80	85	400.20	18
367.00	118	378.50	34	391.10	329	400.90	214
367.30	47	379.90	257	391.40	103	401.15	495
369.50	235	380.60	28	392.00	69	402.05	1403
371.00	768	383.05	965	392.20	164	402.40	305

Average of 2.536 to 2.547 min.: Z110073.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
403.00	1595	415.20	158	423.10	7725	432.50	139
403.20	86	416.30	138	423.90	614	433.20	71
403.70	90	417.80	20	424.10	401	434.55	288
404.10	261	418.10	65	424.30	133	434.90	17
405.20	95	418.50	27	425.25	260	435.40	323
407.10	127	419.60	212	425.80	151	436.20	139
408.70	18	420.70	417	426.30	18	436.60	333
409.00	69	421.00	653	429.50	16	437.25	543
409.30	35	421.30	385	430.95	324	437.60	574
412.00	49	422.00	1022	431.70	58	437.80	216
414.90	94	422.20	353	431.90	282	438.35	780

Average of 2.536 to 2.547 min.: Z110073.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
438.50	562	448.20	144	468.00	57	503.30	74
438.70	216	449.00	77	473.70	115	504.00	70
439.85	1253	449.40	69	474.10	24	504.35	230
441.10	12250	449.90	42	478.20	27	504.90	34
442.05	133061	451.80	22	481.50	58	505.30	24
443.10	26285	453.30	23	484.70	20	505.85	148
444.00	945	454.70	153	485.80	78	511.30	48
444.20	1398	457.50	86	486.90	178	512.40	46
444.95	366	460.80	195	492.10	73	517.50	57
445.40	77	463.20	46	500.90	45	520.20	45
447.40	69	463.90	188	502.60	19	523.40	24

Average of 2.536 to 2.547 min.: Z110073.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
526.70	67	547.80	208				
530.00	52	548.50	57				
531.40	46						
532.40	207						
533.40	59						

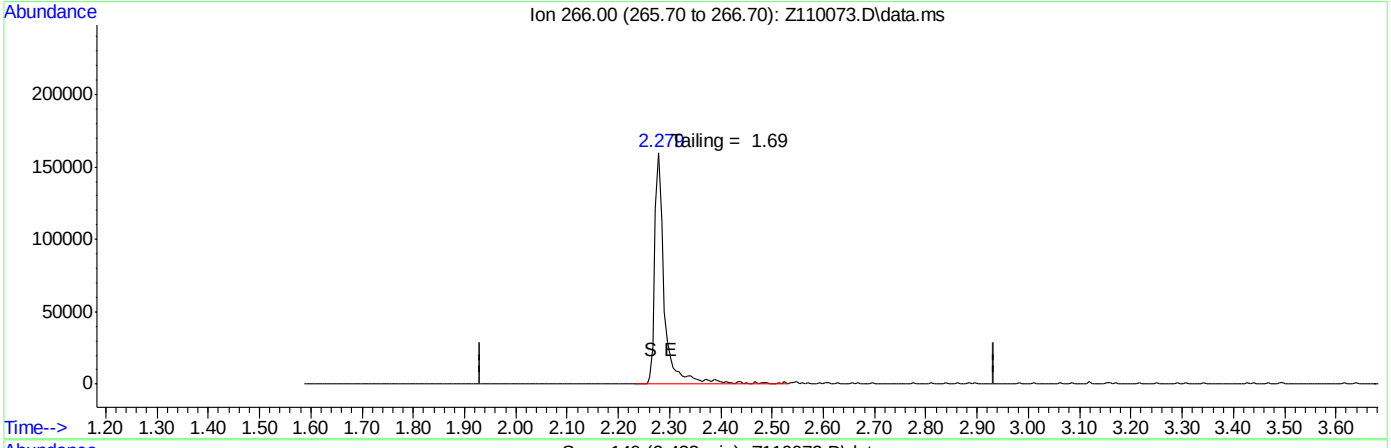
DFTPPZ.M Tue Apr 26 12:16:49 2016 RTE Page: 4

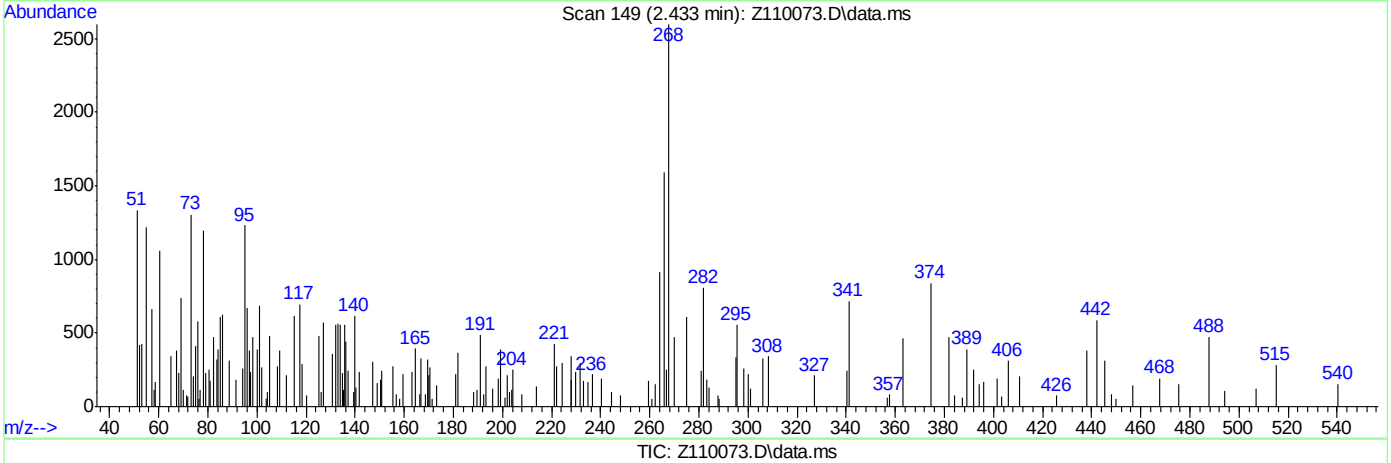
534.00	16
534.60	46
535.30	38
540.00	22
541.90	83
546.00	76

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110073.D
Acq On : 26 Apr 2016 12:03 pm
Operator : ariellec
Sample : dftpp
Misc : op93086,ez5500
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 12:09:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: Z110073.D\data.ms

(1) Pentachlorophenol

2.433min (-2.433) 0.00

response 0

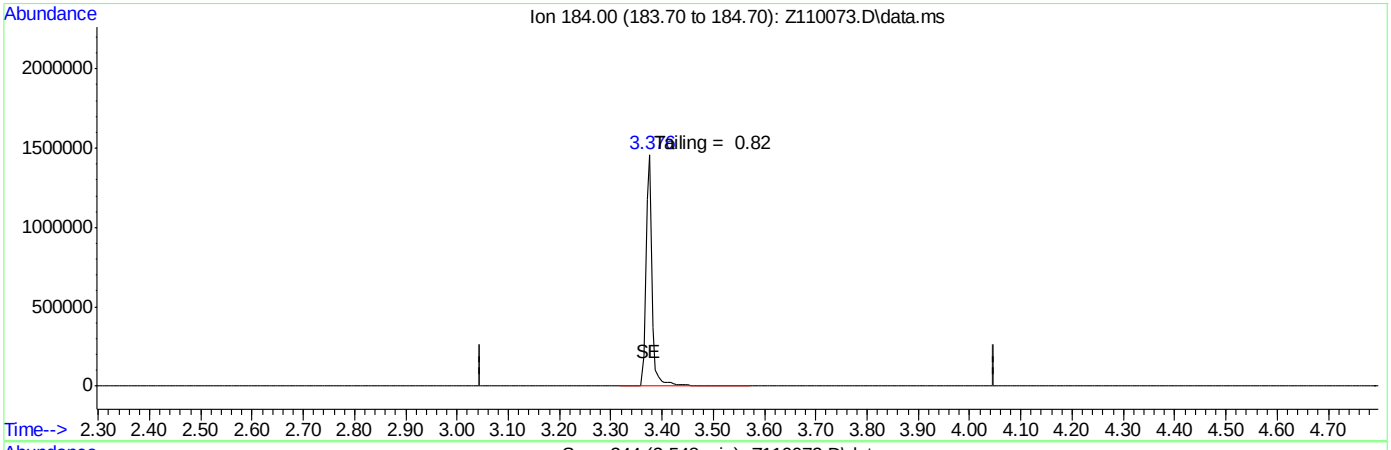
Ion	Exp%	Act%
266.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

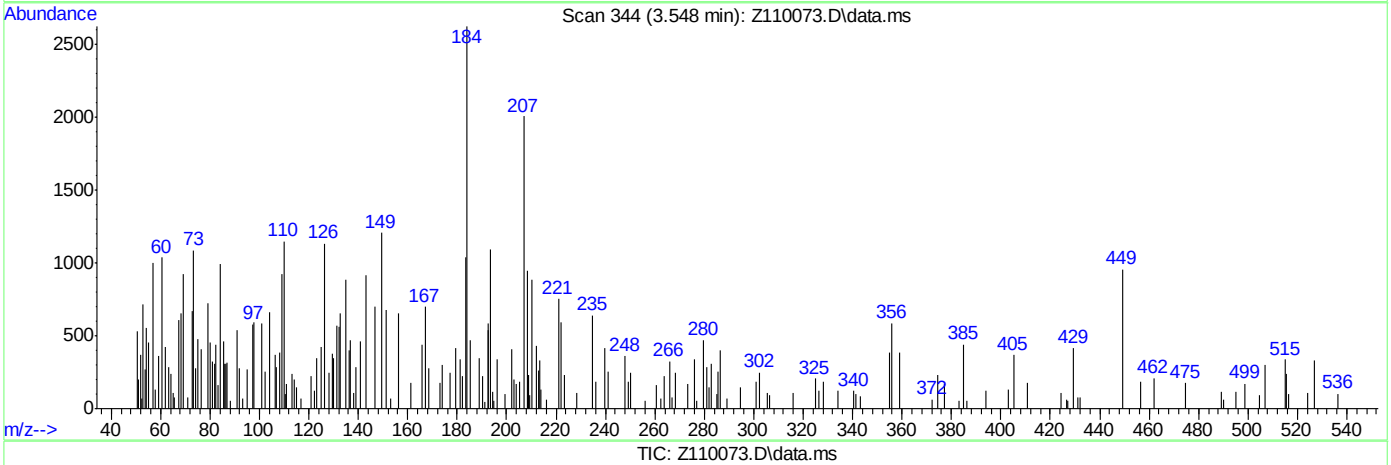
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110073.D
Acq On : 26 Apr 2016 12:03 pm
Operator : ariellec
Sample : dftpp
Misc : op93086,ez5500
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 12:09:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: Z110073.D\data.ms

(2) Benzidine

3.547min (-3.547) 0.00

response 0

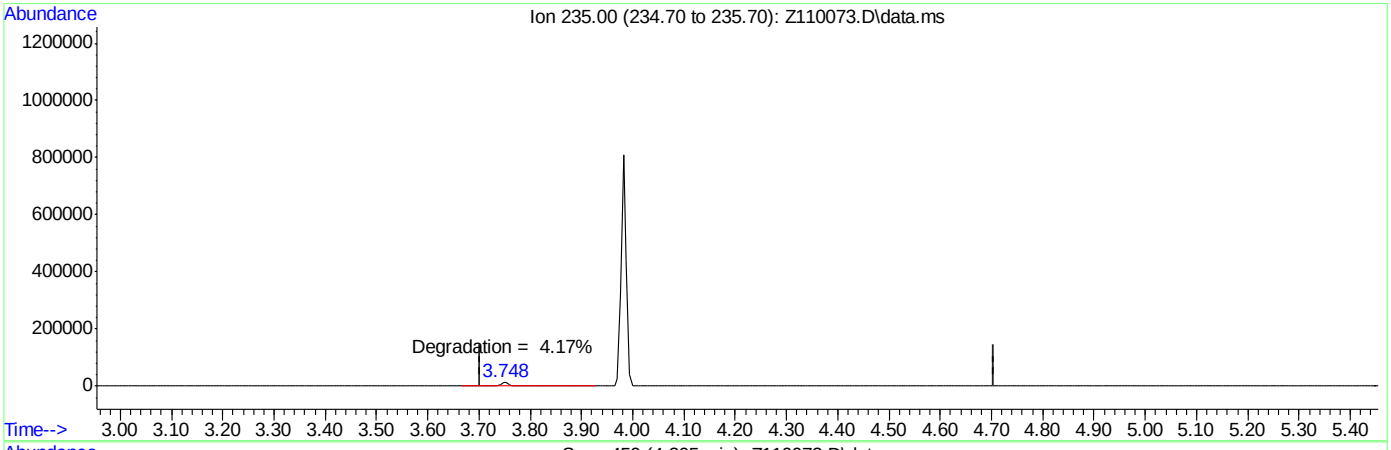
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

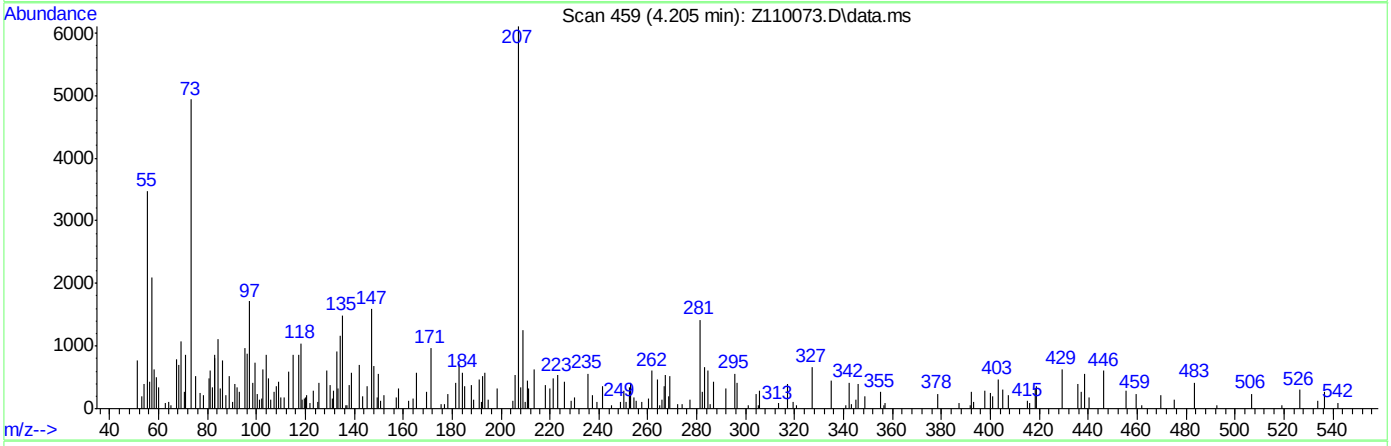
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110073.D
Acq On : 26 Apr 2016 12:03 pm
Operator : ariellec
Sample : dftpp
Misc : op93086,ez5500
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 12:09:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPZ.M
Quant Title : column rtx-5msi 30mx0.25mmx0.25um
QLast Update : Thu Sep 10 14:02:56 2015
Response via : Initial Calibration





TIC: Z110073.D\data.ms

(3) PP-DDT

4.205min (-4.205) 0.00

response 0

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

SGS ACCUTEST JC18649

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/18/16 10:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83066.D
Acq On : 15 Apr 2016 9:12 am
Operator : ashleyn
Sample : ic3649-2
Misc : op92470,e2m3649
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 11:21:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	170025	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	678734	40.00	ppm	0.00
47) Acenaphthene-d10	8.141	164	393840	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	589479	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	509988	40.00	ppm	-0.01
92) Perylene-d12	16.672	264	503883	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	170025	40.00	ppm	0.00
104) Acenaphthene-d10a	8.141	164	393840	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	509988	40.00	ppm	-0.01
109) Phenanthrene-d10a	10.340	188	589479	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	678734	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	509988	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	3.911	112	13883	2.30	ppm	0.00
Spiked Amount 50.000			Recovery = 4.60%			
8) Phenol-d5	4.617	99	17743	2.45	ppm	0.01
Spiked Amount 50.000			Recovery = 4.90%			
25) Nitrobenzene-d5	5.349	82	13469	2.34	ppm	0.00
Spiked Amount 50.000			Recovery = 4.68%			
51) 2-Fluorobiphenyl	7.248	172	28061	2.73	ppm	-0.01
Spiked Amount 50.000			Recovery = 5.46%			
73) 2,4,6-Tribromophenol	9.286	330	2913	1.93	ppm	-0.01
Spiked Amount 50.000			Recovery = 3.86%			
85) Terphenyl-d14	12.902	244	23101	2.24	ppm	-0.02
Spiked Amount 50.000			Recovery = 4.48%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.483	88	6241	2.35	ppm	95
3) Pyridine	2.825	79	14900	2.20	ppm	97
4) N-Nitrosodimethylamine	2.771	74	8991	2.23	ppm	98
6) Indene	5.103	116	25355	3.34	ppm	97
7) Cumene	4.290	105	34733	2.61	ppm	100
9) Phenol	4.627	94	20030	2.64	ppm	86
10) Aniline	4.643	93	20736	2.75	ppm	97
11) bis(2-Chloroethyl)ether	4.681	93	13931	2.37	ppm	94
12) 2-Chlorophenol	4.740	128	14830	2.57	ppm	99
13) Decane	4.761	43	11900	2.98	ppm	94
14) 1,3-Dichlorobenzene	4.852	146	16615	2.66	ppm	99
15) 1,4-Dichlorobenzene	4.905	146	16883	2.75	ppm	98
16) Benzyl alcohol	5.007	108	8949	2.42	ppm	97
17) 1,2-Dichlorobenzene	5.034	146	15736	2.84	ppm	98
18) Acetophenone	5.221	105	19275	3.06	ppm	83
19) 2-Methylphenol	5.098	108	13643	3.21	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.109	45	16223	3.61	ppm	91
21) 3&4-Methylphenol	5.221	108	13662	3.10	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83066.D
Acq On : 15 Apr 2016 9:12 am
Operator : ashleyn
Sample : ic3649-2
Misc : op92470,e2m3649
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 11:21:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.216	70	9538	3.08	ppm		90
23) Hexachloroethane	5.317	201	4379	2.44	ppm		99
26) Nitrobenzene	5.365	77	13882	2.42	ppm		98
27) Quinoline	6.398	129	27712	2.32	ppm		97
28) Isophorone	5.579	82	23933	2.32	ppm		96
29) 2-Nitrophenol	5.654	139	7250	2.38	ppm		92
30) 2,4-Dimethylphenol	5.686	107	13046	2.39	ppm		94
31) Benzoic acid	5.740	105	8877	1.70	ppm		98
32) bis(2-Chloroethoxy)met...	5.772	93	16332	2.66	ppm		97
33) 2,4-Dichlorophenol	5.884	162	10788	2.44	ppm		99
34) 2,6-Dichlorophenol	6.109	162	10726	2.61	ppm		97
35) 1,3,5-Trichlorobenzene	5.665	180	12212	2.78	ppm		98
36) 1,2,4-Trichlorobenzene	5.965	180	11797	2.63	ppm		97
37) 1,2,3-Trichlorobenzene	6.194	180	11416	2.61	ppm		95
38) Naphthalene	6.045	128	45428	2.79	ppm		99
39) 4-Chloroaniline	6.098	127	16292	2.67	ppm		95
40) 2,3-Dichloroaniline	7.141	161	13508	2.75	ppm		99
41) Caprolactam	6.446	55	4823	2.06	ppm		91
42) Hexachlorobutadiene	6.173	225	5336	2.63	ppm		95
43) 4-Chloro-3-methylphenol	6.622	107	11063	2.22	ppm		98
44) 2-Methylnaphthalene	6.799	141	23077	2.61	ppm		96
45) 1-Methylnaphthalene	6.917	141	23926	2.63	ppm		98
46) Dimethylnaphthalene	7.574	156	24207	2.63	ppm		98
48) Hexachlorocyclopentadiene	6.997	237	10254	4.53	ppm		95
49) 2,4,6-Trichlorophenol	7.147	196	6736	2.56	ppm		99
50) 2,4,5-Trichlorophenol	7.189	196	6850	2.18	ppm		98
52) 2-Chloronaphthalene	7.398	162	25278	2.66	ppm		97
53) Biphenyl	7.371	154	33517	2.76	ppm		98
54) 2-Nitroaniline	7.532	65	6329	2.12	ppm		91
55) Dimethylphthalate	7.783	163	26753	2.38	ppm		98
56) Acenaphthylene	7.944	152	39169	2.44	ppm		99
57) 2,6-Dinitrotoluene	7.853	165	4976	1.81	ppm		90
58) 3-Nitroaniline	8.088	138	6329	1.91	ppm		96
59) Acenaphthene	8.184	153	26123	2.71	ppm		98
60) 2,4-Dinitrophenol	8.238	184	3579	2.21	ppm	#	73
61) 4-Nitrophenol	8.361	109	2907	1.80	ppm		96
62) Dibenzofuran	8.430	168	34388	2.82	ppm		95
63) 2,4-Dinitrotoluene	8.420	165	6827	2.00	ppm		81
64) 2,3,4,6-Tetrachlorophenol	8.617	232	4958	2.16	ppm		94
65) Diethylphthalate	8.794	149	24985	2.26	ppm		99
66) Fluorene	8.922	166	28143	2.75	ppm		95
67) 4-Chlorophenyl-phenyle...	8.938	204	11571	2.76	ppm		98
68) 4-Nitroaniline	8.965	138	6006	1.77	ppm		97
70) 4,6-Dinitro-2-methylph...	9.013	198	2683	1.23	ppm		96
71) n-Nitrosodiphenylamine	9.120	169	17883	2.40	ppm		99
72) 1,2-Diphenylhydrazine	9.174	77	24857	2.27	ppm		97
74) 4-Bromophenyl-phenylether	9.671	248	6243	2.39	ppm		95
75) Hexachlorobenzene	9.757	284	6988	2.41	ppm		99
76) Pentachlorophenol	10.067	266	7835	4.24	ppm		99
77) Phenanthrene	10.372	178	40304	2.71	ppm		99

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83066.D
Acq On : 15 Apr 2016 9:12 am
Operator : ashleyn
Sample : ic3649-2
Misc : op92470,e2m3649
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 11:21:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.452	178	38124	2.53 ppm	100
79) Carbazole	10.725	167	34957	2.42 ppm	98
80) Di-n-butylphthalate	11.345	149	43024	2.34 ppm	100
81) Fluoranthene	12.249	202	35858	2.49 ppm	99
82) Octadecane	10.270	57	15368	2.45 ppm	96
84) Pyrene	12.597	202	38110	2.31 ppm	98
86) Butylbenzylphthalate	13.736	149	18808	2.03 ppm	94
87) Butyl stearate	13.891	56	10481	2.13 ppm	96
88) Benzo[a]anthracene	14.528	228	33804	2.51 ppm	100
89) 3,3'-Dichlorobenzidine	14.528	252	11316	2.25 ppm	98
90) Chrysene	14.581	228	34082	2.37 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.694	149	24490	1.98 ppm	99
93) Di-n-octylphthalate	15.683	149	40828	2.06 ppm	100
94) Benzo[b]fluoranthene	16.138	252	35876	2.58 ppm	94
95) Benzo[k]fluoranthene	16.175	252	34062	2.56 ppm	97
96) Benzo[a]pyrene	16.587	252	29482	2.23 ppm	96
97) Indeno[1,2,3-cd]pyrene	18.331	276	25983m	1.76 ppm	
98) Dibenz(a,h)acridine	17.951	279	24785	1.96 ppm	98
99) Dibenz[a,h]anthracene	18.379	278	30723	2.12 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.138	256	15525	2.63 ppm	97
101) Benzo[g,h,i]perylene	18.812	276	31910	2.18 ppm	98

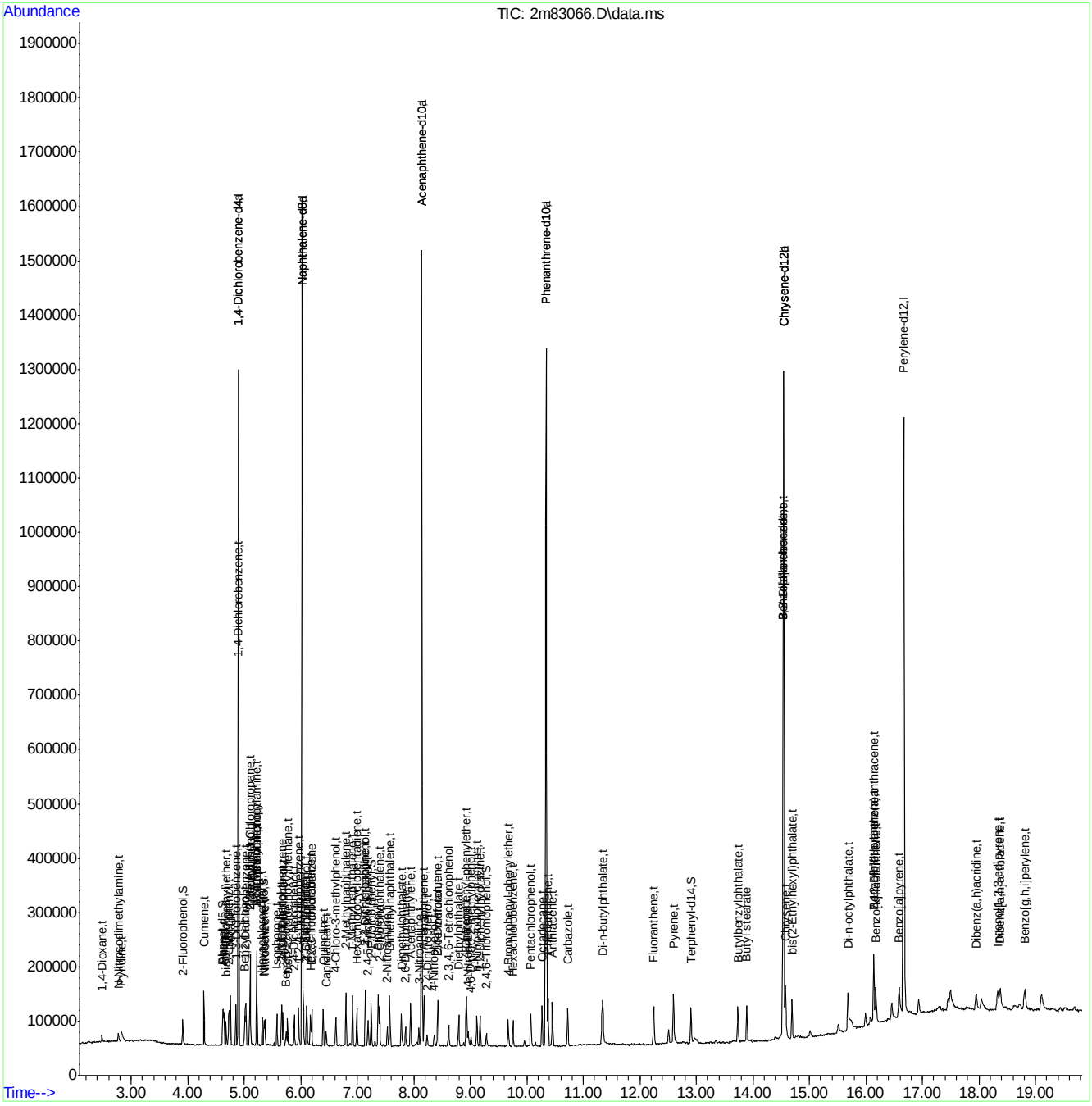
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83066.D
Acq On : 15 Apr 2016 9:12 am
Operator : ashleyn
Sample : ic3649-2
Misc : op92470,e2m3649
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 11:21:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Manual Integration Approval Summary

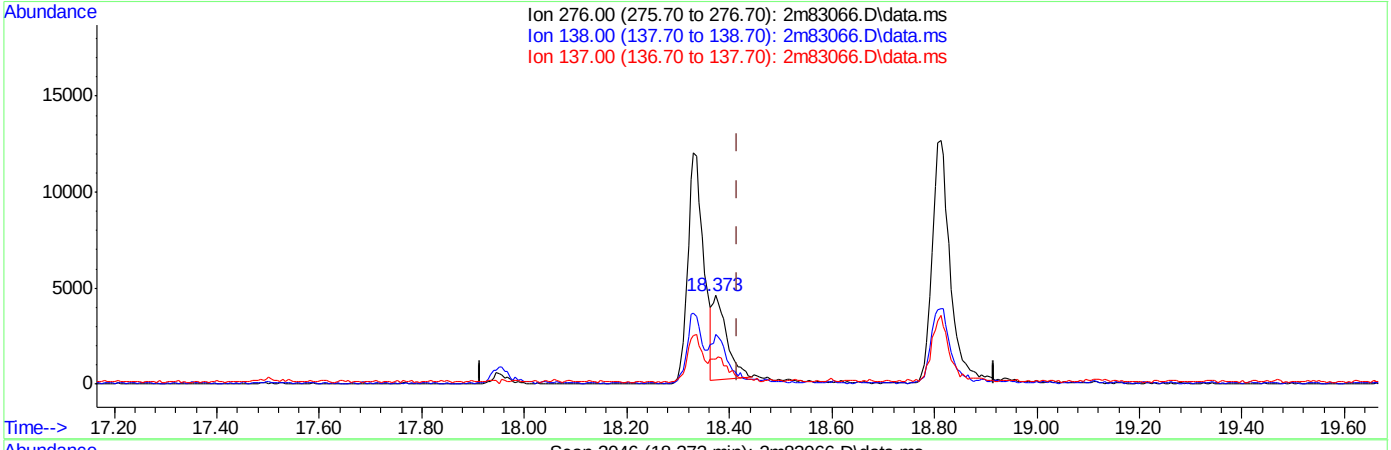
Sample Number:	E2M3649-IC3649	**Method:**	SW846 8270D
Lab FileID:	2M83066.D	**Analyst approved:**	04/15/16 17:43 Ashley Noble
Injection Time:	04/15/16 09:12	**Supervisor approved:**	04/18/16 10:23 Nina Pandya

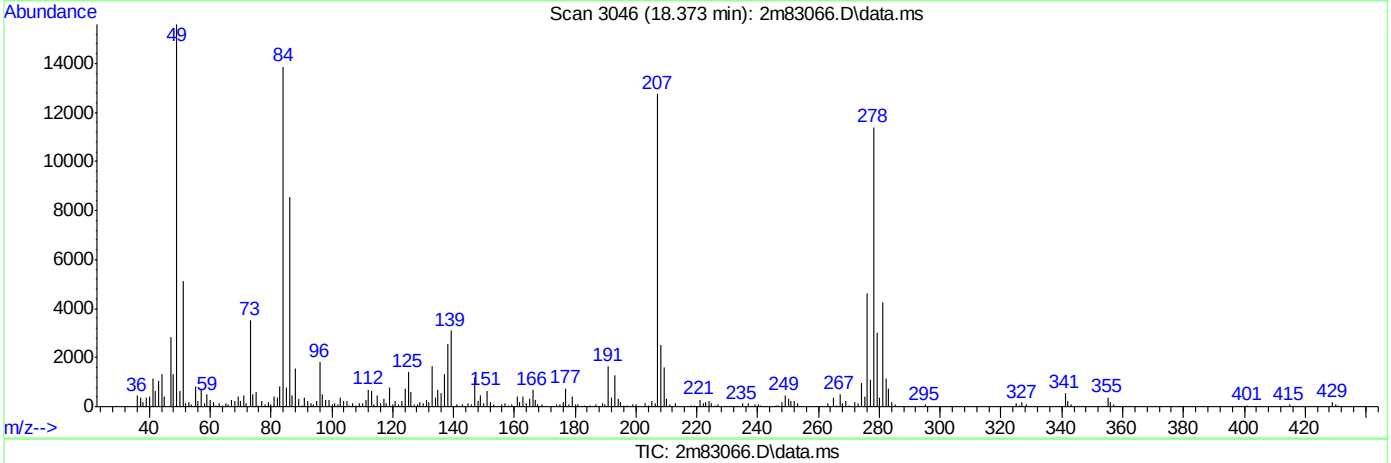
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.33	Split peak

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83066.D
Acq On    : 15 Apr 2016   9:12 am
Operator  : ashleyn
Sample    : ic3649-2
Misc      : op92470,e2m3649
ALS Vial  : 2   Sample Multiplier: 1

Quant Time: Apr 15 11:20:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title  : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration
```





TIC: 2m83066.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.373min (-0.043) 0.59ppm

response 8684

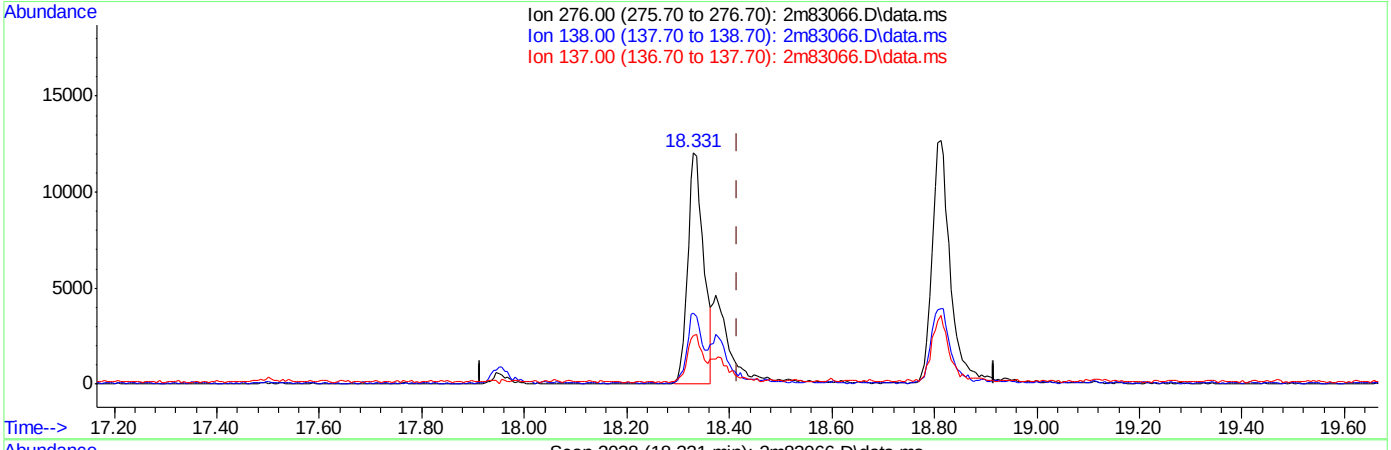
Ion	Exp%	Act%
276.00	100	100
138.00	28.30	56.76
137.00	20.20	21.89
0.00	0.00	0.00

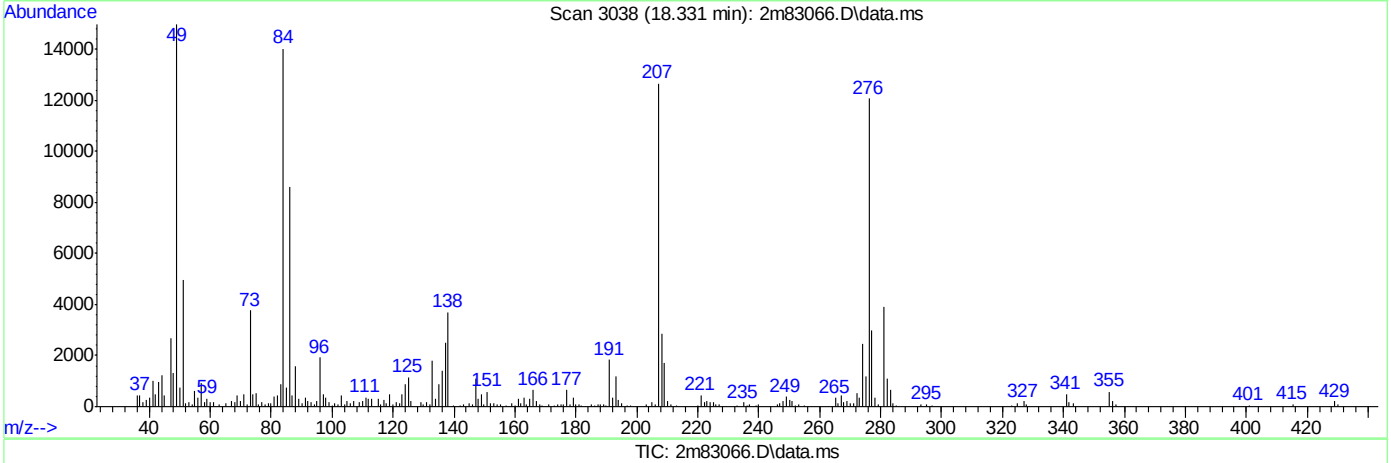
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83066.D
Acq On : 15 Apr 2016 9:12 am
Operator : ashleyn
Sample : ic3649-2
Misc : op92470,e2m3649
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 11:20:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration





TIC: 2m83066.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.331min (-0.085) 1.76ppm m

response 25983

Ion	Exp%	Act%
276.00	100	100
138.00	28.30	30.64
137.00	20.20	20.89
0.00	0.00	0.00

SGS ACCUTEST JC18649

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/18/16 10:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83067.D
Acq On : 15 Apr 2016 9:42 am
Operator : ashleyn
Sample : ic3649-1
Misc : op92470,e2m3649
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 11:27:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:22:37 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	176178	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	698744	40.00 ppm	0.00
47) Acenaphthene-d10	8.142	164	402224	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	603430	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	522218	40.00 ppm	-0.01
92) Perylene-d12	16.673	264	516486	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	176178	40.00 ppm	0.00
104) Acenaphthene-d10a	8.142	164	402224	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	522218	40.00 ppm	-0.01
109) Phenanthrene-d10a	10.340	188	603430	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	698744	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	522218	40.00 ppm	-0.01

System Monitoring Compounds					
5) 2-Fluorophenol	3.916	112	7137	1.06 ppm	0.00
Spiked Amount 50.000			Recovery = 2.12%		
8) Phenol-d5	4.617	99	8955	1.07 ppm	0.01
Spiked Amount 50.000			Recovery = 2.14%		
25) Nitrobenzene-d5	5.350	82	7180	1.12 ppm	0.00
Spiked Amount 50.000			Recovery = 2.24%		
51) 2-Fluorobiphenyl	7.248	172	14998	1.21 ppm	-0.01
Spiked Amount 50.000			Recovery = 2.42%		
73) 2,4,6-Tribromophenol	9.281	330	1536	1.01 ppm	-0.02
Spiked Amount 50.000			Recovery = 2.02%		
85) Terphenyl-d14	12.902	244	11893	1.06 ppm	-0.02
Spiked Amount 50.000			Recovery = 2.12%		
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds					Qvalue
2) 1,4-Dioxane	2.483	88	3451	1.15 ppm	95
3) Pyridine	2.836	79	7872	1.07 ppm	97
4) N-Nitrosodimethylamine	2.777	74	4836	1.10 ppm	99
6) Indene	5.104	116	13312	1.27 ppm	99
7) Cumene	4.290	105	18544	1.17 ppm	99
9) Phenol	4.627	94	10577	1.16 ppm	86
10) Aniline	4.644	93	11196	1.21 ppm	97
11) bis(2-Chloroethyl)ether	4.686	93	7362	1.11 ppm	99
12) 2-Chlorophenol	4.740	128	7806	1.14 ppm	97
13) Decane	4.761	43	6537	1.27 ppm	91
14) 1,3-Dichlorobenzene	4.852	146	8556	1.13 ppm	98
15) 1,4-Dichlorobenzene	4.906	146	8820	1.17 ppm	99
16) Benzyl alcohol	5.007	108	4646	1.10 ppm	98
17) 1,2-Dichlorobenzene	5.034	146	8348	1.20 ppm	96
18) Acetophenone	5.221	105	10169	1.23 ppm	89
19) 2-Methylphenol	5.098	108	6877	1.20 ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.109	45	8786	1.35 ppm	98
21) 3&4-Methylphenol	5.221	108	7627	1.31 ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83067.D
Acq On : 15 Apr 2016 9:42 am
Operator : ashleyn
Sample : ic3649-1
Misc : op92470,e2m3649
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 11:27:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:22:37 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.216	70	5087	1.25	ppm		85
23) Hexachloroethane	5.317	201	2375	1.15	ppm		89
26) Nitrobenzene	5.371	77	7475	1.15	ppm		97
27) Quinoline	6.398	129	14779	1.11	ppm		96
28) Isophorone	5.580	82	12528	1.09	ppm		99
29) 2-Nitrophenol	5.654	139	3541	1.03	ppm		95
30) 2,4-Dimethylphenol	5.686	107	6762	1.10	ppm		95
31) Benzoic acid	5.735	105	3656	0.73	ppm		91
32) bis(2-Chloroethoxy)met...	5.772	93	8282	1.12	ppm		97
33) 2,4-Dichlorophenol	5.884	162	5603	1.11	ppm		96
34) 2,6-Dichlorophenol	6.109	162	5661	1.16	ppm		98
35) 1,3,5-Trichlorobenzene	5.665	180	6753	1.25	ppm		97
36) 1,2,4-Trichlorobenzene	5.965	180	6196	1.16	ppm		96
37) 1,2,3-Trichlorobenzene	6.195	180	5849	1.13	ppm		98
38) Naphthalene	6.045	128	23746	1.18	ppm		98
39) 4-Chloroaniline	6.098	127	8527	1.16	ppm		97
40) 2,3-Dichloroaniline	7.141	161	6934	1.15	ppm		97
41) Caprolactam	6.446	55	2408	0.98	ppm		91
42) Hexachlorobutadiene	6.173	225	2823	1.17	ppm		96
43) 4-Chloro-3-methylphenol	6.622	107	5686	1.05	ppm		97
44) 2-Methylnaphthalene	6.799	141	12191	1.16	ppm		98
45) 1-Methylnaphthalene	6.917	141	13049	1.20	ppm		98
46) Dimethylnaphthalene	7.575	156	12698	1.16	ppm		97
48) Hexachlorocyclopentadiene	6.997	237	5152	2.09	ppm		97
49) 2,4,6-Trichlorophenol	7.147	196	3551	1.16	ppm		95
50) 2,4,5-Trichlorophenol	7.189	196	3550	1.06	ppm		96
52) 2-Chloronaphthalene	7.398	162	13408	1.19	ppm		97
53) Biphenyl	7.371	154	17816	1.21	ppm		98
54) 2-Nitroaniline	7.532	65	3083	0.98	ppm		89
55) Dimethylphthalate	7.783	163	14088	1.12	ppm		96
56) Acenaphthylene	7.944	152	20211	1.11	ppm		99
57) 2,6-Dinitrotoluene	7.853	165	2495	0.93	ppm		88
58) 3-Nitroaniline	8.088	138	3020	0.91	ppm		95
59) Acenaphthene	8.184	153	13776	1.19	ppm		98
60) 2,4-Dinitrophenol	8.238	184	1462	1.14	ppm	#	55
61) 4-Nitrophenol	8.361	109	1378	0.88	ppm		95
62) Dibenzofuran	8.430	168	18842	1.26	ppm		96
63) 2,4-Dinitrotoluene	8.420	165	3432	0.98	ppm		83
64) 2,3,4,6-Tetrachlorophenol	8.623	232	2471	1.01	ppm		82
65) Diethylphthalate	8.794	149	13368	1.11	ppm		99
66) Fluorene	8.922	166	14923	1.20	ppm		99
67) 4-Chlorophenyl-phenyle...	8.938	204	5989	1.18	ppm		98
68) 4-Nitroaniline	8.965	138	2938	0.90	ppm		96
70) 4,6-Dinitro-2-methylph...	9.013	198	1155	0.64	ppm		95
71) n-Nitrosodiphenylamine	9.115	169	9123	1.09	ppm		99
72) 1,2-Diphenylhydrazine	9.174	77	12973	1.08	ppm		96
74) 4-Bromophenyl-phenylether	9.671	248	3077	1.05	ppm		85
75) Hexachlorobenzene	9.757	284	3845	1.17	ppm		92
76) Pentachlorophenol	10.072	266	3744	1.92	ppm		98
77) Phenanthrene	10.372	178	21589	1.20	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83067.D
Acq On : 15 Apr 2016 9:42 am
Operator : ashleyn
Sample : ic3649-1
Misc : op92470,e2m3649
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 11:27:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:22:37 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.452	178	19530	1.12 ppm	99
79) Carbazole	10.725	167	17800	1.09 ppm	96
80) Di-n-butylphthalate	11.345	149	20467	1.00 ppm	98
81) Fluoranthene	12.249	202	18154	1.10 ppm	98
82) Octadecane	10.270	57	7485	1.05 ppm	93
84) Pyrene	12.597	202	19350	1.06 ppm	96
86) Butylbenzylphthalate	13.736	149	8881	0.93 ppm	95
87) Butyl stearate	13.897	56	4733	0.91 ppm	89
88) Benzo[a]anthracene	14.528	228	18111	1.16 ppm	98
89) 3,3'-Dichlorobenzidine	14.528	252	5501	1.01 ppm	90
90) Chrysene	14.581	228	18195	1.13 ppm	97
91) bis(2-Ethylhexyl)phtha...	14.694	149	11728	0.93 ppm	90
93) Di-n-octylphthalate	15.683	149	17818	0.86 ppm	98
94) Benzo[b]fluoranthene	16.138	252	17417	1.07 ppm	95
95) Benzo[k]fluoranthene	16.175	252	17370	1.12 ppm	98
96) Benzo[a]pyrene	16.587	252	14795	1.03 ppm	96
97) Indeno[1,2,3-cd]pyrene	18.331	276	12683m	0.89 ppm	
98) Dibenz(a,h)acridine	17.951	279	11061	0.86 ppm	97
99) Dibenz[a,h]anthracene	18.379	278	16310	1.07 ppm	96
100) 7,12-Dimethylbenz(a)an...	16.138	256	7491	1.07 ppm	96
101) Benzo[g,h,i]perylene	18.812	276	16369	1.04 ppm	96

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

7.6.2

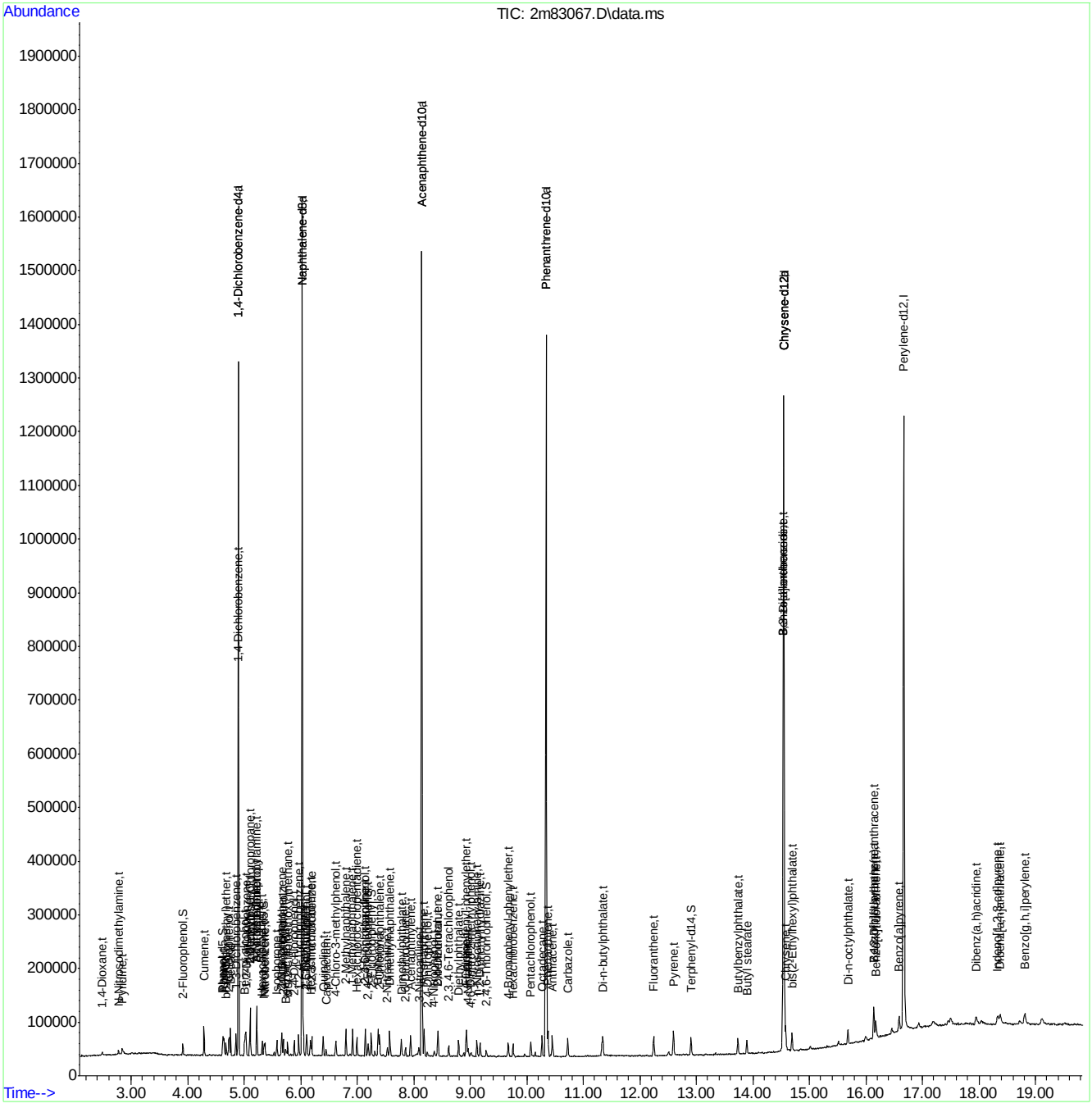
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83067.D
Acq On : 15 Apr 2016 9:42 am
Operator : ashleyn
Sample : ic3649-1
Misc : op92470,e2m3649
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 11:27:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:22:37 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Manual Integration Approval Summary

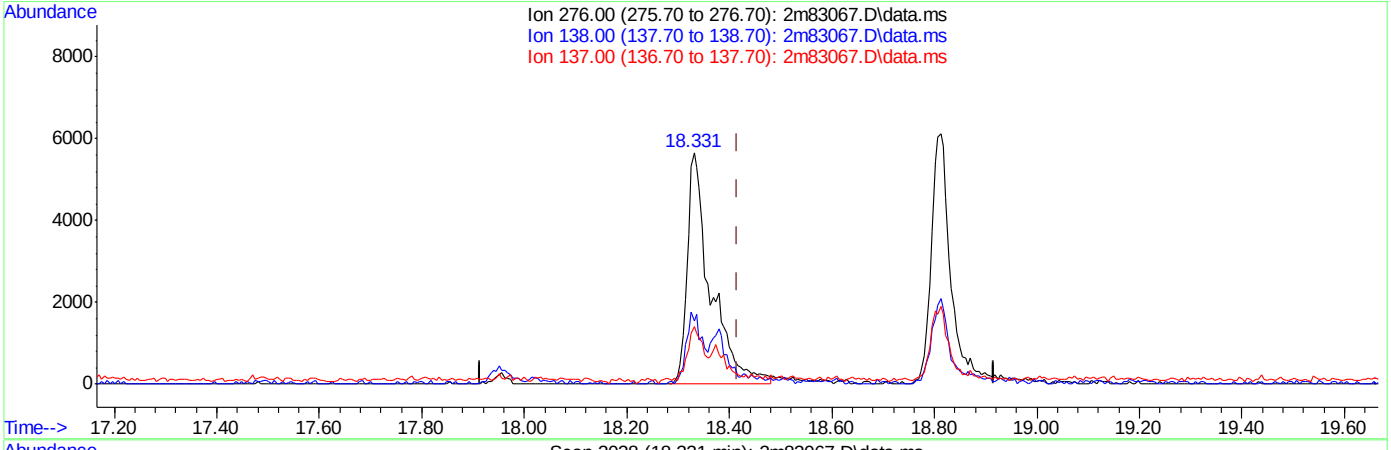
Sample Number:	E2M3649-IC3649	**Method:**	SW846 8270D
Lab FileID:	2M83067.D	**Analyst approved:**	04/15/16 17:43 Ashley Noble
Injection Time:	04/15/16 09:42	**Supervisor approved:**	04/18/16 10:23 Nina Pandya

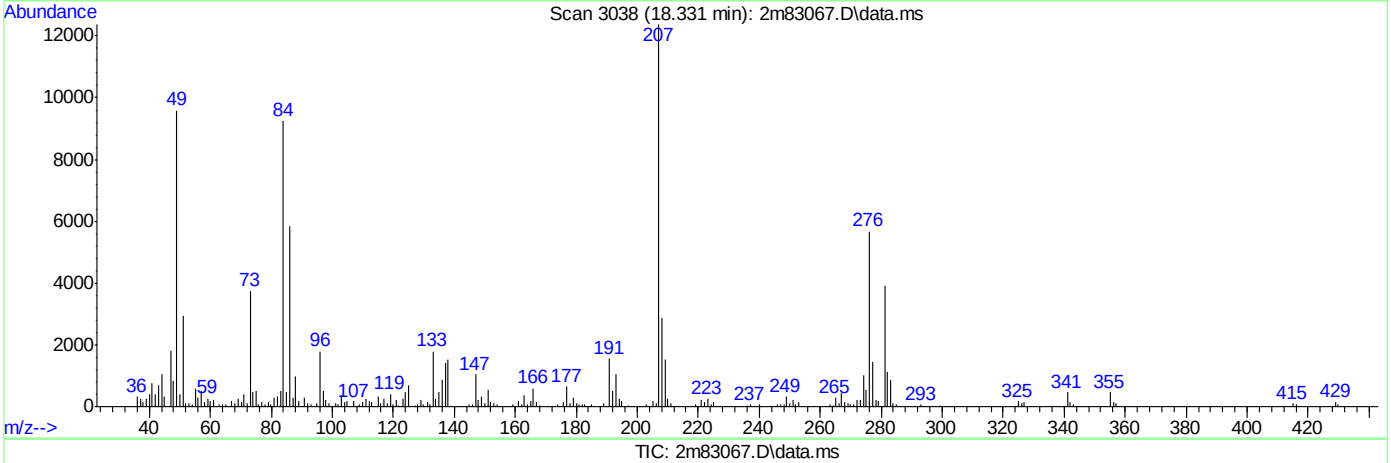
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.33	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83067.D
Acq On : 15 Apr 2016 9:42 am
Operator : ashleyn
Sample : ic3649-1
Misc : op92470,e2m3649
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 11:22:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:22:37 2016
Response via : Initial Calibration





(97) Indeno[1,2,3-cd]pyrene (t)

18.331min (-0.085) 1.27ppm

response 18000

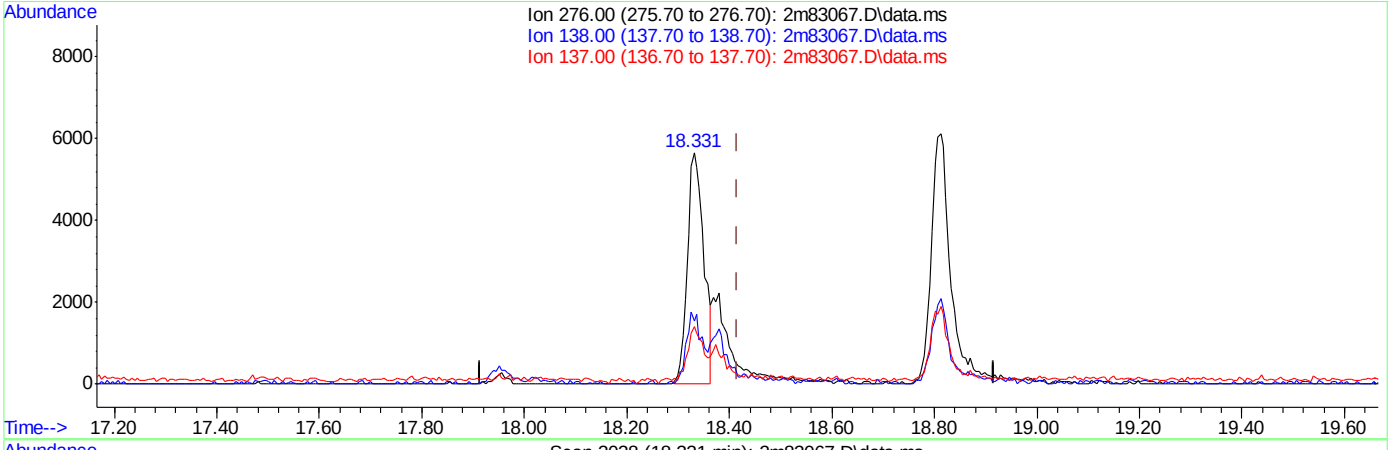
Ion	Exp%	Act%
276.00	100	100
138.00	28.30	25.77
137.00	20.20	21.34
0.00	0.00	0.00

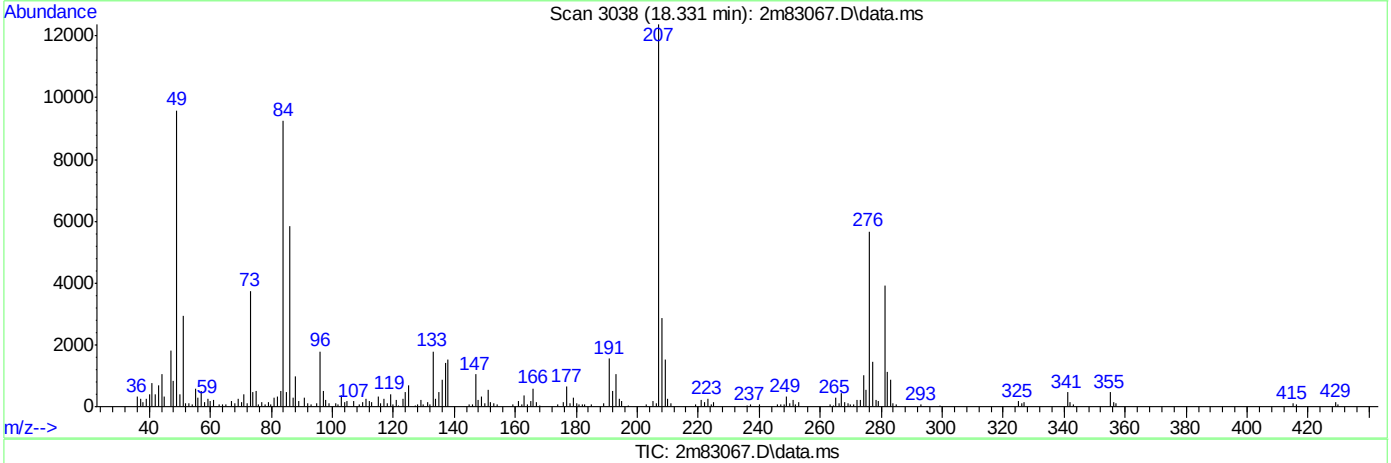
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83067.D
Acq On : 15 Apr 2016 9:42 am
Operator : ashleyn
Sample : ic3649-1
Misc : op92470,e2m3649
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 11:22:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:22:37 2016
Response via : Initial Calibration





(97) Indeno[1,2,3-cd]pyrene (t)

18.331min (-0.085) 0.89ppm m

response 12683

Ion	Exp%	Act%
276.00	100	100
138.00	28.30	27.25
137.00	20.20	24.81
0.00	0.00	0.00

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83068.D
Acq On : 15 Apr 2016 10:08 am
Operator : ashleyn
Sample : ic3649-100
Misc : op92470,e2m3649
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 11:19:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	160582	40.00	ppm	0.00
24) Naphthalene-d8	6.029	136	647966	40.00	ppm	0.00
47) Acenaphthene-d10	8.147	164	380537	40.00	ppm	0.00
69) Phenanthrene-d10	10.345	188	578561	40.00	ppm	0.00
83) Chrysene-d12	14.554	240	452602	40.00	ppm	0.00
92) Perylene-d12	16.678	264	493837	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	160582	40.00	ppm	0.00
104) Acenaphthene-d10a	8.147	164	380537	40.00	ppm	0.00
106) Chrysene-d12a	14.554	240	452602	40.00	ppm	0.00
109) Phenanthrene-d10a	10.345	188	578561	40.00	ppm	0.00
112) Naphthalene-d8a	6.029	136	647966	40.00	ppm	0.00
114) Chrysene-d12b	14.554	240	452602	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	3.916	112	569463	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
8) Phenol-d5	4.627	99	684734	100.00	ppm	0.02
Spiked Amount 50.000			Recovery	=	200.00%	
25) Nitrobenzene-d5	5.355	82	549823	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
51) 2-Fluorobiphenyl	7.253	172	992369	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
73) 2,4,6-Tribromophenol	9.297	330	148515	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
85) Terphenyl-d14	12.912	244	914104	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds						Qvalue
2) 1,4-Dioxane	2.472	88	251112	100.00	ppm	98
3) Pyridine	2.798	79	639127	100.00	ppm	95
4) N-Nitrosodimethylamine	2.755	74	380193	100.00	ppm	95
6) Indene	5.103	116	716572	100.00	ppm	97
7) Cumene	4.290	105	1255742	100.00	ppm	99
9) Phenol	4.638	94	717232	100.00	ppm	75
10) Aniline	4.649	93	713445	100.00	ppm	95
11) bis(2-Chloroethyl)ether	4.686	93	554737	100.00	ppm	96
12) 2-Chlorophenol	4.740	128	544087	100.00	ppm	93
13) Decane	4.766	43	376555	100.00	ppm	99
14) 1,3-Dichlorobenzene	4.852	146	590525	100.00	ppm	99
15) 1,4-Dichlorobenzene	4.911	146	579570	100.00	ppm	100
16) Benzyl alcohol	5.012	108	349711	100.00	ppm	95
17) 1,2-Dichlorobenzene	5.034	146	522920	100.00	ppm	99
18) Acetophenone	5.226	105	595680	100.00	ppm	78
19) 2-Methylphenol	5.103	108	400967	100.00	ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.114	45	424630	100.00	ppm	88
21) 3&4-Methylphenol	5.232	108	416190	100.00	ppm	100

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83068.D
Acq On : 15 Apr 2016 10:08 am
Operator : ashleyn
Sample : ic3649-100
Misc : op92470,e2m3649
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 11:19:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
22) n-Nitroso-di-n-propyla...	5.226	70	292367	100.00	ppm	94
23) Hexachloroethane	5.317	201	169506	100.00	ppm	98
26) Nitrobenzene	5.376	77	547396	100.00	ppm	100
27) Quinoline	6.414	129	1141145	100.00	ppm	99
28) Isophorone	5.585	82	983833	100.00	ppm	99
29) 2-Nitrophenol	5.660	139	290976	100.00	ppm	86
30) 2,4-Dimethylphenol	5.697	107	521234	100.00	ppm	97
31) Benzoic acid	5.831	105	499223	100.00	ppm	98
32) bis(2-Chloroethoxy)met...	5.777	93	587249	100.00	ppm	99
33) 2,4-Dichlorophenol	5.895	162	421532	100.00	ppm	100
34) 2,6-Dichlorophenol	6.114	162	391966	100.00	ppm	98
35) 1,3,5-Trichlorobenzene	5.670	180	419260	100.00	ppm	99
36) 1,2,4-Trichlorobenzene	5.970	180	427938	100.00	ppm	99
37) 1,2,3-Trichlorobenzene	6.200	180	418164	100.00	ppm	98
38) Naphthalene	6.050	128	1553321	100.00	ppm	99
39) 4-Chloroaniline	6.103	127	582462	100.00	ppm	96
40) 2,3-Dichloroaniline	7.146	161	468789	100.00	ppm	97
41) Caprolactam	6.510	55	223603	100.00	ppm	96
42) Hexachlorobutadiene	6.178	225	193930	100.00	ppm	98
43) 4-Chloro-3-methylphenol	6.638	107	476370	100.00	ppm	100
44) 2-Methylnaphthalene	6.804	141	845237	100.00	ppm	99
45) 1-Methylnaphthalene	6.922	141	866978	100.00	ppm	98
46) Dimethylnaphthalene	7.585	156	879448	100.00	ppm	99
48) Hexachlorocyclopentadiene	6.997	237	437072	200.00	ppm	99
49) 2,4,6-Trichlorophenol	7.152	196	254625	100.00	ppm	99
50) 2,4,5-Trichlorophenol	7.205	196	303207	100.00	ppm	99
52) 2-Chloronaphthalene	7.403	162	919290	100.00	ppm	99
53) Biphenyl	7.382	154	1173856	100.00	ppm	100
54) 2-Nitroaniline	7.548	65	288300	100.00	ppm	96
55) Dimethylphthalate	7.794	163	1087371	100.00	ppm	99
56) Acenaphthylene	7.949	152	1549808	100.00	ppm	99
57) 2,6-Dinitrotoluene	7.869	165	265778	100.00	ppm	99
58) 3-Nitroaniline	8.104	138	320344	100.00	ppm	99
59) Acenaphthene	8.195	153	932785	100.00	ppm	97
60) 2,4-Dinitrophenol	8.248	184	312655	200.00	ppm	70
61) 4-Nitrophenol	8.377	109	156247	100.00	ppm	96
62) Dibenzofuran	8.441	168	1179395	100.00	ppm	98
63) 2,4-Dinitrotoluene	8.435	165	329689	100.00	ppm	76
64) 2,3,4,6-Tetrachlorophenol	8.628	232	221576	100.00	ppm	95
65) Diethylphthalate	8.805	149	1070315	100.00	ppm	100
66) Fluorene	8.933	166	988498	100.00	ppm	99
67) 4-Chlorophenyl-phenyle...	8.949	204	405327	100.00	ppm	98
68) 4-Nitroaniline	8.997	138	327029	100.00	ppm	97
70) 4,6-Dinitro-2-methylph...	9.035	198	214511	100.00	ppm	95
71) n-Nitrosodiphenylamine	9.131	169	730500	100.00	ppm	99
72) 1,2-Diphenylhydrazine	9.184	77	1075089	100.00	ppm	98
74) 4-Bromophenyl-phenylether	9.682	248	256583	100.00	ppm	98
75) Hexachlorobenzene	9.767	284	284907	100.00	ppm	96
76) Pentachlorophenol	10.078	266	362304	200.00	ppm	100
77) Phenanthrene	10.382	178	1460596	100.00	ppm	100

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83068.D
Acq On : 15 Apr 2016 10:08 am
Operator : ashleyn
Sample : ic3649-100
Misc : op92470,e2m3649
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 11:19:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.463	178	1476887	100.00 ppm	99
79) Carbazole	10.735	167	1419032	100.00 ppm	99
80) Di-n-butylphthalate	11.351	149	1802455	100.00 ppm	100
81) Fluoranthene	12.260	202	1410861	100.00 ppm	98
82) Octadecane	10.275	57	615203	100.00 ppm	98
84) Pyrene	12.613	202	1461807	100.00 ppm	100
86) Butylbenzylphthalate	13.741	149	821538	100.00 ppm	98
87) Butyl stearate	13.896	56	436193	100.00 ppm	95
88) Benzo[a]anthracene	14.533	228	1194754	100.00 ppm	99
89) 3,3'-Dichlorobenzidine	14.538	252	446044	100.00 ppm	99
90) Chrysene	14.597	228	1275381	100.00 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.699	149	1099208	100.00 ppm	98
93) Di-n-octylphthalate	15.688	149	1941557	100.00 ppm	100
94) Benzo[b]fluoranthene	16.154	252	1362523	100.00 ppm	97
95) Benzo[k]fluoranthene	16.202	252	1304717	100.00 ppm	96
96) Benzo[a]pyrene	16.603	252	1293570	100.00 ppm	98
97) Indeno[1,2,3-cd]pyrene	18.368	276	1442943	100.00 ppm	93
98) Dibenz(a,h)acridine	17.972	279	1237106	100.00 ppm	98
99) Dibenz[a,h]anthracene	18.411	278	1419685	100.00 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.164	256	577923	100.00 ppm	97
101) Benzo[g,h,i]perylene	18.855	276	1436835	100.00 ppm	99

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

7.6.3

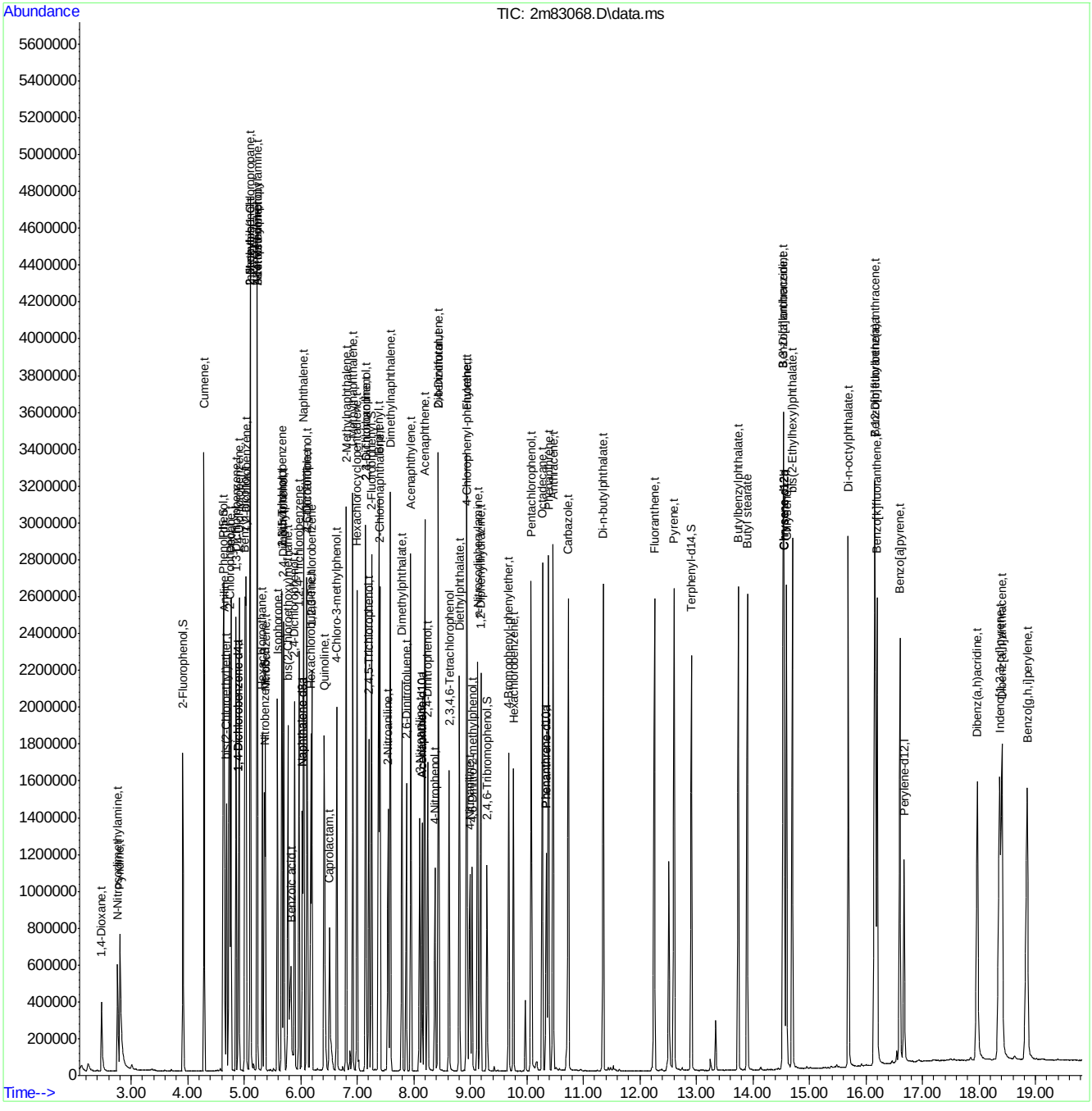
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83068.D
Acq On : 15 Apr 2016 10:08 am
Operator : ashleyn
Sample : ic3649-100
Misc : op92470,e2m3649
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 11:19:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83069.D
Acq On : 15 Apr 2016 10:34 am
Operator : ashleyn
Sample : ic3649-80
Misc : op92470,e2m3649
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 11:29:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:27:52 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	160389	40.00	ppm	0.00
24) Naphthalene-d8	6.029	136	647316	40.00	ppm	0.00
47) Acenaphthene-d10	8.147	164	380610	40.00	ppm	0.00
69) Phenanthrene-d10	10.345	188	587483	40.00	ppm	0.00
83) Chrysene-d12	14.555	240	467299	40.00	ppm	0.00
92) Perylene-d12	16.678	264	497654	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	160389	40.00	ppm	0.00
104) Acenaphthene-d10a	8.147	164	380610	40.00	ppm	0.00
106) Chrysene-d12a	14.555	240	467299	40.00	ppm	0.00
109) Phenanthrene-d10a	10.345	188	587483	40.00	ppm	0.00
112) Naphthalene-d8a	6.029	136	647316	40.00	ppm	0.00
114) Chrysene-d12b	14.555	240	467299	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	3.916	112	466687	74.74	ppm	0.00
Spiked Amount 50.000			Recovery = 149.48%			
8) Phenol-d5	4.627	99	565562	72.63	ppm	0.03
Spiked Amount 50.000			Recovery = 145.26%			
25) Nitrobenzene-d5	5.355	82	454512	73.44	ppm	0.00
Spiked Amount 50.000			Recovery = 146.88%			
51) 2-Fluorobiphenyl	7.248	172	833219	66.34	ppm	-0.01
Spiked Amount 50.000			Recovery = 132.68%			
73) 2,4,6-Tribromophenol	9.291	330	124643	83.93	ppm	0.00
Spiked Amount 50.000			Recovery = 167.86%			
85) Terphenyl-d14	12.907	244	772157	75.54	ppm	-0.02
Spiked Amount 50.000			Recovery = 151.08%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.472	88	201407	70.31	ppm	98
3) Pyridine	2.798	79	509359	74.26	ppm	97
4) N-Nitrosodimethylamine	2.755	74	308620	74.42	ppm	96
6) Indene	5.104	116	622189	59.76	ppm	98
7) Cumene	4.291	105	1048559	68.67	ppm	99
9) Phenol	4.638	94	603372	68.98	ppm	72
10) Aniline	4.649	93	603858	66.85	ppm	97
11) bis(2-Chloroethyl)ether	4.686	93	459316	73.24	ppm	97
12) 2-Chlorophenol	4.740	128	454695	69.83	ppm	95
13) Decane	4.761	43	321602	62.96	ppm	96
14) 1,3-Dichlorobenzene	4.852	146	493980	68.85	ppm	98
15) 1,4-Dichlorobenzene	4.911	146	490171	67.51	ppm	100
16) Benzyl alcohol	5.013	108	293834	73.81	ppm	98
17) 1,2-Dichlorobenzene	5.034	146	449097	66.55	ppm	99
18) Acetophenone	5.227	105	511835	63.19	ppm	78
19) 2-Methylphenol	5.104	108	348789	62.66	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.114	45	372296	56.15	ppm	92
21) 3&4-Methylphenol	5.227	108	363451	62.15	ppm	99

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83069.D
Acq On : 15 Apr 2016 10:34 am
Operator : ashleyn
Sample : ic3649-80
Misc : op92470,e2m3649
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 11:29:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:27:52 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.221	70	252588	62.89	ppm		92
23) Hexachloroethane	5.317	201	143131	72.53	ppm		99
26) Nitrobenzene	5.371	77	452490	71.40	ppm		98
27) Quinoline	6.409	129	935708	73.28	ppm		98
28) Isophorone	5.585	82	813170	74.27	ppm		99
29) 2-Nitrophenol	5.660	139	246425	76.65	ppm		87
30) 2,4-Dimethylphenol	5.697	107	433077	73.43	ppm		99
31) Benzoic acid	5.826	105	403692	96.06	ppm		98
32) bis(2-Chloroethoxy)met...	5.772	93	486925	68.49	ppm		98
33) 2,4-Dichlorophenol	5.890	162	354316	73.07	ppm		98
34) 2,6-Dichlorophenol	6.114	162	331844	69.74	ppm		99
35) 1,3,5-Trichlorobenzene	5.670	180	355947	65.64	ppm		100
36) 1,2,4-Trichlorobenzene	5.970	180	359951	69.04	ppm		99
37) 1,2,3-Trichlorobenzene	6.200	180	345307	68.88	ppm		98
38) Naphthalene	6.050	128	1302948	66.05	ppm		99
39) 4-Chloroaniline	6.104	127	499004	69.67	ppm		97
40) 2,3-Dichloroaniline	7.147	161	398957	68.20	ppm		98
41) Caprolactam	6.500	55	181132	80.33	ppm		96
42) Hexachlorobutadiene	6.179	225	164081	69.36	ppm		99
43) 4-Chloro-3-methylphenol	6.639	107	392423	76.94	ppm		99
44) 2-Methylnaphthalene	6.804	141	711342	69.42	ppm		99
45) 1-Methylnaphthalene	6.922	141	731358	68.23	ppm		99
46) Dimethylnaphthalene	7.580	156	737854	68.97	ppm		99
48) Hexachlorocyclopentadiene	6.997	237	374524	158.23	ppm		99
49) 2,4,6-Trichlorophenol	7.152	196	216185	70.79	ppm		98
50) 2,4,5-Trichlorophenol	7.200	196	250811	77.56	ppm		99
52) 2-Chloronaphthalene	7.403	162	767544	67.53	ppm		99
53) Biphenyl	7.377	154	989182	66.25	ppm		99
54) 2-Nitroaniline	7.542	65	234944	79.56	ppm		98
55) Dimethylphthalate	7.794	163	906539	73.24	ppm		100
56) Acenaphthylene	7.949	152	1299264	72.78	ppm		99
57) 2,6-Dinitrotoluene	7.869	165	219233	88.60	ppm		96
58) 3-Nitroaniline	8.099	138	261926	86.16	ppm		100
59) Acenaphthene	8.190	153	783963	67.22	ppm		99
60) 2,4-Dinitrophenol	8.248	184	255950	246.11	ppm	#	80
61) 4-Nitrophenol	8.372	109	126747	89.02	ppm		94
62) Dibenzofuran	8.436	168	1004417	65.16	ppm		90
63) 2,4-Dinitrotoluene	8.430	165	275611	83.99	ppm		79
64) 2,3,4,6-Tetrachlorophenol	8.623	232	185316	79.99	ppm		96
65) Diethylphthalate	8.805	149	885901	75.02	ppm		99
66) Fluorene	8.933	166	846081	67.49	ppm		99
67) 4-Chlorophenyl-phenyle...	8.944	204	346336	67.85	ppm		98
68) 4-Nitroaniline	8.992	138	268185	89.86	ppm		98
70) 4,6-Dinitro-2-methylph...	9.029	198	174143	112.60	ppm		96
71) n-Nitrosodiphenylamine	9.126	169	606273	72.14	ppm		100
72) 1,2-Diphenylhydrazine	9.179	77	888947	74.22	ppm		99
74) 4-Bromophenyl-phenylether	9.677	248	215948	74.36	ppm		94
75) Hexachlorobenzene	9.762	284	239194	70.92	ppm		98
76) Pentachlorophenol	10.078	266	303589	162.23	ppm		98
77) Phenanthrene	10.383	178	1230735	66.01	ppm		100

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83069.D
Acq On : 15 Apr 2016 10:34 am
Operator : ashleyn
Sample : ic3649-80
Misc : op92470,e2m3649
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 11:29:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:27:52 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.463	178	1249460	70.71 ppm	100
79) Carbazole	10.736	167	1185346	72.34 ppm	100
80) Di-n-butylphthalate	11.351	149	1503443	75.59 ppm	100
81) Fluoranthene	12.255	202	1186990	71.41 ppm	98
82) Octadecane	10.276	57	517885	73.31 ppm	99
84) Pyrene	12.608	202	1235596	74.33 ppm	99
86) Butylbenzylphthalate	13.742	149	680246	81.48 ppm	96
87) Butyl stearate	13.897	56	373155	82.67 ppm	94
88) Benzo[a]anthracene	14.533	228	1019793	69.49 ppm	99
89) 3,3'-Dichlorobenzidine	14.539	252	384550	78.41 ppm	99
90) Chrysene	14.597	228	1067768	71.08 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.699	149	917082	83.21 ppm	98
93) Di-n-octylphthalate	15.688	149	1617149	85.27 ppm	99
94) Benzo[b]fluoranthene	16.154	252	1121299	69.75 ppm	96
95) Benzo[k]fluoranthene	16.197	252	1122381	72.09 ppm	97
96) Benzo[a]pyrene	16.598	252	1087150	77.93 ppm	99
97) Indeno[1,2,3-cd]pyrene	18.363	276	1151368	87.24 ppm	93
98) Dibenz(a,h)acridine	17.972	279	1029728	87.35 ppm	99
99) Dibenz[a,h]anthracene	18.406	278	1191363	79.08 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.159	256	492181	71.30 ppm	97
101) Benzo[g,h,i]perylene	18.849	276	1185447	77.30 ppm	98

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

7.6.4

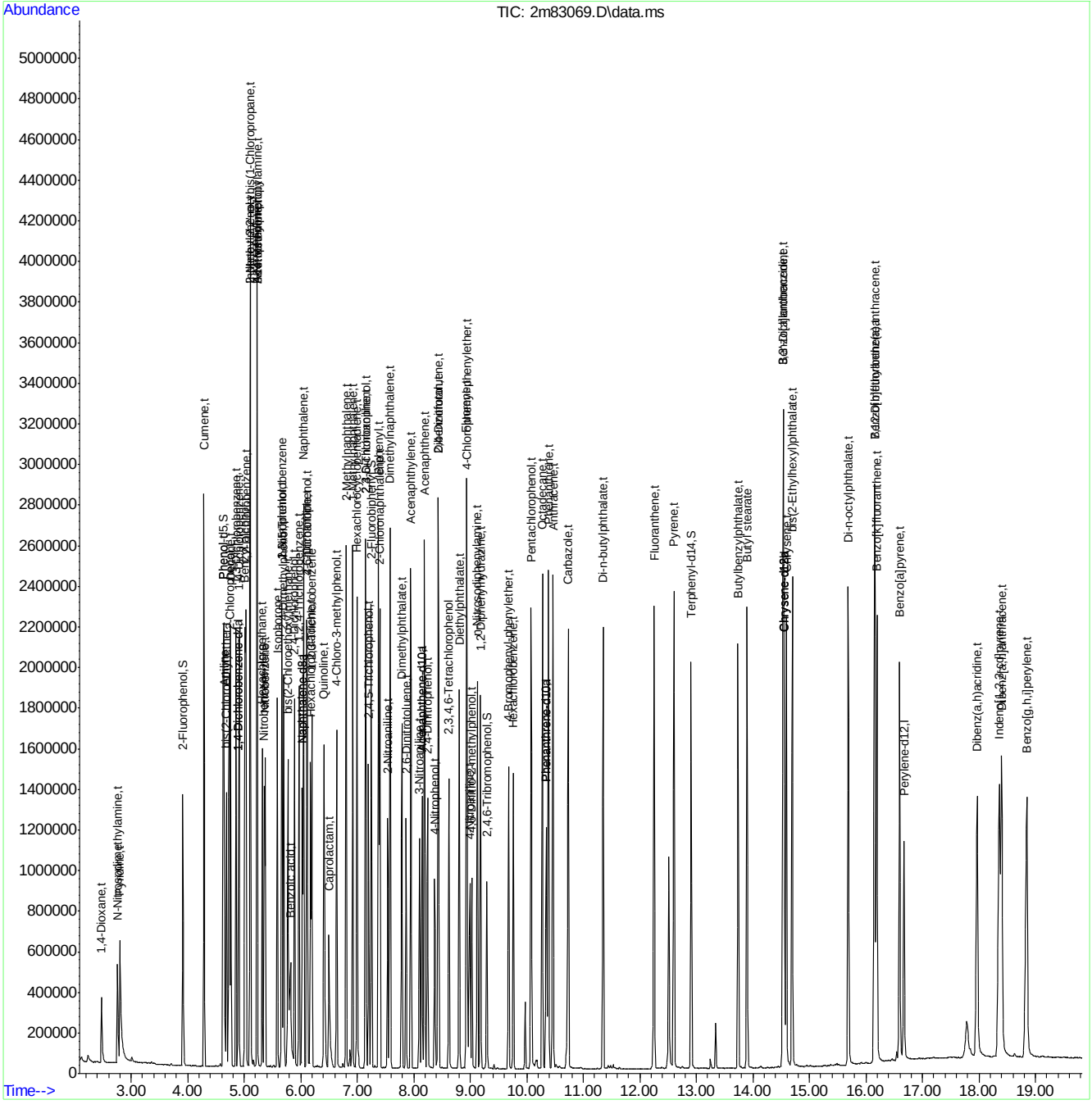
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83069.D
Acq On : 15 Apr 2016 10:34 am
Operator : ashleyn
Sample : ic3649-80
Misc : op92470,e2m3649
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 11:29:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:27:52 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83070.D
Acq On : 15 Apr 2016 11:00 am
Operator : ashleyn
Sample : ic3649-25
Misc : op92470,e2m3649
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 11:31:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:30:08 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	177563	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	700902	40.00 ppm	0.00
47) Acenaphthene-d10	8.142	164	406709	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	617884	40.00 ppm	0.00
83) Chrysene-d12	14.549	240	523152	40.00 ppm	0.00
92) Perylene-d12	16.673	264	528141	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	177563	40.00 ppm	0.00
104) Acenaphthene-d10a	8.142	164	406709	40.00 ppm	0.00
106) Chrysene-d12a	14.549	240	523152	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	617884	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	700902	40.00 ppm	0.00
114) Chrysene-d12b	14.549	240	523152	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	3.911	112	161814	23.80 ppm	0.00
Spiked Amount 50.000			Recovery = 47.60%		
8) Phenol-d5	4.622	99	205402	24.39 ppm	0.02
Spiked Amount 50.000			Recovery = 48.78%		
25) Nitrobenzene-d5	5.350	82	162519	24.76 ppm	0.00
Spiked Amount 50.000			Recovery = 49.52%		
51) 2-Fluorobiphenyl	7.248	172	313797	24.42 ppm	-0.01
Spiked Amount 50.000			Recovery = 48.84%		
73) 2,4,6-Tribromophenol	9.286	330	41102	26.00 ppm	-0.01
Spiked Amount 50.000			Recovery = 52.00%		
85) Terphenyl-d14	12.902	244	276645	24.52 ppm	-0.02
Spiked Amount 50.000			Recovery = 49.04%		
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds					Qvalue
2) 1,4-Dioxane	2.472	88	69395	22.57 ppm	96
3) Pyridine	2.798	79	174607	23.41 ppm	95
4) N-Nitrosodimethylamine	2.761	74	104814	23.24 ppm	97
6) Indene	5.103	116	267466	24.77 ppm	98
7) Cumene	4.290	105	387685	23.78 ppm	99
9) Phenol	4.633	94	225435	24.11 ppm	80
10) Aniline	4.644	93	237858	24.80 ppm	97
11) bis(2-Chloroethyl)ether	4.686	93	156669	23.05 ppm	99
12) 2-Chlorophenol	4.740	128	171057	24.51 ppm	99
13) Decane	4.761	43	129433	24.17 ppm	93
14) 1,3-Dichlorobenzene	4.852	146	184532	24.07 ppm	100
15) 1,4-Dichlorobenzene	4.911	146	185971	24.08 ppm	99
16) Benzyl alcohol	5.007	108	106824	24.72 ppm	99
17) 1,2-Dichlorobenzene	5.034	146	171506	23.96 ppm	99
18) Acetophenone	5.221	105	210060	24.72 ppm	84
19) 2-Methylphenol	5.098	108	146272	25.09 ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.109	45	164887	24.27 ppm	91
21) 3&4-Methylphenol	5.221	108	154007	25.19 ppm	99

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83070.D
Acq On : 15 Apr 2016 11:00 am
Operator : ashleyn
Sample : ic3649-25
Misc : op92470,e2m3649
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 11:31:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:30:08 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.216	70	104073	24.73	ppm		91
23) Hexachloroethane	5.317	201	51432	24.10	ppm		96
26) Nitrobenzene	5.366	77	162480	24.33	ppm		97
27) Quinoline	6.398	129	325516	24.05	ppm		100
28) Isophorone	5.580	82	288043	24.74	ppm		99
29) 2-Nitrophenol	5.654	139	88760	25.77	ppm		94
30) 2,4-Dimethylphenol	5.692	107	153473	24.54	ppm		99
31) Benzoic acid	5.783	105	123711	25.89	ppm		98
32) bis(2-Chloroethoxy)met...	5.772	93	175682	23.67	ppm		97
33) 2,4-Dichlorophenol	5.884	162	127386	24.80	ppm		99
34) 2,6-Dichlorophenol	6.109	162	124875	25.04	ppm		99
35) 1,3,5-Trichlorobenzene	5.665	180	137441	24.51	ppm		99
36) 1,2,4-Trichlorobenzene	5.965	180	132643	24.33	ppm		99
37) 1,2,3-Trichlorobenzene	6.195	180	127560	24.35	ppm		98
38) Naphthalene	6.045	128	494686	24.22	ppm		100
39) 4-Chloroaniline	6.098	127	190226	25.35	ppm		96
40) 2,3-Dichloroaniline	7.141	161	151568	24.85	ppm		97
41) Caprolactam	6.467	55	59736	24.44	ppm		97
42) Hexachlorobutadiene	6.173	225	59890	24.18	ppm		98
43) 4-Chloro-3-methylphenol	6.628	107	135135	24.70	ppm		99
44) 2-Methylnaphthalene	6.799	141	264186	24.62	ppm		99
45) 1-Methylnaphthalene	6.917	141	273503	24.46	ppm		100
46) Dimethylnaphthalene	7.580	156	276946	24.76	ppm		97
48) Hexachlorocyclopentadiene	6.997	237	137421	54.48	ppm		99
49) 2,4,6-Trichlorophenol	7.147	196	80915	25.53	ppm		97
50) 2,4,5-Trichlorophenol	7.195	196	87555	25.53	ppm		99
52) 2-Chloronaphthalene	7.398	162	285258	24.44	ppm		99
53) Biphenyl	7.371	154	377092	24.70	ppm		99
54) 2-Nitroaniline	7.537	65	80085	25.41	ppm		97
55) Dimethylphthalate	7.783	163	318766	24.62	ppm		99
56) Acenaphthylene	7.944	152	475493	25.50	ppm		99
57) 2,6-Dinitrotoluene	7.858	165	72064	26.54	ppm		100
58) 3-Nitroaniline	8.093	138	89962	27.17	ppm		96
59) Acenaphthene	8.184	153	292157	24.42	ppm		99
60) 2,4-Dinitrophenol	8.238	184	78330	62.13	ppm	#	78
61) 4-Nitrophenol	8.361	109	40431	25.85	ppm		99
62) Dibenzofuran	8.430	168	385783	24.56	ppm		99
63) 2,4-Dinitrotoluene	8.425	165	100267	28.24	ppm		85
64) 2,3,4,6-Tetrachlorophenol	8.623	232	63142	25.51	ppm		91
65) Diethylphthalate	8.799	149	308463	24.83	ppm		98
66) Fluorene	8.928	166	321088	24.95	ppm		100
67) 4-Chlorophenyl-phenyle...	8.938	204	132426	25.24	ppm		99
68) 4-Nitroaniline	8.971	138	90003	27.38	ppm		98
70) 4,6-Dinitro-2-methylph...	9.019	198	54235	30.26	ppm		97
71) n-Nitrosodiphenylamine	9.120	169	218905	25.39	ppm		99
72) 1,2-Diphenylhydrazine	9.174	77	314971	25.46	ppm		99
74) 4-Bromophenyl-phenylether	9.677	248	74485	24.82	ppm		97
75) Hexachlorobenzene	9.757	284	85629	24.84	ppm		98
76) Pentachlorophenol	10.072	266	105973	53.66	ppm		98
77) Phenanthrene	10.377	178	453617	24.19	ppm		100

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83070.D
Acq On : 15 Apr 2016 11:00 am
Operator : ashleyn
Sample : ic3649-25
Misc : op92470,e2m3649
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 11:31:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:30:08 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.452	178	464132	25.72 ppm	99
79) Carbazole	10.725	167	424988	25.26 ppm	100
80) Di-n-butylphthalate	11.345	149	519449	25.18 ppm	100
81) Fluoranthene	12.249	202	422124	24.81 ppm	97
82) Octadecane	10.270	57	189941	26.11 ppm	97
84) Pyrene	12.602	202	450325	24.64 ppm	99
86) Butylbenzylphthalate	13.736	149	228213	24.30 ppm	96
87) Butyl stearate	13.891	56	131713	25.85 ppm	98
88) Benzo[a]anthracene	14.528	228	381356	24.00 ppm	100
89) 3,3'-Dichlorobenzidine	14.533	252	147907	27.07 ppm	97
90) Chrysene	14.587	228	390943	23.91 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.694	149	316174	25.37 ppm	96
93) Di-n-octylphthalate	15.683	149	530708	25.94 ppm	100
94) Benzo[b]fluoranthene	16.143	252	412821	25.00 ppm	98
95) Benzo[k]fluoranthene	16.181	252	404680	25.11 ppm	98
96) Benzo[a]pyrene	16.587	252	369654	25.13 ppm	99
97) Indeno[1,2,3-cd]pyrene	18.341	276	358427	25.02 ppm	96
98) Dibenz(a,h)acridine	17.956	279	343104	26.81 ppm	100
99) Dibenz[a,h]anthracene	18.384	278	406952	25.53 ppm	99
100) 7,12-Dimethylbenz(a)an...	16.143	256	185466	26.02 ppm	99
101) Benzo[g,h,i]perylene	18.823	276	396481	24.57 ppm	99

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

7.6.5

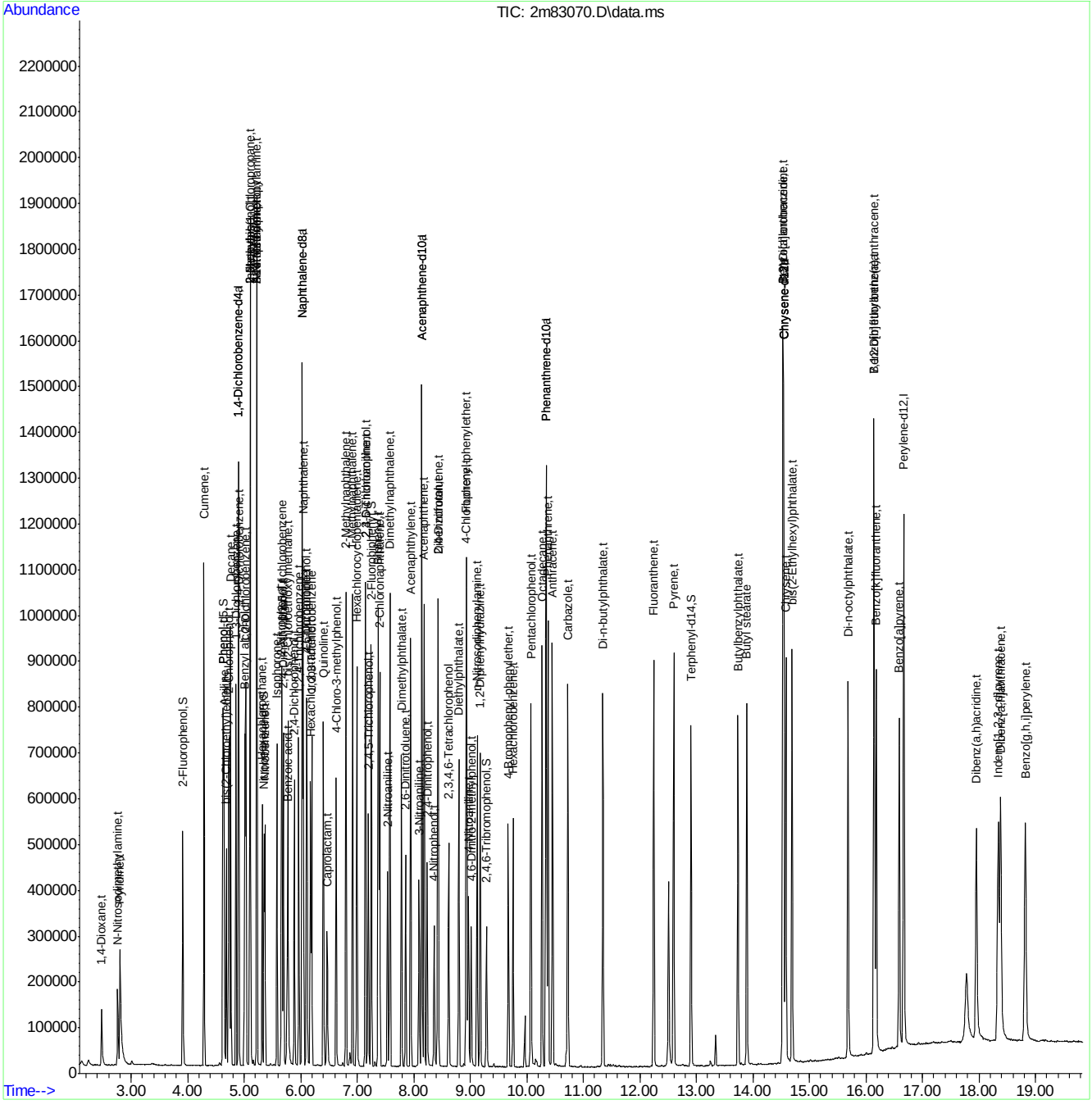
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83070.D
Acq On : 15 Apr 2016 11:00 am
Operator : ashleyn
Sample : ic3649-25
Misc : op92470,e2m3649
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 11:31:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:30:08 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83071.D
Acq On : 15 Apr 2016 11:27 am
Operator : ashleyn
Sample : ic3649-10
Misc : op92470,e2m3649
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 12:19:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:31:27 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	177644	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	696666	40.00	ppm	0.00
47) Acenaphthene-d10	8.141	164	401062	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	611792	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	525904	40.00	ppm	-0.01
92) Perylene-d12	16.672	264	520114	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	177644	40.00	ppm	0.00
104) Acenaphthene-d10a	8.141	164	401062	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	525904	40.00	ppm	-0.01
109) Phenanthrene-d10a	10.340	188	611792	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	696666	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	525904	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	3.911	112	61954	9.20	ppm	0.00
Spiked Amount 50.000			Recovery = 18.40%			
8) Phenol-d5	4.617	99	79679	9.50	ppm	0.01
Spiked Amount 50.000			Recovery = 19.00%			
25) Nitrobenzene-d5	5.349	82	63526	9.76	ppm	0.00
Spiked Amount 50.000			Recovery = 19.52%			
51) 2-Fluorobiphenyl	7.243	172	126865	10.06	ppm	-0.02
Spiked Amount 50.000			Recovery = 20.12%			
73) 2,4,6-Tribromophenol	9.286	330	14795	9.38	ppm	-0.01
Spiked Amount 50.000			Recovery = 18.76%			
85) Terphenyl-d14	12.902	244	108171	9.57	ppm	-0.02
Spiked Amount 50.000			Recovery = 19.14%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.477	88	27315	9.05	ppm	98
3) Pyridine	2.809	79	68742	9.33	ppm	96
4) N-Nitrosodimethylamine	2.766	74	40835	9.18	ppm	95
6) Indene	5.103	116	112483	10.43	ppm	98
7) Cumene	4.290	105	154457	9.56	ppm	99
9) Phenol	4.627	94	89214	9.61	ppm	84
10) Aniline	4.643	93	99016	10.34	ppm	98
11) bis(2-Chloroethyl)ether	4.681	93	62261	9.30	ppm	95
12) 2-Chlorophenol	4.734	128	69038	9.93	ppm	95
13) Decane	4.761	43	52907	9.94	ppm	94
14) 1,3-Dichlorobenzene	4.852	146	74947	9.85	ppm	99
15) 1,4-Dichlorobenzene	4.905	146	73938	9.64	ppm	100
16) Benzyl alcohol	5.007	108	42058	9.75	ppm	97
17) 1,2-Dichlorobenzene	5.034	146	69692	9.81	ppm	99
18) Acetophenone	5.221	105	87128	10.27	ppm	85
19) 2-Methylphenol	5.098	108	60216	10.32	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.109	45	69228	10.25	ppm	93
21) 3&4-Methylphenol	5.221	108	63232	10.32	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83071.D
Acq On : 15 Apr 2016 11:27 am
Operator : ashleyn
Sample : ic3649-10
Misc : op92470,e2m3649
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 12:19:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:31:27 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.216	70	42650	10.15	ppm		91
23) Hexachloroethane	5.317	201	20405	9.63	ppm		96
26) Nitrobenzene	5.365	77	64381	9.75	ppm		98
27) Quinoline	6.392	129	129219	9.68	ppm		99
28) Isophorone	5.574	82	112823	9.77	ppm		98
29) 2-Nitrophenol	5.654	139	33515	9.73	ppm		88
30) 2,4-Dimethylphenol	5.686	107	61419	9.92	ppm		97
31) Benzoic acid	5.756	105	41687	8.71	ppm		95
32) bis(2-Chloroethoxy)met...	5.772	93	72161	9.89	ppm		98
33) 2,4-Dichlorophenol	5.884	162	50122	9.83	ppm		98
34) 2,6-Dichlorophenol	6.109	162	49764	10.04	ppm		98
35) 1,3,5-Trichlorobenzene	5.665	180	55178	9.94	ppm		99
36) 1,2,4-Trichlorobenzene	5.964	180	52751	9.79	ppm		99
37) 1,2,3-Trichlorobenzene	6.194	180	51576	9.96	ppm		97
38) Naphthalene	6.045	128	200831	9.95	ppm		99
39) 4-Chloroaniline	6.098	127	78697	10.52	ppm		98
40) 2,3-Dichloroaniline	7.141	161	60914	10.06	ppm		99
41) Caprolactam	6.451	55	22544	9.32	ppm		95
42) Hexachlorobutadiene	6.173	225	24409	9.98	ppm		96
43) 4-Chloro-3-methylphenol	6.622	107	52377	9.66	ppm		97
44) 2-Methylnaphthalene	6.799	141	105796	9.95	ppm		98
45) 1-Methylnaphthalene	6.916	141	110726	10.01	ppm		99
46) Dimethylnaphthalene	7.574	156	111458	10.05	ppm		98
48) Hexachlorocyclopentadiene	6.997	237	52463	20.72	ppm		99
49) 2,4,6-Trichlorophenol	7.146	196	31432	10.01	ppm		99
50) 2,4,5-Trichlorophenol	7.189	196	33452	9.85	ppm		98
52) 2-Chloronaphthalene	7.393	162	112835	9.85	ppm		99
53) Biphenyl	7.371	154	152417	10.15	ppm		99
54) 2-Nitroaniline	7.532	65	30349	9.73	ppm		98
55) Dimethylphthalate	7.783	163	124690	9.80	ppm		99
56) Acenaphthylene	7.943	152	186566	10.11	ppm		99
57) 2,6-Dinitrotoluene	7.858	165	26312	9.71	ppm		97
58) 3-Nitroaniline	8.088	138	33555	10.10	ppm		97
59) Acenaphthene	8.184	153	116692	9.94	ppm		96
60) 2,4-Dinitrophenol	8.232	184	23820	18.27	ppm	#	65
61) 4-Nitrophenol	8.355	109	14653	9.44	ppm		95
62) Dibenzofuran	8.430	168	158329	10.26	ppm		97
63) 2,4-Dinitrotoluene	8.419	165	37796	10.52	ppm		91
64) 2,3,4,6-Tetrachlorophenol	8.617	232	23736	9.68	ppm		95
65) Diethylphthalate	8.794	149	120605	9.86	ppm		99
66) Fluorene	8.922	166	128108	10.10	ppm		99
67) 4-Chlorophenyl-phenyle...	8.938	204	53071	10.24	ppm		99
68) 4-Nitroaniline	8.965	138	34108	10.33	ppm		98
70) 4,6-Dinitro-2-methylph...	9.013	198	17827	9.64	ppm		97
71) n-Nitrosodiphenylamine	9.115	169	85635	10.00	ppm		99
72) 1,2-Diphenylhydrazine	9.174	77	122401	9.96	ppm		97
74) 4-Bromophenyl-phenylether	9.671	248	28914	9.75	ppm		95
75) Hexachlorobenzene	9.757	284	33177	9.73	ppm		96
76) Pentachlorophenol	10.067	266	38428	19.37	ppm		99
77) Phenanthrene	10.372	178	184082	9.98	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83071.D
Acq On : 15 Apr 2016 11:27 am
Operator : ashleyn
Sample : ic3649-10
Misc : op92470,e2m3649
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 12:19:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:31:27 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.452	178	184418	10.26 ppm	99
79) Carbazole	10.725	167	167069	10.01 ppm	98
80) Di-n-butylphthalate	11.345	149	193455	9.46 ppm	99
81) Fluoranthene	12.244	202	164893	9.80 ppm	98
82) Octadecane	10.270	57	73648	10.14 ppm	96
84) Pyrene	12.597	202	177921	9.71 ppm	99
86) Butylbenzylphthalate	13.736	149	82748	8.82 ppm	95
87) Butyl stearate	13.891	56	47735	9.26 ppm	99
88) Benzo[a]anthracene	14.528	228	151234	9.54 ppm	98
89) 3,3'-Dichlorobenzidine	14.528	252	56000	10.03 ppm	97
90) Chrysene	14.581	228	155326	9.53 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.693	149	114647	9.12 ppm	98
93) Di-n-octylphthalate	15.683	149	186658	9.20 ppm	99
94) Benzo[b]fluoranthene	16.138	252	161193	9.91 ppm	96
95) Benzo[k]fluoranthene	16.175	252	162150	10.21 ppm	98
96) Benzo[a]pyrene	16.587	252	139507	9.62 ppm	99
97) Indeno[1,2,3-cd]pyrene	18.336	276	128143	9.08 ppm	94
98) Dibenz(a,h)acridine	17.951	279	124283	9.72 ppm	97
99) Dibenz[a,h]anthracene	18.379	278	152331	9.66 ppm	98
100) 7,12-Dimethylbenz(a)an...	16.143	256	70590	9.98 ppm	96
101) Benzo[g,h,i]perylene	18.812	276	149337	9.43 ppm	98

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

7.6.6

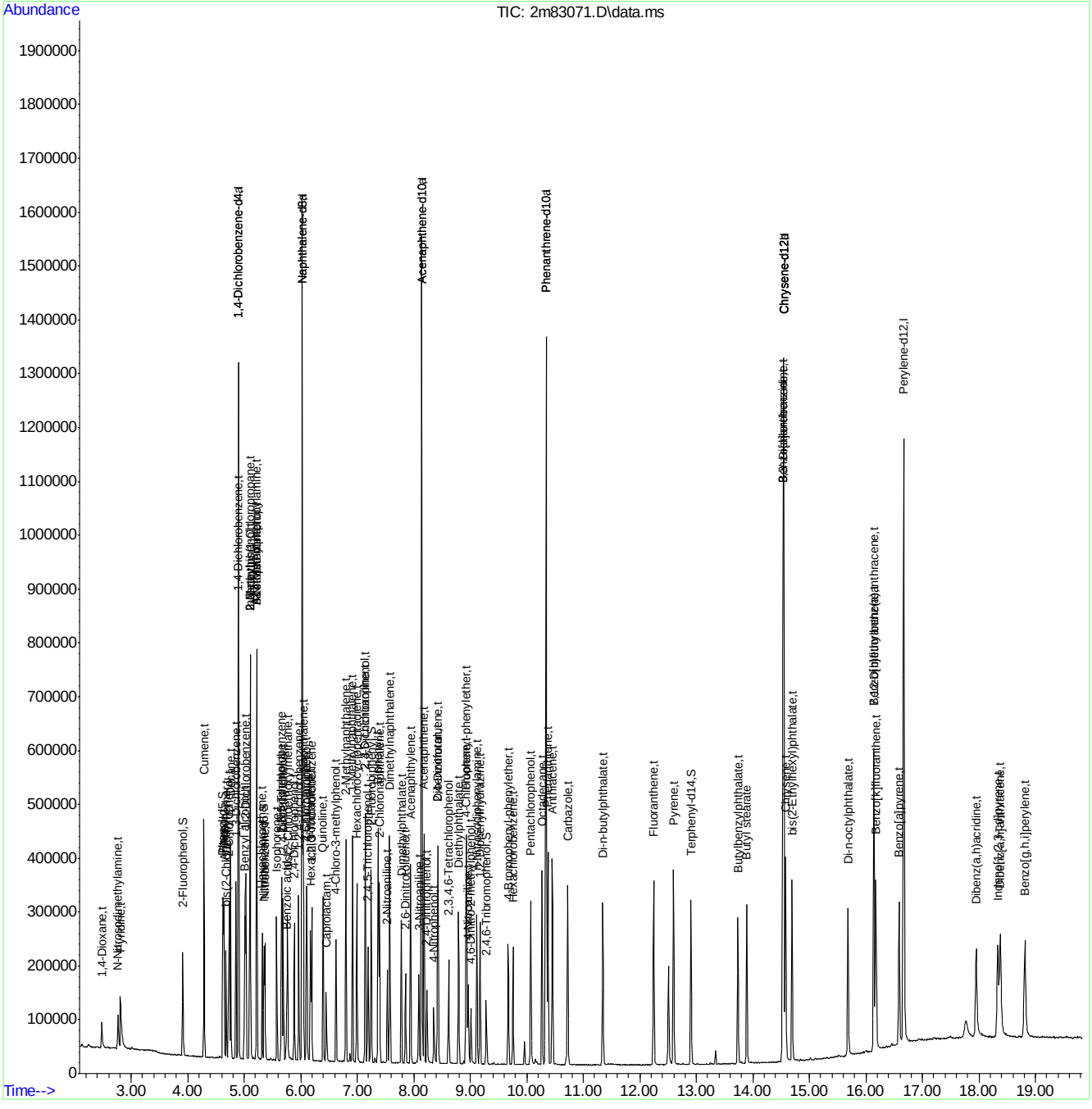
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83071.D
Acq On : 15 Apr 2016 11:27 am
Operator : ashleyn
Sample : ic3649-10
Misc : op92470,e2m3649
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 12:19:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:31:27 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83072.D
Acq On : 15 Apr 2016 11:53 am
Operator : ashleyn
Sample : ic3649-5
Misc : op92470,e2m3649
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 12:21:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:20:06 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	178589	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	698844	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	403450	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	608010	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	523167	40.00 ppm	-0.01
92) Perylene-d12	16.673	264	514485	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	178589	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	403450	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	523167	40.00 ppm	-0.01
109) Phenanthrene-d10a	10.340	188	608010	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	698844	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	523167	40.00 ppm	-0.01

System Monitoring Compounds					
5) 2-Fluorophenol	3.911	112	34884	5.22 ppm	0.00
Spiked Amount 50.000			Recovery	= 10.44%	
8) Phenol-d5	4.617	99	45228	5.41 ppm	0.01
Spiked Amount 50.000			Recovery	= 10.82%	
25) Nitrobenzene-d5	5.349	82	35665	5.48 ppm	0.00
Spiked Amount 50.000			Recovery	= 10.96%	
51) 2-Fluorobiphenyl	7.243	172	72665	5.72 ppm	-0.02
Spiked Amount 50.000			Recovery	= 11.44%	
73) 2,4,6-Tribromophenol	9.281	330	8069	5.20 ppm	-0.02
Spiked Amount 50.000			Recovery	= 10.40%	
85) Terphenyl-d14	12.902	244	59793	5.36 ppm	-0.02
Spiked Amount 50.000			Recovery	= 10.72%	
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	

Target Compounds					Qvalue
2) 1,4-Dioxane	2.477	88	15797	5.29 ppm	94
3) Pyridine	2.814	79	39149	5.35 ppm	94
4) N-Nitrosodimethylamine	2.766	74	22857	5.18 ppm	98
6) Indene	5.103	116	64898	5.94 ppm	98
7) Cumene	4.290	105	89714	5.57 ppm	99
9) Phenol	4.627	94	51299	5.53 ppm	83
10) Aniline	4.643	93	57747	5.96 ppm	99
11) bis(2-Chloroethyl)ether	4.681	93	36526	5.49 ppm	97
12) 2-Chlorophenol	4.740	128	39036	5.59 ppm	99
13) Decane	4.761	43	30743	5.75 ppm	93
14) 1,3-Dichlorobenzene	4.852	146	42586	5.58 ppm	98
15) 1,4-Dichlorobenzene	4.906	146	43551	5.68 ppm	99
16) Benzyl alcohol	5.007	108	23617	5.47 ppm	98
17) 1,2-Dichlorobenzene	5.034	146	41103	5.78 ppm	99
18) Acetophenone	5.221	105	50361	5.88 ppm	83
19) 2-Methylphenol	5.098	108	34448	5.84 ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.109	45	40518	5.94 ppm	92
21) 3&4-Methylphenol	5.221	108	37062	5.99 ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83072.D
Acq On : 15 Apr 2016 11:53 am
Operator : ashleyn
Sample : ic3649-5
Misc : op92470,e2m3649
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 12:21:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:20:06 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.216	70	24262	5.73	ppm		94
23) Hexachloroethane	5.317	201	11792	5.57	ppm		98
26) Nitrobenzene	5.366	77	36619	5.55	ppm		96
27) Quinoline	6.392	129	73166	5.49	ppm		99
28) Isophorone	5.574	82	62634	5.43	ppm		99
29) 2-Nitrophenol	5.654	139	18479	5.37	ppm		93
30) 2,4-Dimethylphenol	5.686	107	34386	5.54	ppm		95
31) Benzoic acid	5.751	105	21055	4.48	ppm		98
32) bis(2-Chloroethoxy)met...	5.767	93	41368	5.66	ppm		99
33) 2,4-Dichlorophenol	5.884	162	28154	5.52	ppm		99
34) 2,6-Dichlorophenol	6.109	162	28425	5.71	ppm		100
35) 1,3,5-Trichlorobenzene	5.665	180	32491	5.84	ppm		99
36) 1,2,4-Trichlorobenzene	5.965	180	30501	5.66	ppm		97
37) 1,2,3-Trichlorobenzene	6.195	180	29971	5.77	ppm		98
38) Naphthalene	6.045	128	117051	5.79	ppm		100
39) 4-Chloroaniline	6.098	127	46137	6.10	ppm		98
40) 2,3-Dichloroaniline	7.141	161	35369	5.82	ppm		99
41) Caprolactam	6.446	55	12389	5.17	ppm		92
42) Hexachlorobutadiene	6.173	225	14195	5.79	ppm		96
43) 4-Chloro-3-methylphenol	6.622	107	28594	5.29	ppm		99
44) 2-Methylnaphthalene	6.799	141	60419	5.67	ppm		98
45) 1-Methylnaphthalene	6.917	141	63122	5.69	ppm		99
46) Dimethylnaphthalene	7.574	156	63990	5.75	ppm		96
48) Hexachlorocyclopentadiene	6.997	237	28493	11.12	ppm		98
49) 2,4,6-Trichlorophenol	7.147	196	17336	5.49	ppm		98
50) 2,4,5-Trichlorophenol	7.189	196	18687	5.48	ppm		100
52) 2-Chloronaphthalene	7.398	162	65422	5.69	ppm		96
53) Biphenyl	7.371	154	88997	5.88	ppm		99
54) 2-Nitroaniline	7.532	65	16203	5.19	ppm		95
55) Dimethylphthalate	7.783	163	71372	5.59	ppm		99
56) Acenaphthylene	7.944	152	105613	5.68	ppm		100
57) 2,6-Dinitrotoluene	7.853	165	14620	5.39	ppm		96
58) 3-Nitroaniline	8.088	138	17940	5.36	ppm		97
59) Acenaphthene	8.184	153	67445	5.72	ppm		100
60) 2,4-Dinitrophenol	8.238	184	10767	8.33	ppm	#	71
61) 4-Nitrophenol	8.355	109	7876	5.09	ppm		95
62) Dibenzofuran	8.430	168	90785	5.82	ppm		97
63) 2,4-Dinitrotoluene	8.420	165	20488	5.62	ppm		87
64) 2,3,4,6-Tetrachlorophenol	8.617	232	12996	5.30	ppm		95
65) Diethylphthalate	8.794	149	67471	5.50	ppm		98
66) Fluorene	8.922	166	73818	5.77	ppm		100
67) 4-Chlorophenyl-phenyle...	8.938	204	30931	5.91	ppm		98
68) 4-Nitroaniline	8.965	138	17643	5.28	ppm		94
70) 4,6-Dinitro-2-methylph...	9.013	198	8665	4.74	ppm		100
71) n-Nitrosodiphenylamine	9.115	169	48338	5.68	ppm		96
72) 1,2-Diphenylhydrazine	9.174	77	69170	5.67	ppm		95
74) 4-Bromophenyl-phenylether	9.671	248	16826	5.73	ppm		99
75) Hexachlorobenzene	9.757	284	19482	5.78	ppm		91
76) Pentachlorophenol	10.067	266	20272	10.33	ppm		98
77) Phenanthrene	10.372	178	105967	5.78	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83072.D
Acq On : 15 Apr 2016 11:53 am
Operator : ashleyn
Sample : ic3649-5
Misc : op92470,e2m3649
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 12:21:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:20:06 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.452	178	103215	5.75 ppm	98
79) Carbazole	10.725	167	93917	5.66 ppm	98
80) Di-n-butylphthalate	11.345	149	104122	5.17 ppm	99
81) Fluoranthene	12.244	202	92112	5.53 ppm	98
82) Octadecane	10.270	57	40436	5.59 ppm	96
84) Pyrene	12.597	202	100085	5.52 ppm	99
86) Butylbenzylphthalate	13.731	149	43626	4.77 ppm	99
87) Butyl stearate	13.891	56	24475	4.83 ppm	97
88) Benzo[a]anthracene	14.528	228	84844	5.42 ppm	99
89) 3,3'-Dichlorobenzidine	14.528	252	29704	5.35 ppm	99
90) Chrysene	14.581	228	88501	5.50 ppm	100
91) bis(2-Ethylhexyl)phtha...	14.694	149	60031	4.87 ppm	99
93) Di-n-octylphthalate	15.683	149	94982	4.79 ppm	99
94) Benzo[b]fluoranthene	16.138	252	89067	5.54 ppm	97
95) Benzo[k]fluoranthene	16.175	252	89496	5.68 ppm	99
96) Benzo[a]pyrene	16.587	252	76257	5.35 ppm	98
97) Indeno[1,2,3-cd]pyrene	18.331	276	68246	4.97 ppm	96
98) Dibenz(a,h)acridine	17.951	279	66967	5.32 ppm	97
99) Dibenz[a,h]anthracene	18.379	278	82185	5.30 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.138	256	39274	5.61 ppm	96
101) Benzo[g,h,i]perylene	18.812	276	82544	5.32 ppm	99

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

7.6.7

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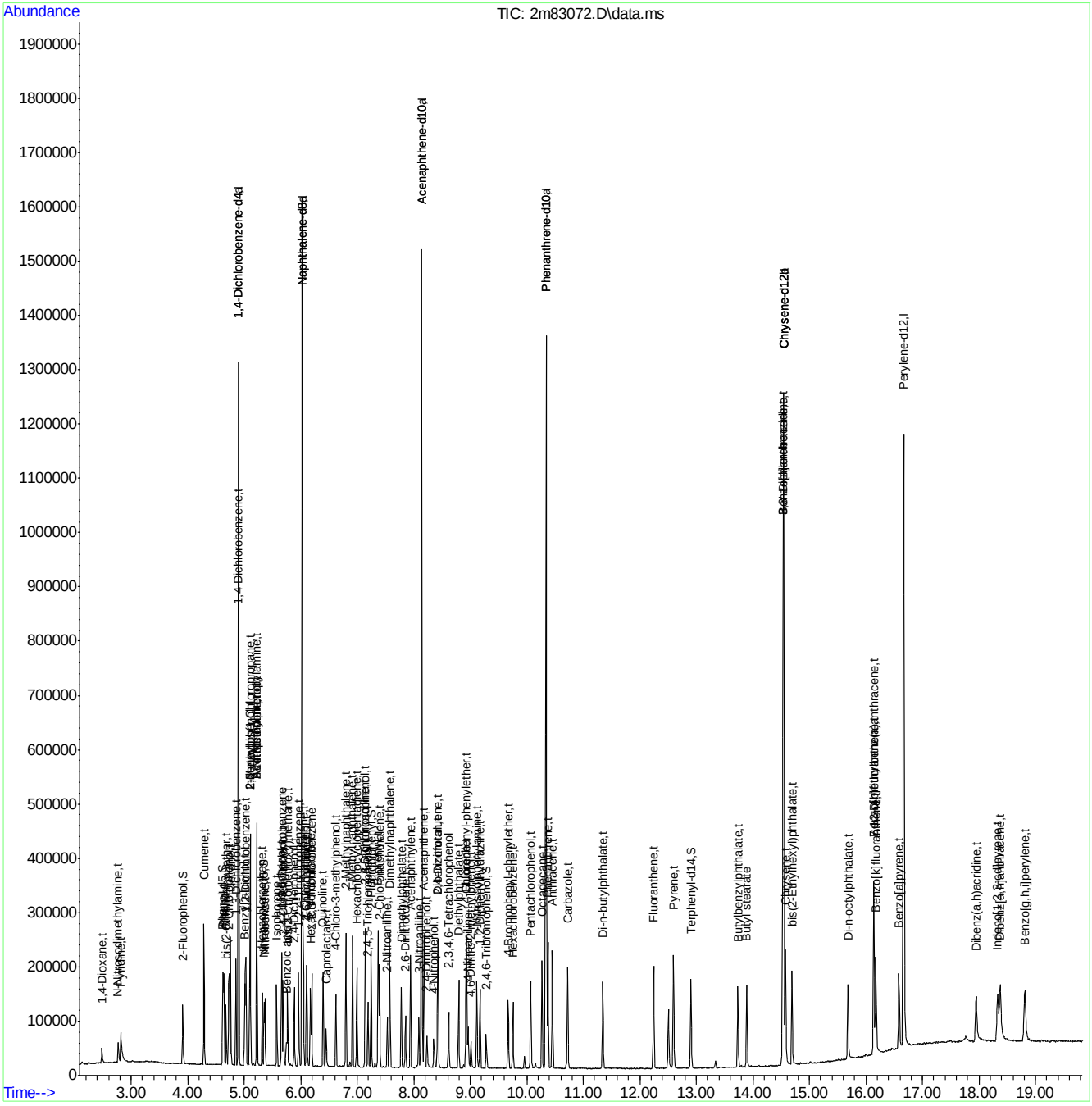
SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83072.D
Acq On : 15 Apr 2016 11:53 am
Operator : ashleyn
Sample : ic3649-5
Misc : op92470,e2m3649
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 12:21:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:20:06 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83073.D
Acq On : 15 Apr 2016 12:19 pm
Operator : ashleyn
Sample : icc3649-50
Misc : op92470,e2m3649
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 12:41:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:27:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	170345	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	678216	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	396153	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	600031	40.00 ppm	0.00
83) Chrysene-d12	14.549	240	499079	40.00 ppm	0.00
92) Perylene-d12	16.672	264	518892	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	170345	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	396153	40.00 ppm	0.00
106) Chrysene-d12a	14.549	240	499079	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	600031	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	678216	40.00 ppm	0.00
114) Chrysene-d12b	14.549	240	499079	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	3.911	112	311194	48.52 ppm	0.00
Spiked Amount 50.000			Recovery = 97.04%		
8) Phenol-d5	4.622	99	385248	47.76 ppm	0.02
Spiked Amount 50.000			Recovery = 95.52%		
25) Nitrobenzene-d5	5.355	82	301534	47.11 ppm	0.00
Spiked Amount 50.000			Recovery = 94.22%		
51) 2-Fluorobiphenyl	7.248	172	574097	45.11 ppm	-0.01
Spiked Amount 50.000			Recovery = 90.22%		
73) 2,4,6-Tribromophenol	9.286	330	78833	51.18 ppm	-0.01
Spiked Amount 50.000			Recovery = 102.36%		
85) Terphenyl-d14	12.907	244	522697	48.60 ppm	-0.02
Spiked Amount 50.000			Recovery = 97.20%		
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds					Qvalue
2) 1,4-Dioxane	2.472	88	134074	46.70 ppm	99
3) Pyridine	2.803	79	338658	48.01 ppm	96
4) N-Nitrosodimethylamine	2.755	74	204217	48.28 ppm	95
6) Indene	5.103	116	460624	43.07 ppm	98
7) Cumene	4.290	105	726855	46.52 ppm	100
9) Phenol	4.633	94	420782	46.85 ppm	84
10) Aniline	4.643	93	405193	42.69 ppm	90
11) bis(2-Chloroethyl)ether	4.686	93	307411	47.79 ppm	98
12) 2-Chlorophenol	4.740	128	313869	46.34 ppm	96
13) Decane	4.761	43	229584	44.09 ppm	96
14) 1,3-Dichlorobenzene	4.852	146	341001	46.07 ppm	99
15) 1,4-Dichlorobenzene	4.911	146	341137	45.77 ppm	99
16) Benzyl alcohol	5.007	108	199462	47.78 ppm	96
17) 1,2-Dichlorobenzene	5.034	146	310728	44.78 ppm	98
18) Acetophenone	5.221	105	368250	43.97 ppm	83
19) 2-Methylphenol	5.103	108	255062	44.27 ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.109	45	281072	42.07 ppm	84
21) 3&4-Methylphenol	5.226	108	266479	43.89 ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83073.D
Acq On : 15 Apr 2016 12:19 pm
Operator : ashleyn
Sample : icc3649-50
Misc : op92470,e2m3649
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 12:41:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:27:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.221	70	183780	44.57	ppm		94
23) Hexachloroethane	5.317	201	96201	46.87	ppm		97
26) Nitrobenzene	5.371	77	304729	46.87	ppm		99
27) Quinoline	6.403	129	620434	47.33	ppm		99
28) Isophorone	5.579	82	540561	47.68	ppm		99
29) 2-Nitrophenol	5.654	139	166953	49.48	ppm		92
30) 2,4-Dimethylphenol	5.692	107	284560	46.54	ppm		99
31) Benzoic acid	5.804	105	251284	55.97	ppm		97
32) bis(2-Chloroethoxy)met...	5.772	93	331615	45.90	ppm		99
33) 2,4-Dichlorophenol	5.890	162	240727	47.93	ppm		99
34) 2,6-Dichlorophenol	6.114	162	228762	46.42	ppm		99
35) 1,3,5-Trichlorobenzene	5.665	180	249975	45.21	ppm		99
36) 1,2,4-Trichlorobenzene	5.970	180	246884	46.34	ppm		100
37) 1,2,3-Trichlorobenzene	6.194	180	237665	46.14	ppm		99
38) Naphthalene	6.050	128	910836	45.38	ppm		100
39) 4-Chloroaniline	6.098	127	334974	44.22	ppm		96
40) 2,3-Dichloroaniline	7.141	161	274322	45.43	ppm		98
41) Caprolactam	6.483	55	116762	49.93	ppm		96
42) Hexachlorobutadiene	6.173	225	112823	46.36	ppm		97
43) 4-Chloro-3-methylphenol	6.633	107	258445	48.83	ppm		98
44) 2-Methylnaphthalene	6.799	141	488195	46.32	ppm		99
45) 1-Methylnaphthalene	6.917	141	503254	45.82	ppm		99
46) Dimethylnaphthalene	7.580	156	505729	45.81	ppm		100
48) Hexachlorocyclopentadiene	6.997	237	257735	100.83	ppm		98
49) 2,4,6-Trichlorophenol	7.147	196	146740	46.67	ppm		99
50) 2,4,5-Trichlorophenol	7.200	196	165851	48.89	ppm		99
52) 2-Chloronaphthalene	7.398	162	527202	45.80	ppm		100
53) Biphenyl	7.377	154	687550	45.10	ppm		99
54) 2-Nitroaniline	7.537	65	153035	49.65	ppm		98
55) Dimethylphthalate	7.788	163	600173	47.10	ppm		99
56) Acenaphthylene	7.949	152	884895	47.52	ppm		99
57) 2,6-Dinitrotoluene	7.863	165	140799	52.27	ppm		98
58) 3-Nitroaniline	8.099	138	170489	51.35	ppm		97
59) Acenaphthene	8.190	153	537593	45.46	ppm		99
60) 2,4-Dinitrophenol	8.243	184	157818	127.39	ppm	#	80
61) 4-Nitrophenol	8.366	109	79465	52.16	ppm		96
62) Dibenzofuran	8.436	168	702810	44.85	ppm		98
63) 2,4-Dinitrotoluene	8.425	165	188799	51.84	ppm		86
64) 2,3,4,6-Tetrachlorophenol	8.623	232	121429	49.99	ppm		93
65) Diethylphthalate	8.799	149	589147	48.19	ppm		99
66) Fluorene	8.928	166	589277	45.93	ppm		99
67) 4-Chlorophenyl-phenyle...	8.944	204	242629	46.00	ppm		97
68) 4-Nitroaniline	8.981	138	173696	52.52	ppm		98
70) 4,6-Dinitro-2-methylph...	9.024	198	110521	61.76	ppm		93
71) n-Nitrosodiphenylamine	9.126	169	408378	47.70	ppm		99
72) 1,2-Diphenylhydrazine	9.179	77	596024	48.55	ppm		98
74) 4-Bromophenyl-phenylether	9.676	248	142331	48.12	ppm		99
75) Hexachlorobenzene	9.762	284	159351	46.84	ppm		93
76) Pentachlorophenol	10.072	266	202286	104.00	ppm		99
77) Phenanthrene	10.377	178	843868	45.64	ppm		100

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83073.D
Acq On : 15 Apr 2016 12:19 pm
Operator : ashleyn
Sample : icc3649-50
Misc : op92470,e2m3649
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 12:41:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:27:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.457	178	859230	47.52 ppm	100
79) Carbazole	10.730	167	793838	47.59 ppm	99
80) Di-n-butylphthalate	11.345	149	994294	49.77 ppm	100
81) Fluoranthene	12.254	202	796796	47.74 ppm	97
82) Octadecane	10.270	57	354946	48.87 ppm	97
84) Pyrene	12.602	202	837638	47.70 ppm	99
86) Butylbenzylphthalate	13.736	149	442236	50.99 ppm	99
87) Butyl stearate	13.897	56	251158	52.22 ppm	95
88) Benzo[a]anthracene	14.533	228	701905	46.47 ppm	100
89) 3,3'-Dichlorobenzidine	14.533	252	266954	49.87 ppm	98
90) Chrysene	14.592	228	736444	47.33 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.693	149	607695	51.91 ppm	98
93) Di-n-octylphthalate	15.683	149	1052743	53.00 ppm	100
94) Benzo[b]fluoranthene	16.148	252	768296	46.70 ppm	97
95) Benzo[k]fluoranthene	16.191	252	771942	47.63 ppm	96
96) Benzo[a]pyrene	16.592	252	715440	49.28 ppm	99
97) Indeno[1,2,3-cd]pyrene	18.352	276	730596	52.76 ppm	94
98) Dibenz(a,h)acridine	17.961	279	669350	52.24 ppm	99
99) Dibenz[a,h]anthracene	18.395	278	787668	49.93 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.154	256	339949	47.35 ppm	100
101) Benzo[g,h,i]perylene	18.833	276	779813	49.38 ppm	99

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

7.6.8

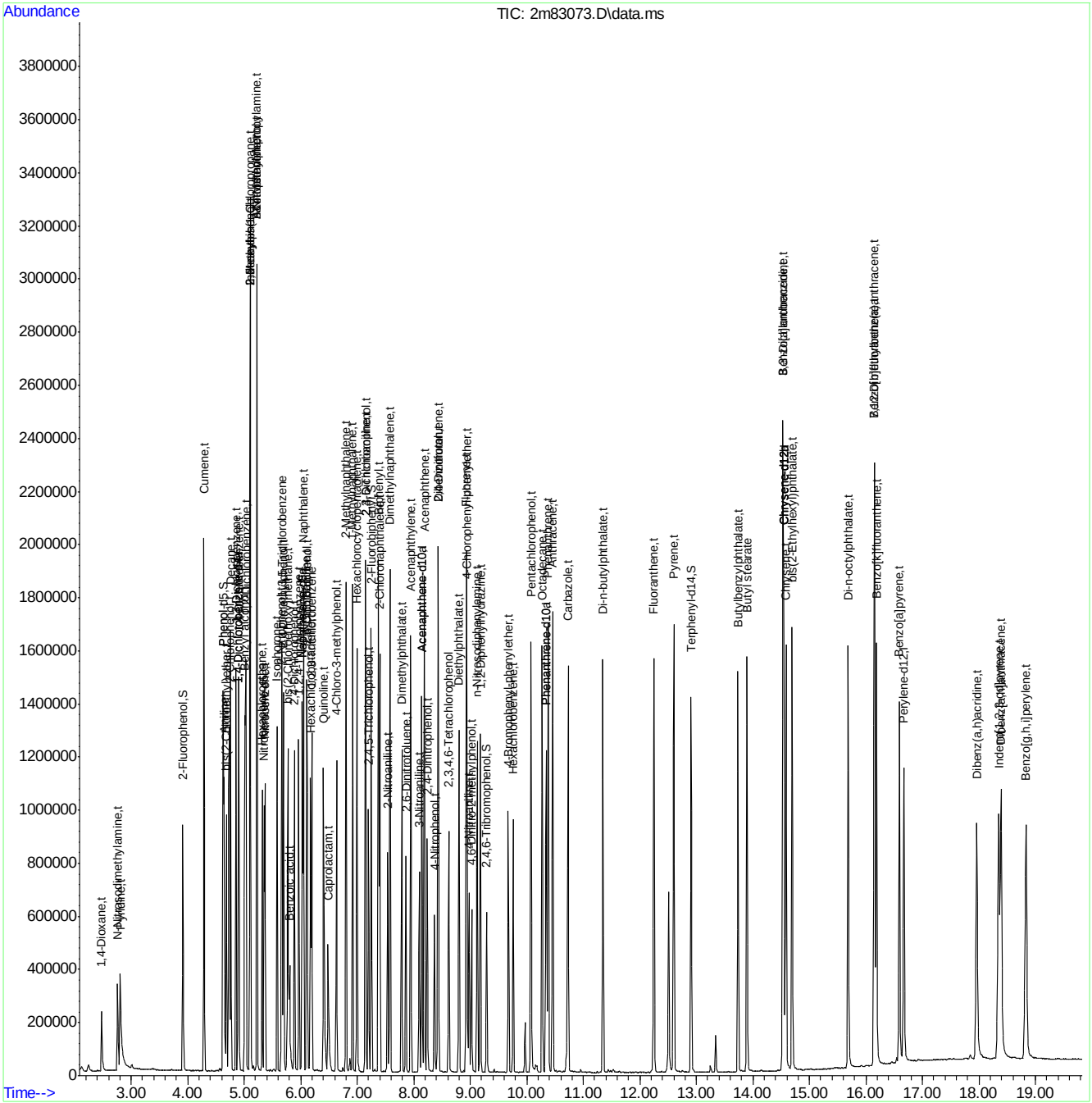
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83073.D
Acq On : 15 Apr 2016 12:19 pm
Operator : ashleyn
Sample : icc3649-50
Misc : op92470,e2m3649
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 12:41:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:27:24 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83091.D
Acq On : 15 Apr 2016 3:22 pm
Operator : ashleyn
Sample : ic3651-100
Misc : op92470,e2m3651
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 17:37:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	186989	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	748605	40.00	ppm	0.00
47) Acenaphthene-d10	8.141	164	377121	40.00	ppm	0.00
69) Phenanthrene-d10	10.339	188	626732	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	545568	40.00	ppm	0.00
92) Perylene-d12	16.672	264	582007	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	186989	40.00	ppm	0.00
104) Acenaphthene-d10a	8.141	164	377121	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	545568	40.00	ppm	0.00
109) Phenanthrene-d10a	10.339	188	626732	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	748605	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	545568	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	12.179	57	426138	100.00	ppm	0.09
Spiked Amount 50.000			Recovery	=	200.00%	
111) o-terphenyl	10.987	230	665759	100.00	ppm	-0.11
Spiked Amount 50.000			Recovery	=	200.00%	

Target Compounds						Qvalue
103) Benzaldehyde	4.558	105	354875	100.00	ppm	86
105) 1,2,4,5-Tetrachloroben...	7.002	216	387792	100.00	ppm	99
107) Benzidine	12.511	184	644696	100.00	ppm	99
110) Atrazine	9.976	215	146113	100.00	ppm	90
113) Hydroquinone	6.467	110	630480	100.00	ppm	78

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

7.6.9

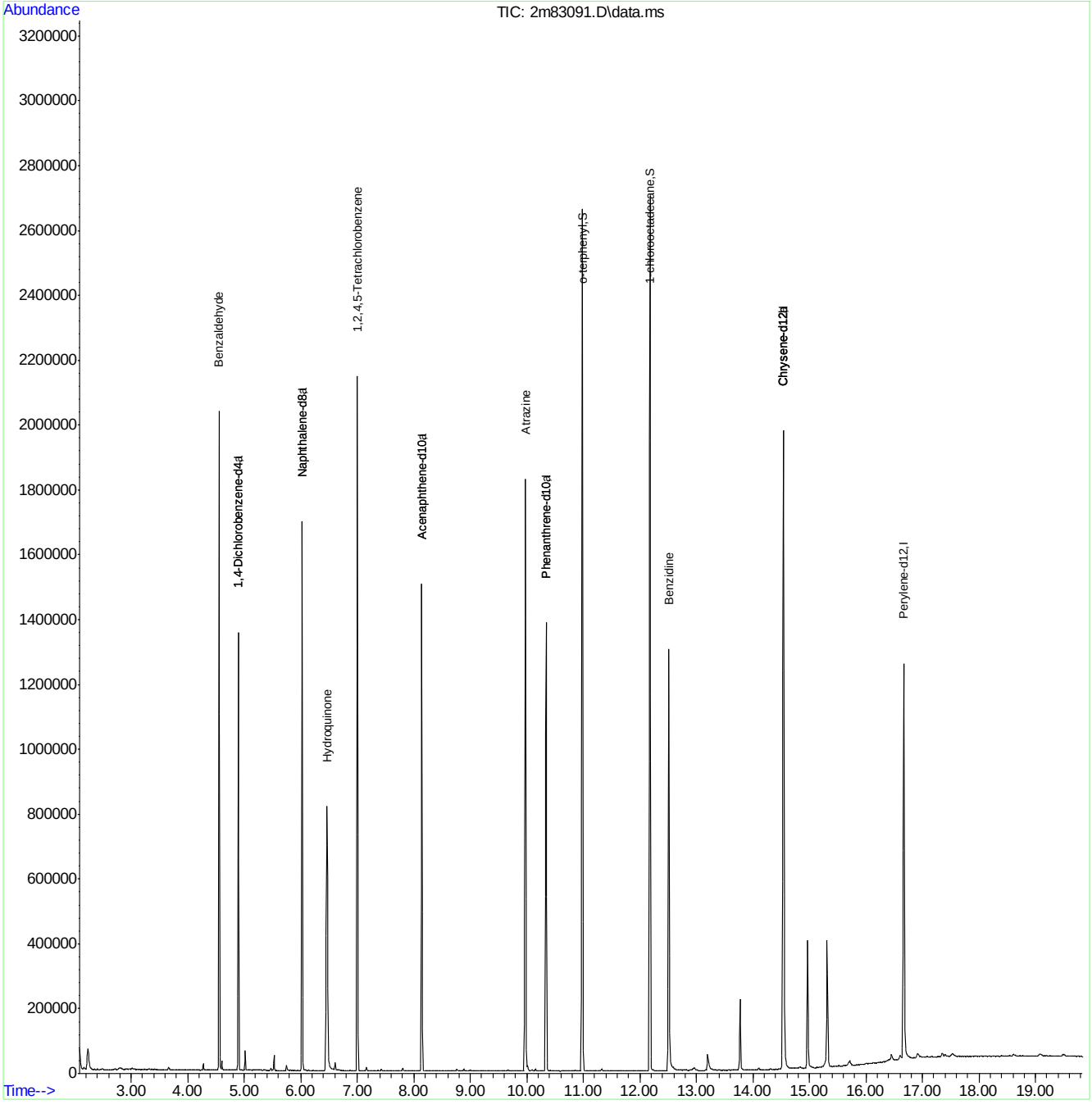
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83091.D
Acq On : 15 Apr 2016 3:22 pm
Operator : ashleyn
Sample : ic3651-100
Misc : op92470,e2m3651
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 17:37:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83092.D
Acq On : 15 Apr 2016 3:48 pm
Operator : ashleyn
Sample : ic3651-80
Misc : op92470,e2m3651
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 17:38:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	182816	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	740046	40.00	ppm	0.00
47) Acenaphthene-d10	8.142	164	376350	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	630998	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	556066	40.00	ppm	0.00
92) Perylene-d12	16.673	264	591495	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	182816	40.00	ppm	0.00
104) Acenaphthene-d10a	8.142	164	376350	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	556066	40.00	ppm	0.00
109) Phenanthrene-d10a	10.340	188	630998	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	740046	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	556066	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	12.180	57	361093	83.14	ppm	0.09
Spiked Amount 50.000			Recovery	=	166.28%	
111) o-terphenyl	10.987	230	559813	83.52	ppm	-0.11
Spiked Amount 50.000			Recovery	=	167.04%	

Target Compounds							Qvalue
103) Benzaldehyde	4.558	105	336826	97.08	ppm		87
105) 1,2,4,5-Tetrachloroben...	7.002	216	320939	82.93	ppm		99
107) Benzidine	12.511	184	555589	84.55	ppm		99
110) Atrazine	9.976	215	119212	81.04	ppm	#	91
113) Hydroquinone	6.457	110	505083	81.04	ppm		78

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

7.6.10

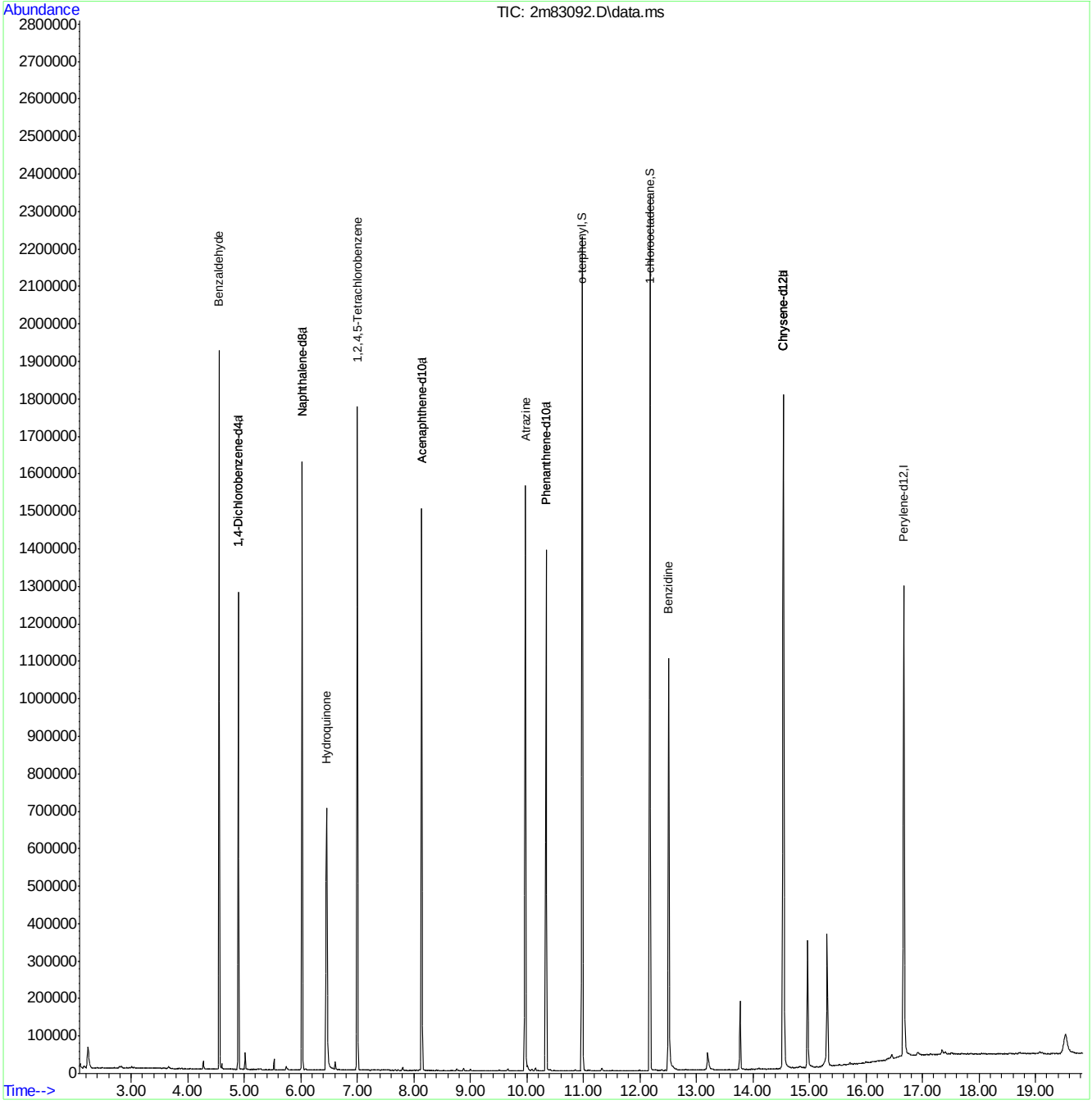
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83092.D
Acq On : 15 Apr 2016 3:48 pm
Operator : ashleyn
Sample : ic3651-80
Misc : op92470,e2m3651
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 17:38:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83093.D
Acq On : 15 Apr 2016 4:15 pm
Operator : ashleyn
Sample : icc3651-50
Misc : op92470,e2m3651
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 17:39:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	188287	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	754554	40.00	ppm	0.00
47) Acenaphthene-d10	8.142	164	383524	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	647808	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	583172	40.00	ppm	0.00
92) Perylene-d12	16.673	264	612562	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	188287	40.00	ppm	0.00
104) Acenaphthene-d10a	8.142	164	383524	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	583172	40.00	ppm	0.00
109) Phenanthrene-d10a	10.340	188	647808	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	754554	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	583172	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	12.180	57	244421	53.66	ppm	0.09
Spiked Amount 50.000			Recovery	=	107.32%	
111) o-terphenyl	10.982	230	379419	55.14	ppm	-0.11
Spiked Amount 50.000			Recovery	=	110.28%	

Target Compounds							Qvalue
103) Benzaldehyde	4.558	105	248745	69.61	ppm		86
105) 1,2,4,5-Tetrachloroben...	7.002	216	216044	54.78	ppm		99
107) Benzidine	12.506	184	427451	62.03	ppm		98
110) Atrazine	9.971	215	77837	51.54	ppm	#	90
113) Hydroquinone	6.451	110	316542	49.81	ppm		78

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

7.6.11

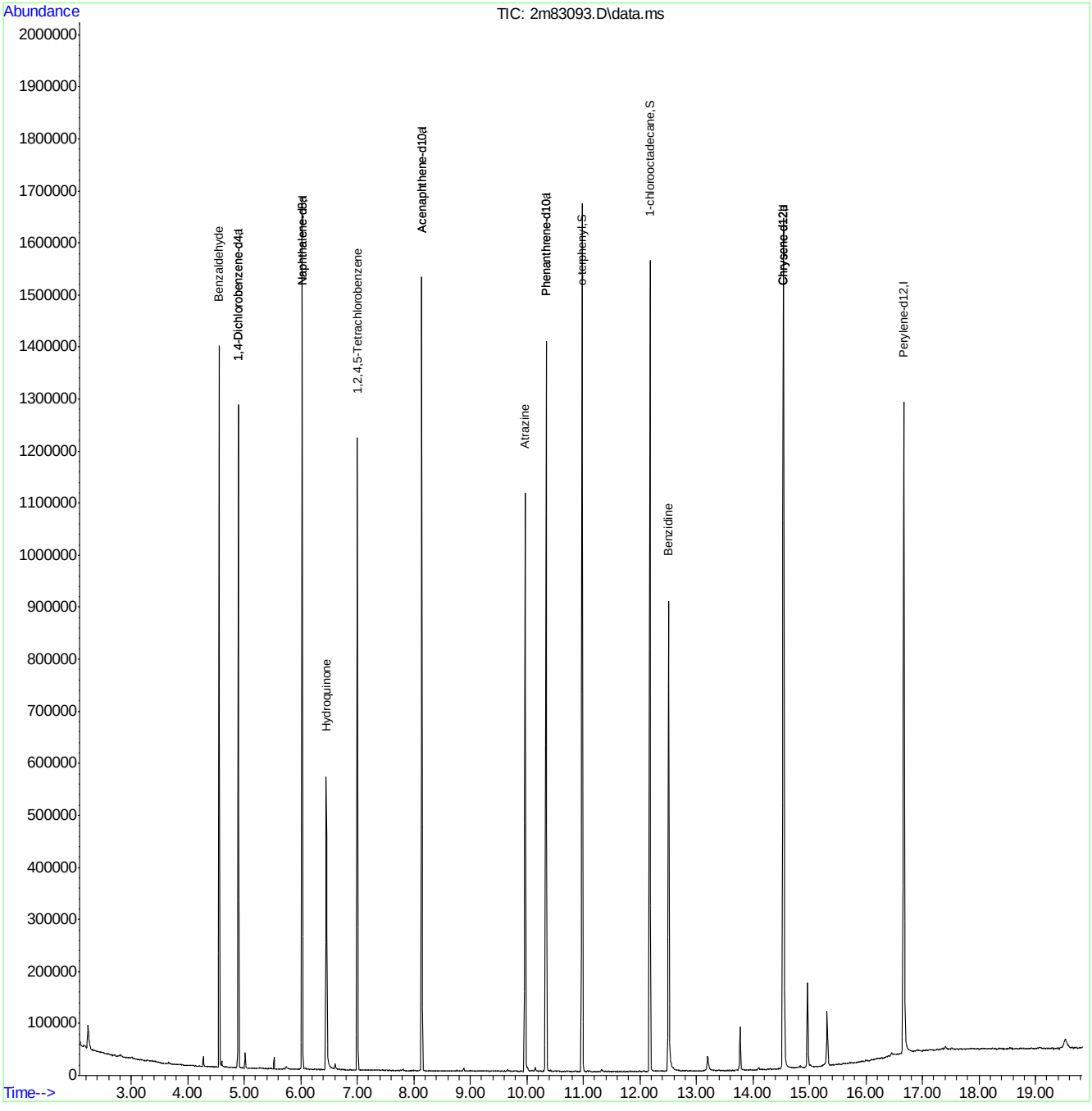
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83093.D
Acq On : 15 Apr 2016 4:15 pm
Operator : ashleyn
Sample : icc3651-50
Misc : op92470,e2m3651
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 17:39:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83094.D
Acq On : 15 Apr 2016 4:47 pm
Operator : ashleyn
Sample : ic3651-10
Misc : op92470,e2m3651
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 17:41:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	196901	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	794673	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	409528	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	689324	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	627250	40.00 ppm	0.00
92) Perylene-d12	16.678	264	642620	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	196901	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	409528	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	627250	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	689324	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	794673	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	627250	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
108) 1-chlorooctadecane	12.180	57	49972	10.20 ppm	0.09
Spiked Amount 50.000			Recovery	= 20.40%	
111) o-terphenyl	10.981	230	86765	11.85 ppm	-0.11
Spiked Amount 50.000			Recovery	= 23.70%	

Target Compounds						Qvalue
103) Benzaldehyde	4.558	105	55905	14.96 ppm		86
105) 1,2,4,5-Tetrachloroben...	7.002	216	48987	11.63 ppm		99
107) Benzidine	12.506	184	83458	11.26 ppm		98
110) Atrazine	9.965	215	15898	9.89 ppm	#	81
113) Hydroquinone	6.446	110	55528	8.30 ppm		78

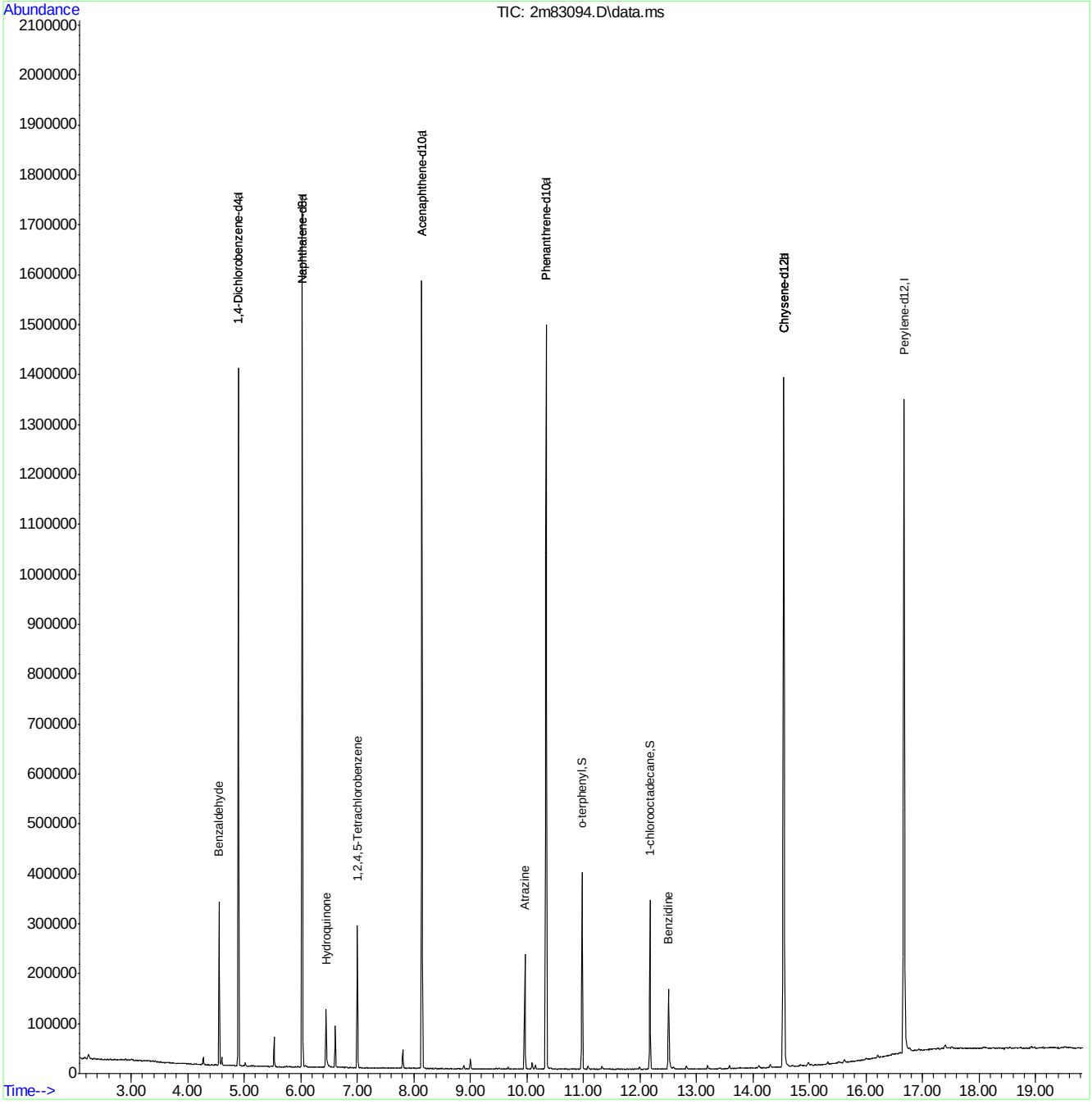
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83094.D
Acq On : 15 Apr 2016 4:47 pm
Operator : ashleyn
Sample : ic3651-10
Misc : op92470,e2m3651
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 17:41:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83095.D
Acq On : 15 Apr 2016 5:14 pm
Operator : ashleyn
Sample : ic3651-5
Misc : op92470,e2m3651
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 17:41:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	199913	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	806162	40.00	ppm	0.00
47) Acenaphthene-d10	8.141	164	410101	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	694277	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	625421	40.00	ppm	0.00
92) Perylene-d12	16.678	264	639829	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	199913	40.00	ppm	0.00
104) Acenaphthene-d10a	8.141	164	410101	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	625421	40.00	ppm	0.00
109) Phenanthrene-d10a	10.340	188	694277	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	806162	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	625421	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	12.174	57	25727	5.27	ppm	0.09
Spiked Amount 50.000			Recovery	=	10.54%	
111) o-terphenyl	10.976	230	47925	6.50	ppm	-0.12
Spiked Amount 50.000			Recovery	=	13.00%	

Target Compounds							Qvalue
103) Benzaldehyde	4.558	105	31073	8.19	ppm		87
105) 1,2,4,5-Tetrachloroben...	7.002	216	27980	6.63	ppm		99
107) Benzidine	12.506	184	40489	5.48	ppm		98
110) Atrazine	9.960	215	7726	4.77	ppm	#	87
113) Hydroquinone	6.446	110	21525	3.17	ppm		77

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

7.6.13

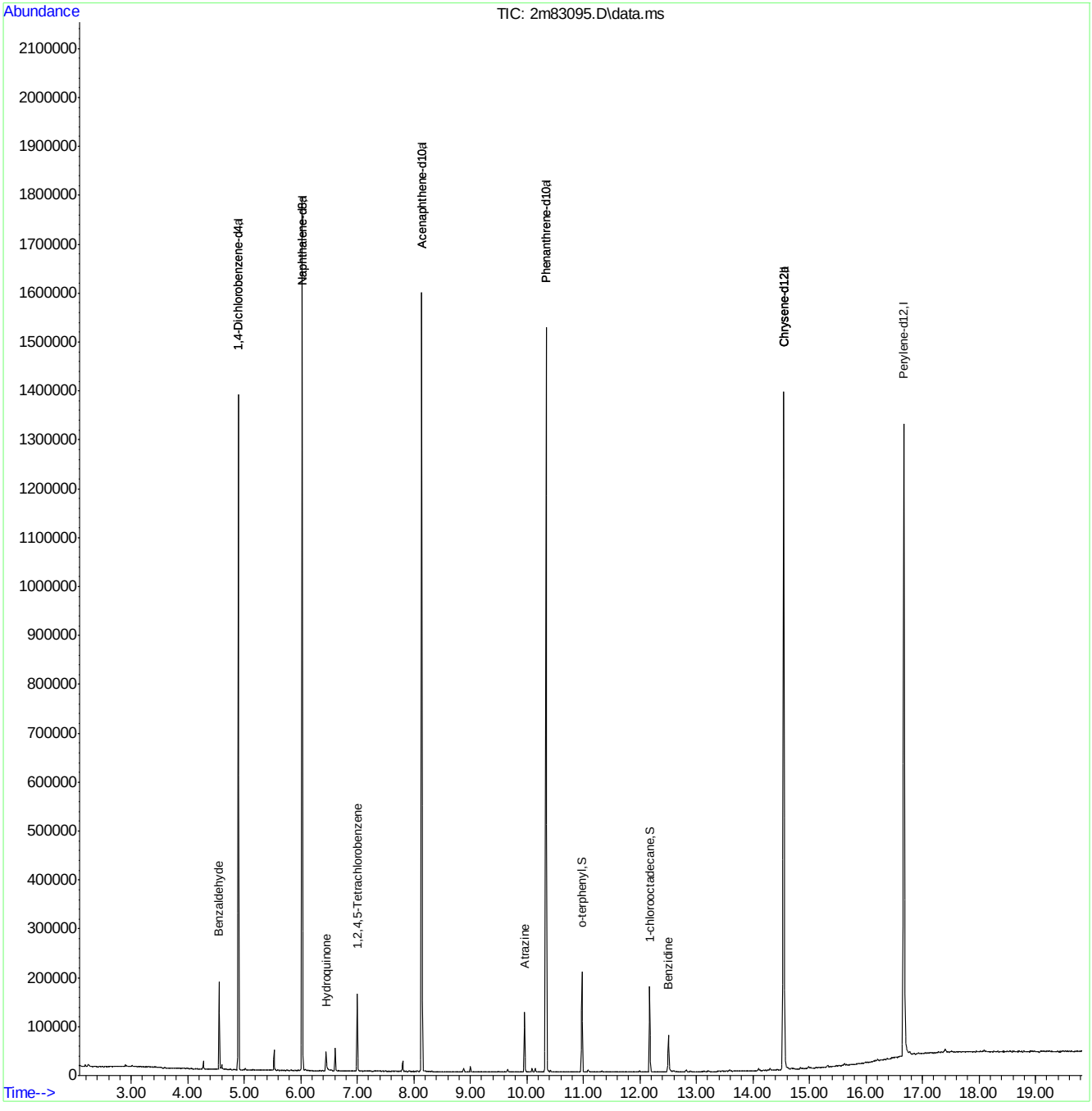
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83095.D
Acq On : 15 Apr 2016 5:14 pm
Operator : ashleyn
Sample : ic3651-5
Misc : op92470,e2m3651
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 17:41:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83096.D
Acq On : 15 Apr 2016 5:40 pm
Operator : ashleyn
Sample : ic3651-2
Misc : op92470,e2m3651
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 18 08:18:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:47:15 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	216514	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	876012	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	449853	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	751450	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	681999	40.00 ppm	0.00
92) Perylene-d12	16.678	264	698051	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	216514	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	449853	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	681999	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	751450	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	876012	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	681999	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
108) 1-chlorooctadecane	12.174	57	9590	1.74 ppm	0.00
Spiked Amount 50.000			Recovery	= 3.48%	
111) o-terphenyl	10.982	230	19850	2.21 ppm	0.00
Spiked Amount 50.000			Recovery	= 4.42%	

Target Compounds					Qvalue
103) Benzaldehyde	4.558	105	13368	2.41 ppm	96
105) 1,2,4,5-Tetrachloroben...	7.002	216	12170	2.34 ppm	98
107) Benzidine	12.501	184	12511	1.41 ppm	97
110) Atrazine	9.960	215	2865	1.64 ppm	95
113) Hydroquinone	6.451	110	5391	0.82 ppm	92

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

7.6.14

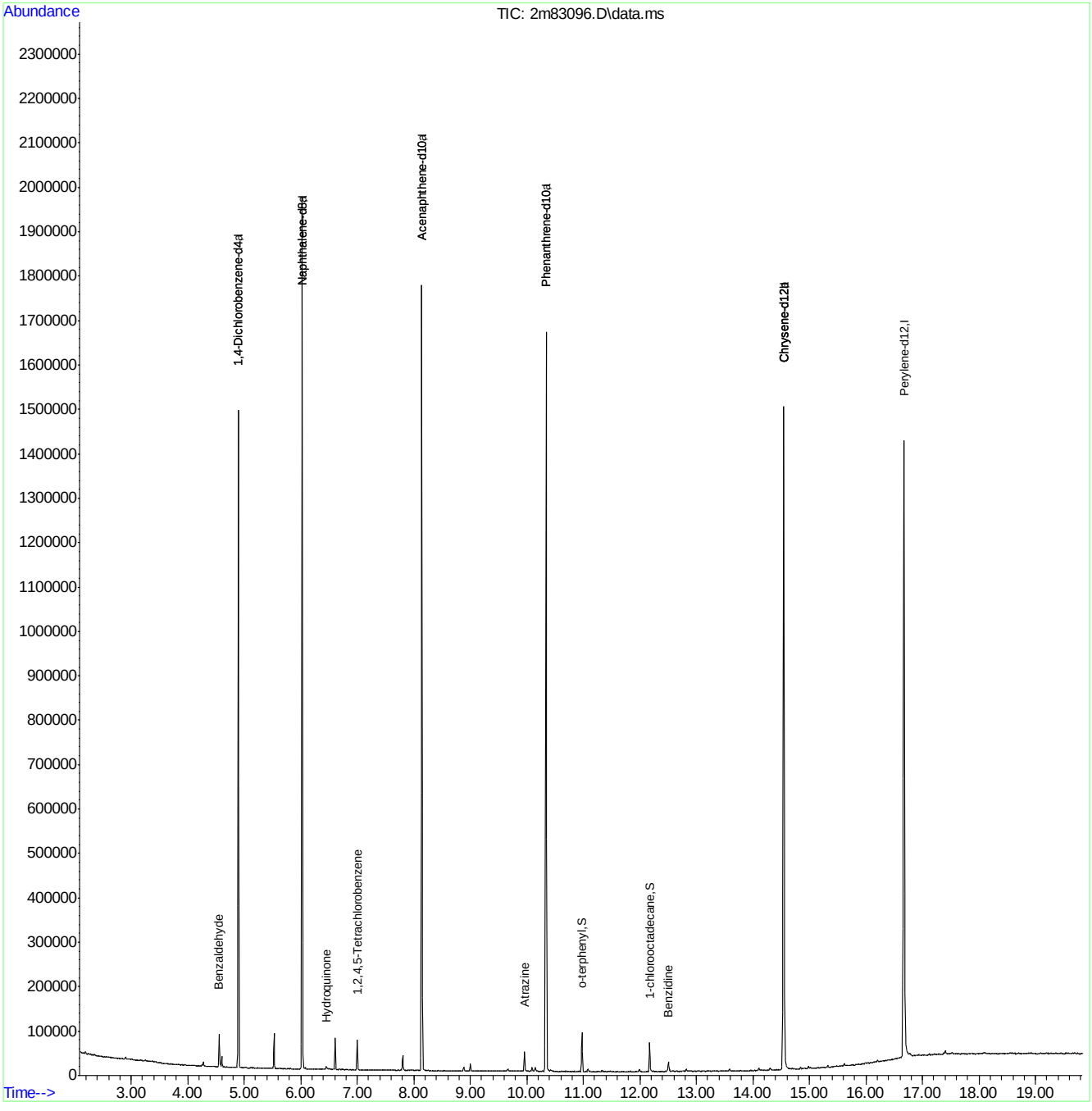
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83096.D
Acq On : 15 Apr 2016 5:40 pm
Operator : ashleyn
Sample : ic3651-2
Misc : op92470,e2m3651
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 18 08:18:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:47:15 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83097.D
Acq On : 15 Apr 2016 6:07 pm
Operator : ashleyn
Sample : ic3651-1
Misc : op92470,e2m3651
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 18 08:19:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:47:15 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	207905	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	835937	40.00	ppm	0.00
47) Acenaphthene-d10	8.141	164	427825	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	712464	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	644938	40.00	ppm	0.00
92) Perylene-d12	16.672	264	659772	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	207905	40.00	ppm	0.00
104) Acenaphthene-d10a	8.141	164	427825	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	644938	40.00	ppm	0.00
109) Phenanthrene-d10a	10.340	188	712464	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	835937	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	644938	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	12.174	57	4046	0.77	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.54%	
111) o-terphenyl	10.982	230	9382	1.10	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.20%	

Target Compounds							Qvalue
103) Benzaldehyde	4.563	105	6241	1.17	ppm		93
105) 1,2,4,5-Tetrachloroben...	7.002	216	6088	1.23	ppm		95
107) Benzidine	12.506	184	4646	0.55	ppm		95
110) Atrazine	9.960	215	1156	0.70	ppm	#	82
113) Hydroquinone	6.451	110	2319	0.37	ppm		90

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

7.6.15

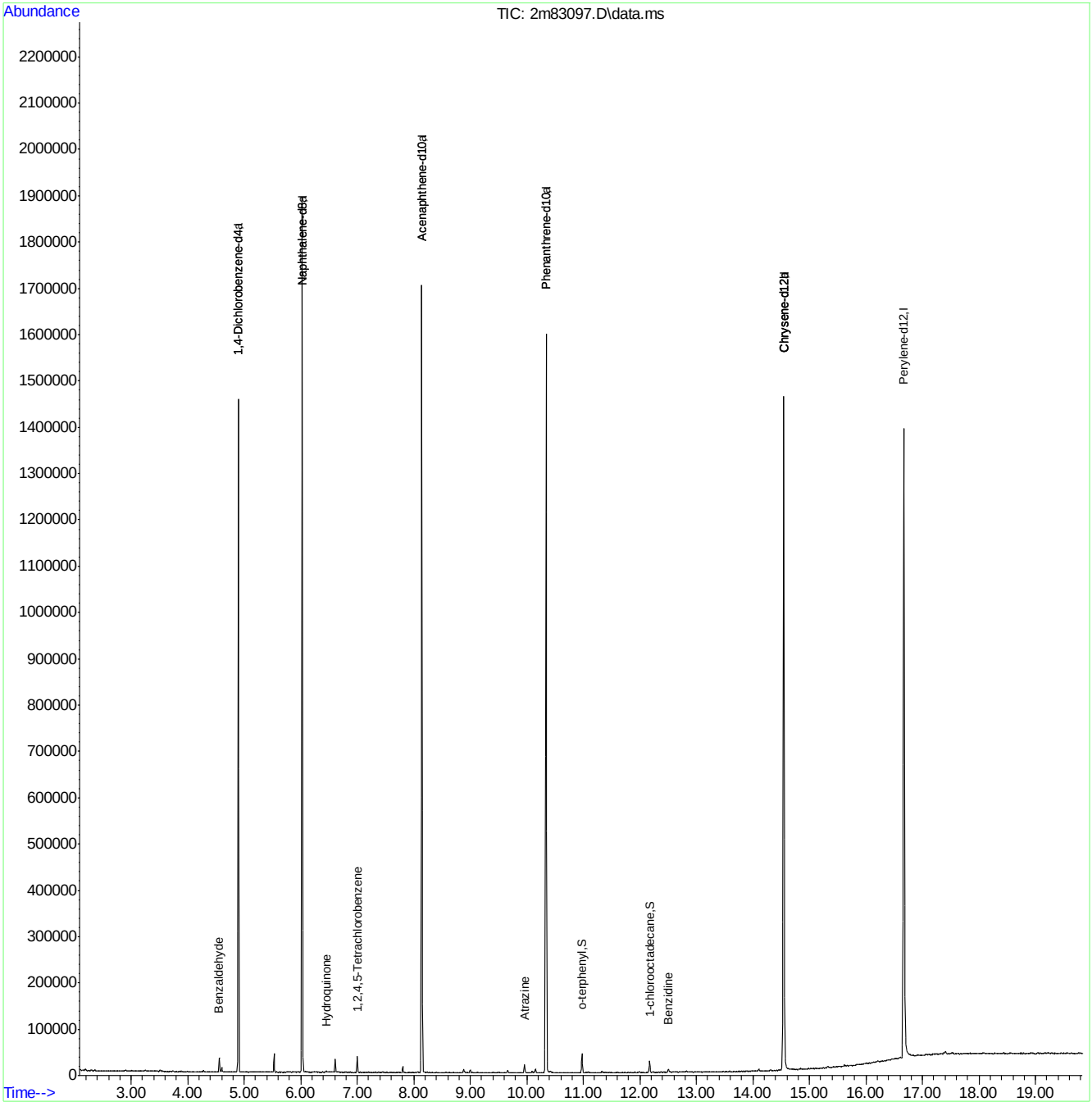
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83097.D
Acq On : 15 Apr 2016 6:07 pm
Operator : ashleyn
Sample : ic3651-1
Misc : op92470,e2m3651
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 18 08:19:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:47:15 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83098.D
Acq On : 15 Apr 2016 6:33 pm
Operator : ashleyn
Sample : ic3651-25
Misc : op92470,e2m3651
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 18 08:20:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:47:15 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	189739	40.00 ppm	0.00
24) Naphthalene-d8	6.024	136	774701	40.00 ppm	0.00
47) Acenaphthene-d10	8.142	164	391499	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	660804	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	603592	40.00 ppm	0.00
92) Perylene-d12	16.673	264	612627	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	189739	40.00 ppm	0.00
104) Acenaphthene-d10a	8.142	164	391499	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	603592	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	660804	40.00 ppm	0.00
112) Naphthalene-d8a	6.024	136	774701	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	603592	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
108) 1-chlorooctadecane	12.174	57	124723	25.51 ppm	0.00
Spiked Amount 50.000			Recovery	= 51.02%	
111) o-terphenyl	10.982	230	202710	25.64 ppm	0.00
Spiked Amount 50.000			Recovery	= 51.28%	

Target Compounds					Qvalue
103) Benzaldehyde	4.558	105	131277	27.05 ppm	100
105) 1,2,4,5-Tetrachloroben...	7.002	216	115633	25.54 ppm	100
107) Benzidine	12.506	184	209157	26.57 ppm	100
110) Atrazine	9.965	215	38102	24.79 ppm	97
113) Hydroquinone	6.446	110	153406	26.28 ppm	99

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

7.6.16

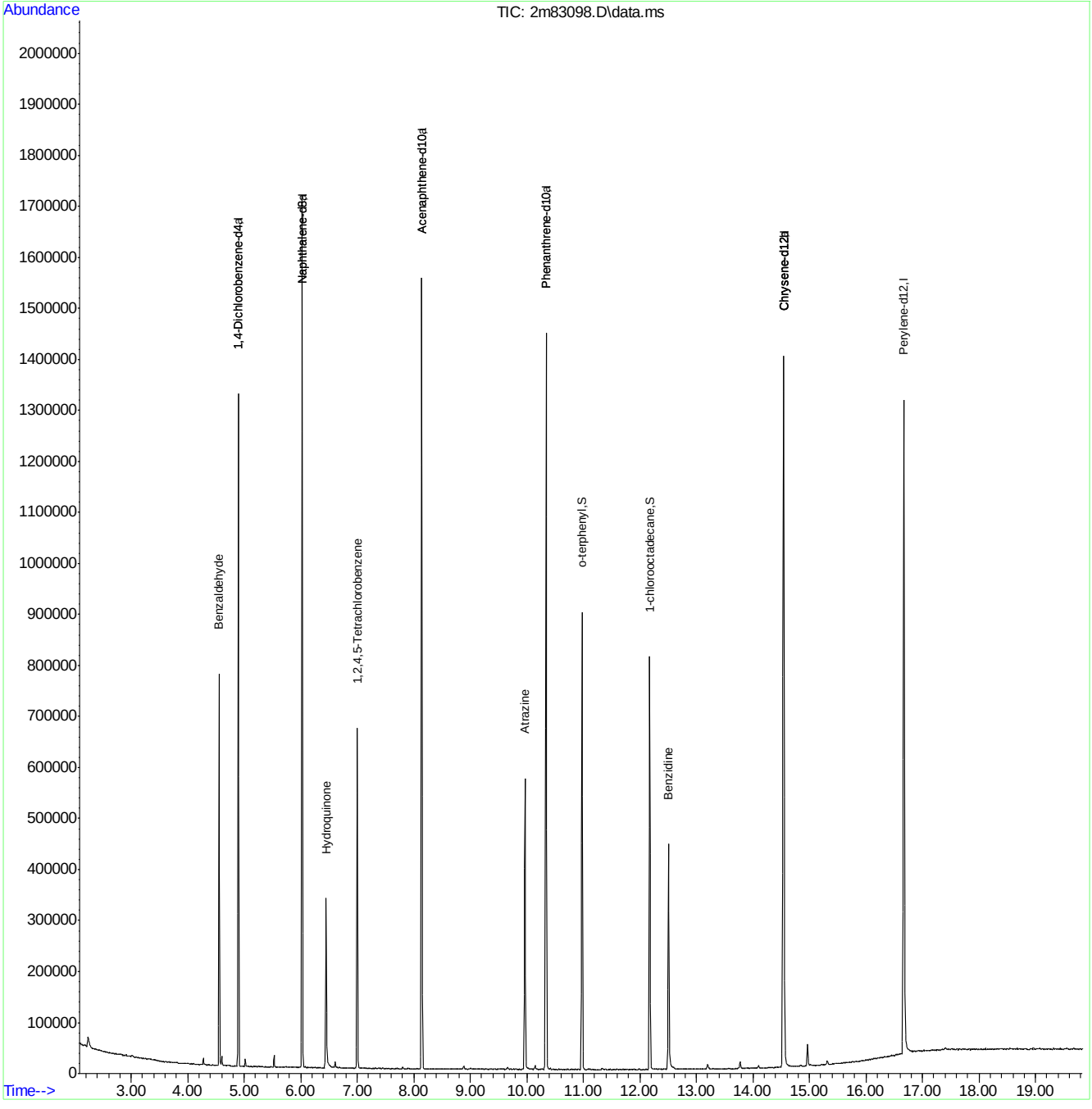
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83098.D
Acq On : 15 Apr 2016 6:33 pm
Operator : ashleyn
Sample : ic3651-25
Misc : op92470,e2m3651
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 18 08:20:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:47:15 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83099.D
Acq On : 15 Apr 2016 7:00 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 18 08:40:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	194977	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	737985	40.00	ppm	0.00
47) Acenaphthene-d10	8.141	164	405519	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	579653	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	470456	40.00	ppm	0.00
92) Perylene-d12	16.672	264	447214	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	194977	40.00	ppm	0.00
104) Acenaphthene-d10a	8.141	164	405519	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	470456	40.00	ppm	0.00
109) Phenanthrene-d10a	10.340	188	579653	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	737985	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	470456	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
9) Phenol	4.627	94	407243	39.93	ppm	100
12) 2-Chlorophenol	4.734	128	342474	44.58	ppm	99
19) 2-Methylphenol	5.098	108	299937	46.15	ppm	99
21) 3&4-Methylphenol	5.221	108	316458	46.24	ppm	99
29) 2-Nitrophenol	5.654	139	172491	47.05	ppm	94
30) 2,4-Dimethylphenol	5.692	107	311110	47.17	ppm	100
31) Benzoic acid	5.793	105	219806	44.33	ppm	99
33) 2,4-Dichlorophenol	5.884	162	254035	46.73	ppm	99
34) 2,6-Dichlorophenol	6.109	162	246715	46.42	ppm	98
43) 4-Chloro-3-methylphenol	6.622	107	255611	44.51	ppm	99
49) 2,4,6-Trichlorophenol	7.146	196	156928	49.16	ppm	98
50) 2,4,5-Trichlorophenol	7.189	196	156403	45.16	ppm	99
60) 2,4-Dinitrophenol	8.238	184	60426	39.13	ppm	95
61) 4-Nitrophenol	8.361	109	72231	46.07	ppm	98
64) 2,3,4,6-Tetrachlorophenol	8.617	232	114321	45.98	ppm	97
70) 4,6-Dinitro-2-methylph...	9.013	198	92467	49.31	ppm	93
76) Pentachlorophenol	10.067	266	91622	48.52	ppm	98

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83099.D
Acq On : 15 Apr 2016 7:00 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 18 08:40:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

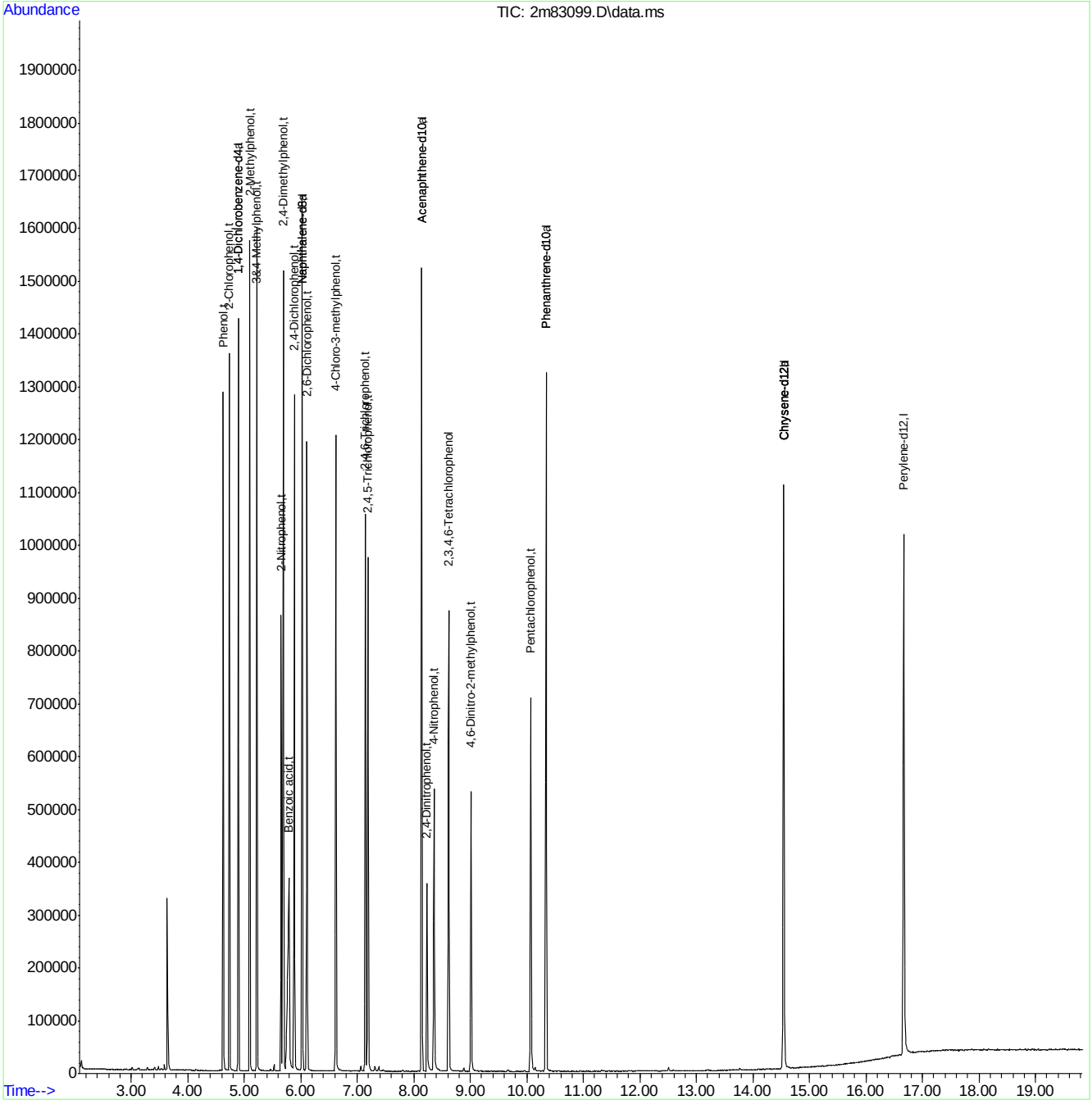
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83099.D
Acq On : 15 Apr 2016 7:00 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 18 08:40:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83100.D
Acq On : 15 Apr 2016 7:26 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 18 08:41:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.900	152	191905	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	775866	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	447194	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	649883	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	520887	40.00 ppm	0.00
92) Perylene-d12	16.672	264	475465	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.900	152	191905	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	447194	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	520887	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	649883	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	775866	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	520887	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
3) Pyridine	2.884	79	361697	45.74 ppm	100
10) Aniline	4.649	93	501713	47.80 ppm	92
16) Benzyl alcohol	5.012	108	222079	47.48 ppm	95
39) 4-Chloroaniline	6.098	127	376852	44.12 ppm	99
44) 2-Methylnaphthalene	6.799	141	530981	44.45 ppm	99
54) 2-Nitroaniline	7.537	65	154650	44.48 ppm	98
58) 3-Nitroaniline	8.093	138	168036	44.68 ppm	95
62) Dibenzofuran	8.430	168	802874	45.98 ppm	100
68) 4-Nitroaniline	8.970	138	168896	44.96 ppm	99
79) Carbazole	10.730	167	825716	45.98 ppm	100

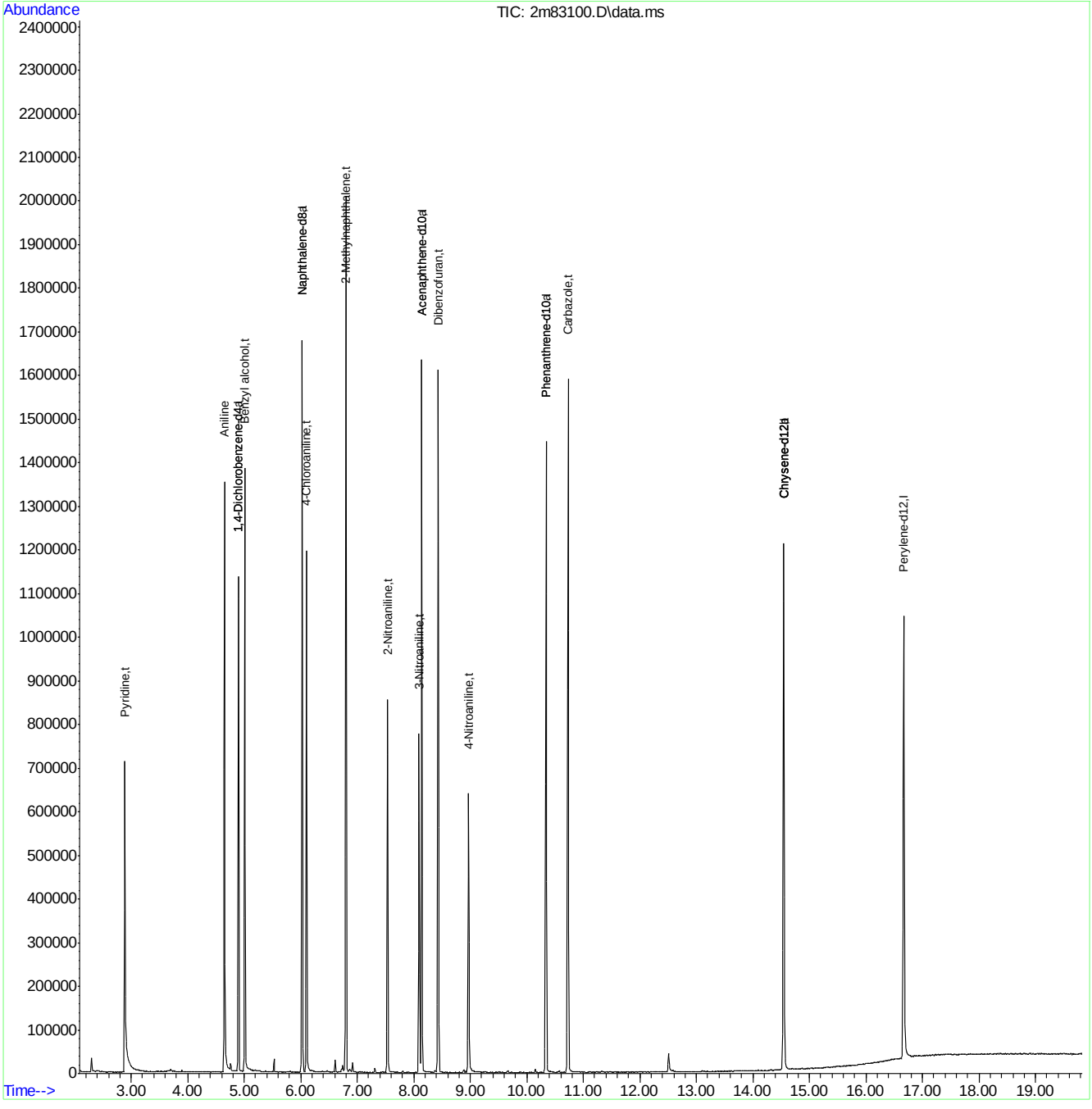
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83100.D
Acq On : 15 Apr 2016 7:26 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 18 08:41:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



M2M3649.M Mon Apr 18 08:42:37 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83101.D
Acq On : 15 Apr 2016 7:53 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 18 08:42:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	201601	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	755504	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	405586	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	569441	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	457910	40.00 ppm	0.00
92) Perylene-d12	16.673	264	434076	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	201601	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	405586	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	457910	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	569441	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	755504	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	457910	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	3.911	112	355591	47.02 ppm	0.00
Spiked Amount 50.000			Recovery	= 94.04%	
8) Phenol-d5	4.617	99	430586	45.36 ppm	0.00
Spiked Amount 50.000			Recovery	= 90.72%	
25) Nitrobenzene-d5	5.349	82	356298	50.34 ppm	0.00
Spiked Amount 50.000			Recovery	= 100.68%	
51) 2-Fluorobiphenyl	7.248	172	654211	50.83 ppm	0.00
Spiked Amount 50.000			Recovery	= 101.66%	
73) 2,4,6-Tribromophenol	9.286	330	71584	48.83 ppm	0.00
Spiked Amount 50.000			Recovery	= 97.66%	
85) Terphenyl-d14	12.907	244	505353	51.39 ppm	0.00
Spiked Amount 50.000			Recovery	= 102.78%	
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	

Target Compounds	Qvalue

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

7.6.19

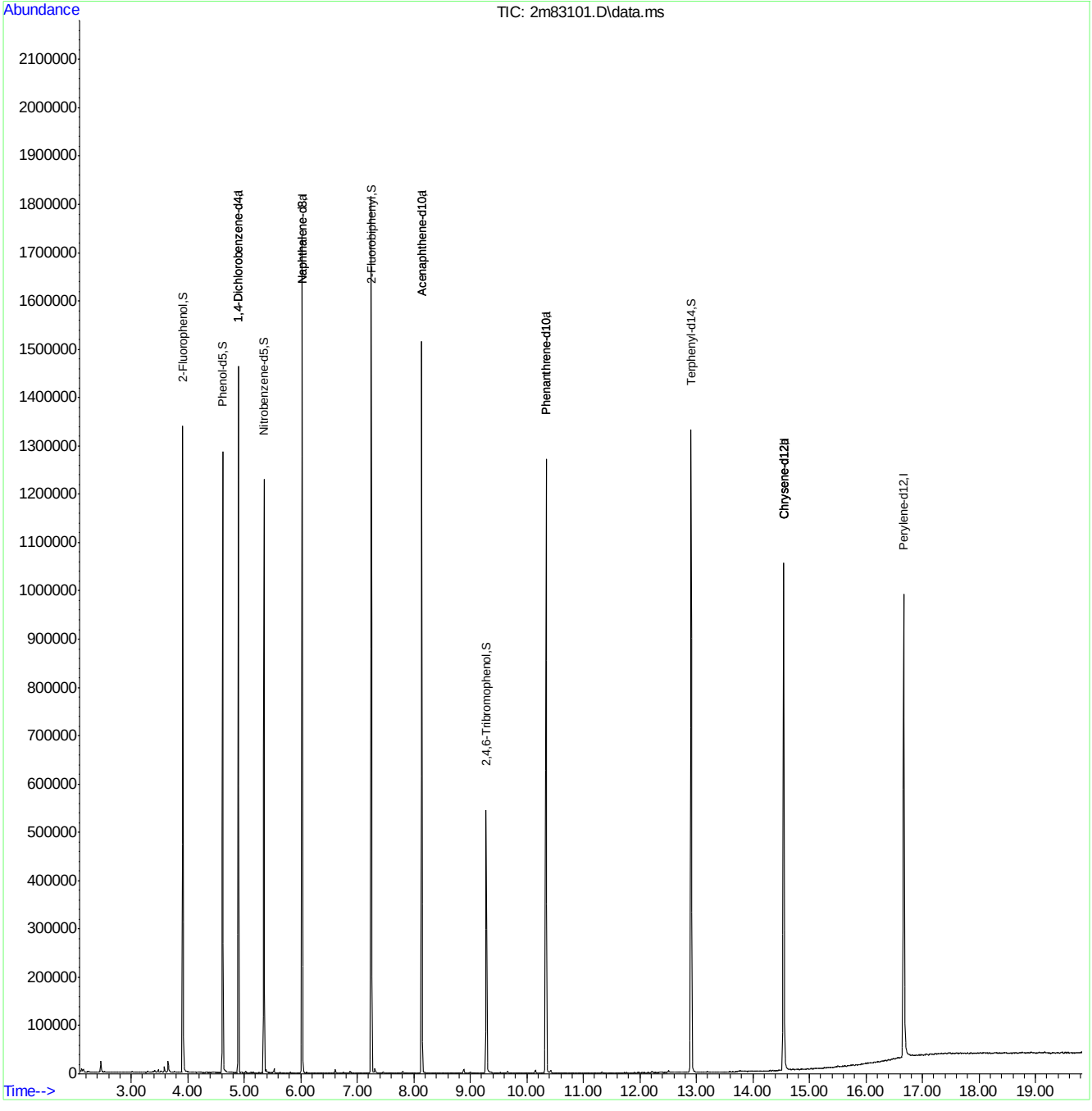
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83101.D
Acq On : 15 Apr 2016 7:53 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 18 08:42:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



M2M3649.M Mon Apr 18 08:42:24 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83102.D
Acq On : 15 Apr 2016 8:19 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 18 08:46:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	176555	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	671776	40.00 ppm	0.00
47) Acenaphthene-d10	8.142	164	369659	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	525868	40.00 ppm	0.00
83) Chrysene-d12	14.549	240	410715	40.00 ppm	0.00
92) Perylene-d12	16.673	264	405970	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	176555	40.00 ppm	0.00
104) Acenaphthene-d10a	8.142	164	369659	40.00 ppm	0.00
106) Chrysene-d12a	14.549	240	410715	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	525868	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	671776	40.00 ppm	0.00
114) Chrysene-d12b	14.549	240	410715	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
4) N-Nitrosodimethylamine	2.761	74	208991	47.88 ppm	98
11) bis(2-Chloroethyl)ether	4.681	93	330502	49.85 ppm	100
14) 1,3-Dichlorobenzene	4.852	146	376139	49.52 ppm	99
15) 1,4-Dichlorobenzene	4.906	146	376614	49.27 ppm	98
17) 1,2-Dichlorobenzene	5.034	146	358153	50.46 ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.109	45	314029	44.29 ppm	85
22) n-Nitroso-di-n-propyla...	5.216	70	212695	50.45 ppm	99
23) Hexachloroethane	5.317	201	109569	51.91 ppm	95
26) Nitrobenzene	5.366	77	317007	49.61 ppm	98
28) Isophorone	5.574	82	598275	53.59 ppm	100
32) bis(2-Chloroethoxy)met...	5.772	93	345244	48.74 ppm	100
36) 1,2,4-Trichlorobenzene	5.965	180	269705	51.58 ppm	99
38) Naphthalene	6.045	128	977546	49.75 ppm	99
42) Hexachlorobutadiene	6.173	225	126479	52.95 ppm	99
48) Hexachlorocyclopentadiene	6.997	237	112866	47.27 ppm	99
52) 2-Chloronaphthalene	7.398	162	546307	51.40 ppm	98
55) Dimethylphthalate	7.783	163	594099	50.33 ppm	99
56) Acenaphthylene	7.944	152	864338	50.06 ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83102.D
Acq On : 15 Apr 2016 8:19 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 18 08:46:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
57) 2,6-Dinitrotoluene	7.858	165	131309	51.94 ppm	97
59) Acenaphthene	8.190	153	543581	49.83 ppm	99
63) 2,4-Dinitrotoluene	8.425	165	166160	48.67 ppm	84
65) Diethylphthalate	8.794	149	556151	48.97 ppm	100
66) Fluorene	8.928	166	575366	48.55 ppm	100
67) 4-Chlorophenyl-phenyle...	8.938	204	240957	49.45 ppm	94
71) n-Nitrosodiphenylamine	9.120	169	393453	52.74 ppm	99
72) 1,2-Diphenylhydrazine	9.174	77	572649	53.41 ppm	99
74) 4-Bromophenyl-phenylether	9.677	248	139436	54.04 ppm	98
75) Hexachlorobenzene	9.757	284	152654	51.61 ppm	95
77) Phenanthrene	10.377	178	798988	49.85 ppm	99
78) Anthracene	10.452	178	787581	50.01 ppm	99
80) Di-n-butylphthalate	11.345	149	891279	50.94 ppm	100
81) Fluoranthene	12.249	202	730175	50.20 ppm	99
84) Pyrene	12.602	202	777719	54.13 ppm	99
86) Butylbenzylphthalate	13.736	149	373742	52.23 ppm	99
88) Benzo[a]anthracene	14.528	228	613313	49.78 ppm	99
90) Chrysene	14.587	228	632868	49.75 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.694	149	516310	53.33 ppm	100
93) Di-n-octylphthalate	15.683	149	862756	55.10 ppm	99
94) Benzo[b]fluoranthene	16.143	252	640025	50.13 ppm	95
95) Benzo[k]fluoranthene	16.186	252	677306	53.73 ppm	99
96) Benzo[a]pyrene	16.592	252	602849	53.17 ppm	98
97) Indeno[1,2,3-cd]pyrene	18.347	276	611519	56.06 ppm	98
99) Dibenz[a,h]anthracene	18.390	278	641117	51.96 ppm	99
101) Benzo[g,h,i]perylene	18.828	276	641595	52.01 ppm	99

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

7.6.20

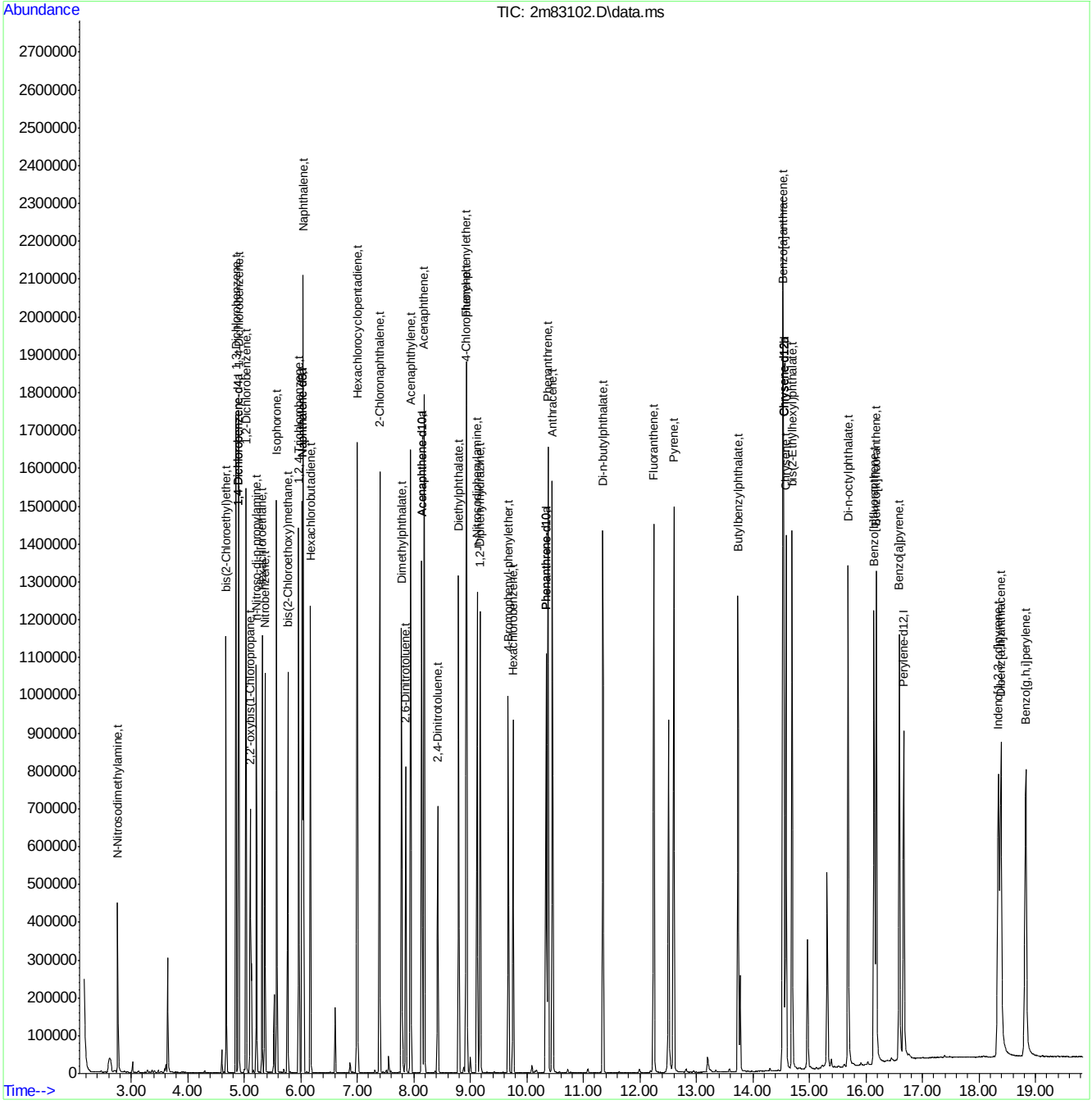
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83102.D
Acq On : 15 Apr 2016 8:19 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 18 08:46:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83102a.D
Acq On : 15 Apr 2016 8:19 pm
Operator : ashleyn
Sample : icv3651-50
Misc : op92470,e2m3651
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 18 08:45:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	176555	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	671776	40.00 ppm	0.00
47) Acenaphthene-d10	8.142	164	369659	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	525868	40.00 ppm	0.00
83) Chrysene-d12	14.549	240	410715	40.00 ppm	0.00
92) Perylene-d12	16.673	264	405970	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	176555	40.00 ppm	0.00
104) Acenaphthene-d10a	8.142	164	369659	40.00 ppm	0.00
106) Chrysene-d12a	14.549	240	410715	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	525868	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	671776	40.00 ppm	0.00
114) Chrysene-d12b	14.549	240	410715	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
105) 1,2,4,5-Tetrachloroben...	7.002	216	228997	50.89 ppm	99
107) Benzidine	12.506	184	459502	88.74 ppm	100

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

7.6.21

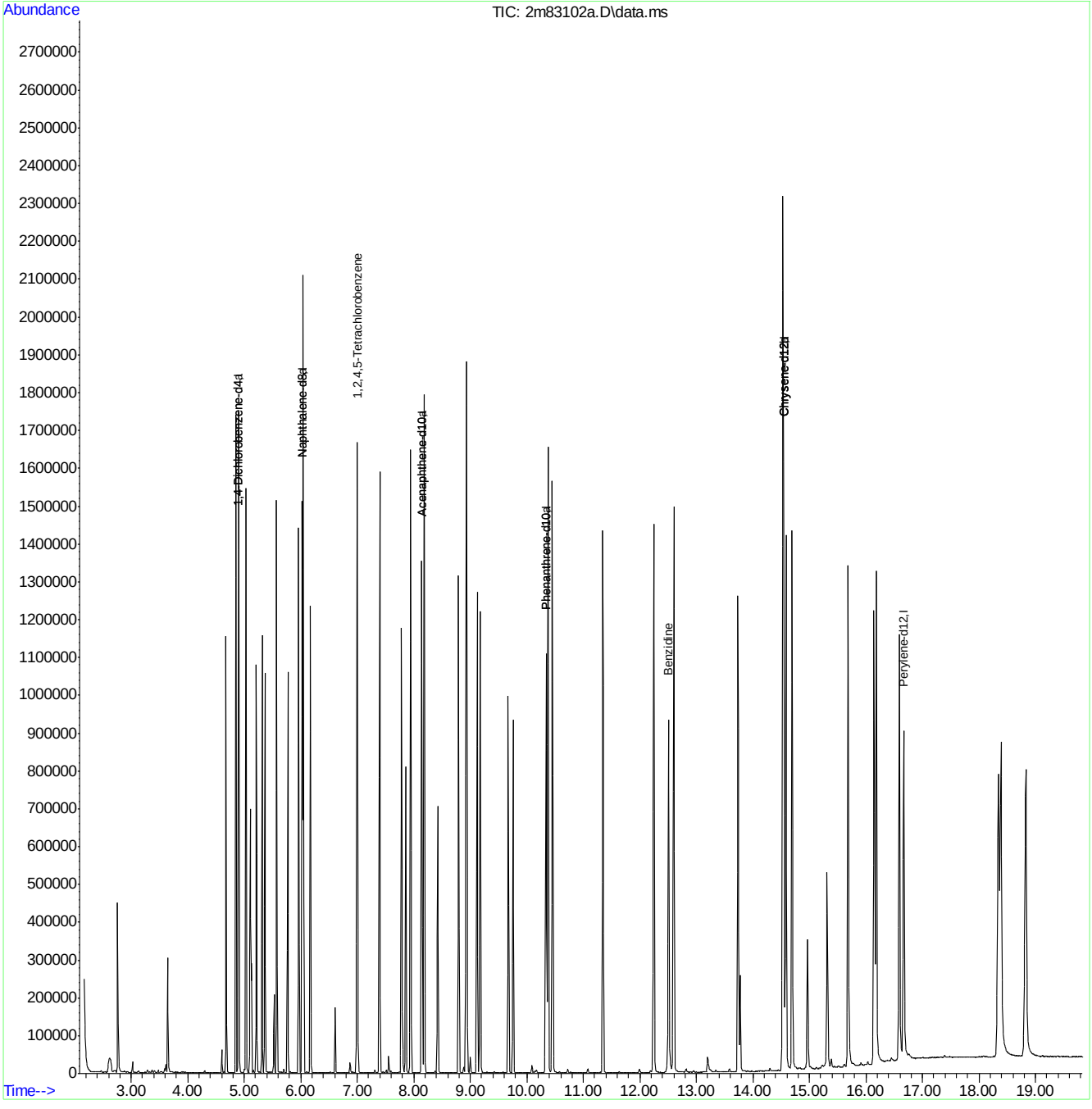
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83102a.D
Acq On : 15 Apr 2016 8:19 pm
Operator : ashleyn
Sample : icv3651-50
Misc : op92470,e2m3651
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 18 08:45:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



M2M3649.M Mon Apr 18 08:46:10 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83103.D
Acq On : 15 Apr 2016 8:46 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 18 08:48:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	201538	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	874181	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	409982	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	589902	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	470229	40.00 ppm	0.00
92) Perylene-d12	16.672	264	438650	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	201538	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	409982	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	470229	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	589902	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	874181	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	470229	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
2) 1,4-Dioxane	2.482	88	156509	46.46 ppm	99
6) Indene	5.103	116	626912	50.42 ppm	99
7) Cumene	4.290	105	843614	46.04 ppm	100
13) Decane	4.761	43	269386	44.38 ppm	97
18) Acetophenone	5.216	105	464008	47.55 ppm	85
27) Quinoline	6.392	129	663623	39.54 ppm	99
40) 2,3-Dichloroaniline	7.141	161	270013	35.09 ppm	98
41) Caprolactam	6.451	55	114273	37.92 ppm	99
45) 1-Methylnaphthalene	6.916	141	549874	39.25 ppm	100
46) Dimethylnaphthalene	7.580	156	549341	39.01 ppm	99
53) Biphenyl	7.371	154	752633	48.29 ppm	99
82) Octadecane	10.270	57	363875	51.11 ppm	99
100) 7,12-Dimethylbenz(a)an...	16.143	256	298715	49.54 ppm	99

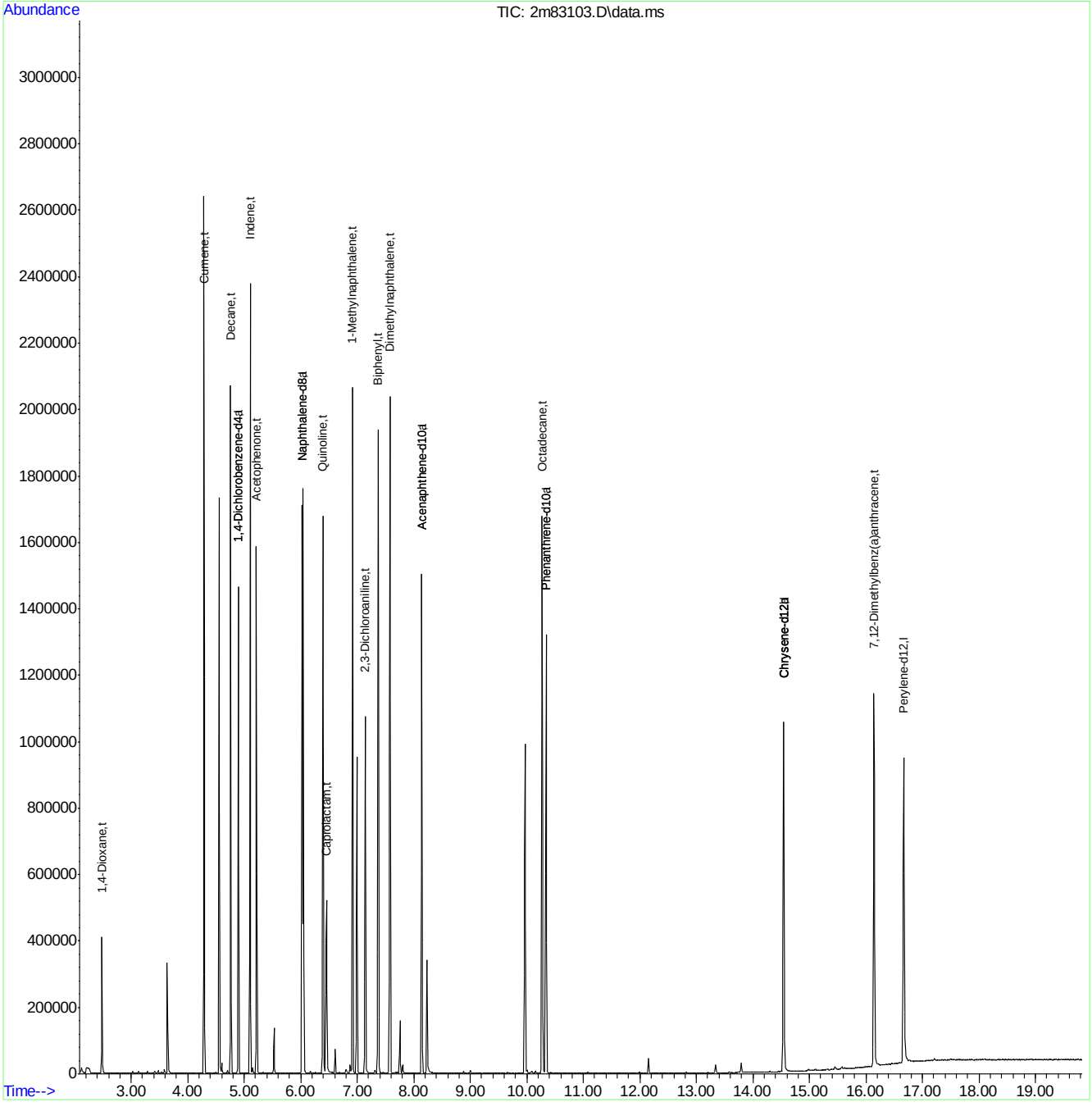
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83103.D
Acq On : 15 Apr 2016 8:46 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 18 08:48:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



M2M3649.M Mon Apr 18 08:48:54 2016 Page: 2

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83103a.D
Acq On : 15 Apr 2016 8:46 pm
Operator : ashleyn
Sample : icv3651-50
Misc : op92470,e2m3651
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 18 08:48:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	201538	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	874181	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	409982	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	589902	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	470229	40.00 ppm	0.00
92) Perylene-d12	16.672	264	438650	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	201538	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	409982	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	470229	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	589902	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	874181	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	470229	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
103) Benzaldehyde	4.558	105	288180	52.84 ppm	99
110) Atrazine	9.971	215	75379	58.54 ppm	95

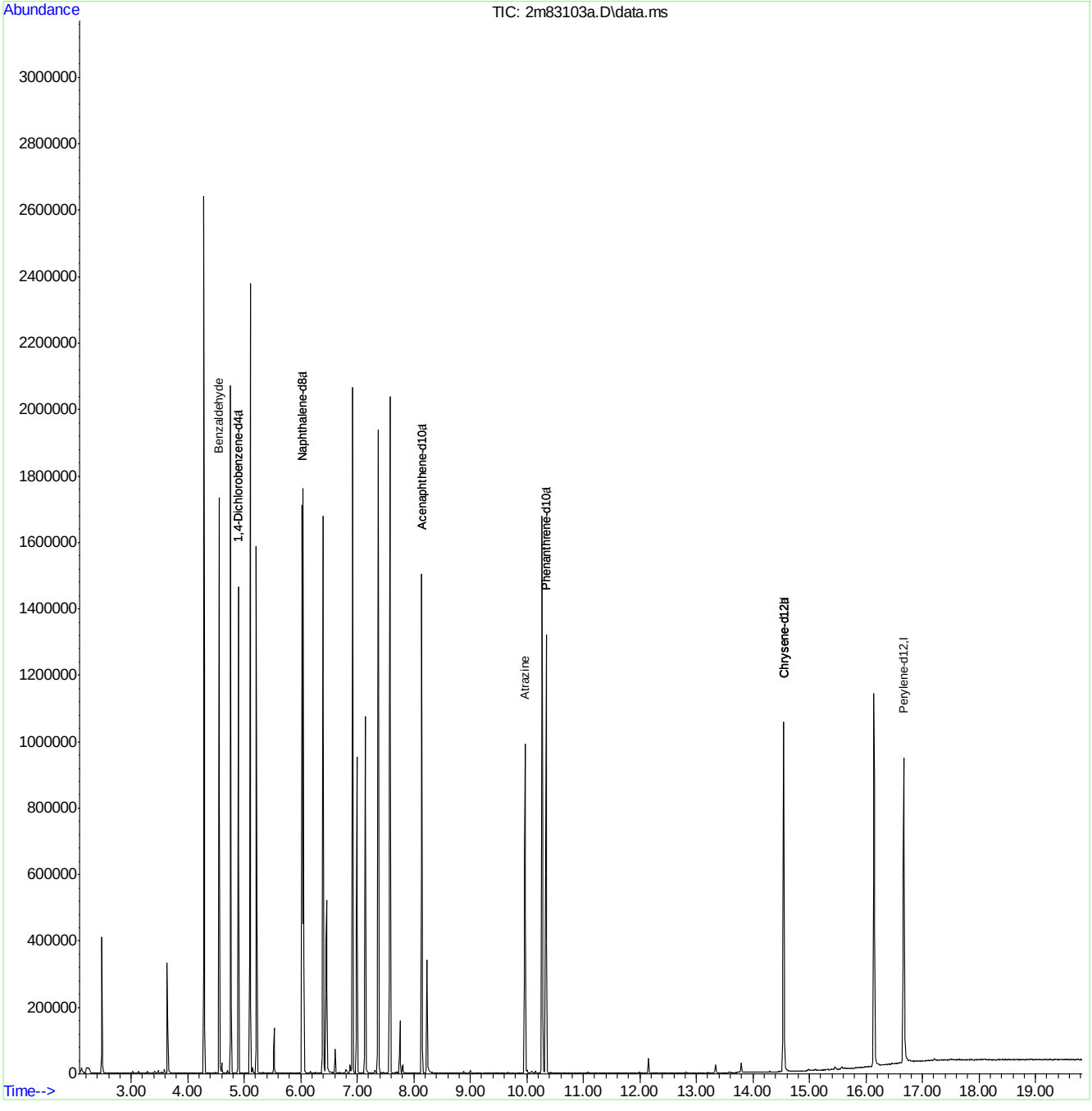
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83103a.D
Acq On : 15 Apr 2016 8:46 pm
Operator : ashleyn
Sample : icv3651-50
Misc : op92470,e2m3651
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 18 08:48:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



M2M3649.M Mon Apr 18 08:48:37 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83104.D
Acq On : 15 Apr 2016 9:12 pm
Operator : ashleyn
Sample : icv3651-50
Misc : op92470,e2m3651
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 18 08:51:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	180584	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	704371	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	405315	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	612567	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	523256	40.00 ppm	0.00
92) Perylene-d12	16.673	264	510996	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	180584	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	405315	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	523256	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	612567	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	704371	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	523256	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
113) Hydroquinone	6.446	110	310770	58.06 ppm	99

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

7.6.24

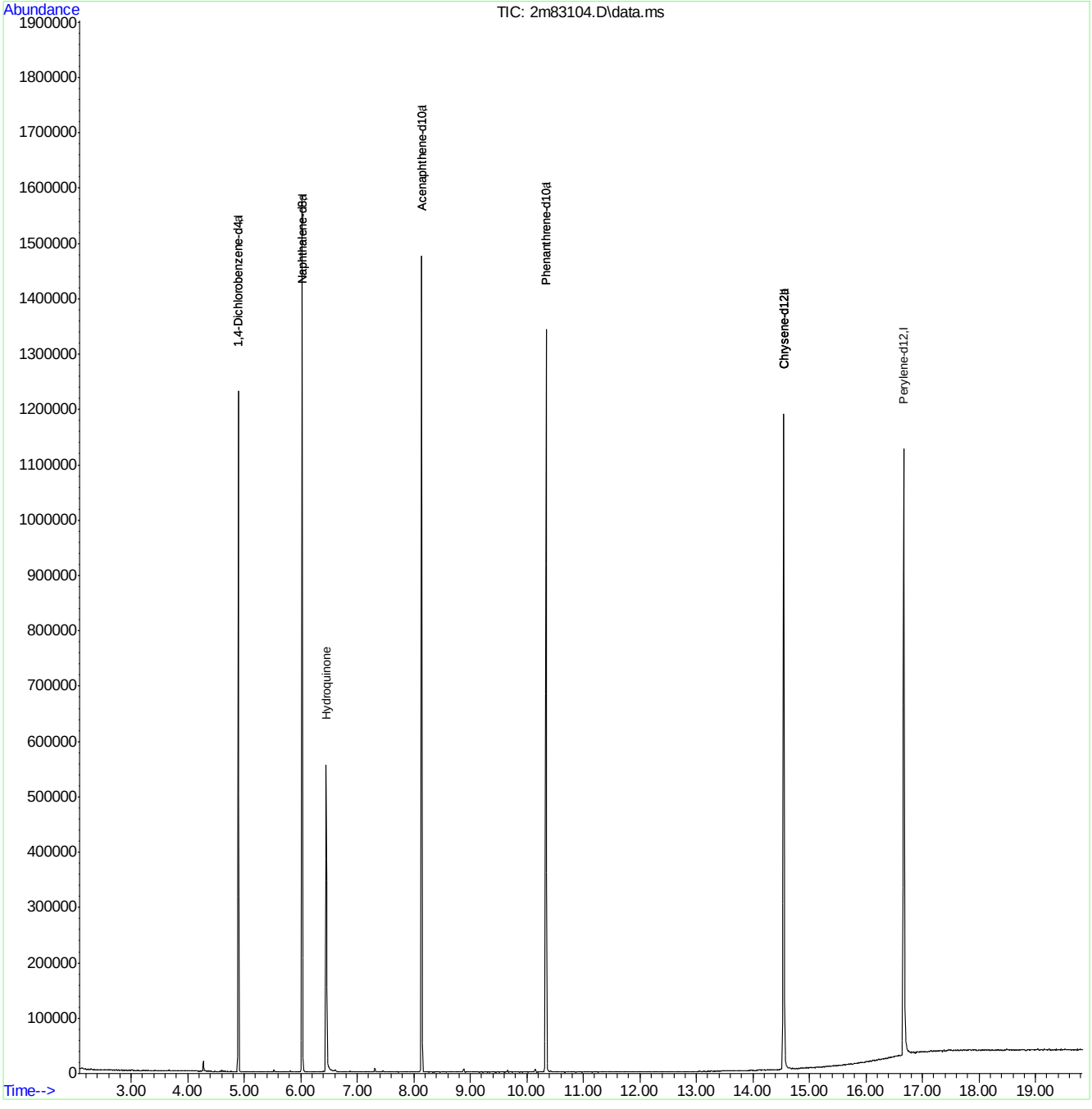
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83104.D
Acq On : 15 Apr 2016 9:12 pm
Operator : ashleyn
Sample : icv3651-50
Misc : op92470,e2m3651
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 18 08:51:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83105.D
Acq On : 15 Apr 2016 9:39 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 18 08:51:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	178981	40.00 ppm	0.00
24) Naphthalene-d8	6.024	136	704023	40.00 ppm	0.00
47) Acenaphthene-d10	8.142	164	404112	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	616308	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	540388	40.00 ppm	0.00
92) Perylene-d12	16.673	264	529669	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	178981	40.00 ppm	0.00
104) Acenaphthene-d10a	8.142	164	404112	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	540388	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	616308	40.00 ppm	0.00
112) Naphthalene-d8a	6.024	136	704023	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	540388	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
89) 3,3'-Dichlorobenzidine	14.533	252	264478	45.64 ppm	99

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

7.6.25

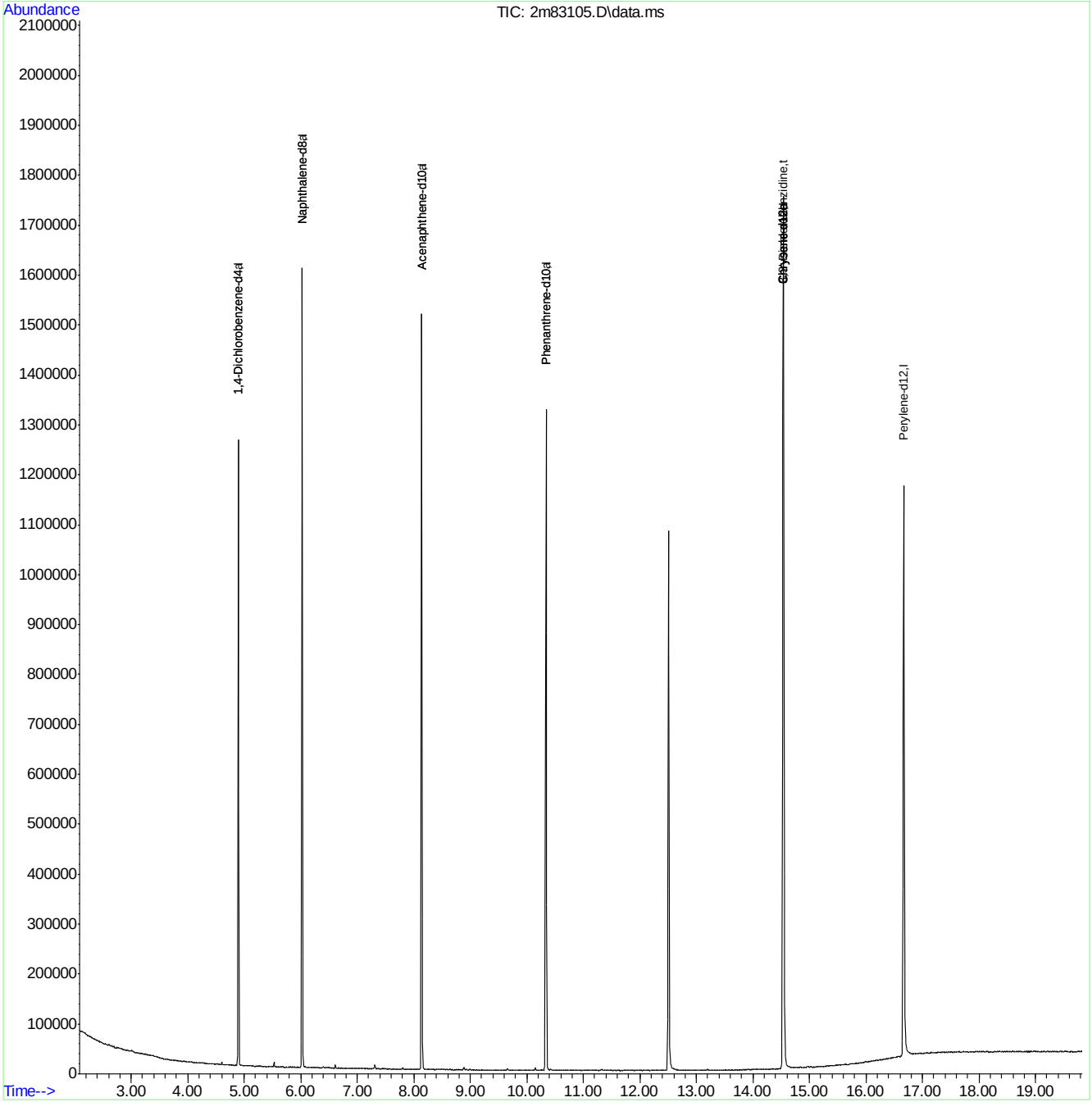
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83105.D
Acq On : 15 Apr 2016 9:39 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 18 08:51:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



M2M3649.M Mon Apr 18 08:52:28 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83243.D
Acq On : 21 Apr 2016 9:18 am
Operator : ashleyn
Sample : cc3649-25
Misc : op92330,e2m3657
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 13:14:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.863	152	161786	40.00	ppm	-0.03
24) Naphthalene-d8	5.986	136	645154	40.00	ppm	-0.04
47) Acenaphthene-d10	8.099	164	382846	40.00	ppm	-0.04
69) Phenanthrene-d10	10.297	188	598851	40.00	ppm	-0.04
83) Chrysene-d12	14.496	240	536633	40.00	ppm	-0.05
92) Perylene-d12	16.624	264	555970	40.00	ppm	-0.05
102) 1,4-Dichlorobenzene-d4a	4.863	152	161786	40.00	ppm	-0.03
104) Acenaphthene-d10a	8.099	164	382846	40.00	ppm	-0.04
106) Chrysene-d12a	14.496	240	536633	40.00	ppm	-0.05
108) Phenanthrene-d10a	10.297	188	598851	40.00	ppm	-0.04
110) Naphthalene-d8a	5.986	136	645154	40.00	ppm	-0.04

System Monitoring Compounds						
5) 2-Fluorophenol	3.889	112	150154	24.74	ppm	-0.12
Spiked Amount 50.000			Recovery = 49.48%			
8) Phenol-d5	4.601	99	190353	24.98	ppm	-0.02
Spiked Amount 50.000			Recovery = 49.96%			
25) Nitrobenzene-d5	5.317	82	156821	25.94	ppm	-0.04
Spiked Amount 50.000			Recovery = 51.88%			
51) 2-Fluorobiphenyl	7.205	172	303929	25.02	ppm	-0.04
Spiked Amount 50.000			Recovery = 50.04%			
73) 2,4,6-Tribromophenol	9.243	330	45679	29.63	ppm	-0.04
Spiked Amount 50.000			Recovery = 59.26%			
85) Terphenyl-d14	12.854	244	295642	25.65	ppm	-0.05
Spiked Amount 50.000			Recovery = 51.30%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.440	88	59532	22.01	ppm		100
3) Pyridine	2.761	79	154388	23.16	ppm		95
4) N-Nitrosodimethylamine	2.729	74	96417	24.10	ppm		96
6) Indene	5.071	116	249121	24.96	ppm		100
7) Cumene	4.258	105	365198	24.83	ppm		99
9) Phenol	4.611	94	205429	24.27	ppm	#	51
10) Aniline	4.611	93	188924	21.35	ppm		59
11) bis(2-Chloroethyl)ether	4.654	93	147586	24.29	ppm		99
12) 2-Chlorophenol	4.713	128	160735	25.22	ppm		98
13) Decane	4.729	43	123934	25.44	ppm		95
14) 1,3-Dichlorobenzene	4.820	146	174812	25.11	ppm		100
15) 1,4-Dichlorobenzene	4.879	146	172921	24.69	ppm		99
16) Benzyl alcohol	4.975	108	100975	25.61	ppm		97
17) 1,2-Dichlorobenzene	5.002	146	162593	25.00	ppm		99
18) Acetophenone	5.189	105	201437	25.71	ppm		89
19) 2-Methylphenol	5.071	108	131472	24.38	ppm		99
20) 2,2'-oxybis(1-Chloropr...	5.077	45	157306	24.21	ppm		88
21) 3&4-Methylphenol	5.200	108	145273	25.58	ppm		100
22) n-Nitroso-di-n-propyla...	5.184	70	105166	27.22	ppm		97
23) Hexachloroethane	5.280	201	51082	26.41	ppm		100
26) Nitrobenzene	5.333	77	158536	25.84	ppm		97
27) Quinoline	6.355	129	308127	24.87	ppm		99
28) Isophorone	5.542	82	277926	25.92	ppm		99

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83243.D
Acq On : 21 Apr 2016 9:18 am
Operator : ashleyn
Sample : cc3649-25
Misc : op92330,e2m3657
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 13:14:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
29) 2-Nitrophenol	5.622	139	87863	27.41 ppm	86
30) 2,4-Dimethylphenol	5.660	107	134397	23.31 ppm	100
31) Benzoic acid	5.751	105	116806	26.95 ppm	98
32) bis(2-Chloroethoxy)met...	5.735	93	170023	24.99 ppm	100
33) 2,4-Dichlorophenol	5.858	162	124272	26.15 ppm	99
34) 2,6-Dichlorophenol	6.077	162	120248	25.88 ppm	98
35) 1,3,5-Trichlorobenzene	5.628	180	131760	25.36 ppm	98
36) 1,2,4-Trichlorobenzene	5.927	180	129196	25.73 ppm	99
37) 1,2,3-Trichlorobenzene	6.157	180	126254	26.02 ppm	98
38) Naphthalene	6.007	128	465504	24.67 ppm	100
39) 4-Chloroaniline	6.061	127	173708	24.46 ppm	100
40) 2,3-Dichloroaniline	7.104	161	148123	26.08 ppm	99
41) Caprolactam	6.430	55	61156	27.49 ppm	97
42) Hexachlorobutadiene	6.136	225	62178	27.11 ppm	97
43) 4-Chloro-3-methylphenol	6.596	107	138159	27.52 ppm	95
44) 2-Methylnaphthalene	6.762	141	252419	25.41 ppm	100
45) 1-Methylnaphthalene	6.874	141	261074	25.25 ppm	99
46) Dimethylnaphthalene	7.537	156	266630	25.66 ppm	99
48) Hexachlorocyclopentadiene	6.954	237	111966	45.28 ppm	99
49) 2,4,6-Trichlorophenol	7.109	196	82750	27.46 ppm	99
50) 2,4,5-Trichlorophenol	7.163	196	88036	26.93 ppm	98
52) 2-Chloronaphthalene	7.355	162	278183	25.27 ppm	99
53) Biphenyl	7.334	154	359707	24.72 ppm	100
54) 2-Nitroaniline	7.494	65	83608	28.09 ppm	94
55) Dimethylphthalate	7.740	163	326257	26.69 ppm	99
56) Acenaphthylene	7.901	152	461198	25.79 ppm	99
57) 2,6-Dinitrotoluene	7.821	165	76311	29.15 ppm	97
58) 3-Nitroaniline	8.051	138	86897	26.99 ppm	94
59) Acenaphthene	8.141	153	275032	24.34 ppm	100
60) 2,4-Dinitrophenol	8.200	184	73129	49.26 ppm	88
61) 4-Nitrophenol	8.339	109	45584	30.80 ppm	94
62) Dibenzofuran	8.388	168	379306	25.37 ppm	93
63) 2,4-Dinitrotoluene	8.382	165	101029	28.57 ppm	99
64) 2,3,4,6-Tetrachlorophenol	8.580	232	67993	28.97 ppm	98
65) Diethylphthalate	8.751	149	323003	27.46 ppm	100
66) Fluorene	8.885	166	315743	25.73 ppm	100
67) 4-Chlorophenyl-phenyle...	8.896	204	137358	27.22 ppm	99
68) 4-Nitroaniline	8.933	138	79992	24.87 ppm	99
70) 4,6-Dinitro-2-methylph...	8.981	198	53252	27.48 ppm	98
71) n-Nitrosodiphenylamine	9.078	169	230103	27.08 ppm	98
72) 1,2-Diphenylhydrazine	9.131	77	313566	25.68 ppm	99
74) 4-Bromophenyl-phenylether	9.628	248	83383	28.38 ppm	99
75) Hexachlorobenzene	9.714	284	90878	26.98 ppm	98
76) Pentachlorophenol	10.030	266	111726	57.27 ppm	99
77) Phenanthrene	10.329	178	442554	24.25 ppm	99
78) Anthracene	10.409	178	452599	25.24 ppm	99
79) Carbazole	10.682	167	421354	25.46 ppm	99
80) Di-n-butylphthalate	11.297	149	561958	28.20 ppm	100
81) Fluoranthene	12.201	202	436963	26.38 ppm	99
82) Octadecane	10.222	57	194412	26.90 ppm	98

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83243.D
Acq On : 21 Apr 2016 9:18 am
Operator : ashleyn
Sample : cc3649-25
Misc : op92330,e2m3657
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 13:14:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
84) Pyrene	12.554	202	456345	24.31 ppm	99
86) Butylbenzylphthalate	13.683	149	252129	26.97 ppm	98
87) Butyl stearate	13.843	56	139765	26.88 ppm	98
88) Benzo[a]anthracene	14.480	228	402065	24.98 ppm	99
89) 3,3'-Dichlorobenzidine	14.485	252	158608	27.56 ppm	98
90) Chrysene	14.538	228	402397	24.21 ppm	100
91) bis(2-Ethylhexyl)phtha...	14.645	149	343540	27.16 ppm	98
93) Di-n-octylphthalate	15.630	149	602708	28.11 ppm	100
94) Benzo[b]fluoranthene	16.095	252	457828	26.19 ppm	98
95) Benzo[k]fluoranthene	16.132	252	421230	24.40 ppm	99
96) Benzo[a]pyrene	16.539	252	403796	26.00 ppm	98
97) Indeno[1,2,3-cd]pyrene	18.272	276	440080	29.46 ppm	92
98) Dibenz(a,h)acridine	17.892	279	389026	28.18 ppm	100
99) Dibenz[a,h]anthracene	18.315	278	441873	26.15 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.095	256	188602	24.68 ppm	99
101) Benzo[g,h,i]perylene	18.742	276	437345	25.89 ppm	96

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

7.6.26

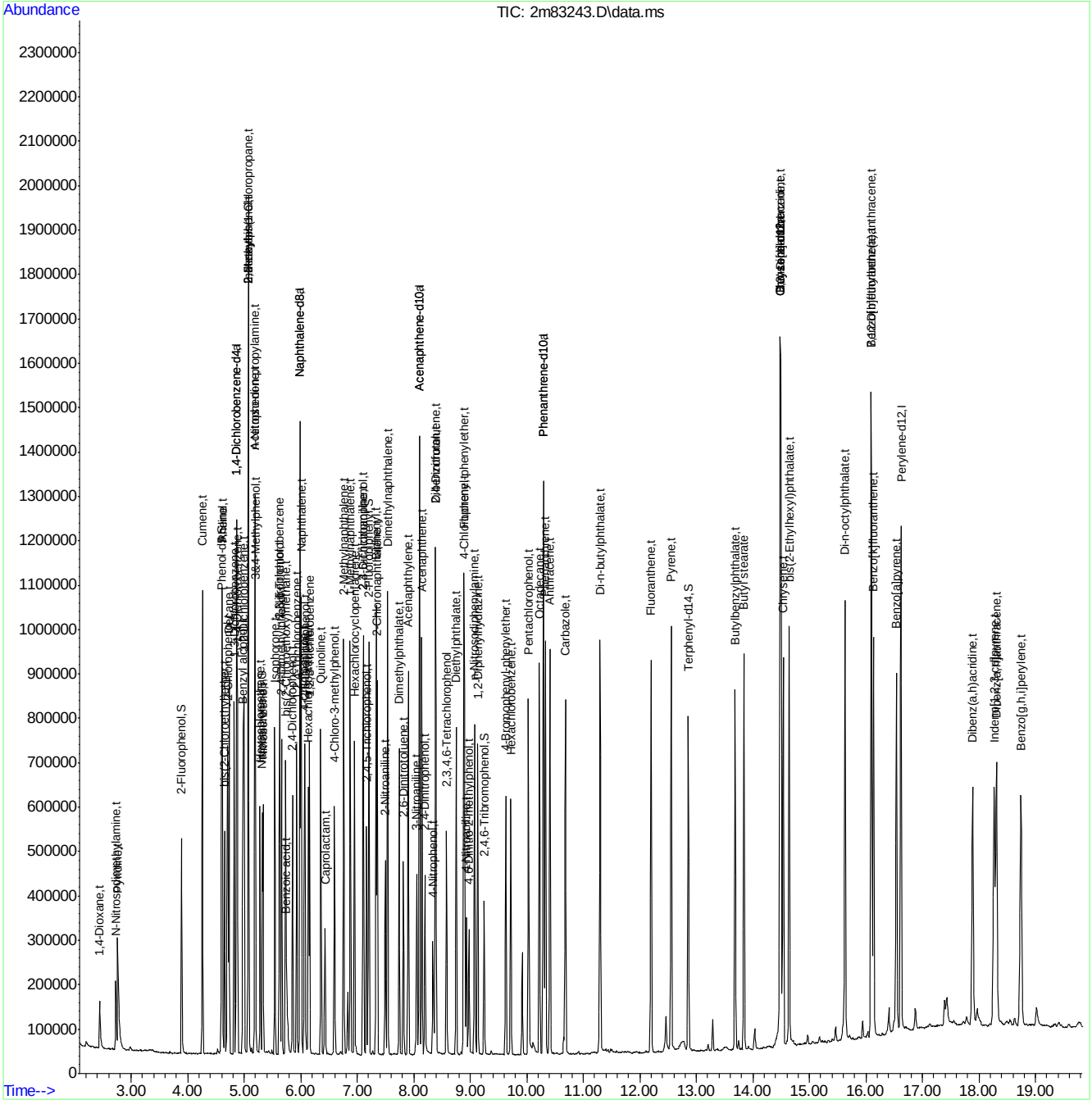
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83243.D
Acq On : 21 Apr 2016 9:18 am
Operator : ashleyn
Sample : cc3649-25
Misc : op92330,e2m3657
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 13:14:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83244.D
Acq On : 21 Apr 2016 9:44 am
Operator : ashleyn
Sample : cc3651-25
Misc : op92330,e2m3657
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 13:15:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.863	152	162406	40.00	ppm	-0.03
24) Naphthalene-d8	5.986	136	655423	40.00	ppm	-0.04
47) Acenaphthene-d10	8.099	164	382200	40.00	ppm	-0.04
69) Phenanthrene-d10	10.292	188	611747	40.00	ppm	-0.05
83) Chrysene-d12	14.496	240	566044	40.00	ppm	-0.05
92) Perylene-d12	16.619	264	587731	40.00	ppm	-0.05
102) 1,4-Dichlorobenzene-d4a	4.863	152	162406	40.00	ppm	-0.03
104) Acenaphthene-d10a	8.099	164	382200	40.00	ppm	-0.04
106) Chrysene-d12a	14.496	240	566044	40.00	ppm	-0.05
108) Phenanthrene-d10a	10.292	188	611747	40.00	ppm	-0.05
110) Naphthalene-d8a	5.986	136	655423	40.00	ppm	-0.04

System Monitoring Compounds

5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds						Qvalue
103) Benzaldehyde	4.526	105	121257	27.59	ppm	96
105) 1,2,4,5-Tetrachloroben...	6.965	216	110367	23.72	ppm	100
107) Benzidine	12.458	184	185919	26.05	ppm	99
109) Atrazine	9.922	215	43134	32.30	ppm	95
111) Hydroquinone	6.424	110	162794	32.69	ppm	97

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

7.6.27

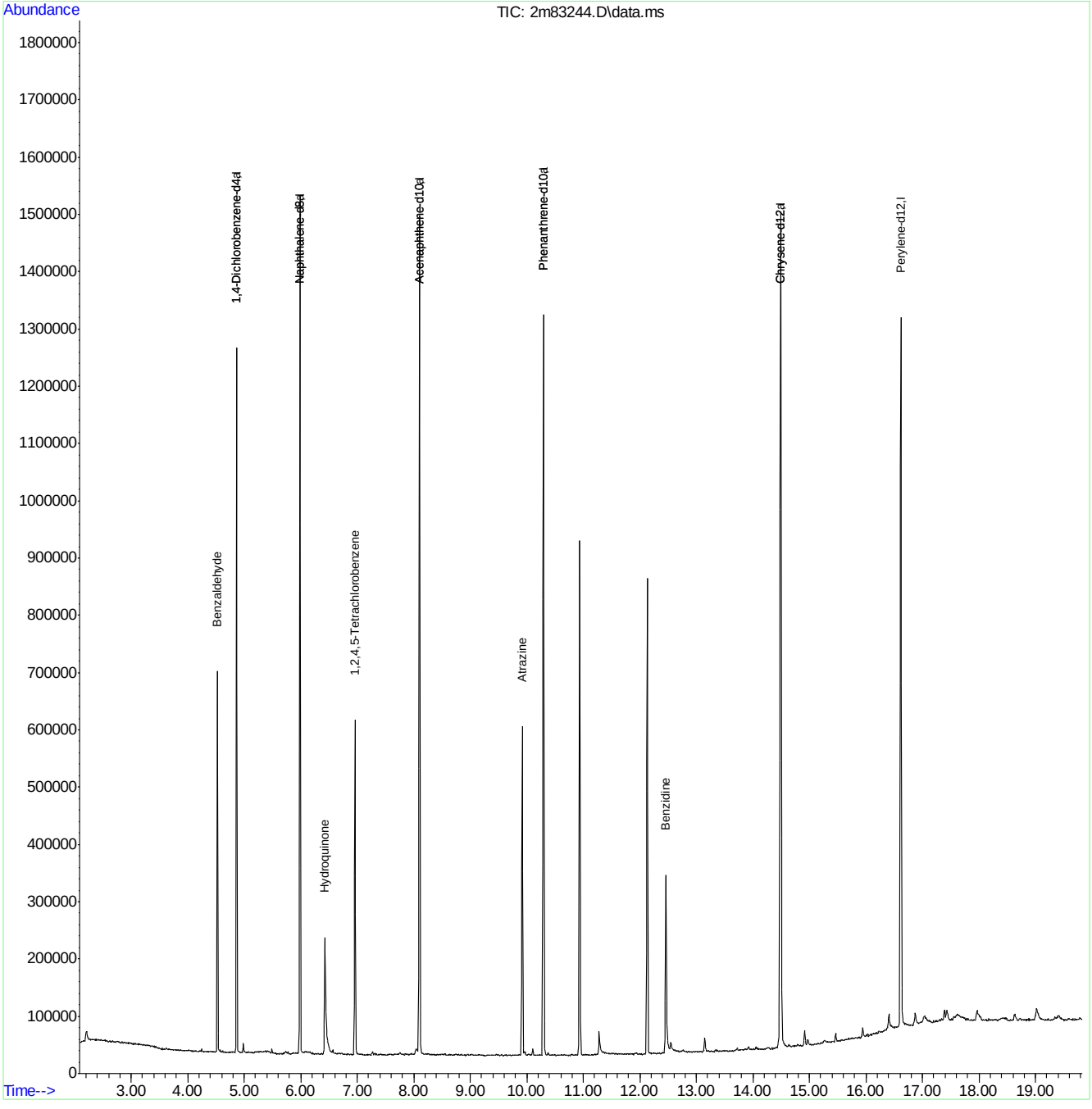
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3657\
Data File : 2m83244.D
Acq On : 21 Apr 2016 9:44 am
Operator : ashleyn
Sample : cc3651-25
Misc : op92330,e2m3657
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 13:15:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration



M2M3649.M Thu Apr 21 13:15:25 2016 Page: 2

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 04/30/16 08:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83437.D
Acq On : 28 Apr 2016 11:04 am
Operator : ashleyn
Sample : cc3649-50
Misc : op93387,e2m3668
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 28 14:53:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 14:36:53 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.761	152	175945	40.00 ppm	0.00
24) Naphthalene-d8	5.868	136	727094	40.00 ppm	-0.15
47) Acenaphthene-d10	7.960	164	460368	40.00 ppm	-0.18
69) Phenanthrene-d10	10.153	188	738569	40.00 ppm	-0.19
83) Chrysene-d12	14.357	240	647048	40.00 ppm	-0.19
92) Perylene-d12	16.480	264	561918	40.00 ppm	-0.19
102) 1,4-Dichlorobenzene-d4a	4.761	152	175945	40.00 ppm	-0.02
104) Acenaphthene-d10a	7.960	164	460368	40.00 ppm	-0.02
106) Chrysene-d12a	14.357	240	647048	40.00 ppm	-0.02
108) Phenanthrene-d10a	10.153	188	738569	40.00 ppm	-0.02
110) Naphthalene-d8a	5.868	136	727094	40.00 ppm	-0.02

System Monitoring Compounds					
5) 2-Fluorophenol	3.793	112	274520	41.59 ppm	-0.01
Spiked Amount 50.000			Recovery	= 83.18%	
8) Phenol-d5	4.510	99	391933	47.30 ppm	0.00
Spiked Amount 50.000			Recovery	= 94.60%	
25) Nitrobenzene-d5	5.210	82	360068	52.86 ppm	-0.14
Spiked Amount 50.000			Recovery	= 105.72%	
51) 2-Fluorobiphenyl	7.077	172	676756	46.33 ppm	-0.17
Spiked Amount 50.000			Recovery	= 92.66%	
73) 2,4,6-Tribromophenol	9.104	330	107986	56.79 ppm	-0.18
Spiked Amount 50.000			Recovery	= 113.58%	
85) Terphenyl-d14	12.714	244	689476	49.62 ppm	-0.19
Spiked Amount 50.000			Recovery	= 99.24%	

Target Compounds					Qvalue
2) 1,4-Dioxane	2.311	88	96098	32.68 ppm	87
3) Pyridine	2.638	79	306856	42.33 ppm	86
4) N-Nitrosodimethylamine	2.606	74	179225	41.20 ppm	72
6) Indene	4.964	116	538728	49.63 ppm	99
7) Cumene	4.157	105	762525	47.66 ppm	97
9) Phenol	4.520	94	426107	46.30 ppm	64
10) Aniline	4.515	93	481329	50.01 ppm	66
11) bis(2-Chloroethyl)ether	4.558	93	300237	45.44 ppm	97
12) 2-Chlorophenol	4.611	128	331596	47.83 ppm	95
13) Decane	4.633	43	297715	56.18 ppm	89
14) 1,3-Dichlorobenzene	4.718	146	355560	46.97 ppm	98
15) 1,4-Dichlorobenzene	4.772	146	359645	47.21 ppm	97
16) Benzyl alcohol	4.873	108	210760	49.15 ppm	86
17) 1,2-Dichlorobenzene	4.895	146	333202	47.11 ppm	99
18) Acetophenone	5.082	105	443901	52.10 ppm	86
19) 2-Methylphenol	4.975	108	296184	50.50 ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.970	45	375265	53.12 ppm	93
21) 3&4-Methylphenol	5.098	108	326829	52.92 ppm	97
22) n-Nitroso-di-n-propyla...	5.082	70	236603	56.32 ppm	100
23) Hexachloroethane	5.173	201	108359	51.51 ppm	93
26) Nitrobenzene	5.226	77	359783	52.03 ppm	91
27) Quinoline	6.237	129	693504	49.68 ppm	99
28) Isophorone	5.430	82	640029	52.97 ppm	94

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83437.D
Acq On : 28 Apr 2016 11:04 am
Operator : ashleyn
Sample : cc3649-50
Misc : op93387,e2m3668
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 28 14:53:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 14:36:53 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2-Nitrophenol	5.510	139	184693	51.13	ppm		82
30) 2,4-Dimethylphenol	5.553	107	339158	52.19	ppm		94
31) Benzoic acid	5.681	105	264290	54.10	ppm		97
32) bis(2-Chloroethoxy)met...	5.622	93	364248	47.51	ppm		99
33) 2,4-Dichlorophenol	5.745	162	269548	50.32	ppm		98
34) 2,6-Dichlorophenol	5.959	162	263083	50.24	ppm		97
35) 1,3,5-Trichlorobenzene	5.521	180	280633	47.92	ppm		99
36) 1,2,4-Trichlorobenzene	5.815	180	273299	48.29	ppm		98
37) 1,2,3-Trichlorobenzene	6.039	180	267847	48.98	ppm		99
38) Naphthalene	5.890	128	1000649	47.05	ppm		99
39) 4-Chloroaniline	5.948	127	416002	51.98	ppm		98
40) 2,3-Dichloroaniline	6.975	161	335907	52.48	ppm		99
41) Caprolactam	6.323	55	155881	62.18	ppm		92
42) Hexachlorobutadiene	6.013	225	137885	53.34	ppm		99
43) 4-Chloro-3-methylphenol	6.489	107	312119	55.17	ppm		96
44) 2-Methylnaphthalene	6.633	141	553514	49.44	ppm		96
45) 1-Methylnaphthalene	6.751	141	577107	49.53	ppm		98
46) Dimethylnaphthalene	7.403	156	603851	51.56	ppm		97
48) Hexachlorocyclopentadiene	6.820	237	296901	99.85	ppm		97
49) 2,4,6-Trichlorophenol	6.986	196	185152	51.10	ppm		99
50) 2,4,5-Trichlorophenol	7.045	196	199114	50.65	ppm		99
52) 2-Chloronaphthalene	7.227	162	615222	46.48	ppm		99
53) Biphenyl	7.200	154	803842	45.93	ppm		99
54) 2-Nitroaniline	7.366	65	211519	59.10	ppm		84
55) Dimethylphthalate	7.612	163	735898	50.06	ppm		99
56) Acenaphthylene	7.767	152	1051180	48.88	ppm		100
57) 2,6-Dinitrotoluene	7.692	165	172160	54.68	ppm		93
58) 3-Nitroaniline	7.922	138	202684	52.35	ppm		90
59) Acenaphthene	8.008	153	637279	46.91	ppm		98
60) 2,4-Dinitrophenol	8.077	184	178588	96.38	ppm		69
61) 4-Nitrophenol	8.227	109	117179	65.83	ppm	#	83
62) Dibenzofuran	8.248	168	858722	47.77	ppm		92
63) 2,4-Dinitrotoluene	8.259	165	244769	57.57	ppm		94
64) 2,3,4,6-Tetrachlorophenol	8.452	232	148777	52.71	ppm		98
65) Diethylphthalate	8.617	149	753451	53.27	ppm		100
66) Fluorene	8.746	166	744201	50.43	ppm		99
67) 4-Chlorophenyl-phenyle...	8.757	204	307965	50.75	ppm		94
68) 4-Nitroaniline	8.805	138	208565	53.93	ppm		83
70) 4,6-Dinitro-2-methylph...	8.858	198	135617	56.75	ppm		92
71) n-Nitrosodiphenylamine	8.938	169	513258	48.98	ppm		99
72) 1,2-Diphenylhydrazine	8.992	77	789468	52.43	ppm		97
74) 4-Bromophenyl-phenylether	9.484	248	189538	52.31	ppm		94
75) Hexachlorobenzene	9.575	284	217626	52.38	ppm		96
76) Pentachlorophenol	9.896	266	239972	99.74	ppm		99
77) Phenanthrene	10.190	178	1072782	47.66	ppm		99
78) Anthracene	10.270	178	1104433	49.93	ppm		99
79) Carbazole	10.543	167	1005649	49.27	ppm		99
80) Di-n-butylphthalate	11.153	149	1304109	53.07	ppm		99
81) Fluoranthene	12.062	202	1055885	51.69	ppm		96
82) Octadecane	10.083	57	494330	55.45	ppm		92

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83437.D
Acq On : 28 Apr 2016 11:04 am
Operator : ashleyn
Sample : cc3649-50
Misc : op93387,e2m3668
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 28 14:53:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 14:36:53 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
84) Pyrene	12.410	202	1083533	47.87 ppm	99
86) Butylbenzylphthalate	13.538	149	588361	52.19 ppm	96
87) Butyl stearate	13.704	56	363259	57.93 ppm	96
88) Benzo[a]anthracene	14.340	228	950973	48.99 ppm	99
89) 3,3'-Dichlorobenzidine	14.340	252	378384	54.54 ppm	98
90) Chrysene	14.394	228	932011	46.51 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.501	149	770268	50.51 ppm	99
93) Di-n-octylphthalate	15.490	149	1298704	59.93 ppm	97
94) Benzo[b]fluoranthene	15.961	252	946850	53.58 ppm	96
95) Benzo[k]fluoranthene	15.999	252	874439	50.12 ppm	97
96) Benzo[a]pyrene	16.400	252	806693	51.40 ppm	96
97) Indeno[1,2,3-cd]pyrene	18.085	276	751445m	49.77 ppm	
98) Dibenz(a,h)acridine	17.710	279	668231	47.89 ppm	100
99) Dibenz[a,h]anthracene	18.122	278	738264	43.23 ppm	98
100) 7,12-Dimethylbenz(a)an...	15.956	256	442162	57.25 ppm	98
101) Benzo[g,h,i]perylene	18.545	276	715755	41.92 ppm	91

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

7.6.28

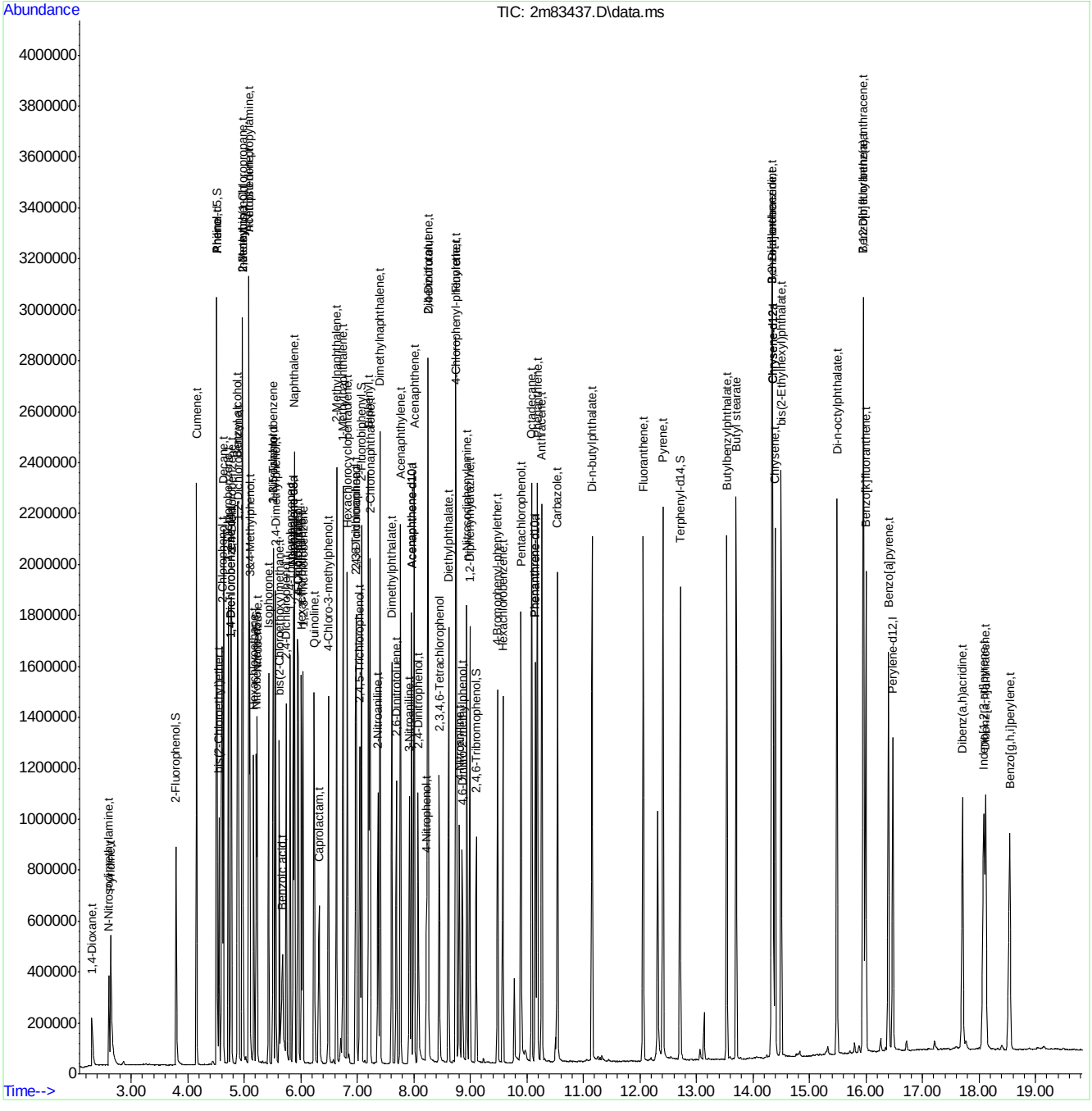
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83437.D
Acq On : 28 Apr 2016 11:04 am
Operator : ashleyn
Sample : cc3649-50
Misc : op93387,e2m3668
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 28 14:53:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 14:36:53 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Manual Integration Approval Summary

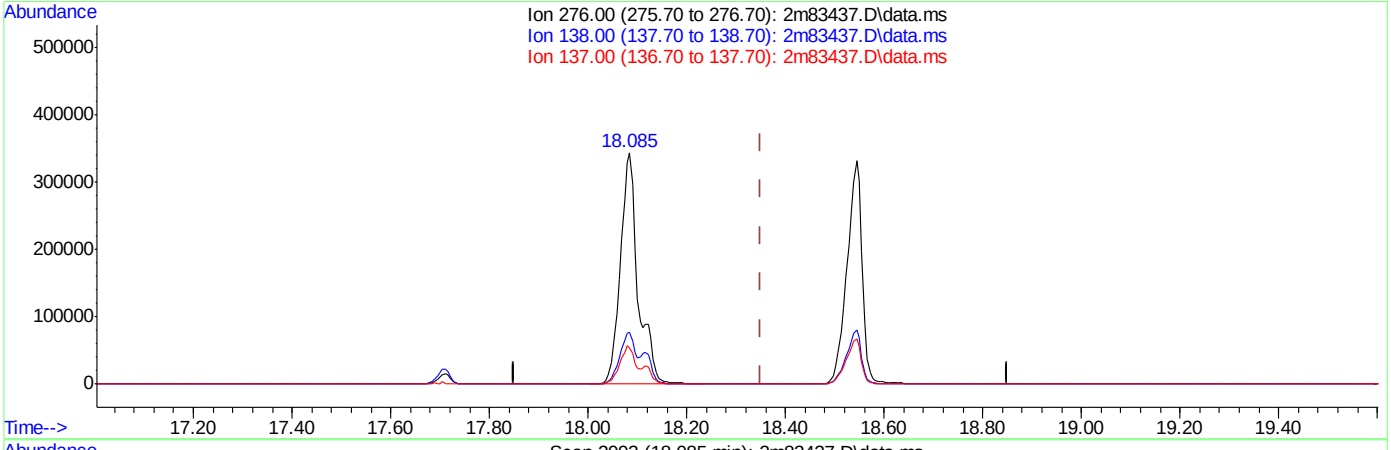
Sample Number:	E2M3668-CC3649	**Method:**	SW846 8270D
Lab FileID:	2M83437.D	**Analyst approved:**	04/28/16 15:15 Ashley Noble
Injection Time:	04/28/16 11:04	**Supervisor approved:**	04/30/16 08:34 Kristi Schollenberger

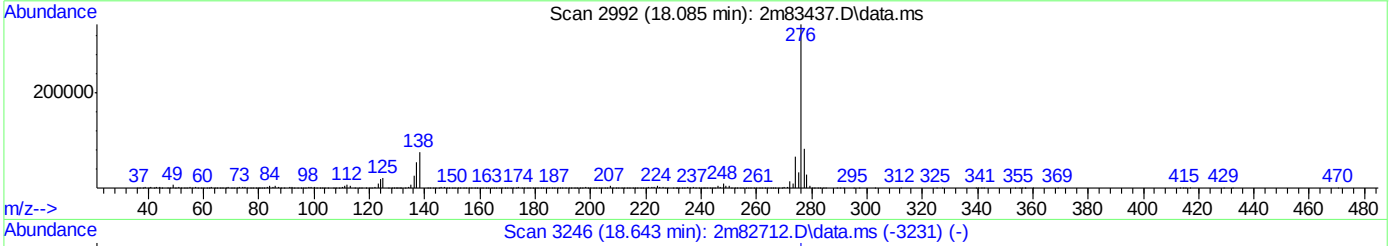
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.08	Overlapping peak

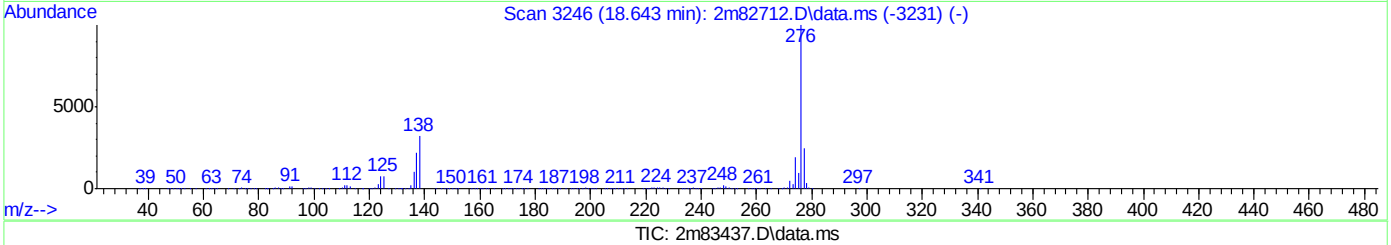
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83437.D
Acq On : 28 Apr 2016 11:04 am
Operator : ashleyn
Sample : cc3649-50
Misc : op93387,e2m3668
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 28 14:37:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 14:36:53 2016
Response via : Initial Calibration







TIC: 2m83437.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.085min (-0.267) 57.13ppm

response 862525

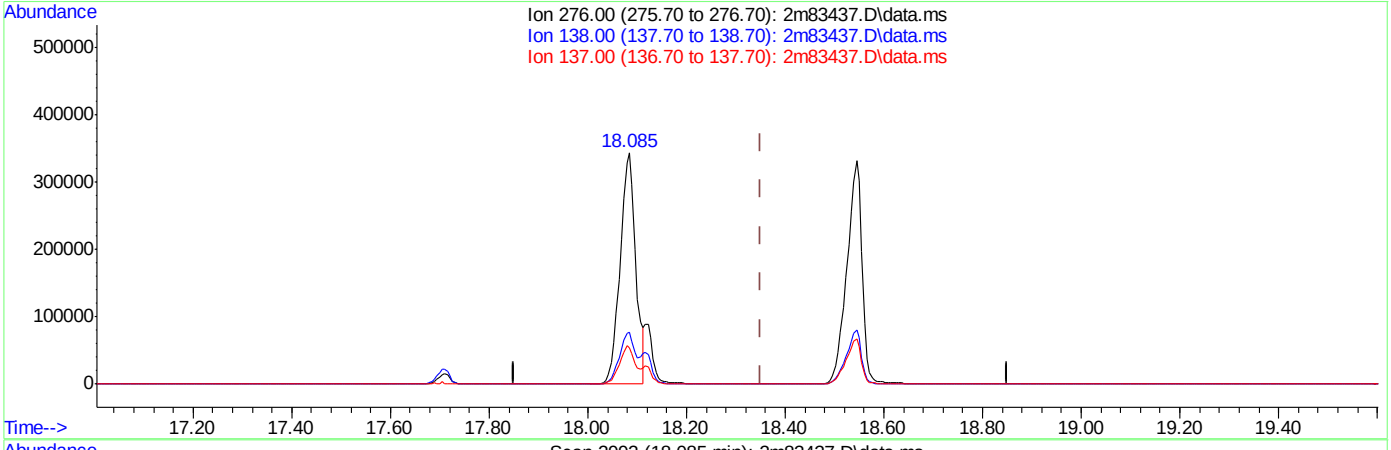
Ion	Exp%	Act%
276.00	100	100
138.00	24.70	22.22
137.00	17.90	15.55
0.00	0.00	0.00

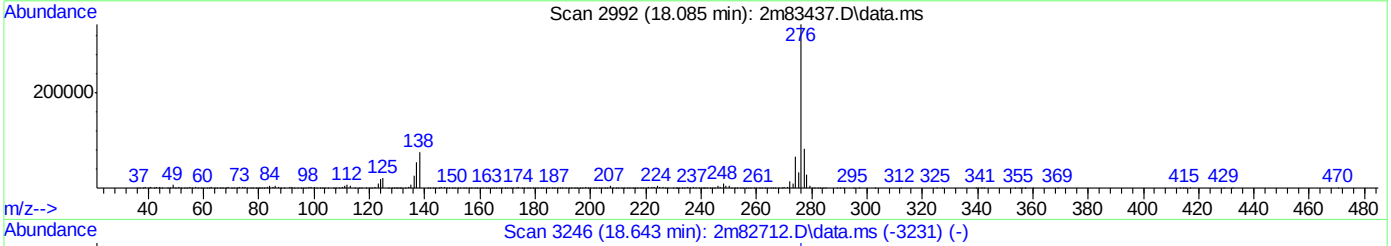
SGS ACCUTEST JC18649

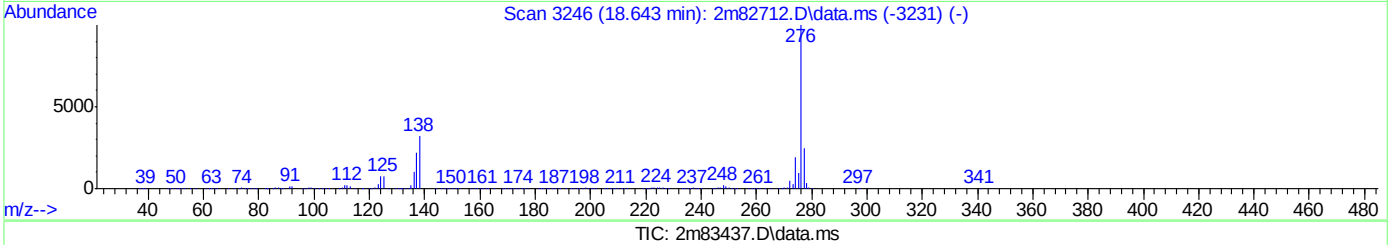
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83437.D
Acq On : 28 Apr 2016 11:04 am
Operator : ashleyn
Sample : cc3649-50
Misc : op93387,e2m3668
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 28 14:37:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 14:36:53 2016
Response via : Initial Calibration







TIC: 2m83437.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.085min (-0.267) 49.77ppm m

response 751445

Ion	Exp%	Act%
276.00	100	100
138.00	24.70	22.28
137.00	17.90	15.61
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83438.D
Acq On : 28 Apr 2016 11:37 am
Operator : ashleyn
Sample : cc3651-50
Misc : op93387,e2m3668
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 28 14:54:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 08:52:04 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.761	152	187217	40.00	ppm	-0.06
24) Naphthalene-d8	5.868	136	788831	40.00	ppm	-0.15
47) Acenaphthene-d10	7.960	164	475322	40.00	ppm	-0.18
69) Phenanthrene-d10	10.147	188	785805	40.00	ppm	-0.19
83) Chrysene-d12	14.346	240	723484	40.00	ppm	-0.20
92) Perylene-d12	16.475	264	658097	40.00	ppm	-0.20
102) 1,4-Dichlorobenzene-d4a	4.761	152	187217	40.00	ppm	-0.02
104) Acenaphthene-d10a	7.960	164	475322	40.00	ppm	-0.02
106) Chrysene-d12a	14.346	240	723484	40.00	ppm	-0.03
108) Phenanthrene-d10a	10.147	188	785805	40.00	ppm	-0.03
110) Naphthalene-d8a	5.868	136	788831	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	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%	

Target Compounds						Qvalue
103) Benzaldehyde	4.429	105	244654	48.29	ppm	95
105) 1,2,4,5-Tetrachloroben...	6.836	216	255937	44.23	ppm	99
107) Benzidine	12.313	184	503091	55.16	ppm	99
109) Atrazine	9.783	215	105858	61.71	ppm	93
111) Hydroquinone	6.317	110	357600	59.66	ppm	90

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

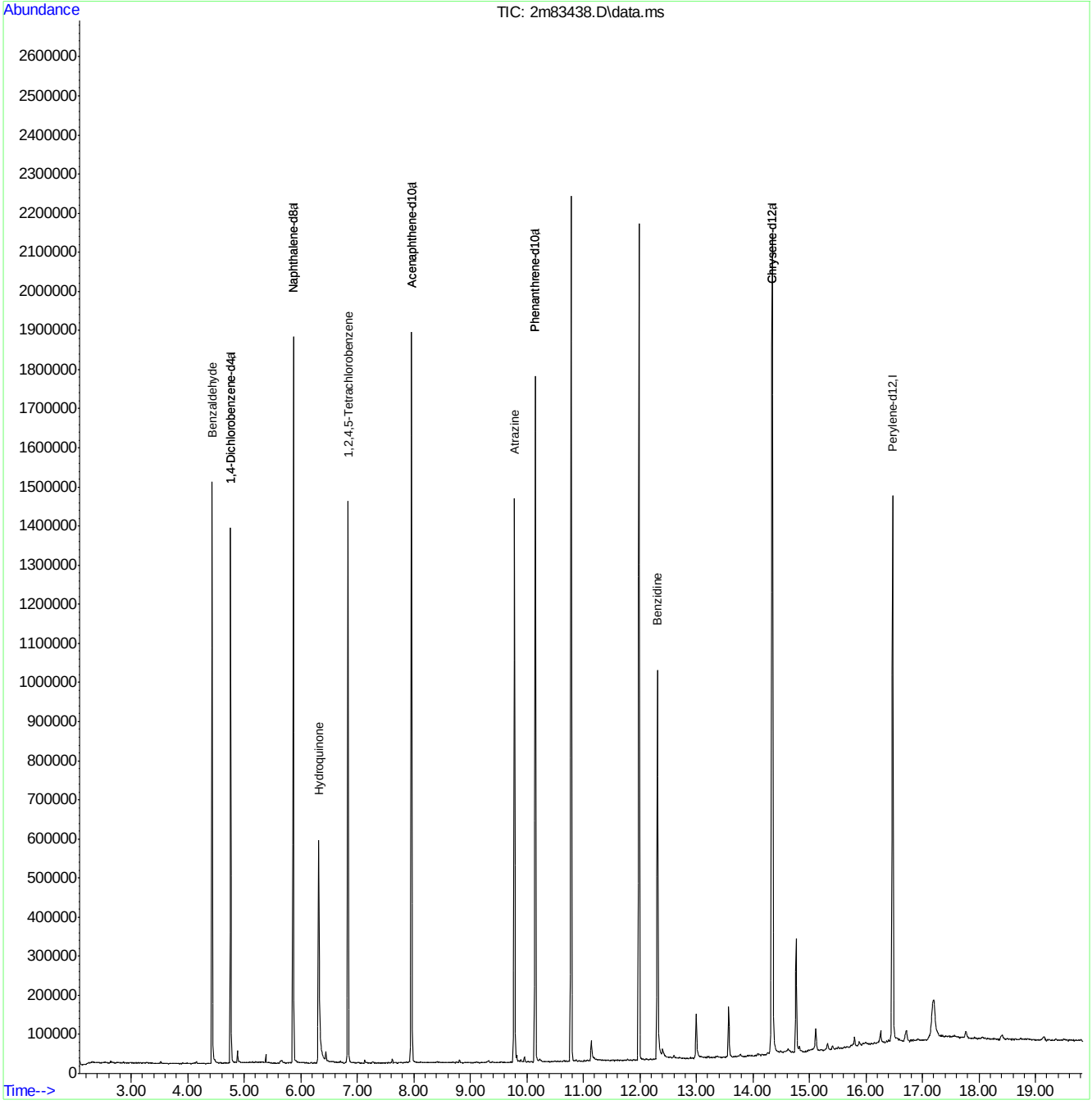
7.6.29

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3668\
Data File : 2m83438.D
Acq On : 28 Apr 2016 11:37 am
Operator : ashleyn
Sample : cc3651-50
Misc : op93387,e2m3668
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 28 14:54:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Thu Apr 28 08:52:04 2016
Response via : Initial Calibration



M2M3649.M Thu Apr 28 14:54:34 2016 Page: 2

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 JC18649

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 JC18649

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

7.6.30

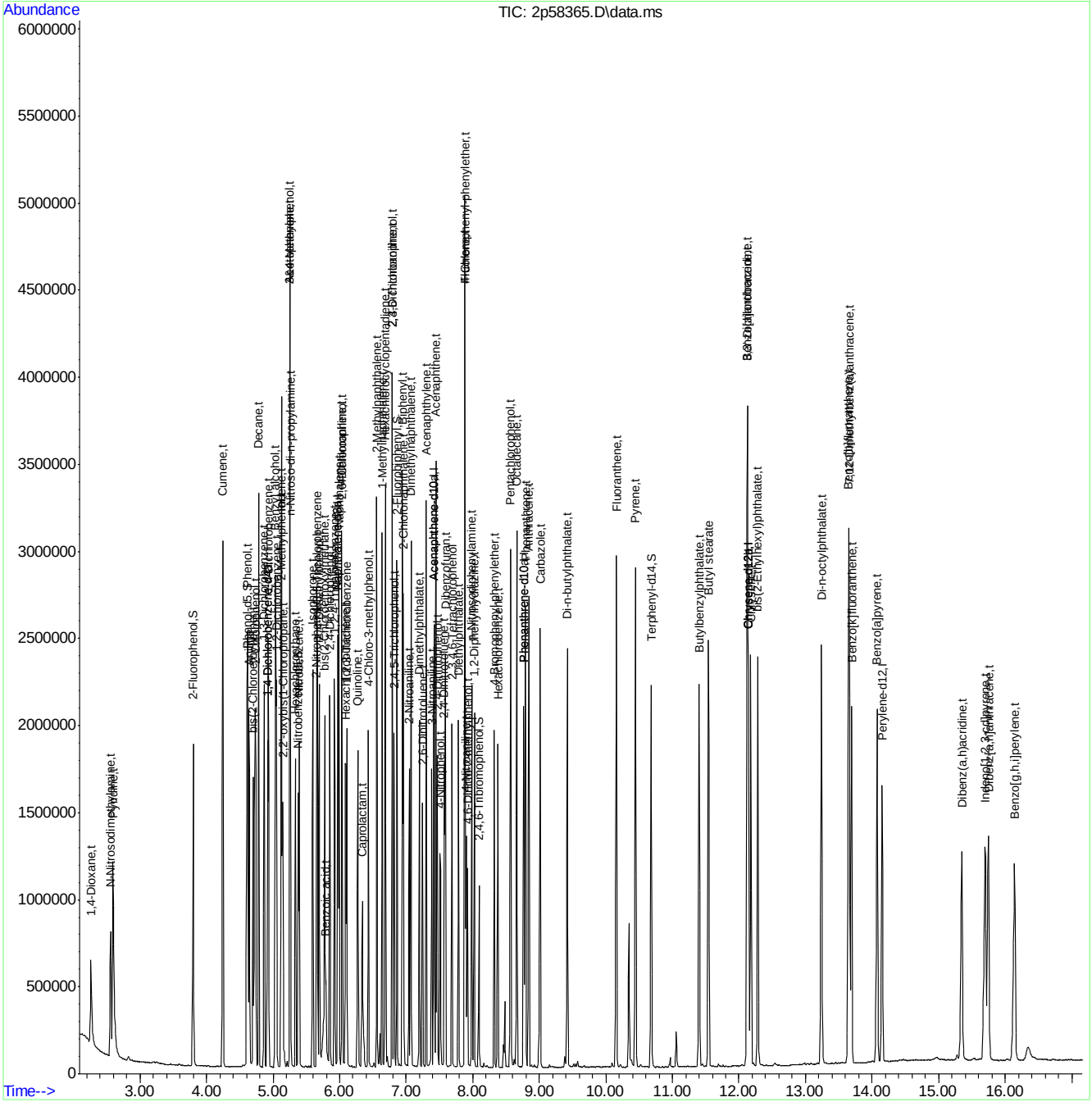
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58365.D
Acq On : 19 Apr 2016 4:33 pm
Operator : robertl1
Sample : ICC2547-50
Misc : op92038,e2p2547
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 08:22:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58366.D
Acq On : 19 Apr 2016 4:57 pm
Operator : robertl1
Sample : IC2547-25
Misc : op92038,e2p2547
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 08:23:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	290544	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1033350	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	560340	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	877948	40.00	ppm	0.00
83) Chrysene-d12	12.142	240	855767	40.00	ppm	0.00
92) Perylene-d12	14.148	264	720892	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	290544	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1033350	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	560340	40.00	ppm	0.00
109) Chrysene-d12a	12.142	240	855767	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	877948	40.00	ppm	0.00
114) Chrysene-d12b	12.142	240	855767	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.799	112	291532	24.77	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 49.54%			
8) Phenol-d5	4.601	99	340206	24.67	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 49.34%			
25) Nitrobenzene-d5	5.376	82	246101	24.15	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery = 48.30%			
51) 2-Fluorobiphenyl	6.858	172	411297	23.59	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery = 47.18%			
73) 2,4,6-Tribromophenol	8.088	330	47803	24.53	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 49.06%			
85) Terphenyl-d14	10.677	244	418192	24.28	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery = 48.56%			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.269	88	127385	23.86	ppm	98
3) Pyridine	2.595	79	329843	24.98	ppm	97
4) N-Nitrosodimethylamine	2.563	74	191600	24.55	ppm	97
6) Indene	5.130	116	391428	23.99	ppm	99
7) Cumene	4.242	105	635909	24.68	ppm	99
9) Phenol	4.612	94	357409	25.06	ppm	84
10) Aniline	4.638	93	416830	24.84	ppm	100
11) bis(2-Chloroethyl)ether	4.697	93	252242	24.49	ppm	99
12) 2-Chlorophenol	4.735	128	263280	24.70	ppm	98
13) Decane	4.783	57	394167	24.82	ppm	98
14) 1,3-Dichlorobenzene	4.863	146	284945	24.32	ppm	99
15) 1,4-Dichlorobenzene	4.927	146	277268	24.05	ppm	99
16) Benzyl alcohol	5.029	108	163752	24.53	ppm	97
17) 1,2-Dichlorobenzene	5.050	146	255533	23.98	ppm	98
18) Acetophenone	5.253	105	311784	23.81	ppm	87
19) 2-Methylphenol	5.120	108	223221	24.40	ppm	100
20) 2,2'-oxybis(1-Chloropr...	5.146	121	70926	23.62	ppm #	93
21) 3&4-Methylphenol	5.248	108	231223	24.23	ppm	99
22) n-Nitroso-di-n-propyla...	5.253	70	159519	23.60	ppm	99

SGS ACCUTEST JC18649

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 JC18649

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

7.6.31

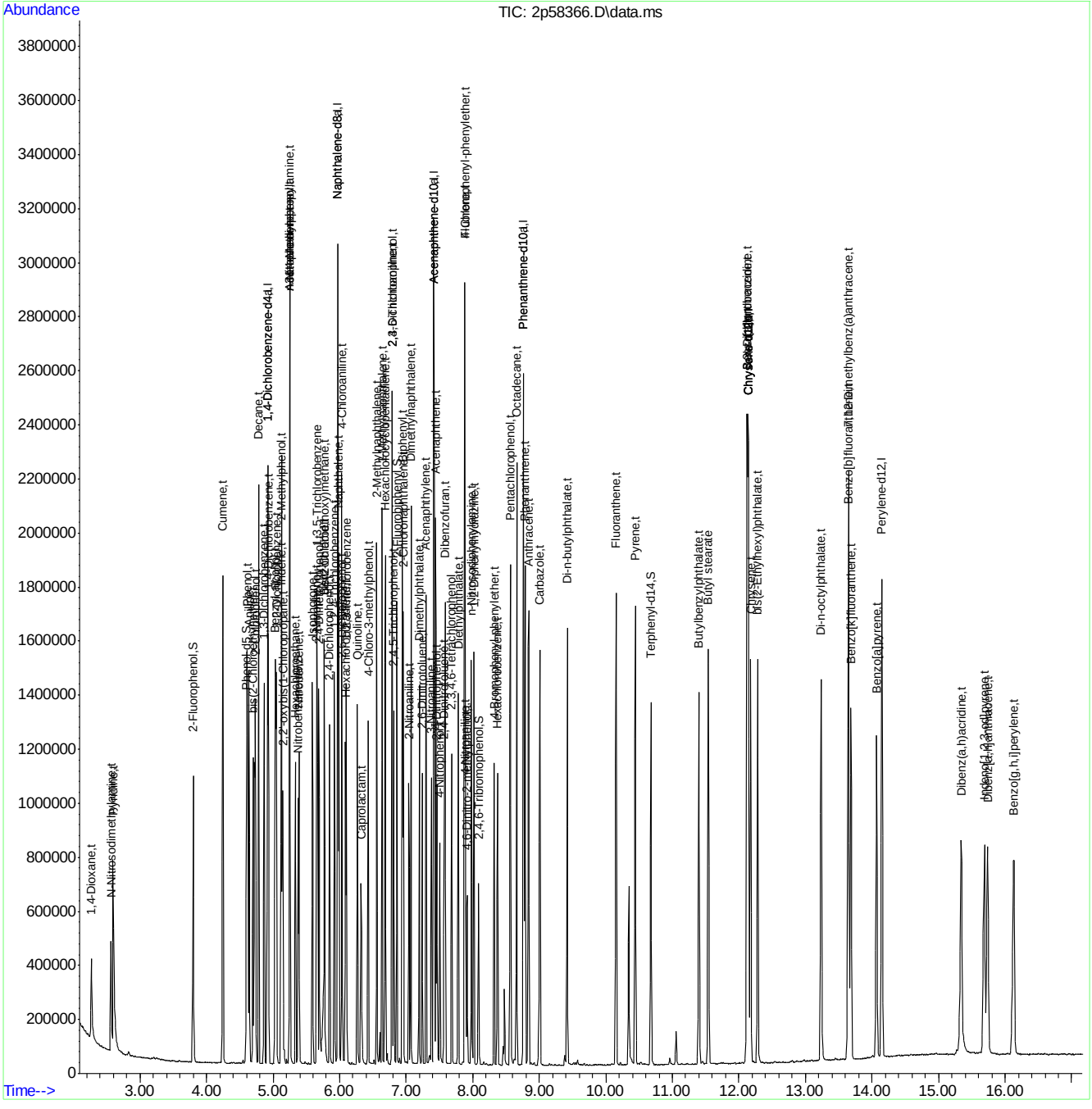
7

SGS ACCUTEST JC18649

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 JC18649

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58367.D
Acq On : 19 Apr 2016 5:21 pm
Operator : robertl1
Sample : IC2547-80
Misc : op92038,e2p2547
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 20 08:24:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23)	Hexachloroethane	5.339	201	223423	75.02	ppm	84
26)	Nitrobenzene	5.398	77	624832	71.71	ppm	96
27)	Quinoline	6.280	129	1192947	76.81	ppm	100
28)	Isophorone	5.601	82	1174481	75.26	ppm	100
29)	2-Nitrophenol	5.660	139	336390	78.09	ppm	84
30)	2,4-Dimethylphenol	5.697	107	572547	74.74	ppm	99
31)	Benzoic acid	5.815	105	539466	89.92	ppm	100
32)	bis(2-Chloroethoxy)met...	5.777	93	695557	71.66	ppm	99
33)	2,4-Dichlorophenol	5.858	162	505174	76.62	ppm	99
34)	2,6-Dichlorophenol	6.045	162	457711	73.71	ppm	98
35)	1,3,5-Trichlorobenzene	5.665	180	548848	72.47	ppm	97
36)	1,2,4-Trichlorobenzene	5.927	180	536023	73.77	ppm	98
37)	1,2,3-Trichlorobenzene	6.109	180	485855	71.88	ppm	98
38)	Naphthalene	5.991	128	1590839	70.51	ppm	99
39)	4-Chloroaniline	6.040	127	685504	70.28	ppm	96
40)	2,3-Dichloroaniline	6.794	161	581606	71.99	ppm	97
41)	Caprolactam	6.360	113	204880	81.03	ppm	93
42)	Hexachlorobutadiene	6.093	225	276764	77.03	ppm	98
43)	4-Chloro-3-methylphenol	6.441	107	519606	76.79	ppm	96
44)	2-Methylnaphthalene	6.558	141	946367	75.10	ppm	99
45)	1-Methylnaphthalene	6.644	141	953813	73.83	ppm	97
46)	Dimethylnaphthalene	7.077	156	911170	71.60	ppm	99
48)	Hexachlorocyclopentadiene	6.687	237	673971	172.01	ppm	98
49)	2,4,6-Trichlorophenol	6.794	196	338355	75.08	ppm	98
50)	2,4,5-Trichlorophenol	6.826	196	369193	76.07	ppm	97
52)	2-Chloronaphthalene	6.965	162	984342	68.84	ppm	97
53)	Biphenyl	6.949	154	1260093	70.21	ppm	98
54)	2-Nitroaniline	7.050	65	369511	62.95	ppm	95
55)	Dimethylphthalate	7.200	163	1139412	73.39	ppm	99
56)	Acenaphthylene	7.302	152	1699894	73.03	ppm	100
57)	2,6-Dinitrotoluene	7.248	165	266948	81.04	ppm	91
58)	3-Nitroaniline	7.387	138	338545	67.73	ppm	95
59)	Acenaphthene	7.446	153	1035606	72.63	ppm	99
60)	2,4-Dinitrophenol	7.473	184	294895	159.90	ppm	83
61)	4-Nitrophenol	7.521	109	160935	81.81	ppm	89
62)	Dibenzofuran	7.591	168	1331830	70.65	ppm	100
63)	2,4-Dinitrotoluene	7.580	165	349617	80.99	ppm	97
64)	2,3,4,6-Tetrachlorophenol	7.687	232	300226	81.31	ppm	98
65)	Diethylphthalate	7.789	149	1162614	73.81	ppm	98
66)	Fluorene	7.885	166	1135938	72.54	ppm	99
67)	4-Chlorophenyl-phenyle...	7.879	204	504520	73.73	ppm	99
68)	4-Nitroaniline	7.912	138	328549	76.49	ppm	96
70)	4,6-Dinitro-2-methylph...	7.928	198	198991	88.15	ppm	98
71)	n-Nitrosodiphenylamine	7.986	169	758468	72.59	ppm	100
72)	1,2-Diphenylhydrazine	8.024	77	1139191	67.81	ppm	93
74)	4-Bromophenyl-phenylether	8.329	248	315407	80.29	ppm	91
75)	Hexachlorobenzene	8.377	284	331387	78.79	ppm	99
76)	Pentachlorophenol	8.569	266	506022	177.99	ppm	98
77)	Phenanthrene	8.794	178	1685742	74.38	ppm	98
78)	Anthracene	8.848	178	1675034	74.50	ppm	99

SGS ACCUTEST JC18649

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

7.6.32

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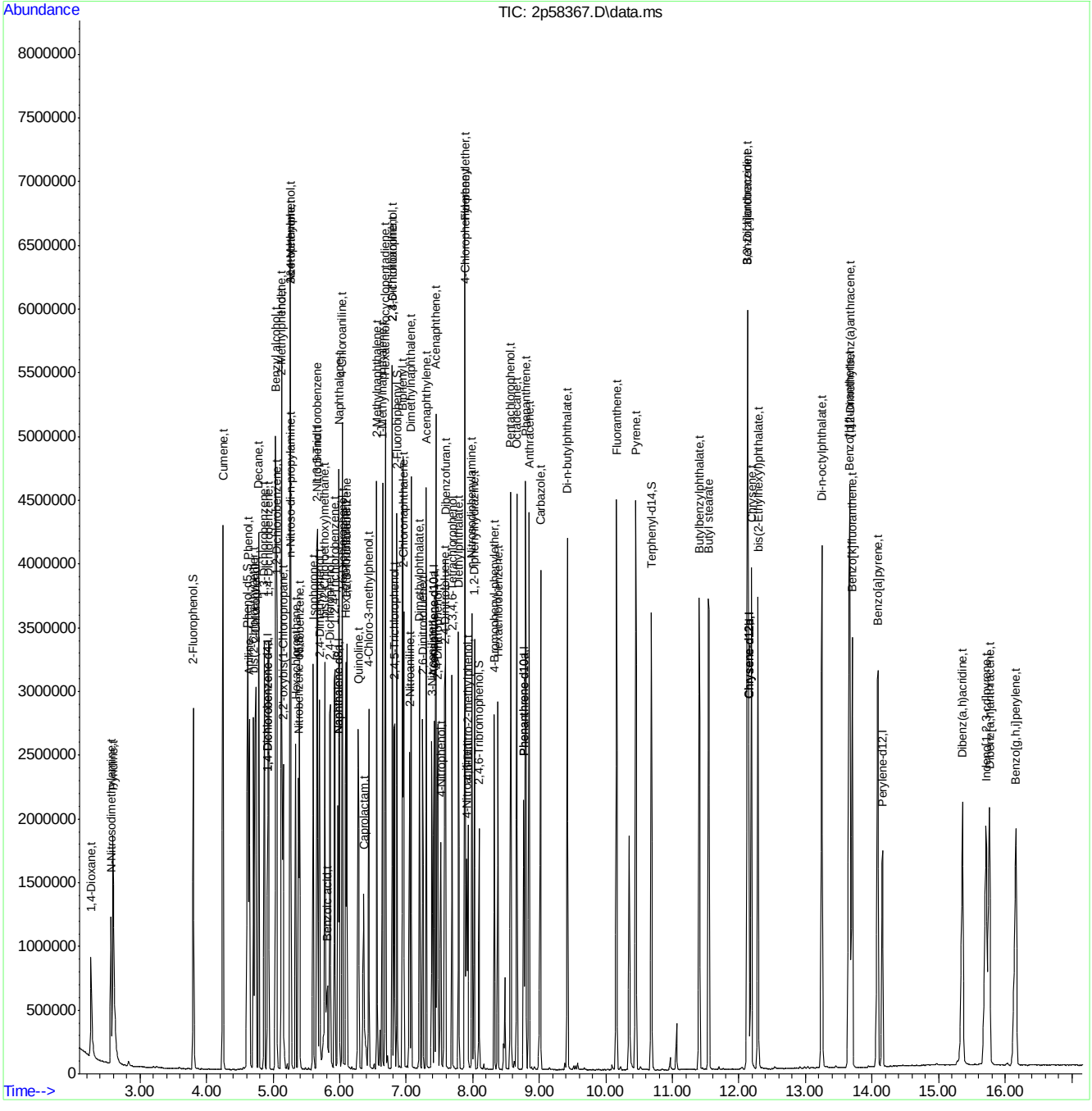
SGS ACCUTEST JC18649

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



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58368.D
Acq On : 19 Apr 2016 5:45 pm
Operator : robertl1
Sample : IC2547-10
Misc : op92038,e2p2547
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 20 08:25:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	322262	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1135036	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	620256	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	978345	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	939414	40.00	ppm	0.00
92) Perylene-d12	14.148	264	782964	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	322262	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1135036	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	620256	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	939414	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	978345	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	939414	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.798	112	120860	9.26	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	18.52%	
8) Phenol-d5	4.601	99	143565	9.39	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery	=	18.78%	
25) Nitrobenzene-d5	5.371	82	108797	9.72	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery	=	19.44%	
51) 2-Fluorobiphenyl	6.858	172	183977	9.53	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery	=	19.06%#	
73) 2,4,6-Tribromophenol	8.088	330	19976	9.20	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery	=	18.40%	
85) Terphenyl-d14	10.677	244	175097	9.26	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery	=	18.52%	
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.269	88	51080	8.63	ppm	93
3) Pyridine	2.600	79	136123	9.29	ppm	97
4) N-Nitrosodimethylamine	2.563	74	79088	9.14	ppm	99
6) Indene	5.125	116	181468	10.03	ppm	99
7) Cumene	4.242	105	271517	9.50	ppm	99
9) Phenol	4.611	94	151257	9.56	ppm	95
10) Aniline	4.638	93	181125	9.73	ppm	98
11) bis(2-Chloroethyl)ether	4.697	93	110553	9.68	ppm	98
12) 2-Chlorophenol	4.734	128	116252	9.83	ppm	94
13) Decane	4.783	57	174620	9.91	ppm	97
14) 1,3-Dichlorobenzene	4.863	146	124112	9.55	ppm	100
15) 1,4-Dichlorobenzene	4.927	146	123321	9.64	ppm	99
16) Benzyl alcohol	5.029	108	70502	9.52	ppm	96
17) 1,2-Dichlorobenzene	5.050	146	117083	9.91	ppm	97
18) Acetophenone	5.248	105	144959	9.98	ppm	98
19) 2-Methylphenol	5.120	108	102006	10.05	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.146	121	32053	9.62	ppm #	93
21) 3&4-Methylphenol	5.243	108	107743	10.18	ppm	100
22) n-Nitroso-di-n-propyla...	5.248	70	75571	10.08	ppm	95

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58368.D
Acq On : 19 Apr 2016 5:45 pm
Operator : robertl1
Sample : IC2547-10
Misc : op92038,e2p2547
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 20 08:25:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23)	Hexachloroethane	5.334	201	37264	9.60	ppm	95
26)	Nitrobenzene	5.387	77	111804	9.90	ppm	98
27)	Quinoline	6.264	129	192134	9.55	ppm	100
28)	Isophorone	5.590	82	195147	9.65	ppm	99
29)	2-Nitrophenol	5.654	139	55233	9.89	ppm	88
30)	2,4-Dimethylphenol	5.687	107	100320	10.11	ppm	96
31)	Benzoic acid	5.745	105	75261	9.68	ppm	99
32)	bis(2-Chloroethoxy)met...	5.772	93	123776	9.84	ppm	98
33)	2,4-Dichlorophenol	5.847	162	83023	9.72	ppm	97
34)	2,6-Dichlorophenol	6.034	162	78552	9.76	ppm	97
35)	1,3,5-Trichlorobenzene	5.660	180	96194	9.80	ppm	97
36)	1,2,4-Trichlorobenzene	5.922	180	92093	9.78	ppm	98
37)	1,2,3-Trichlorobenzene	6.104	180	84864	9.69	ppm	98
38)	Naphthalene	5.986	128	288184	9.86	ppm	98
39)	4-Chloroaniline	6.029	127	124483	9.85	ppm	98
40)	2,3-Dichloroaniline	6.788	161	102517	9.79	ppm	100
41)	Caprolactam	6.312	113	31263	9.54	ppm	97
42)	Hexachlorobutadiene	6.088	225	43807	9.41	ppm	99
43)	4-Chloro-3-methylphenol	6.425	107	84291	9.61	ppm	94
44)	2-Methylnaphthalene	6.558	141	158256	9.69	ppm	100
45)	1-Methylnaphthalene	6.639	141	165050	9.86	ppm	99
46)	Dimethylnaphthalene	7.072	156	159350	9.66	ppm	99
48)	Hexachlorocyclopentadiene	6.687	237	96647	19.38	ppm	99
49)	2,4,6-Trichlorophenol	6.788	196	56138	9.78	ppm	100
50)	2,4,5-Trichlorophenol	6.815	196	60018	9.71	ppm	98
52)	2-Chloronaphthalene	6.960	162	179294	9.85	ppm	95
53)	Biphenyl	6.943	154	222863	9.75	ppm	98
54)	2-Nitroaniline	7.040	65	60850	8.14	ppm	96
55)	Dimethylphthalate	7.195	163	187354	9.48	ppm	100
56)	Acenaphthylene	7.296	152	287974	9.72	ppm	99
57)	2,6-Dinitrotoluene	7.243	165	41037	9.79	ppm	96
58)	3-Nitroaniline	7.377	138	54266	8.53	ppm	97
59)	Acenaphthene	7.441	153	172753	9.52	ppm	99
60)	2,4-Dinitrophenol	7.462	184	30698	18.21	ppm	93
61)	4-Nitrophenol	7.505	109	23973	9.57	ppm	93
62)	Dibenzofuran	7.585	168	233370	9.73	ppm	99
63)	2,4-Dinitrotoluene	7.569	165	55364	10.07	ppm	95
64)	2,3,4,6-Tetrachlorophenol	7.682	232	44226	9.41	ppm	93
65)	Diethylphthalate	7.778	149	190793	9.52	ppm	100
66)	Fluorene	7.874	166	191465	9.61	ppm	99
67)	4-Chlorophenyl-phenyle...	7.879	204	83369	9.57	ppm	100
68)	4-Nitroaniline	7.885	138	54922	10.04	ppm	99
70)	4,6-Dinitro-2-methylph...	7.912	198	24798	8.67	ppm	95
71)	n-Nitrosodiphenylamine	7.981	169	126006	9.51	ppm	99
72)	1,2-Diphenylhydrazine	8.019	77	213831	10.04	ppm	95
74)	4-Bromophenyl-phenylether	8.323	248	46367	9.31	ppm	95
75)	Hexachlorobenzene	8.372	284	49373	9.26	ppm	92
76)	Pentachlorophenol	8.564	266	68144	18.91	ppm	99
77)	Phenanthrene	8.789	178	265779	9.25	ppm	99
78)	Anthracene	8.837	178	271589	9.53	ppm	100

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58368.D
Acq On : 19 Apr 2016 5:45 pm
Operator : robertl1
Sample : IC2547-10
Misc : op92038,e2p2547
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 20 08:25:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.008	167	253649	9.46	ppm	99
80)	Di-n-butylphthalate	9.420	149	343049	9.62	ppm	99
81)	Fluoranthene	10.153	202	286158	9.17	ppm	96
82)	Octadecane	8.660	43	130781	10.40	ppm	96
84)	Pyrene	10.441	202	304609	9.78	ppm	99
86)	Butylbenzylphthalate	11.399	149	150827	9.48	ppm	95
87)	Butyl stearate	11.538	56	139606	10.26	ppm	97
88)	Benzo[a]anthracene	12.121	228	273258	9.12	ppm	100
89)	3,3'-Dichlorobenzidine	12.116	252	94688	9.34	ppm	96
90)	Chrysene	12.174	228	252582	9.32	ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.281	149	197799	9.94	ppm	99
93)	Di-n-octylphthalate	13.233	149	350508	9.84	ppm	99
94)	Benzo[b]fluoranthene	13.640	252	250741	9.22	ppm	98
95)	Benzo[k]fluoranthene	13.677	252	231336	9.74	ppm	98
96)	Benzo[a]pyrene	14.068	252	213062	9.23	ppm	98
97)	Indeno[1,2,3-cd]pyrene	15.678	276	180477	9.04	ppm	94
98)	Dibenz(a,h)acridine	15.335	279	170729	9.38	ppm	99
99)	Dibenz[a,h]anthracene	15.731	278	180925	9.05	ppm	94
100)	7,12-Dimethylbenz(a)an...	13.640	256	104110	9.39	ppm	98
101)	Benzo[g,h,i]perylene	16.122	276	191939	9.09	ppm	95

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

7.6.33

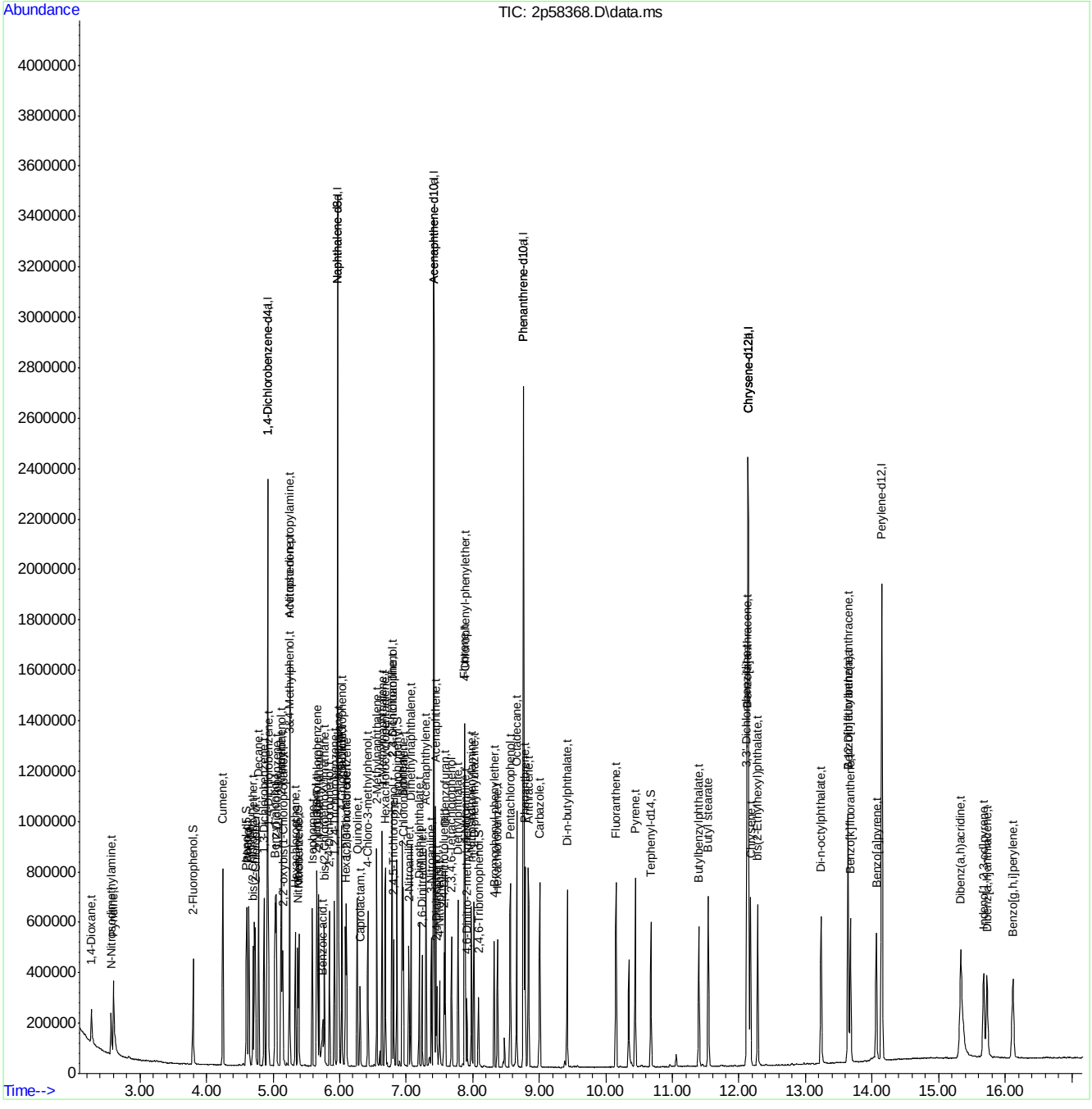
7

SGS ACCUTEST JC18649

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 JC18649

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 JC18649

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

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Data File : 2p58369.D
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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

7.6.34

7

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Data File : 2p58369.D
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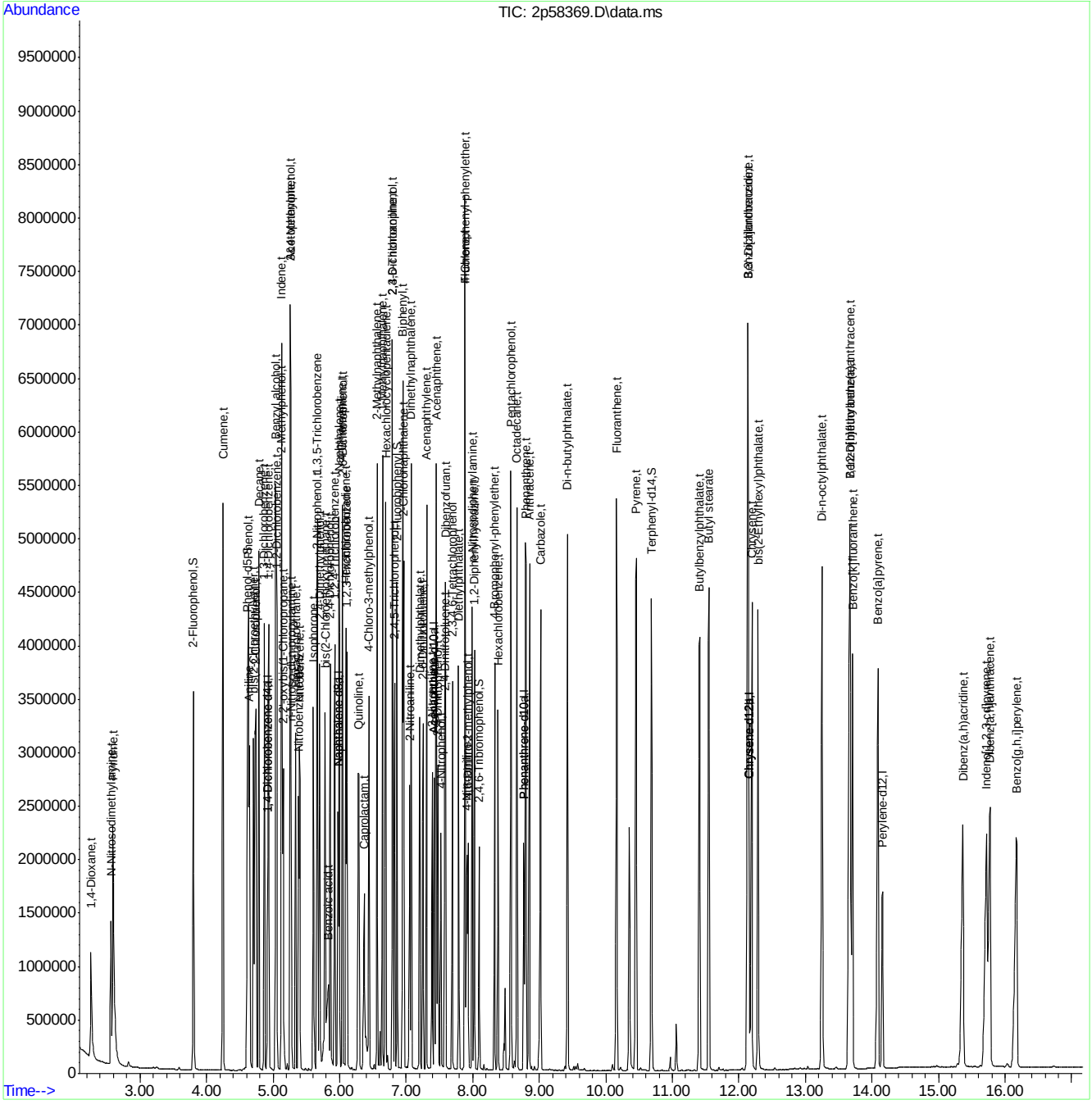
Operator : robertl1
Sample : IC2547-100
Misc : op92038,e2p2547
ALS Vial : 6 Sample Multiplier: 1

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 JC18649

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 JC18649

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 JC18649

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

7.6.35

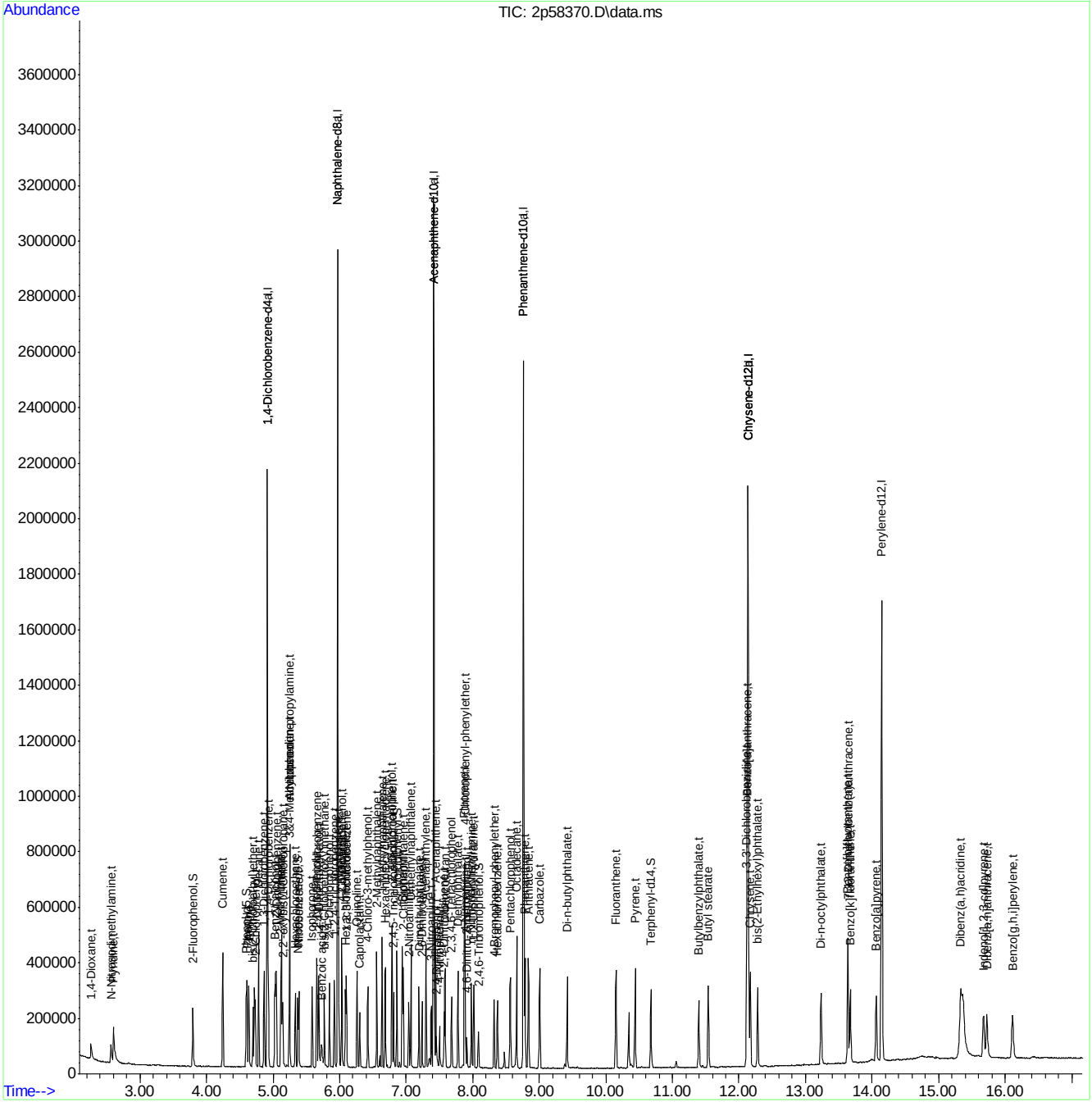
7

SGS ACCUTEST JC18649

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 JC18649

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 JC18649

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 JC18649

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

7.6.36

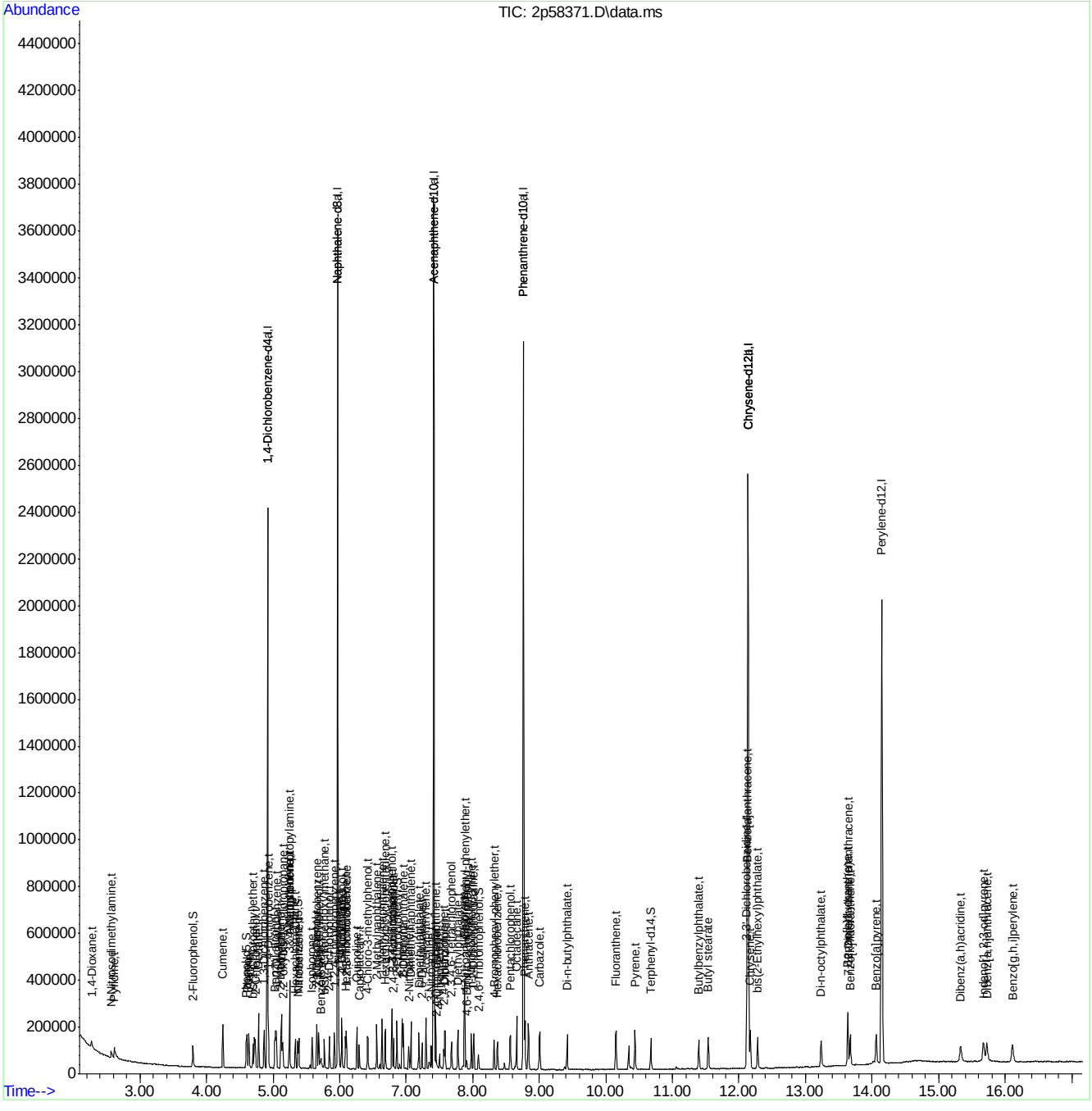
7

SGS ACCUTEST JC18649

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

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 JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58372.D
Acq On : 19 Apr 2016 7:21 pm
Operator : robertl1
Sample : IC2547-1
Misc : op92038,e2p2547
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 20 08:33:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

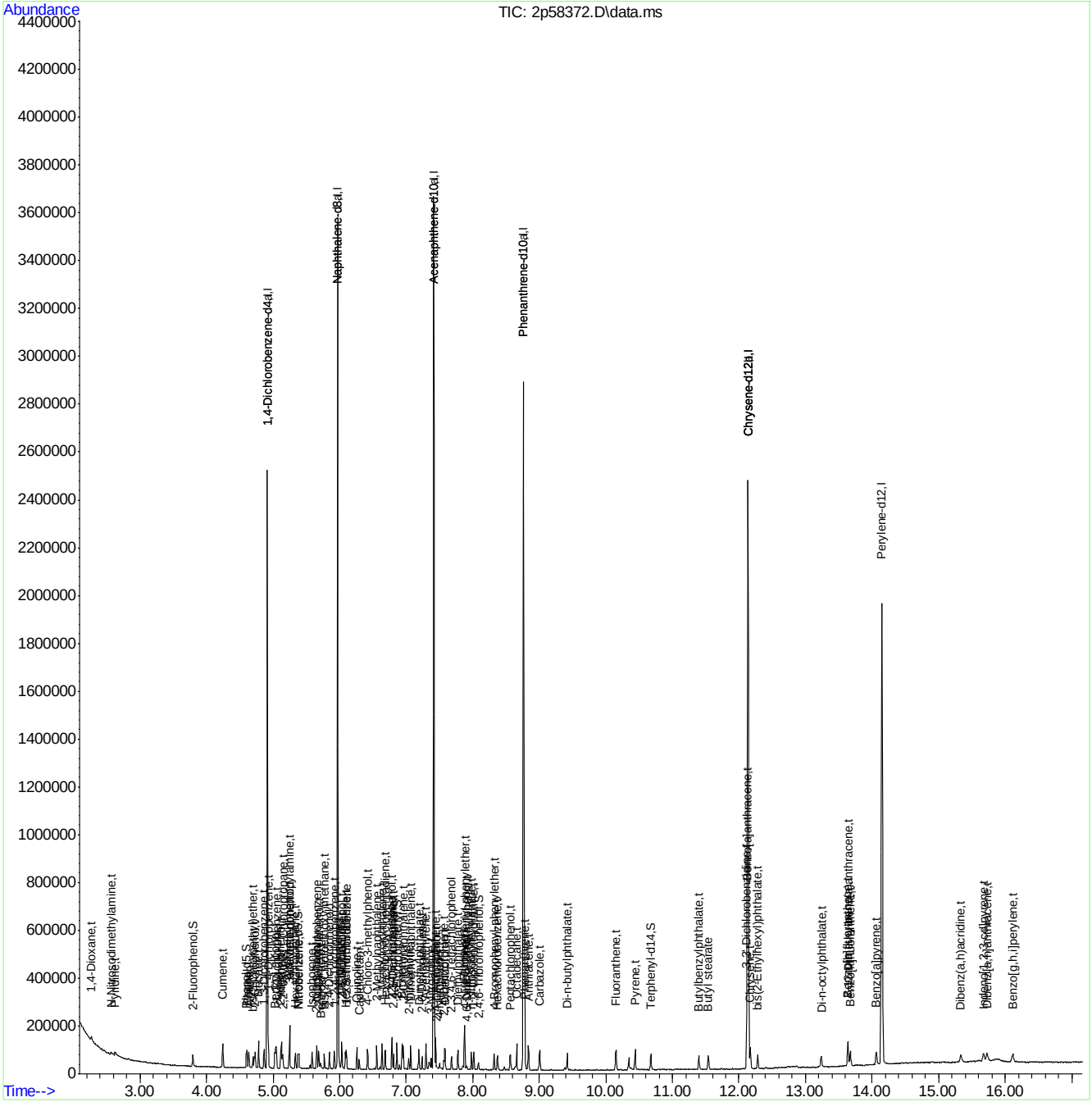
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.008	167	30798	1.13	ppm	98
80)	Di-n-butylphthalate	9.420	149	36053	0.99	ppm	99
81)	Fluoranthene	10.153	202	32405	1.02	ppm	96
82)	Octadecane	8.660	43	13680	1.07	ppm	97
84)	Pyrene	10.441	202	35754	1.14	ppm	98
86)	Butylbenzylphthalate	11.399	149	15181	0.95	ppm	91
87)	Butyl stearate	11.538	56	12111	0.88	ppm	94
88)	Benzo[a]anthracene	12.121	228	32870	1.09	ppm	99
89)	3,3'-Dichlorobenzidine	12.116	252	9565	0.94	ppm	97
90)	Chrysene	12.169	228	30750	1.13	ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.281	149	18696	0.93	ppm	97
93)	Di-n-octylphthalate	13.239	149	29809	0.81	ppm	98
94)	Benzo[b]fluoranthene	13.635	252	27873	0.99	ppm	95
95)	Benzo[k]fluoranthene	13.672	252	26037	1.06	ppm	91
96)	Benzo[a]pyrene	14.062	252	23100	0.97	ppm	96
97)	Indeno[1,2,3-cd]pyrene	15.678	276	19314	0.94	ppm	95
98)	Dibenz(a,h)acridine	15.335	279	17641	0.94	ppm	95
99)	Dibenz[a,h]anthracene	15.731	278	20577	1.00	ppm	97
100)	7,12-Dimethylbenz(a)an...	13.640	256	10380	0.91	ppm	98
101)	Benzo[g,h,i]perylene	16.111	276	21653	0.99	ppm	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58372.D
Acq On : 19 Apr 2016 7:21 pm
Operator : robertl1
Sample : IC2547-1
Misc : op92038,e2p2547
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 20 08:33:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58374.D
Acq On : 19 Apr 2016 8:00 pm
Operator : sarad
Sample : ic2548-100
Misc : op92038,e2p2548
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 19 23:12:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration

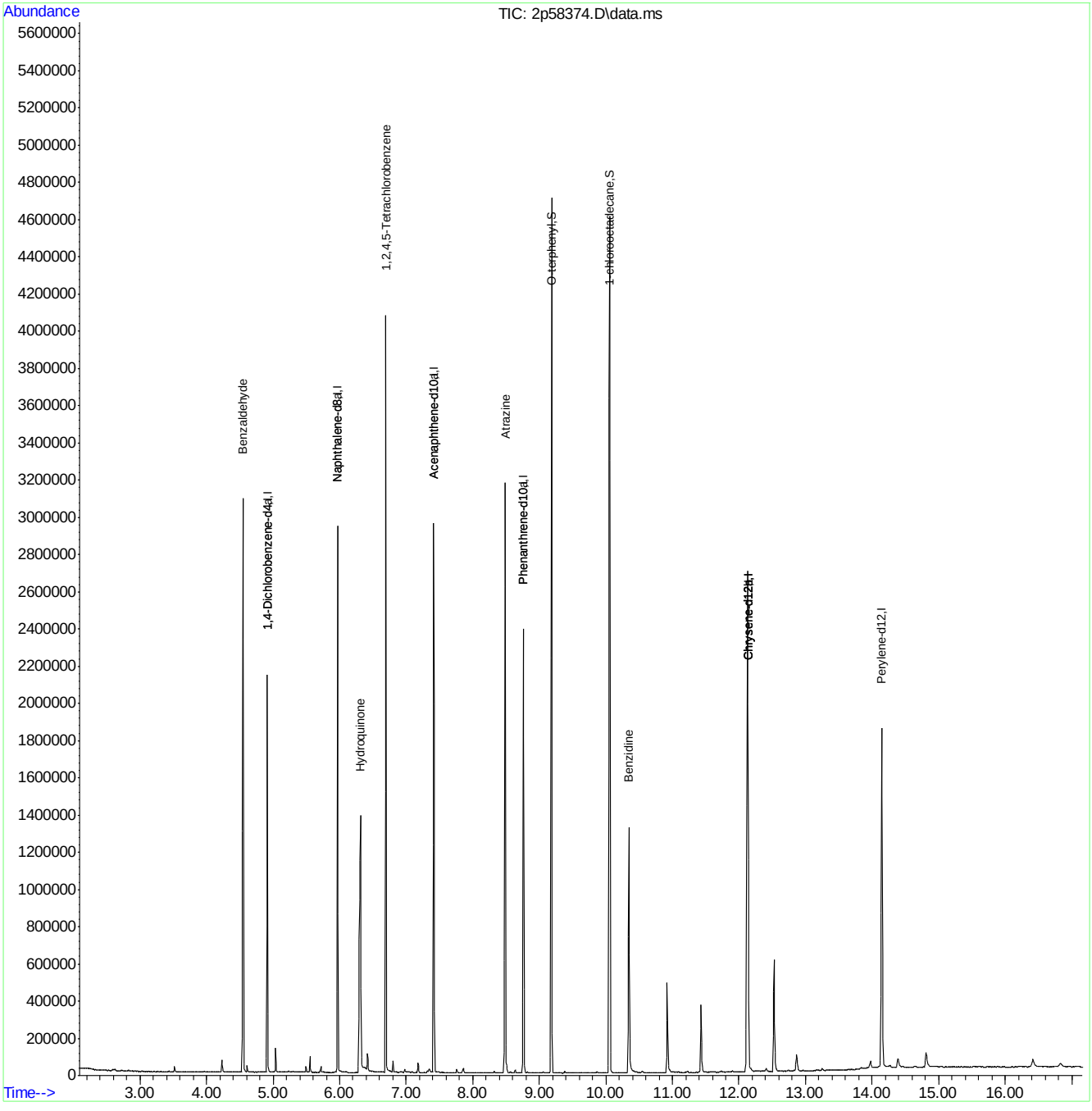
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	264204	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1012789	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	469070	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	798114	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	789888	40.00	ppm	0.00
92) Perylene-d12	14.148	264	713858	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	264204	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1012789	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	469070	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	789888	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	798114	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	789888	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	10.056	57	808390	99.66	ppm	0.00
113) O-terphenyl	9.184	230	952972	99.87	ppm	0.00
Target Compounds						Qvalue
103) Benzaldehyde	4.547	105	481912	99.98	ppm #	84
105) Hydroquinone	6.312	110	869885	100.36	ppm #	77
107) Atrazine	8.489	215	186721	99.97	ppm #	88
108) 1,2,4,5-Tetrachloroben...	6.692	216	620748	99.66	ppm	99
110) Benzidine	10.345	184	580087	98.88	ppm	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58374.D
Acq On : 19 Apr 2016 8:00 pm
Operator : sarad
Sample : ic2548-100
Misc : op92038,e2p2548
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 19 23:12:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58375.D
Acq On : 19 Apr 2016 8:24 pm
Operator : sarad
Sample : ic2548-80
Misc : op92038,e2p2548
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 19 23:13:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration

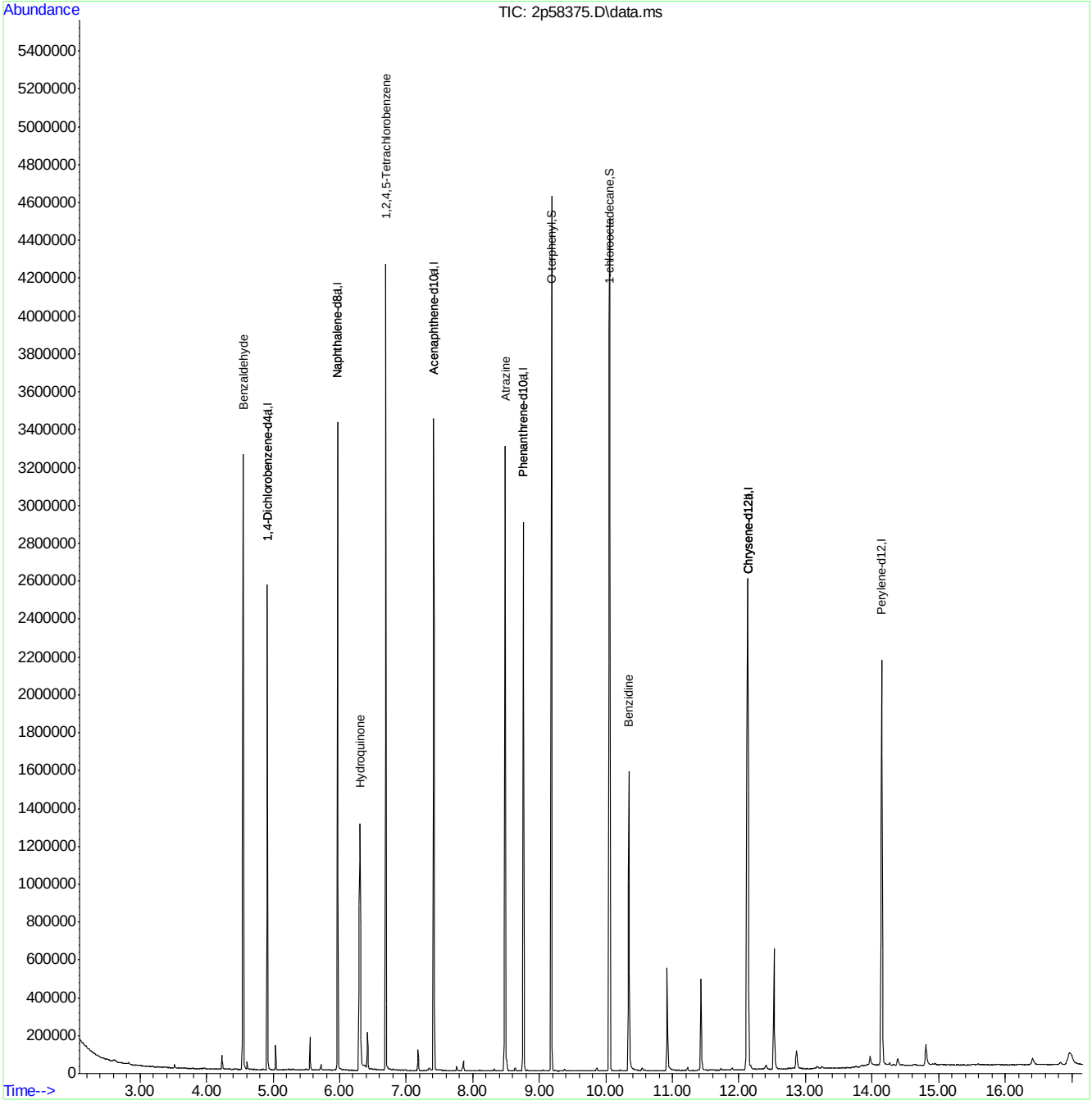
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	327805	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1240041	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	569275	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	977028	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	979647	40.00	ppm	0.00
92) Perylene-d12	14.148	264	899194	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	327805	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1240041	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	569275	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	979647	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	977028	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	979647	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	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	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	10.056	57	815864	82.17	ppm	0.00
113) O-terphenyl	9.185	230	944193	80.83	ppm	0.00
Target Compounds						Qvalue
103) Benzaldehyde	4.553	105	562566	94.07	ppm #	81
105) Hydroquinone	6.312	110	870006	81.98	ppm #	74
107) Atrazine	8.489	215	189369	83.54	ppm	90
108) 1,2,4,5-Tetrachloroben...	6.692	216	624836	82.66	ppm	98
110) Benzidine	10.345	184	663498	91.19	ppm	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58375.D
Acq On : 19 Apr 2016 8:24 pm
Operator : sarad
Sample : ic2548-80
Misc : op92038,e2p2548
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 19 23:13:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58376.D
Acq On : 19 Apr 2016 8:47 pm
Operator : sarad
Sample : icc2548-50
Misc : op92038,e2p2548
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 19 23:14:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	343340	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1305556	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	606847	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	1045690	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	1039101	40.00	ppm	0.00
92) Perylene-d12	14.148	264	952152	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	343340	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1305556	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	606847	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	1039101	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	1045690	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	1039101	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	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	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	10.056	57	587802	55.31	ppm	0.00
113) O-terphenyl	9.179	230	649402	51.95	ppm	0.00
Target Compounds						Qvalue
103) Benzaldehyde	4.547	105	448412	71.59	ppm	# 84
105) Hydroquinone	6.302	110	573990	51.37	ppm	# 76
107) Atrazine	8.484	215	126583	52.38	ppm	# 84
108) 1,2,4,5-Tetrachloroben...	6.692	216	430077	53.37	ppm	99
110) Benzidine	10.345	184	600504	77.81	ppm	97

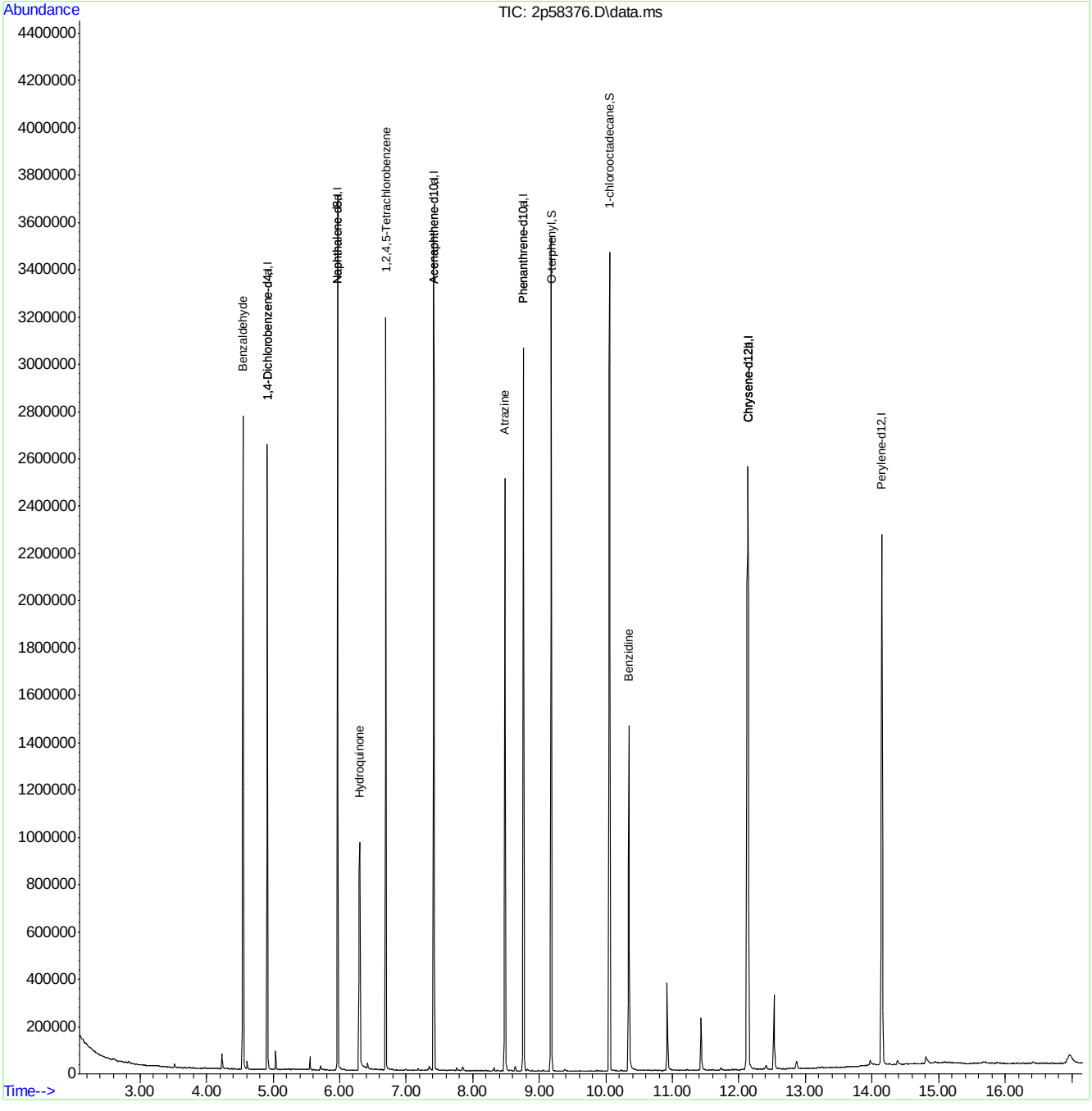
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58376.D
Acq On : 19 Apr 2016 8:47 pm
Operator : sarad
Sample : icc2548-50
Misc : op92038,e2p2548
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 19 23:14:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58377.D
Acq On : 19 Apr 2016 9:11 pm
Operator : sarad
Sample : ic2548-25
Misc : op92038,e2p2548
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 19 23:14:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	361067	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1377582	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	658080	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	1137438	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	1125179	40.00	ppm	0.00
92) Perylene-d12	14.148	264	1002600	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	361067	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1377582	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	658080	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	1125179	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	1137438	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	1125179	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	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	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	10.051	57	336871	29.14	ppm	0.00
113) O-terphenyl	9.179	230	355472	26.14	ppm	0.00
Target Compounds						Qvalue
103) Benzaldehyde	4.547	105	253298	38.45	ppm	# 84
105) Hydroquinone	6.291	110	300027	25.45	ppm	# 76
107) Atrazine	8.484	215	69439	26.50	ppm	90
108) 1,2,4,5-Tetrachloroben...	6.692	216	237614	27.19	ppm	100
110) Benzidine	10.345	184	384811	46.05	ppm	96

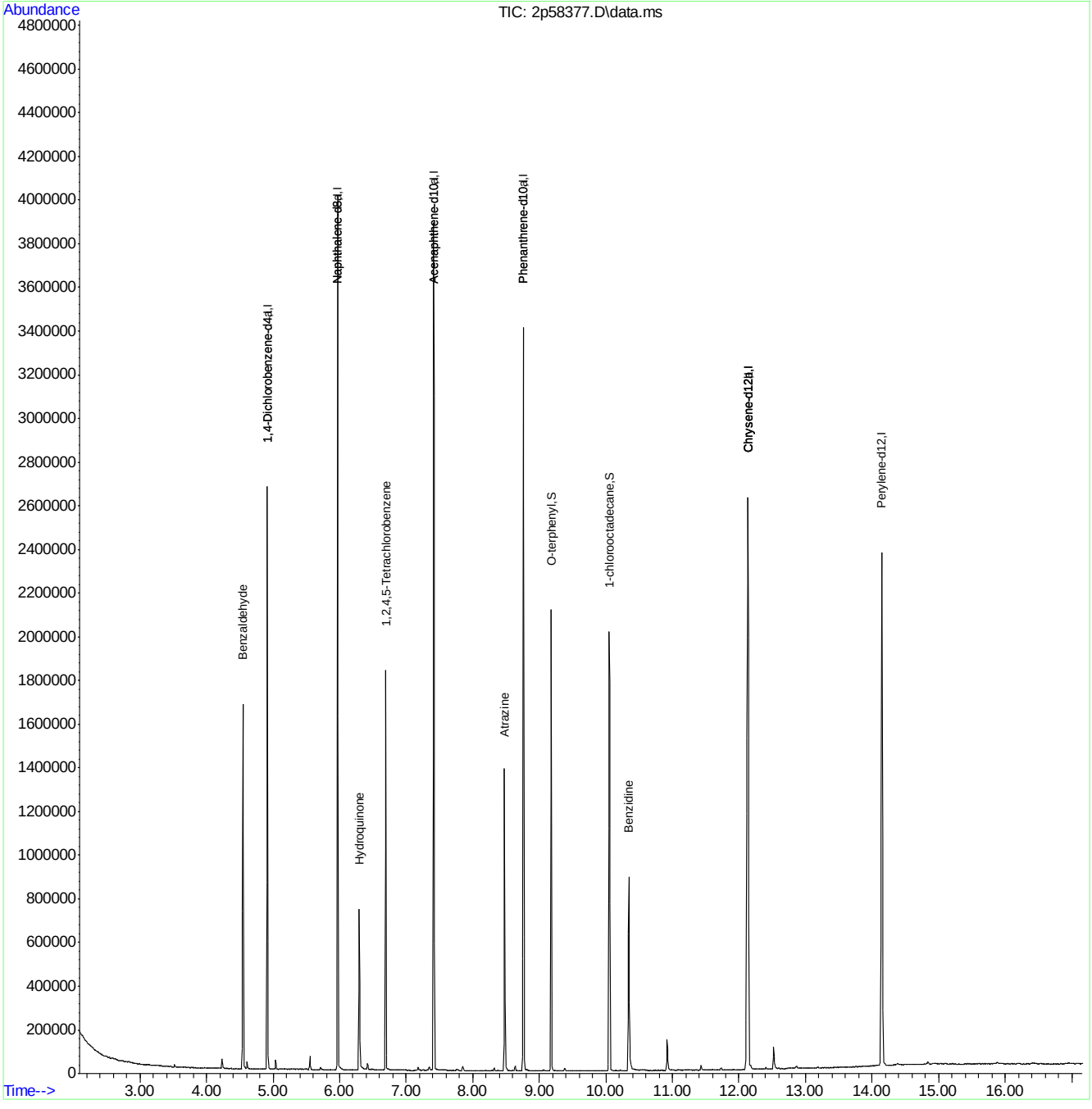
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58377.D
Acq On : 19 Apr 2016 9:11 pm
Operator : sarad
Sample : ic2548-25
Misc : op92038,e2p2548
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 19 23:14:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58378.D
Acq On : 19 Apr 2016 9:34 pm
Operator : sarad
Sample : ic2548-10
Misc : op92038,e2p2548
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 19 23:15:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	373019	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1398887	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	681191	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	1168988	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	1167382	40.00	ppm	0.00
92) Perylene-d12	14.148	264	1037064	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	373019	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1398887	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	681191	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	1167382	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	1168988	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	1167382	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	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	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	10.051	57	142516	12.00	ppm	0.00
113) O-terphenyl	9.179	230	150306	10.75	ppm	0.00
Target Compounds						Qvalue
103) Benzaldehyde	4.547	105	109524	16.09	ppm	# 84
105) Hydroquinone	6.291	110	104120	8.70	ppm	# 74
107) Atrazine	8.478	215	28097	10.36	ppm	# 86
108) 1,2,4,5-Tetrachloroben...	6.692	216	99014	10.95	ppm	98
110) Benzidine	10.345	184	169225	19.52	ppm	96

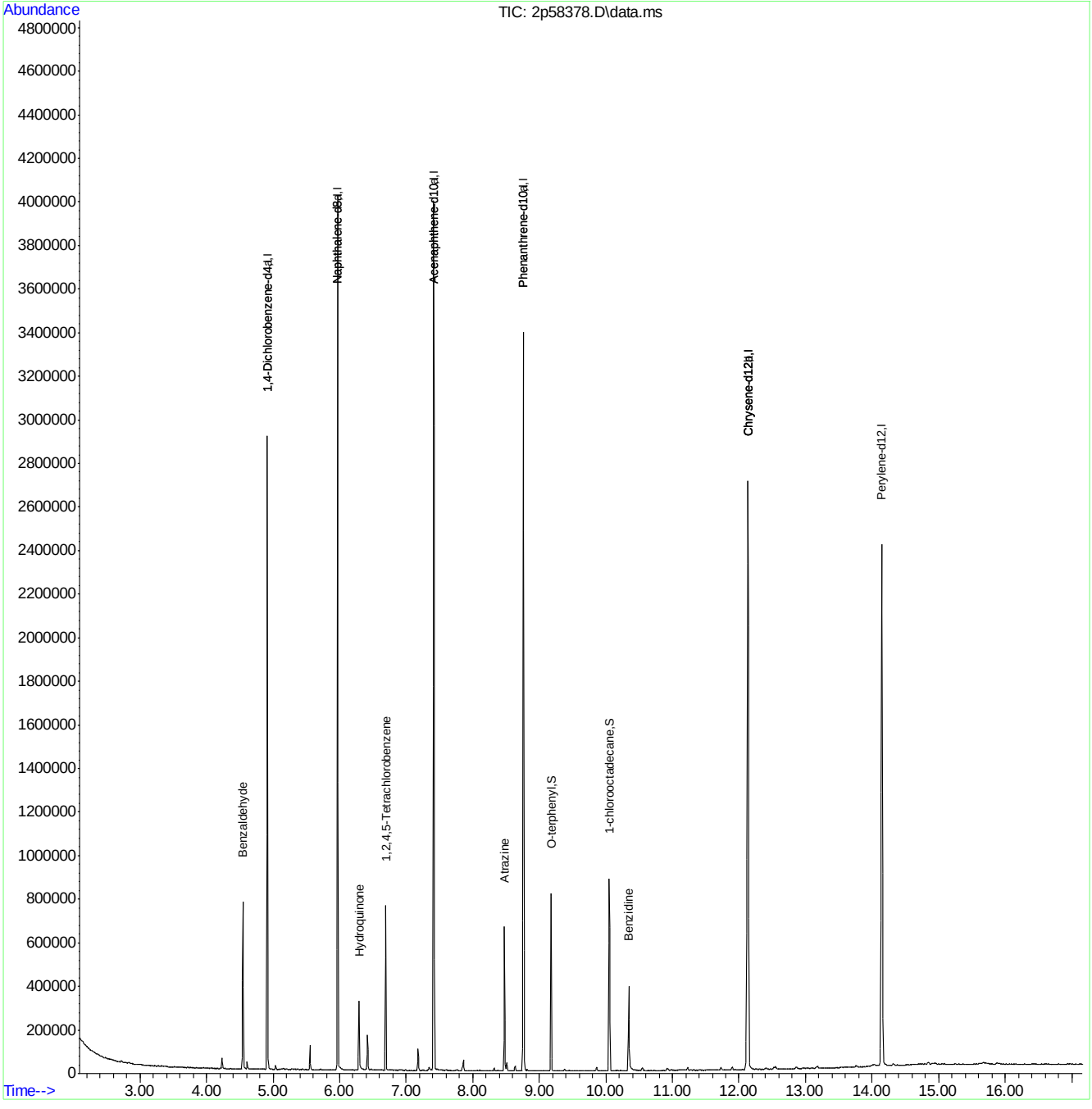
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58378.D
Acq On : 19 Apr 2016 9:34 pm
Operator : sarad
Sample : ic2548-10
Misc : op92038,e2p2548
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 19 23:15:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58379.D
Acq On : 19 Apr 2016 9:57 pm
Operator : sarad
Sample : ic2548-5
Misc : op92038,e2p2548
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 19 23:16:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	376466	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1412603	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	675740	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	1164907	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	1152673	40.00	ppm	0.00
92) Perylene-d12	14.148	264	1022165	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	376466	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1412603	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	675740	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	1152673	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	1164907	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	1152673	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	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	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	10.051	57	76822	6.49	ppm	0.00
113) O-terphenyl	9.179	230	81554	5.86	ppm	0.00
Target Compounds						Qvalue
103) Benzaldehyde	4.547	105	60518	8.81	ppm #	85
105) Hydroquinone	6.286	110	46435	3.84	ppm #	79
107) Atrazine	8.479	215	15093	5.61	ppm	90
108) 1,2,4,5-Tetrachloroben...	6.692	216	54717	6.10	ppm	98
110) Benzidine	10.345	184	86461	10.10	ppm	96

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

7.6.43

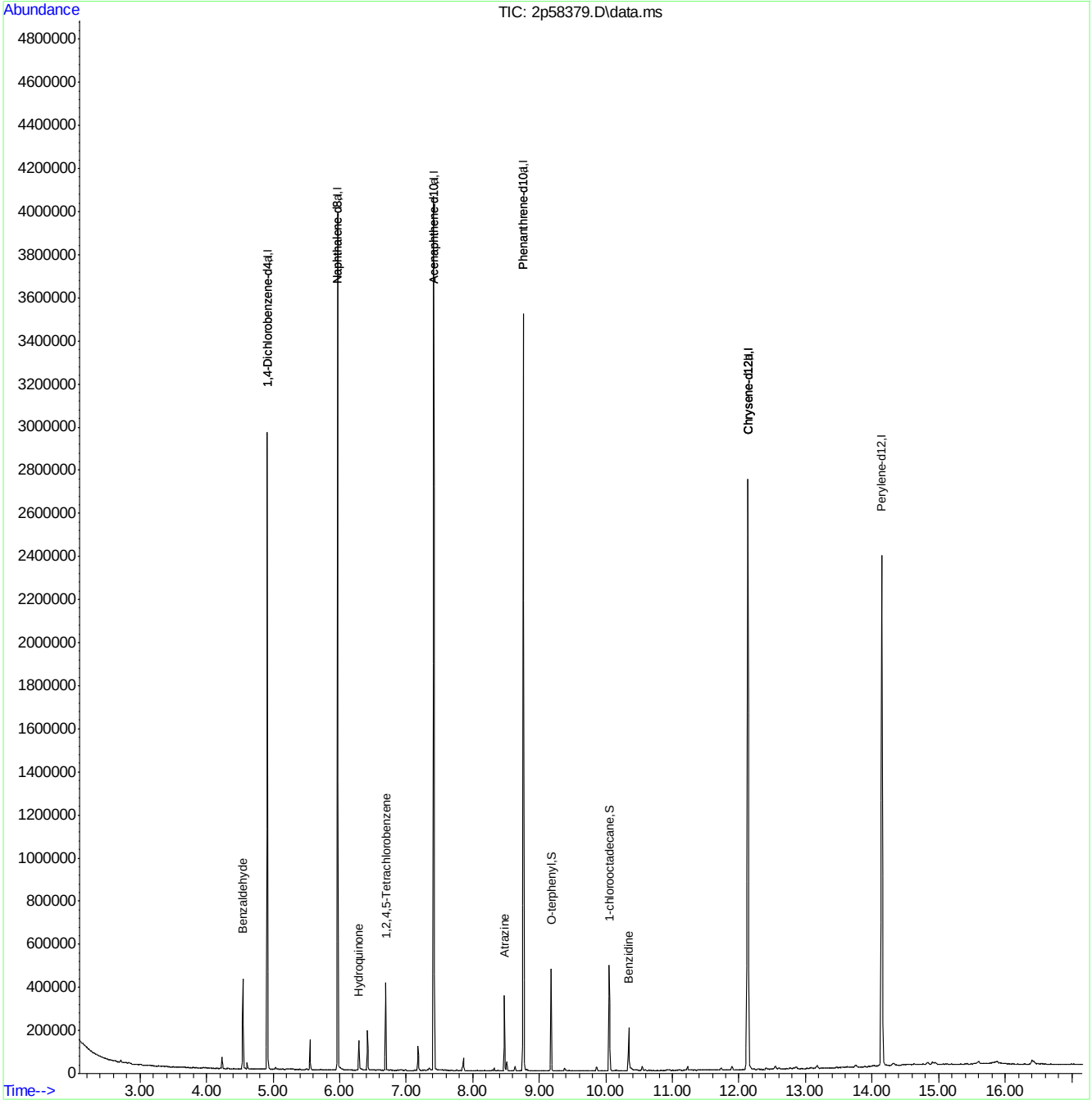
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58379.D
Acq On : 19 Apr 2016 9:57 pm
Operator : sarad
Sample : ic2548-5
Misc : op92038,e2p2548
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 19 23:16:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58380.D
Acq On : 19 Apr 2016 10:21 pm
Operator : sarad
Sample : ic2548-2
Misc : op92038,e2p2548
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 19 23:16:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	334275	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1228296	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	594963	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	1016905	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	988965	40.00	ppm	0.00
92) Perylene-d12	14.148	264	858908	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	334275	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1228296	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	594963	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	988965	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	1016905	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	988965	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	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	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery	=	0.00%#	
112) 1-chlorooctadecane	10.051	57	24052	2.33	ppm	0.00
113) O-terphenyl	9.179	230	27265	2.24	ppm	0.00
Target Compounds						Qvalue
103) Benzaldehyde	4.547	105	20330	3.33	ppm	# 85
105) Hydroquinone	6.291	110	9664	0.92	ppm	# 77
107) Atrazine	8.478	215	4684	1.98	ppm	87
108) 1,2,4,5-Tetrachloroben...	6.692	216	18467	2.34	ppm	96
110) Benzidine	10.345	184	23969	3.26	ppm	96

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

7.6.44

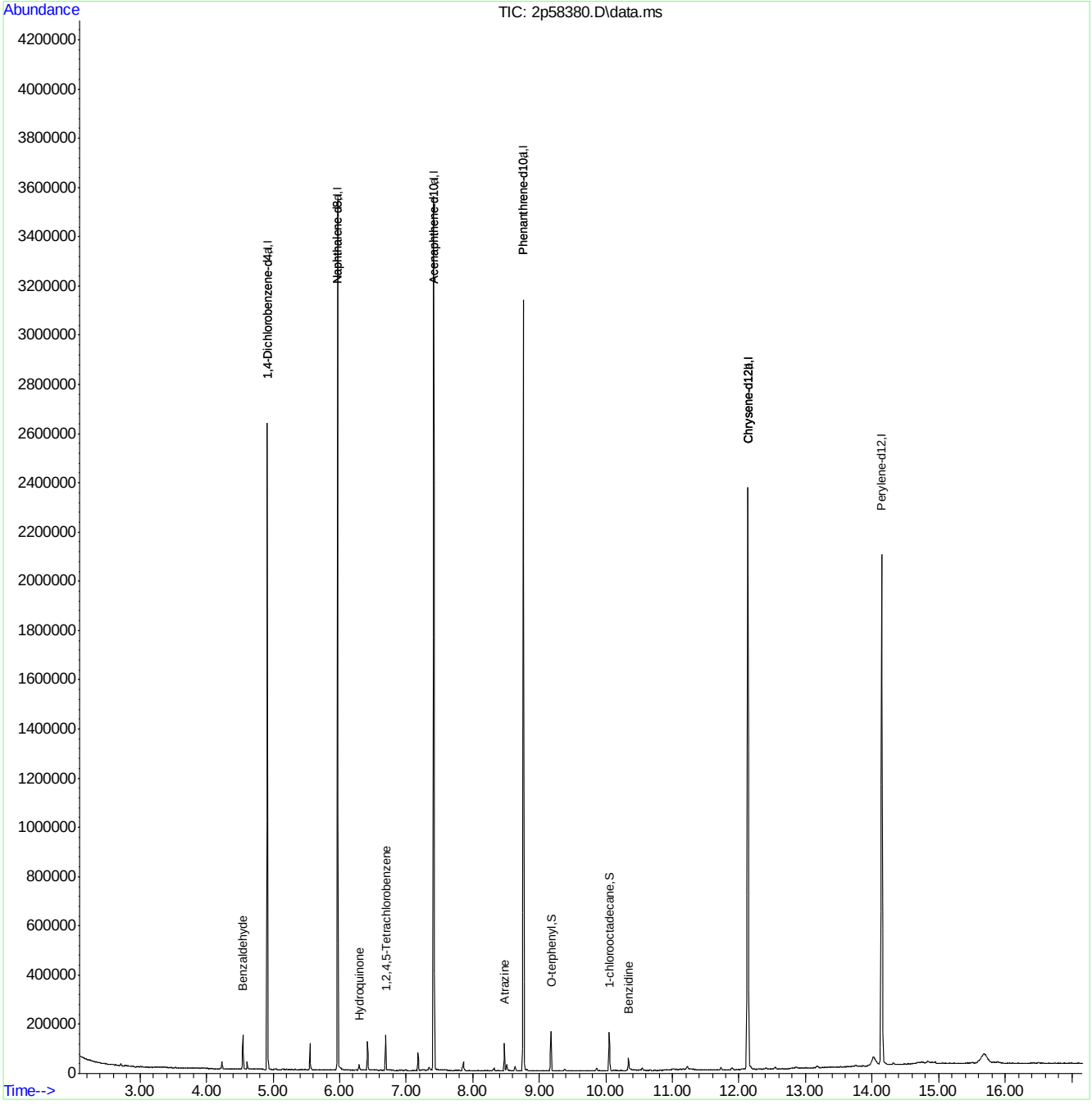
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58380.D
Acq On : 19 Apr 2016 10:21 pm
Operator : sarad
Sample : ic2548-2
Misc : op92038,e2p2548
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 19 23:16:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58381.D
Acq On : 19 Apr 2016 10:44 pm
Operator : sarad
Sample : ic2548-1
Misc : op92038,e2p2548
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 19 23:17:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	371497	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1393331	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	673649	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	1157358	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	1179510	40.00	ppm	0.00
92) Perylene-d12	14.148	264	1038004	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	371497	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1393331	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	673649	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	1179510	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	1157358	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	1179510	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	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	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery	=	0.00%#	
112) 1-chlorooctadecane	10.051	57	13408	1.14	ppm	0.00
113) O-terphenyl	9.179	230	16567	1.20	ppm	0.00
Target Compounds						Qvalue
103) Benzaldehyde	4.547	105	11899	1.76	ppm	86
105) Hydroquinone	6.291	110	4441	0.37	ppm #	77
107) Atrazine	8.473	215	2639	0.98	ppm #	76
108) 1,2,4,5-Tetrachloroben...	6.692	216	11315	1.26	ppm	99
110) Benzidine	10.345	184	10933	1.25	ppm	96

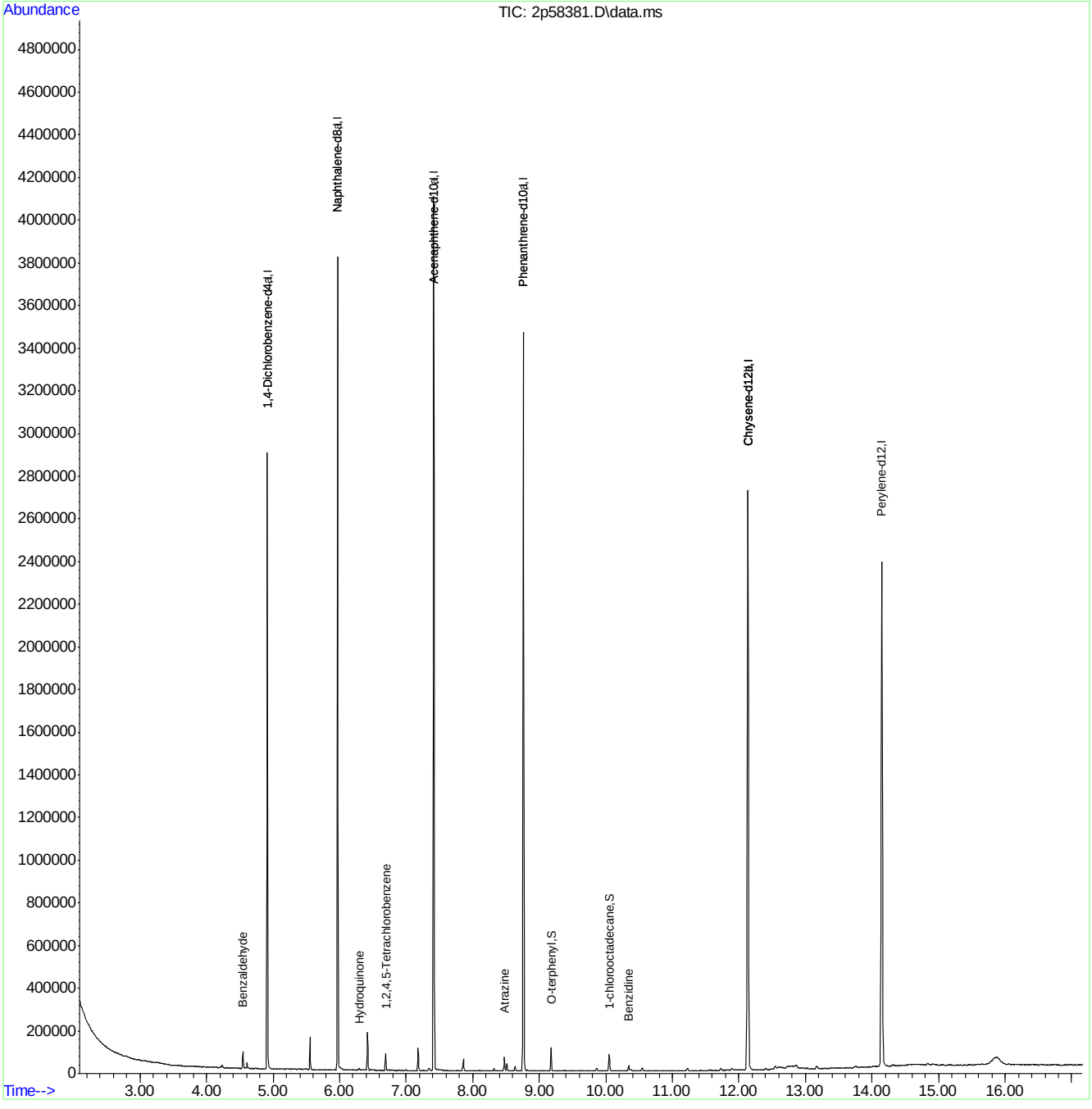
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58381.D
Acq On : 19 Apr 2016 10:44 pm
Operator : sarad
Sample : ic2548-1
Misc : op92038,e2p2548
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 19 23:17:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:11:40 2016
Response via : Initial Calibration



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

7.6.46

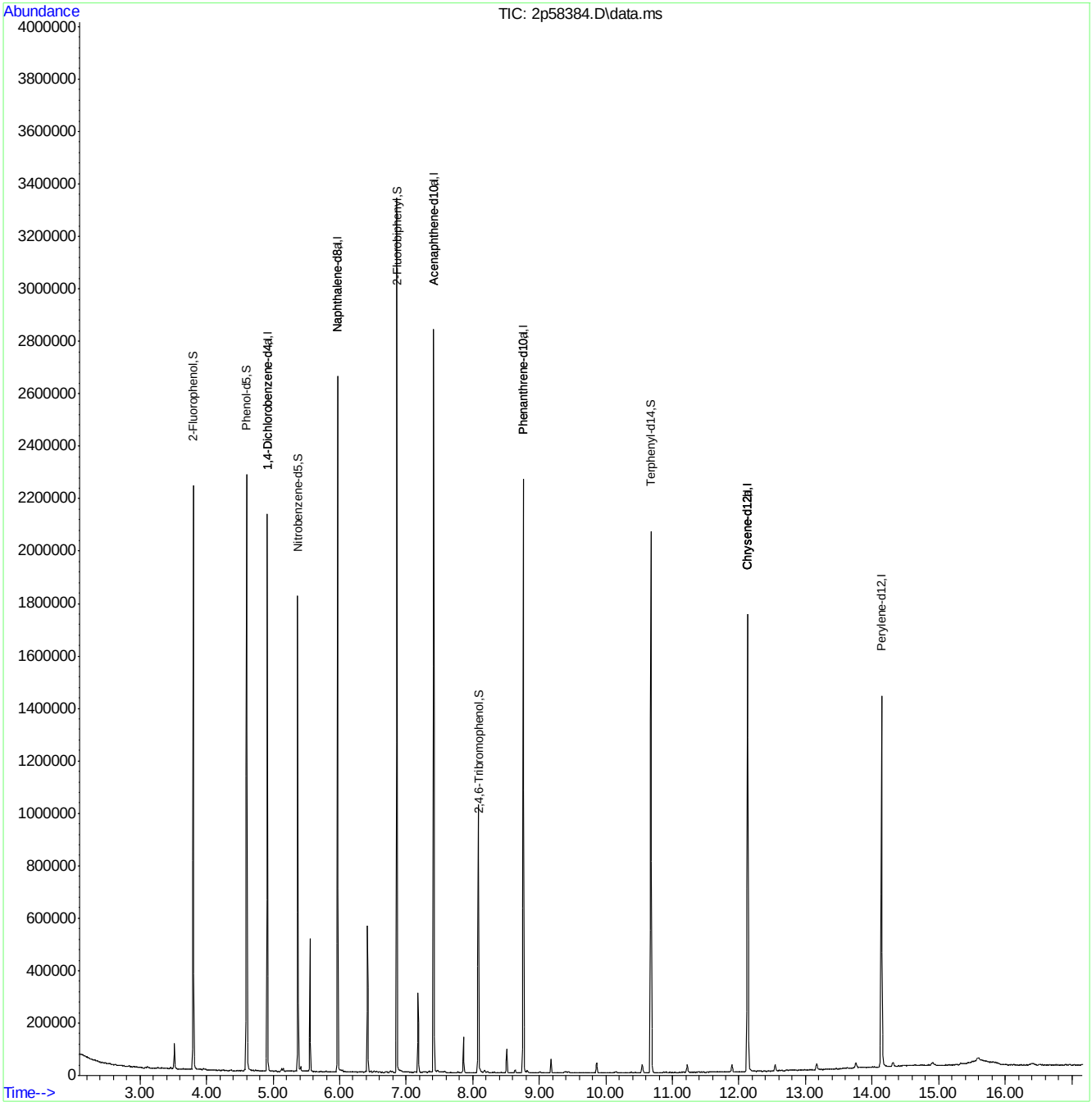
7

SGS ACCUTEST JC18649

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



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

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

7.6.47

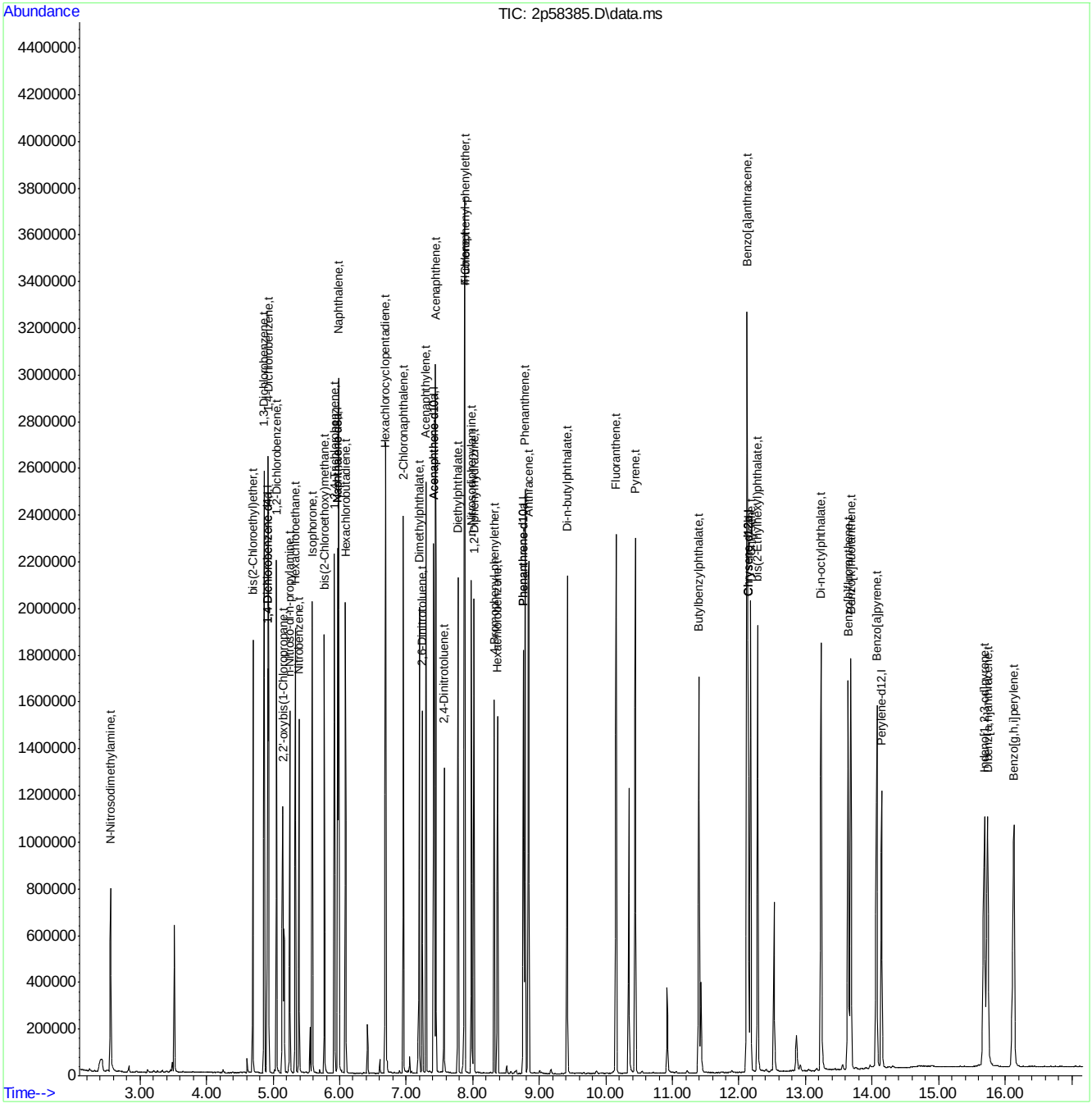
7

SGS ACCUTEST JC18649

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 JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58385a.D
Acq On : 20 Apr 2016 12:14 am
Operator : sarad
Sample : icv2548-50
Misc : op92038,e2p2548
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 20 16:30:15 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
108) 1,2,4,5-Tetrachloroben...	6.692	216	313465	54.51	ppm	100

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

7.6.48

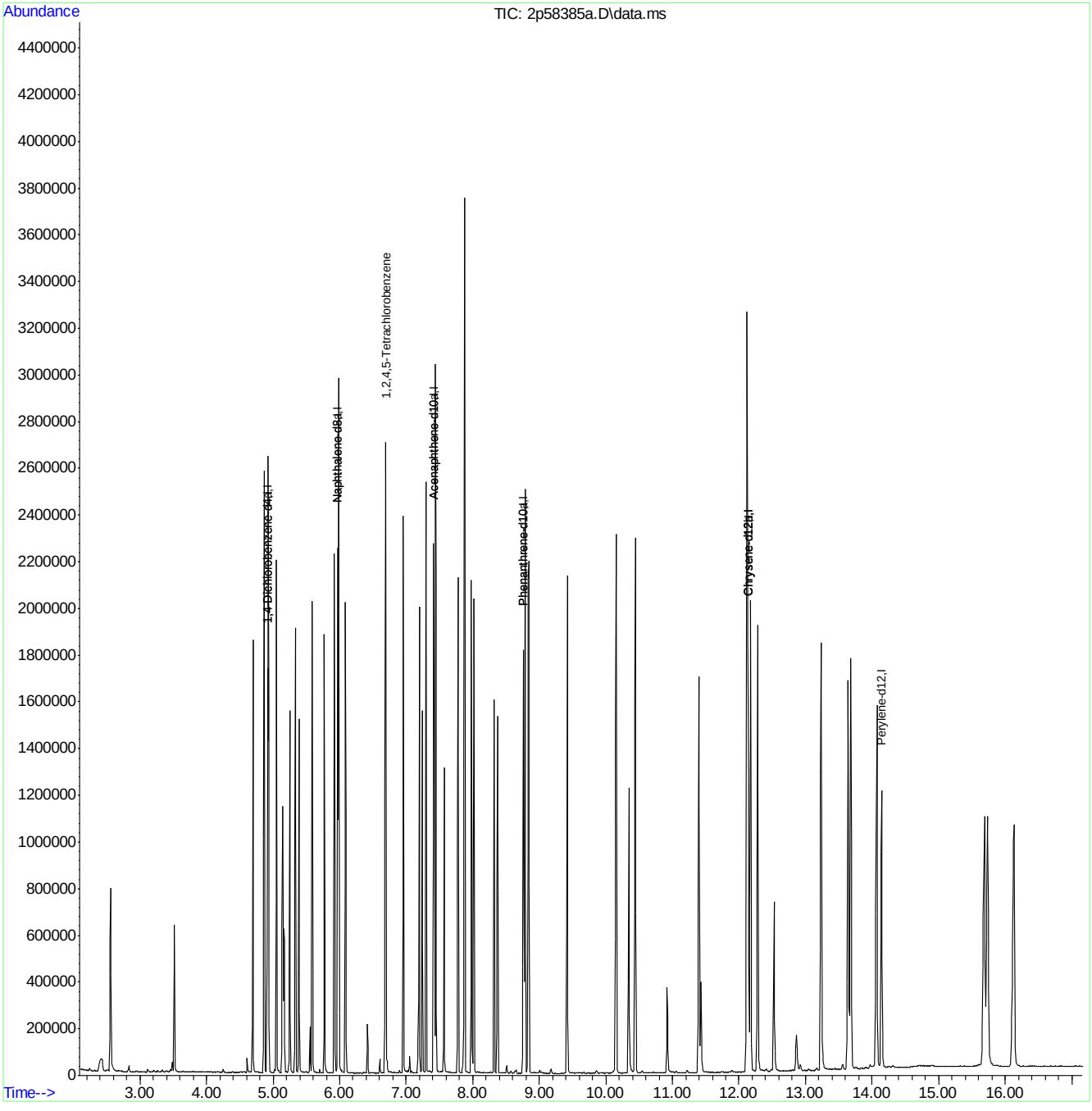
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58385a.D
Acq On : 20 Apr 2016 12:14 am
Operator : sarad
Sample : icv2548-50
Misc : op92038,e2p2548
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 20 16:30:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



M2P2547.M Wed Apr 20 16:30:20 2016 RPT1 Page: 2

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

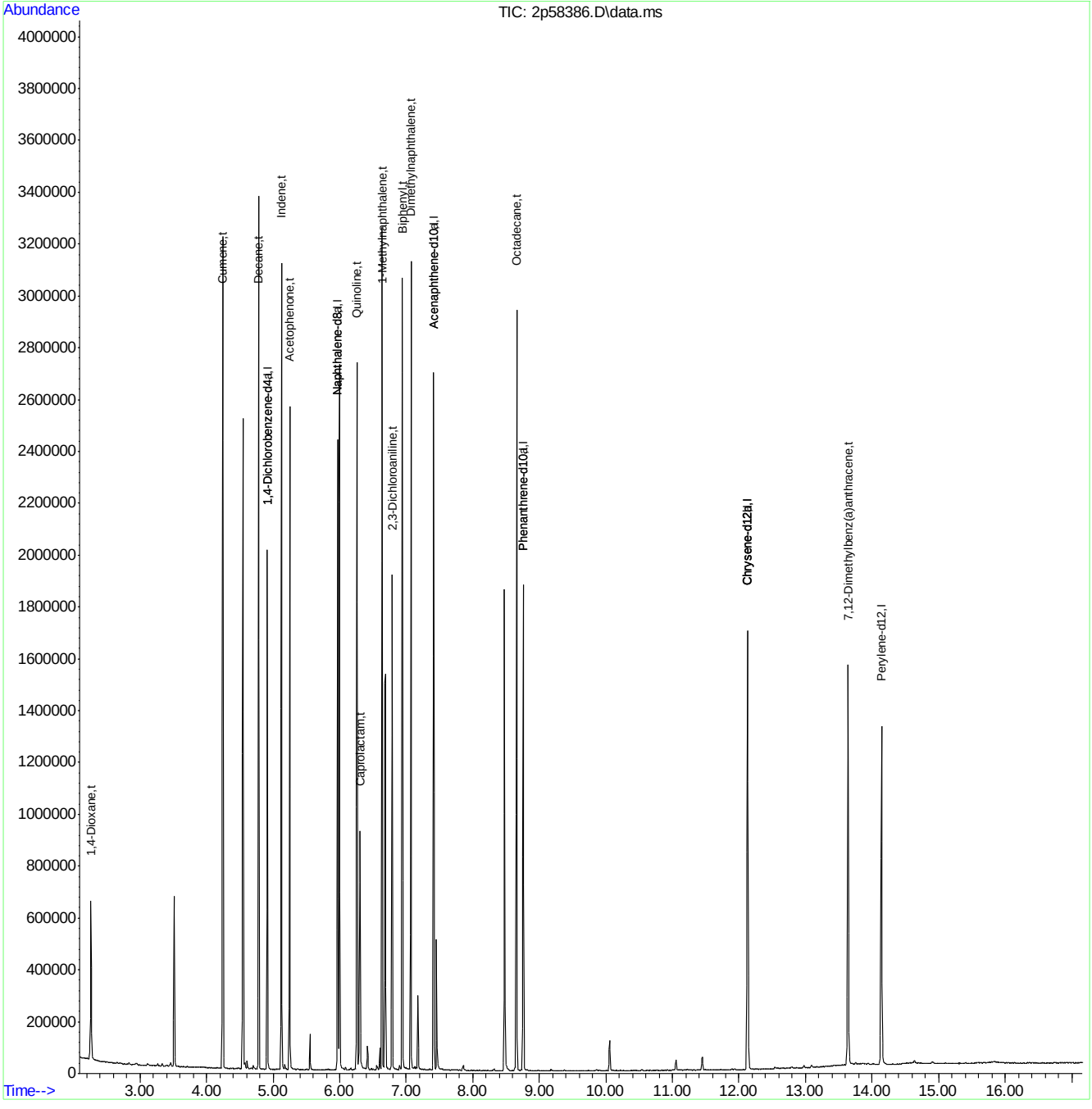
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

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



M2P2547.M Wed Apr 20 16:34:23 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58386a.D
Acq On : 20 Apr 2016 12:36 am
Operator : sarad
Sample : icv2548-50
Misc : op92038,e2p2548
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 20 16:30:59 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
103) Benzaldehyde	4.547	105	359030	51.29	ppm	99
107) Atrazine	8.479	215	89214	48.77	ppm	90

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

7.6.50

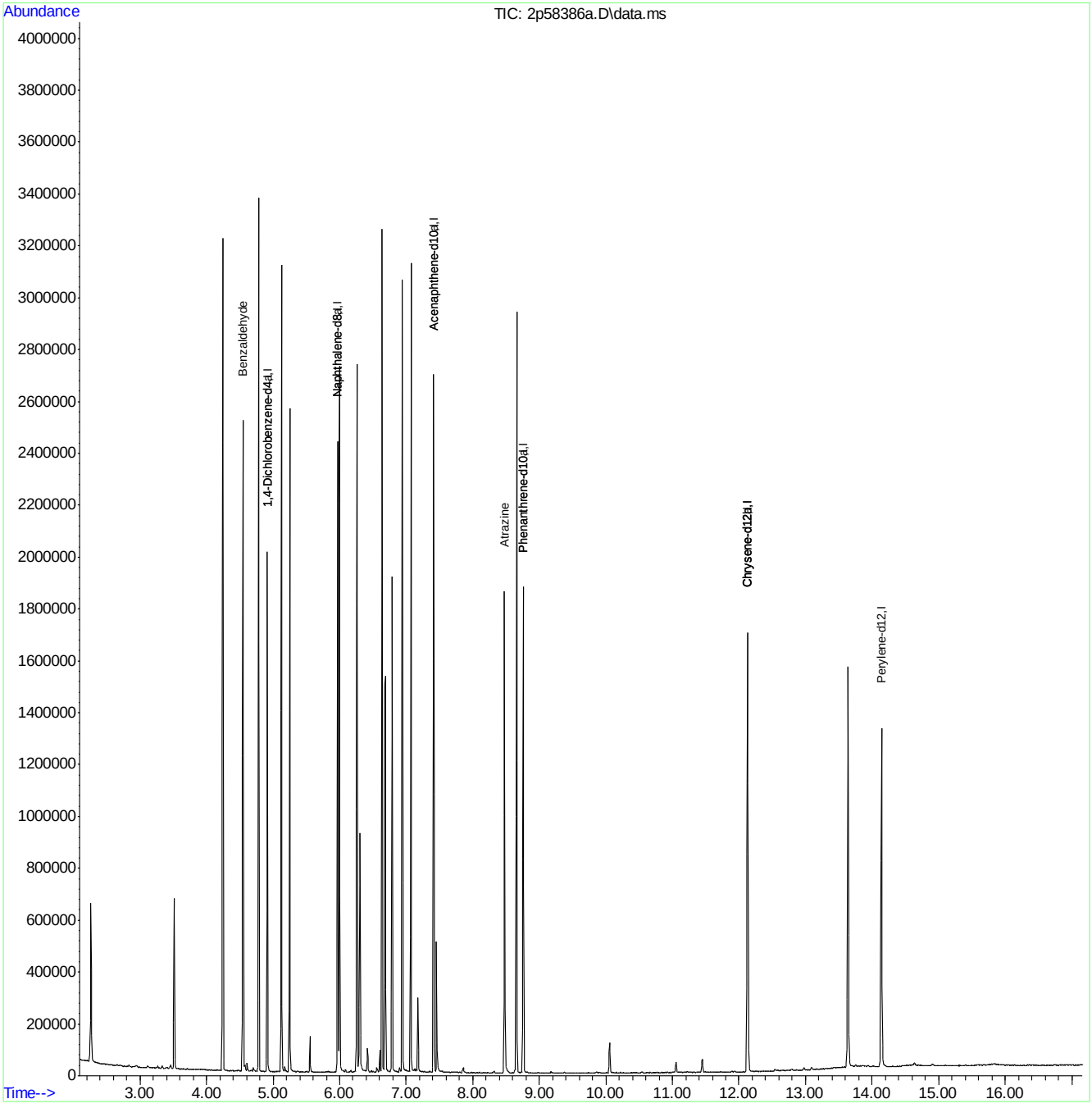
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58386a.D
Acq On : 20 Apr 2016 12:36 am
Operator : sarad
Sample : icv2548-50
Misc : op92038,e2p2548
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 20 16:30:59 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 JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58387.D
Acq On : 20 Apr 2016 12:59 am
Operator : sarad
Sample : icv2548-50
Misc : op92038,e2p2548
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 20 08:56:32 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

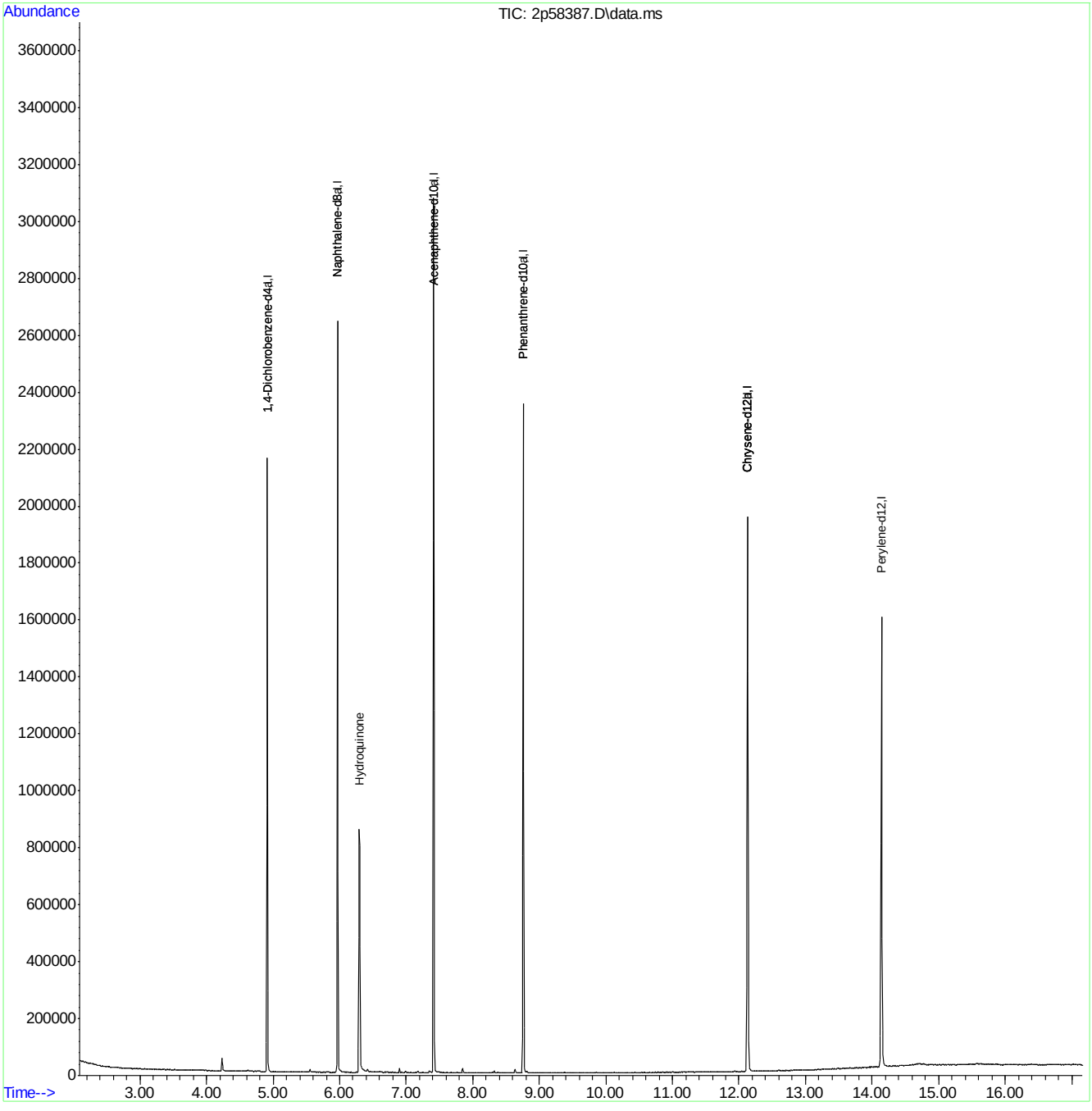
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	267606	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	968060	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	514215	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	791615	40.00	ppm	0.00
83) Chrysene-d12	12.132	240	734038	40.00	ppm	0.00
92) Perylene-d12	14.143	264	605627	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	267606	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	968060	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	514215	40.00	ppm	0.00
109) Chrysene-d12a	12.132	240	734038	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	791615	40.00	ppm	0.00
114) Chrysene-d12b	12.132	240	734038	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	0	0.00	ppm	
Target Compounds						Qvalue
105) Hydroquinone	6.296	110	435145	55.17	ppm	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58387.D
Acq On : 20 Apr 2016 12:59 am
Operator : sarad
Sample : icv2548-50
Misc : op92038,e2p2548
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 20 08:56:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



M2P2547.M Wed Apr 20 08:56:36 2016 RPT1 Page: 2

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

7.6.52

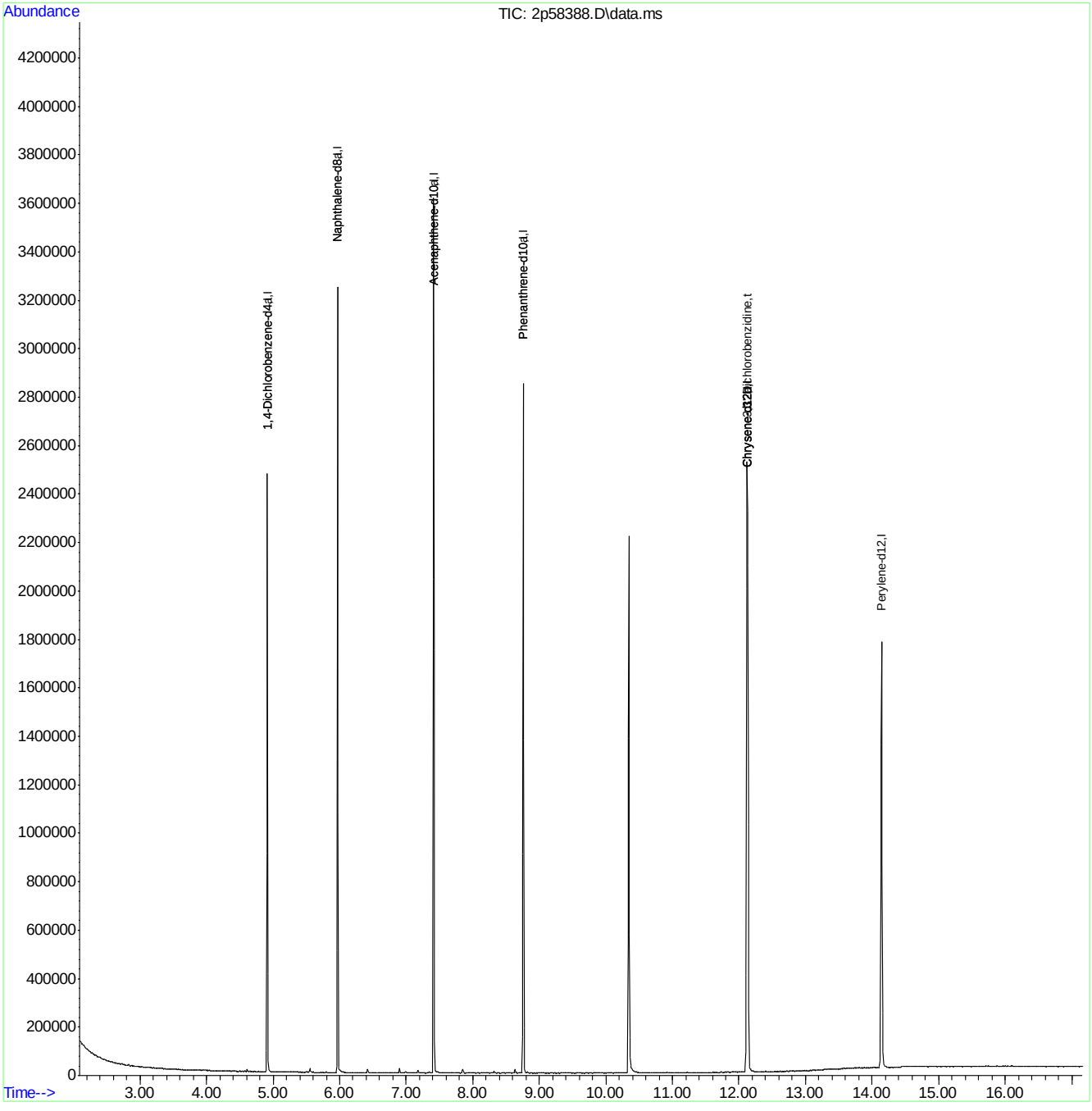
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58388.D
Acq On : 20 Apr 2016 1:21 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 20 16:34:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



M2P2547.M Wed Apr 20 16:37:12 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58388a.D
Acq On : 20 Apr 2016 1:21 am
Operator : sarad
Sample : icv2548-50
Misc : op92038,e2p2548
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 20 16:35:03 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
110) Benzidine	10.345	184	894039	78.48	ppm	100

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

7.6.53

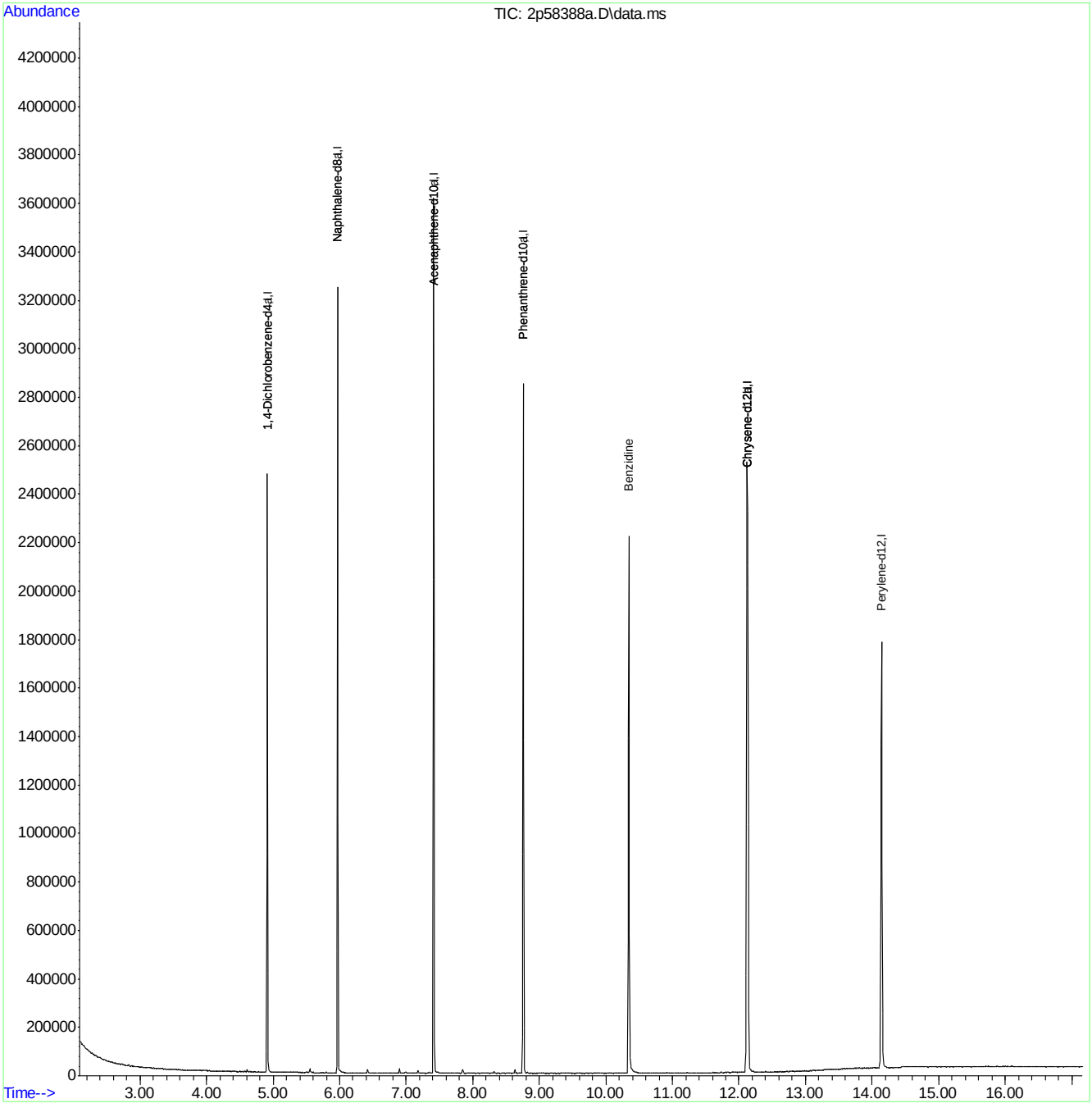
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58388a.D
Acq On : 20 Apr 2016 1:21 am
Operator : sarad
Sample : icv2548-50
Misc : op92038,e2p2548
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 20 16:35:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



M2P2547.M Wed Apr 20 16:35:06 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58391.D
Acq On : 20 Apr 2016 9:53 am
Operator : robertl1
Sample : ICV2547-50
Misc : op92038,e2p2549
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 17:37:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.895	152	250697	40.00	ppm	-0.02
24) Naphthalene-d8	5.949	136	846929	40.00	ppm	-0.02
47) Acenaphthene-d10	7.398	164	483791	40.00	ppm	-0.02
69) Phenanthrene-d10	8.741	188	755620	40.00	ppm	-0.02
83) Chrysene-d12	12.105	240	777389	40.00	ppm	-0.03
92) Perylene-d12	14.116	264	663496	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.895	152	250697	40.00	ppm	-0.02
104) Naphthalene-d8a	5.949	136	846929	40.00	ppm	-0.02
106) Acenaphthene-d10a	7.398	164	483791	40.00	ppm	-0.02
109) Chrysene-d12a	12.105	240	777389	40.00	ppm	-0.03
111) Phenanthrene-d10a	8.741	188	755620	40.00	ppm	-0.02
114) Chrysene-d12b	12.105	240	777389	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
9) Phenol	4.595	94	546786	43.36	ppm	91
12) 2-Chlorophenol	4.713	128	434642	47.25	ppm	94
19) 2-Methylphenol	5.098	108	381267	48.30	ppm	93
21) 3&4-Methylphenol	5.226	108	393831	47.81	ppm	97
29) 2-Nitrophenol	5.633	139	209449	50.28	ppm	93
30) 2,4-Dimethylphenol	5.670	107	369843	49.93	ppm	95
31) Benzoic acid	5.767	105	306865	52.90	ppm	97
33) 2,4-Dichlorophenol	5.831	162	316947	49.71	ppm	92
34) 2,6-Dichlorophenol	6.018	162	301441	50.20	ppm	98
43) 4-Chloro-3-methylphenol	6.403	107	306909	46.90	ppm	96
49) 2,4,6-Trichlorophenol	6.767	196	220919	49.37	ppm	98
50) 2,4,5-Trichlorophenol	6.794	196	219478	45.55	ppm	98
60) 2,4-Dinitrophenol	7.441	184	93822	57.45	ppm #	100
61) 4-Nitrophenol	7.489	109	99985	51.19	ppm	90
64) 2,3,4,6-Tetrachlorophenol	7.665	232	175320	47.82	ppm	91
70) 4,6-Dinitro-2-methylph...	7.895	198	124899	56.51	ppm	90
76) Pentachlorophenol	8.543	266	138342	49.70	ppm	98

SGS ACCUTEST JC18649

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

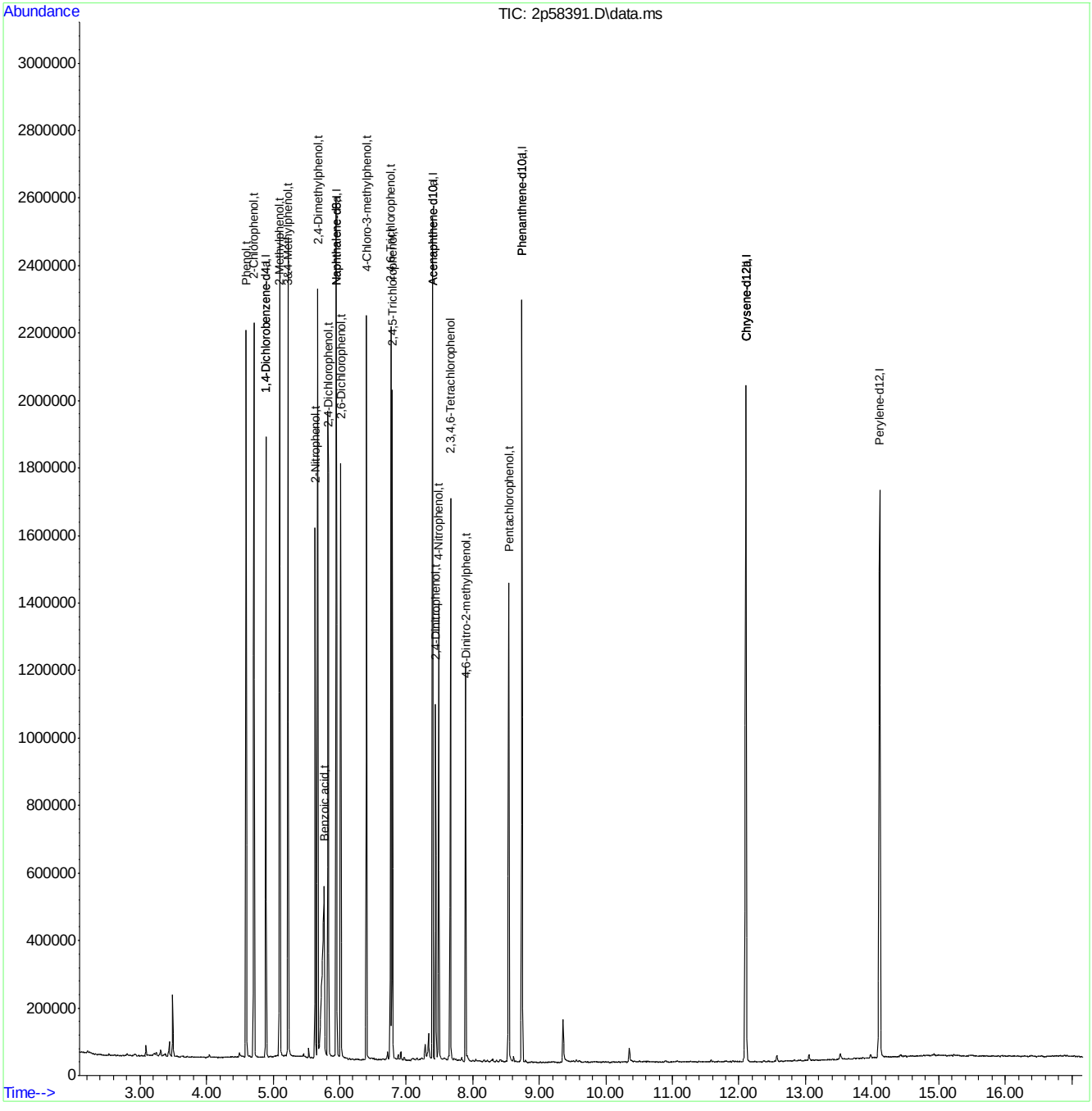
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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 JC18649

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

7.6.55

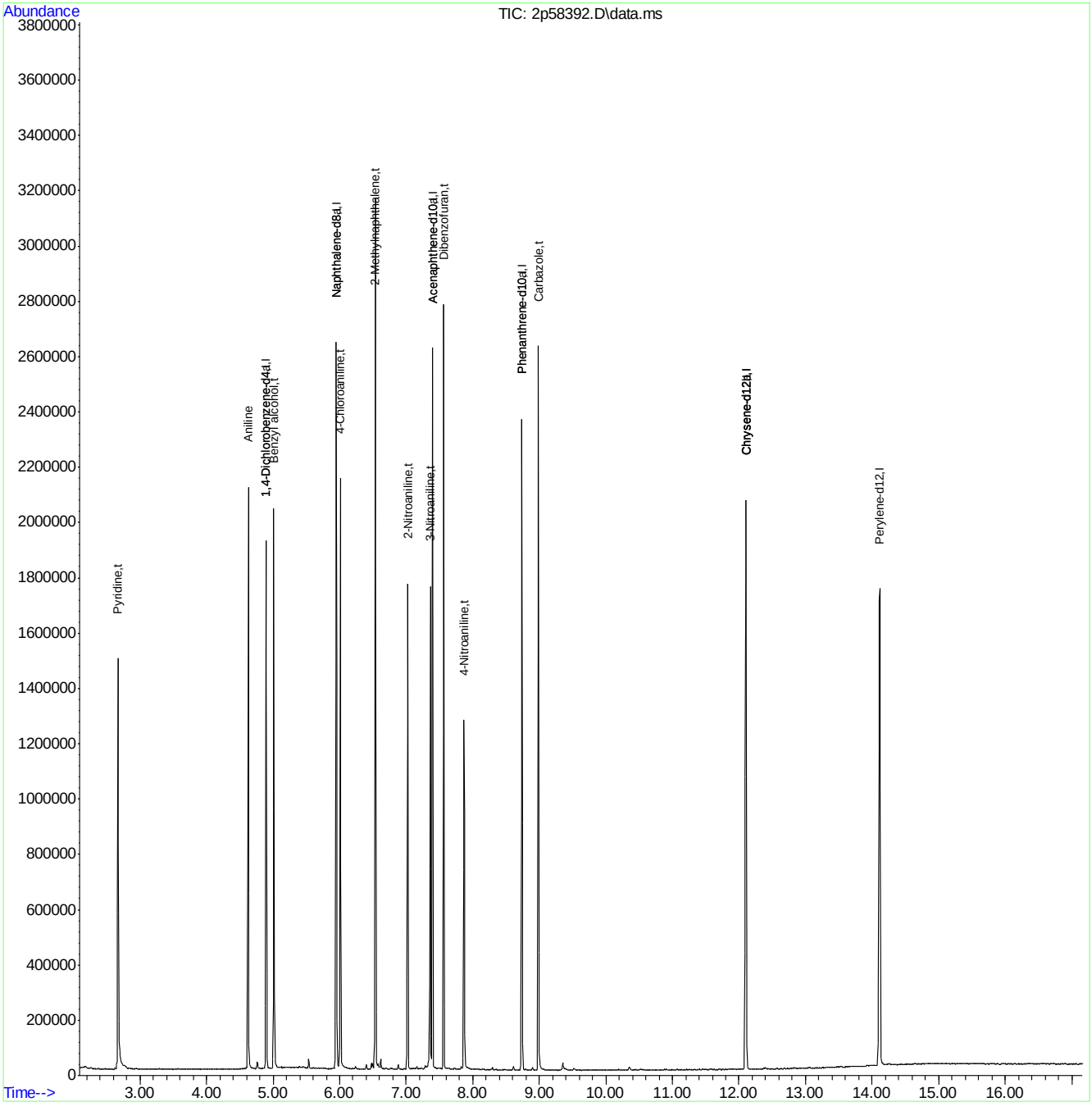
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58392.D
Acq On : 20 Apr 2016 10:16 am
Operator : robertl1
Sample : ICV2547-50
Misc : op92038,e2p2549
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 17:38:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58442.D
Acq On : 21 Apr 2016 10:13 am
Operator : robertl1
Sample : CC2547-50
Misc : op92038,e2p2552
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 15:35:22 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	4.863	152	223584	40.00	ppm	-0.05
24) Naphthalene-d8	5.916	136	763906	40.00	ppm	-0.05
47) Acenaphthene-d10	7.366	164	430728	40.00	ppm	-0.05
69) Phenanthrene-d10	8.703	188	690074	40.00	ppm	-0.06
83) Chrysene-d12	12.067	240	713290	40.00	ppm	-0.07
92) Perylene-d12	14.073	264	605997	40.00	ppm	-0.07
102) 1,4-Dichlorobenzene-d4a	4.863	152	223584	40.00	ppm	-0.05
104) Naphthalene-d8a	5.916	136	763906	40.00	ppm	-0.05
106) Acenaphthene-d10a	7.366	164	430728	40.00	ppm	-0.05
109) Chrysene-d12a	12.067	240	713290	40.00	ppm	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	3.745	112	428877	47.35	ppm	-0.05
Spiked Amount 50.000	Range 11 - 58		Recovery = 94.70%#			
8) Phenol-d5	4.563	99	489368	46.11	ppm	-0.03
Spiked Amount 50.000	Range 10 - 59		Recovery = 92.22%#			
25) Nitrobenzene-d5	5.323	82	357484	47.46	ppm	-0.05
Spiked Amount 50.000	Range 19 - 61		Recovery = 94.92%#			
51) 2-Fluorobiphenyl	6.810	172	631319	47.11	ppm	-0.05
Spiked Amount 50.000	Range 21 - 58		Recovery = 94.22%#			
73) 2,4,6-Tribromophenol	8.034	330	86156	56.24	ppm	-0.05
Spiked Amount 50.000	Range 12 - 68		Recovery = 112.48%#			
85) Terphenyl-d14	10.607	244	698101	48.62	ppm	-0.07
Spiked Amount 50.000	Range 16 - 65		Recovery = 97.24%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.188	88	196500	47.82	ppm	99
3) Pyridine	2.520	79	471922	46.44	ppm	94
4) N-Nitrosodimethylamine	2.493	74	283734	47.24	ppm	85
6) Indene	5.071	116	552283	43.99	ppm	99
7) Cumene	4.189	105	948459	47.84	ppm	96
9) Phenol	4.574	94	523097	46.51	ppm	83
10) Aniline	4.585	93	547295	42.38	ppm	90
11) bis(2-Chloroethyl)ether	4.649	93	345475	43.59	ppm	95
12) 2-Chlorophenol	4.686	128	370789	45.20	ppm	95
13) Decane	4.729	57	527083	43.14	ppm	97
14) 1,3-Dichlorobenzene	4.809	146	418115	46.38	ppm	98
15) 1,4-Dichlorobenzene	4.873	146	412565	46.49	ppm	99
16) Benzyl alcohol	4.980	108	227175	44.22	ppm	96
17) 1,2-Dichlorobenzene	5.002	146	379476	46.28	ppm	97
18) Acetophenone	5.200	105	426742	42.36	ppm	96
19) 2-Methylphenol	5.077	108	298708	42.43	ppm	96
20) 2,2'-oxybis(1-Chloropr...	5.098	121	101919	44.11	ppm #	81
21) 3&4-Methylphenol	5.205	108	306612	41.74	ppm	95
22) n-Nitroso-di-n-propyla...	5.205	70	213749	39.95	ppm	94
23) Hexachloroethane	5.280	201	131739	48.92	ppm	85
26) Nitrobenzene	5.339	77	343202	45.16	ppm	99
27) Quinoline	6.221	129	639186	47.19	ppm	98
28) Isophorone	5.542	82	624162	45.86	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58442.D
Acq On : 21 Apr 2016 10:13 am
Operator : robertl1
Sample : CC2547-50
Misc : op92038,e2p2552
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 15:35:22 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)
29) 2-Nitrophenol	5.606	139	190120	50.60	ppm		79
30) 2,4-Dimethylphenol	5.644	107	305737	45.76	ppm		97
31) Benzoic acid	5.761	105	292472	55.90	ppm		98
32) bis(2-Chloroethoxy)met...	5.724	93	372707	44.03	ppm		95
33) 2,4-Dichlorophenol	5.804	162	286483	49.82	ppm		95
34) 2,6-Dichlorophenol	5.991	162	258691	47.77	ppm		98
35) 1,3,5-Trichlorobenzene	5.612	180	318637	48.24	ppm		100
36) 1,2,4-Trichlorobenzene	5.868	180	308159	48.63	ppm		99
37) 1,2,3-Trichlorobenzene	6.055	180	282044	47.84	ppm		93
38) Naphthalene	5.938	128	915082	46.50	ppm		100
39) 4-Chloroaniline	5.986	127	375435	44.13	ppm		96
40) 2,3-Dichloroaniline	6.735	161	327803	46.52	ppm		93
41) Caprolactam	6.296	113	110249	49.99	ppm		80
42) Hexachlorobutadiene	6.034	225	162446	51.84	ppm		95
43) 4-Chloro-3-methylphenol	6.387	107	287069	48.64	ppm		95
44) 2-Methylnaphthalene	6.505	141	535253	48.70	ppm		95
45) 1-Methylnaphthalene	6.585	141	540869	48.00	ppm		95
46) Dimethylnaphthalene	7.018	156	527272	47.50	ppm		93
48) Hexachlorocyclopentadiene	6.633	237	365052	105.39	ppm		93
49) 2,4,6-Trichlorophenol	6.740	196	193328	48.52	ppm		99
50) 2,4,5-Trichlorophenol	6.772	196	211904	49.39	ppm		98
52) 2-Chloronaphthalene	6.906	162	564751	44.68	ppm		99
53) Biphenyl	6.890	154	727916	45.88	ppm		96
54) 2-Nitroaniline	6.991	65	202450	46.10	ppm		100
55) Dimethylphthalate	7.147	163	627934	45.75	ppm		100
56) Acenaphthylene	7.248	152	980894	47.67	ppm		98
57) 2,6-Dinitrotoluene	7.195	165	148909	51.14	ppm		83
58) 3-Nitroaniline	7.334	138	160917	41.86	ppm		95
59) Acenaphthene	7.393	153	580670	46.06	ppm		96
60) 2,4-Dinitrophenol	7.419	184	163460	105.50	ppm	#	100
61) 4-Nitrophenol	7.473	109	89999	51.75	ppm		95
62) Dibenzofuran	7.532	168	758663	45.53	ppm		92
63) 2,4-Dinitrotoluene	7.526	165	197520	51.76	ppm		94
64) 2,3,4,6-Tetrachlorophenol	7.633	232	172724	52.91	ppm		92
65) Diethylphthalate	7.730	149	655773	47.09	ppm		95
66) Fluorene	7.826	166	639625	46.21	ppm		97
67) 4-Chlorophenyl-phenyle...	7.821	204	281664	46.56	ppm		96
68) 4-Nitroaniline	7.847	138	155766	41.02	ppm		90
70) 4,6-Dinitro-2-methylph...	7.869	198	112736	55.86	ppm		94
71) n-Nitrosodiphenylamine	7.927	169	440531	47.16	ppm		96
72) 1,2-Diphenylhydrazine	7.960	77	636295	42.36	ppm		96
74) 4-Bromophenyl-phenylether	8.264	248	181781	51.75	ppm		95
75) Hexachlorobenzene	8.318	284	194177	51.63	ppm		81
76) Pentachlorophenol	8.510	266	274859	108.13	ppm		97
77) Phenanthrene	8.724	178	943956	46.58	ppm		99
78) Anthracene	8.778	178	956762	47.59	ppm		98
79) Carbazole	8.949	167	863779	45.70	ppm		97
80) Di-n-butylphthalate	9.356	149	1221937	48.59	ppm		98
81) Fluoranthene	10.083	202	1125254	51.12	ppm		94
82) Octadecane	8.596	43	414979	46.78	ppm		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58442.D
Acq On : 21 Apr 2016 10:13 am
Operator : robertl1
Sample : CC2547-50
Misc : op92038,e2p2552
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 15:35:22 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)
84) Pyrene	10.372	202	1152494	46.81 ppm	99
86) Butylbenzylphthalate	11.324	149	589348	48.78 ppm	92
87) Butyl stearate	11.463	56	467463	45.27 ppm	94
88) Benzo[a]anthracene	12.046	228	1057913	46.49 ppm	99
89) 3,3'-Dichlorobenzidine	12.046	252	302462	39.28 ppm	96
90) Chrysene	12.105	228	961800	46.74 ppm	99
91) bis(2-Ethylhexyl)phtha...	12.206	149	720634	47.70 ppm	99
93) Di-n-octylphthalate	13.158	149	1367551	49.62 ppm	95
94) Benzo[b]fluoranthene	13.570	252	1006869	47.82 ppm	92
95) Benzo[k]fluoranthene	13.613	252	864122	46.99 ppm	88
96) Benzo[a]pyrene	13.998	252	859123	48.09 ppm	91
97) Indeno[1,2,3-cd]pyrene	15.587	276	752801	48.73 ppm	84
98) Dibenz(a,h)acridine	15.244	279	659752	46.83 ppm	94
99) Dibenz[a,h]anthracene	15.635	278	740756	47.88 ppm	92
100) 7,12-Dimethylbenz(a)an...	13.576	256	422247	49.20 ppm	98
101) Benzo[g,h,i]perylene	16.020	276	767857	47.01 ppm	89

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

7.6.56

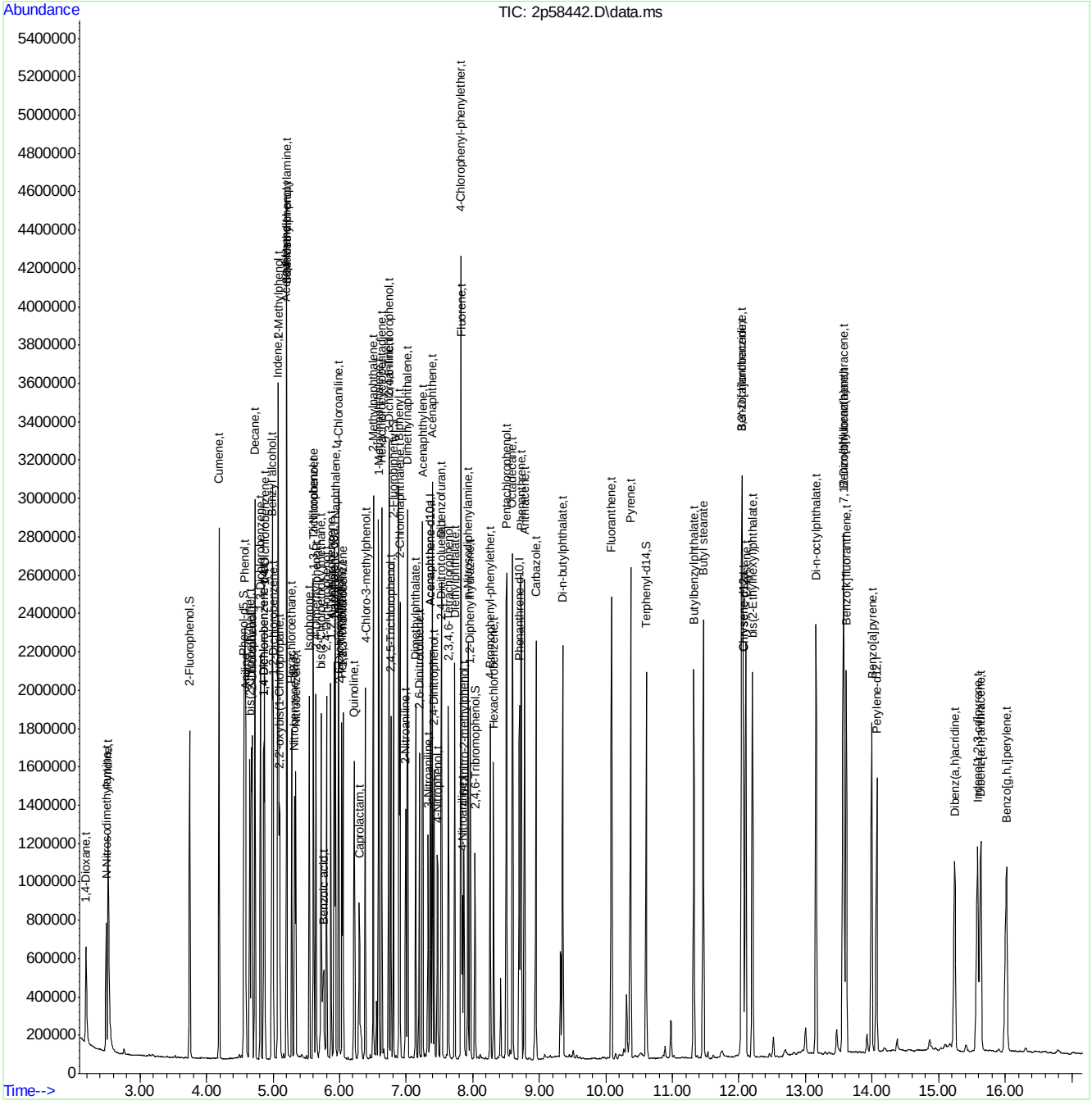
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58442.D
Acq On : 21 Apr 2016 10:13 am
Operator : robertl1
Sample : CC2547-50
Misc : op92038,e2p2552
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 15:35:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



M2P2547.M Thu Apr 21 15:35:26 2016 RPT1 Page: 4

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58443.D
Acq On : 21 Apr 2016 10:48 am
Operator : robertl1
Sample : CC2548-50
Misc : op92038,e2p2552
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 15:35:43 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	4.857	152	291590	40.00	ppm	-0.05
24) Naphthalene-d8	5.916	136	1044569	40.00	ppm	-0.05
47) Acenaphthene-d10	7.361	164	554894	40.00	ppm	-0.05
69) Phenanthrene-d10	8.698	188	884840	40.00	ppm	-0.06
83) Chrysene-d12	12.057	240	862908	40.00	ppm	-0.08
92) Perylene-d12	14.068	264	736226	40.00	ppm	-0.08
102) 1,4-Dichlorobenzene-d4a	4.857	152	291590	40.00	ppm	-0.05
104) Naphthalene-d8a	5.916	136	1044569	40.00	ppm	-0.05
106) Acenaphthene-d10a	7.361	164	554894	40.00	ppm	-0.05
109) Chrysene-d12a	12.057	240	862908	40.00	ppm	-0.08
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	4.494	105	413169	49.70	ppm	99
105) Hydroquinone	6.253	110	525007	61.69	ppm	99
107) Atrazine	8.425	215	122094	53.38	ppm	97
108) 1,2,4,5-Tetrachloroben...	6.639	216	403130	49.00	ppm	98
110) Benzidine	10.270	184	291459	26.91	ppm	98

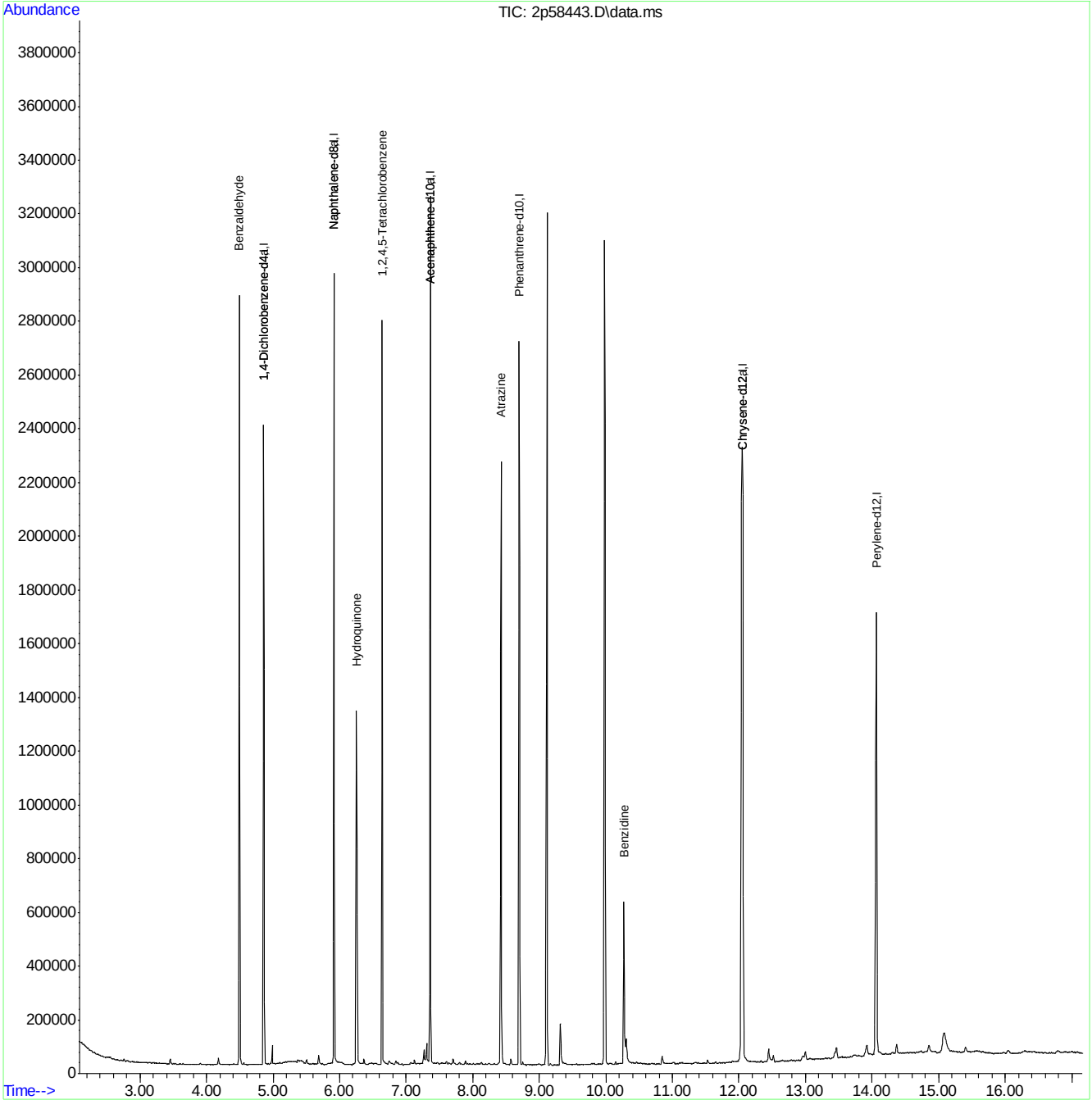
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2552\
Data File : 2p58443.D
Acq On : 21 Apr 2016 10:48 am
Operator : robertl1
Sample : CC2548-50
Misc : op92038,e2p2552
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 15:35:43 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 JC18649

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 JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60763a.D
Acq On : 21 Apr 2016 2:34 pm
Operator : linseyk
Sample : icc2855-1
Misc : op93052a,e3m2855
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 08:25:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:25:42 2016
Response via : Initial Calibration

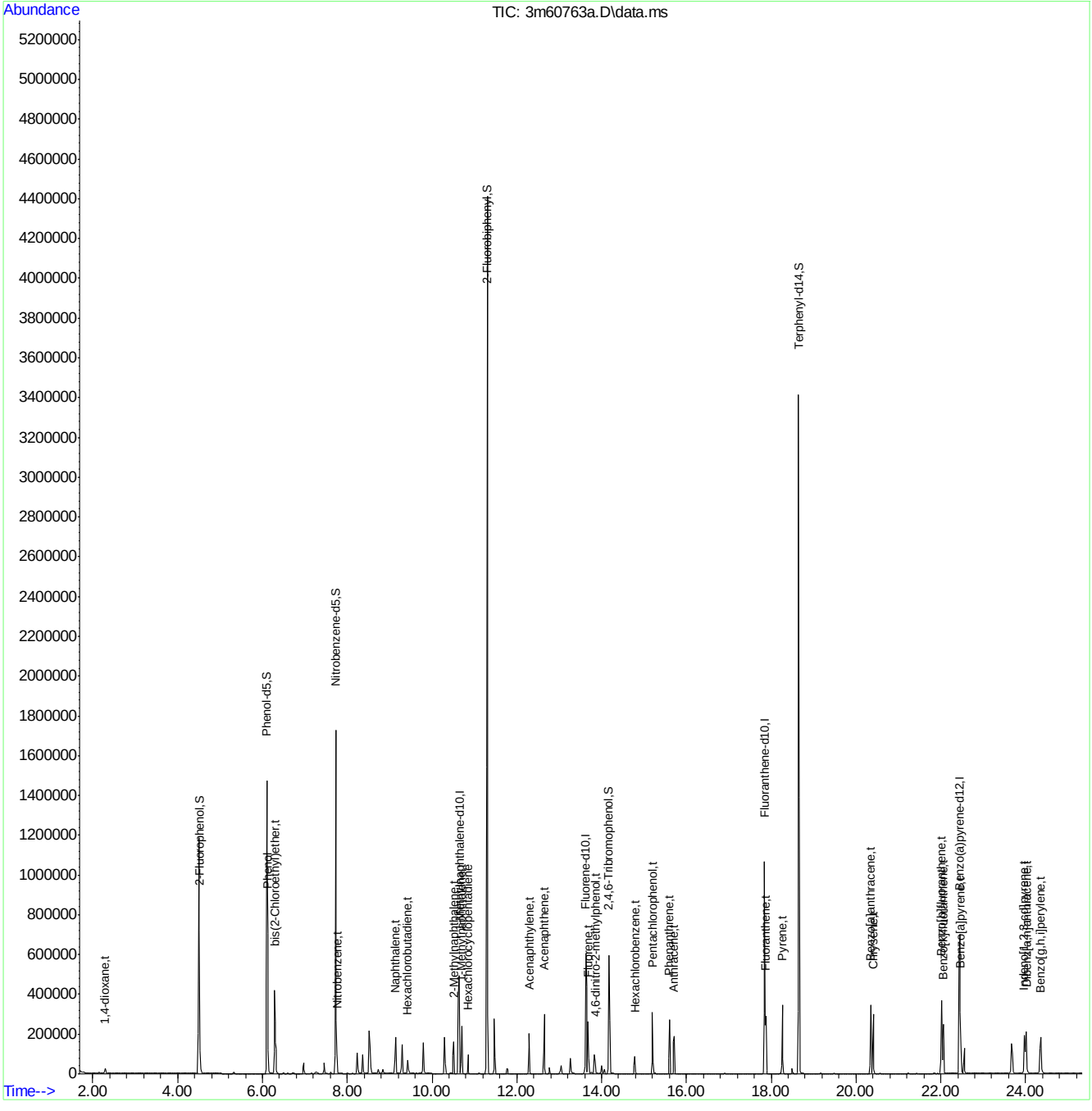
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60763a.D
Acq On : 21 Apr 2016 2:34 pm
Operator : linseyk
Sample : icc2855-1
Misc : op93052a,e3m2855
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 08:25:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:25:42 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

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 JC18649

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

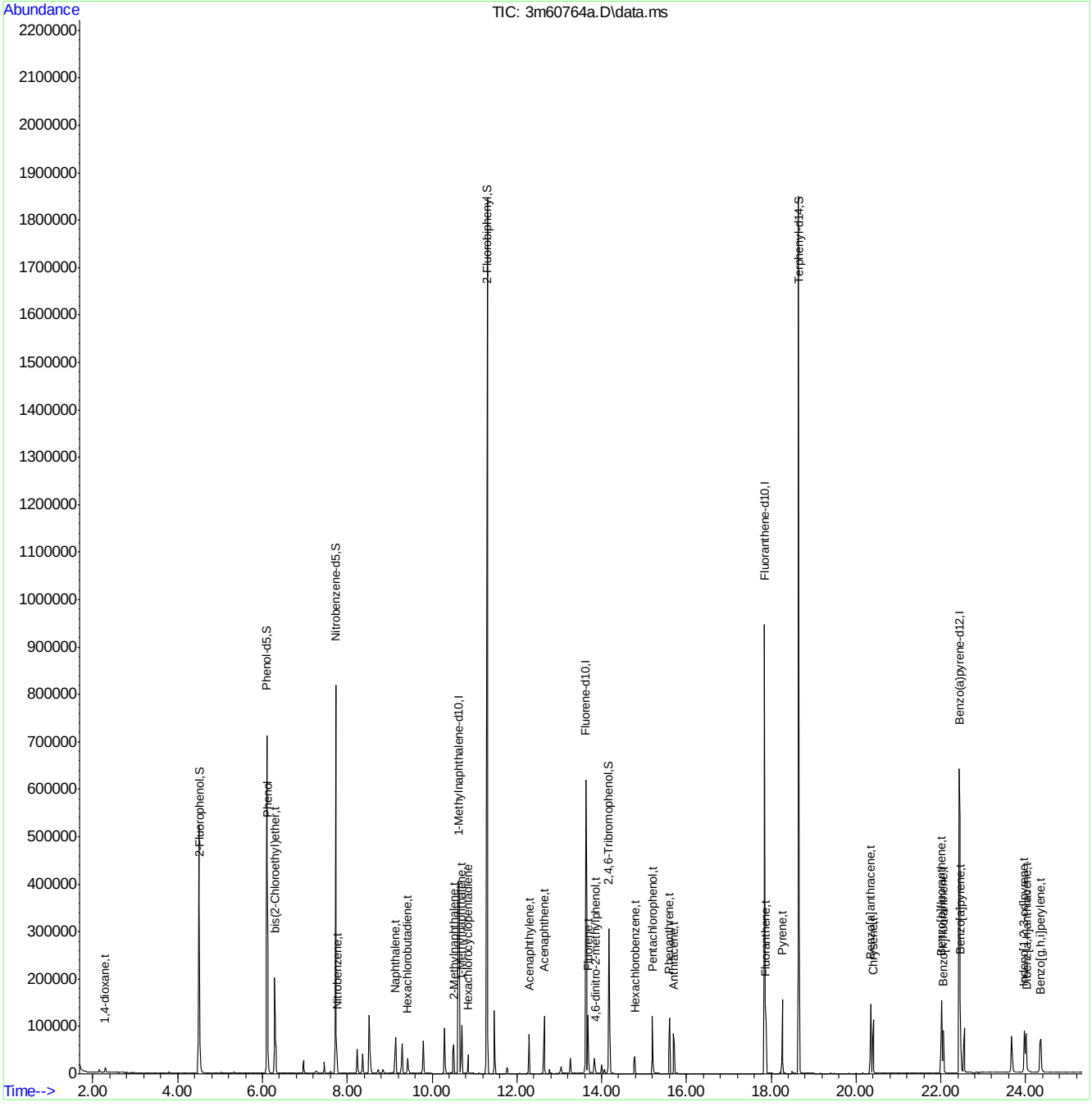
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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 JC18649

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 JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60765a.D
Acq On : 21 Apr 2016 3:39 pm
Operator : linseyk
Sample : ic2855-0.2
Misc : op93052a,e3m2855
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 22 08:26:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:26:46 2016
Response via : Initial Calibration

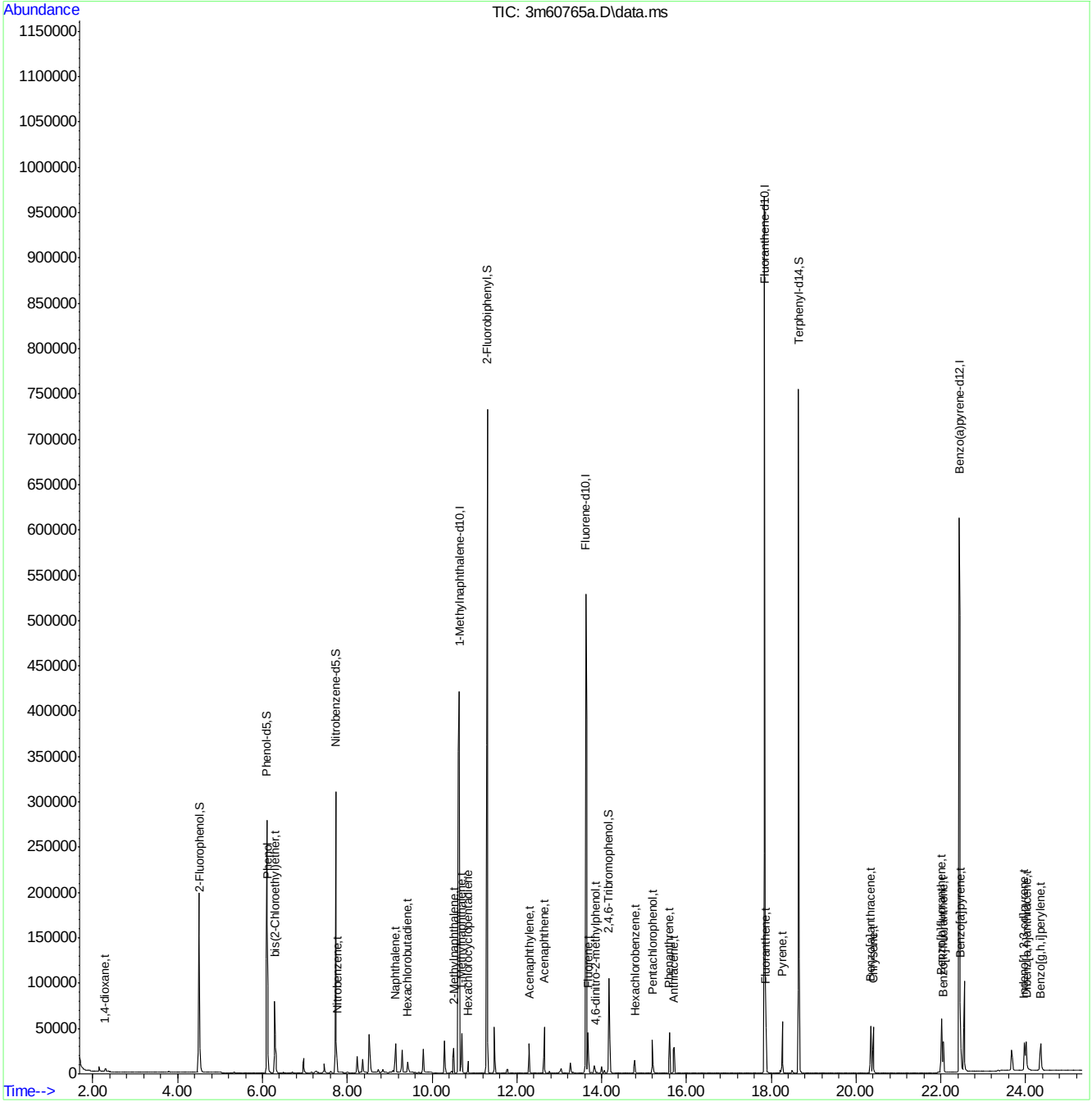
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60765a.D
Acq On : 21 Apr 2016 3:39 pm
Operator : linseyk
Sample : ic2855-0.2
Misc : op93052a,e3m2855
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 22 08:26:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:26:46 2016
Response via : Initial Calibration



M3M2855SIM.M Fri Apr 22 08:27:14 2016 RPT1 Page: 3

SGS ACCUTEST JC18649

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 JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60766.D
Acq On : 21 Apr 2016 4:12 pm
Operator : linseyk
Sample : ic2855-0.1
Misc : op93052a,e3m2855
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 22 08:27:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:27:18 2016
Response via : Initial Calibration

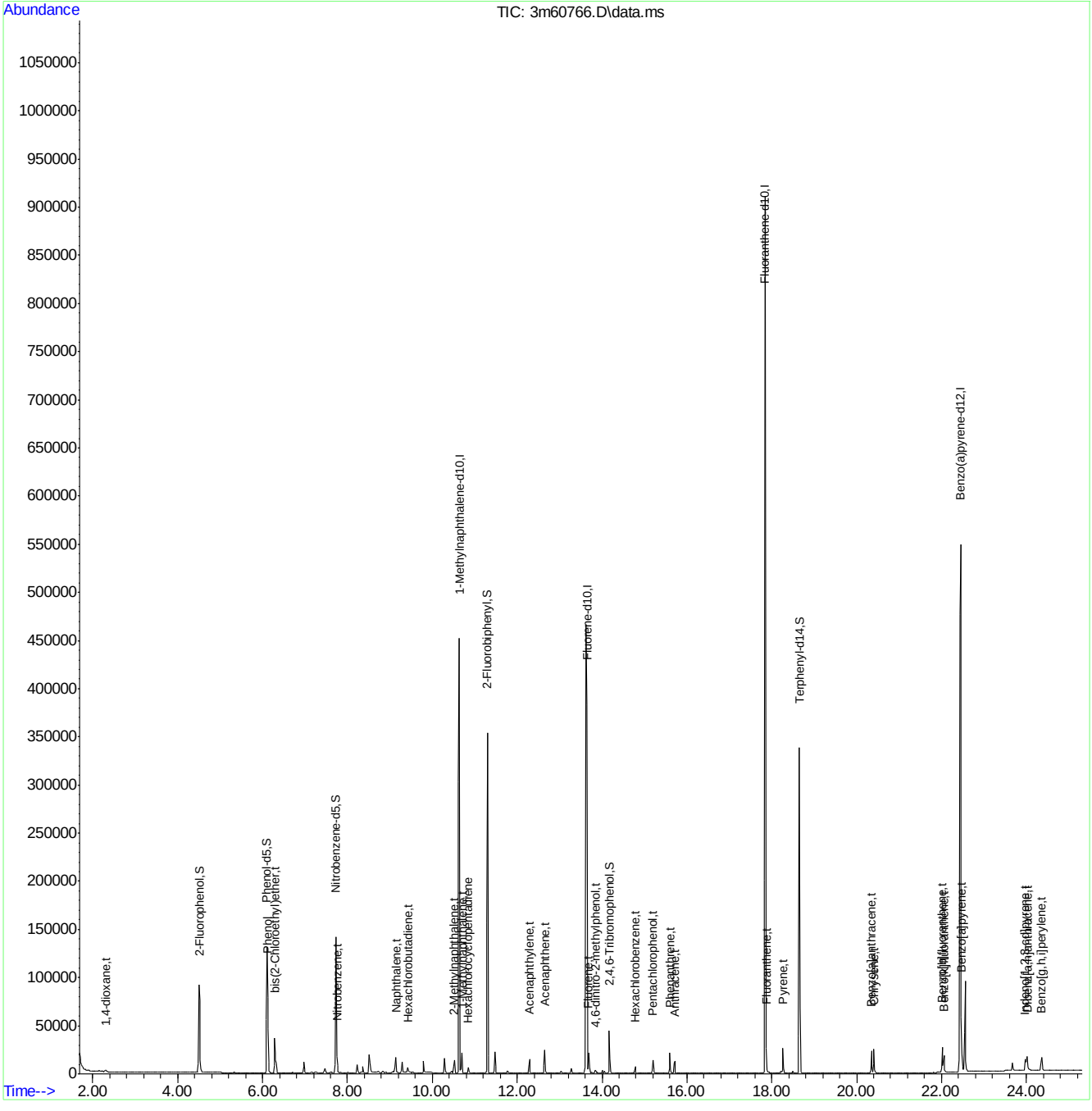
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60766.D
Acq On : 21 Apr 2016 4:12 pm
Operator : linseyk
Sample : ic2855-0.1
Misc : op93052a,e3m2855
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 22 08:27:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:27:18 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

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 JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60767.D
Acq On : 21 Apr 2016 4:44 pm
Operator : linseyk
Sample : ic2855-0.05
Misc : op93052a,e3m2855
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 22 08:34:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:32:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.62

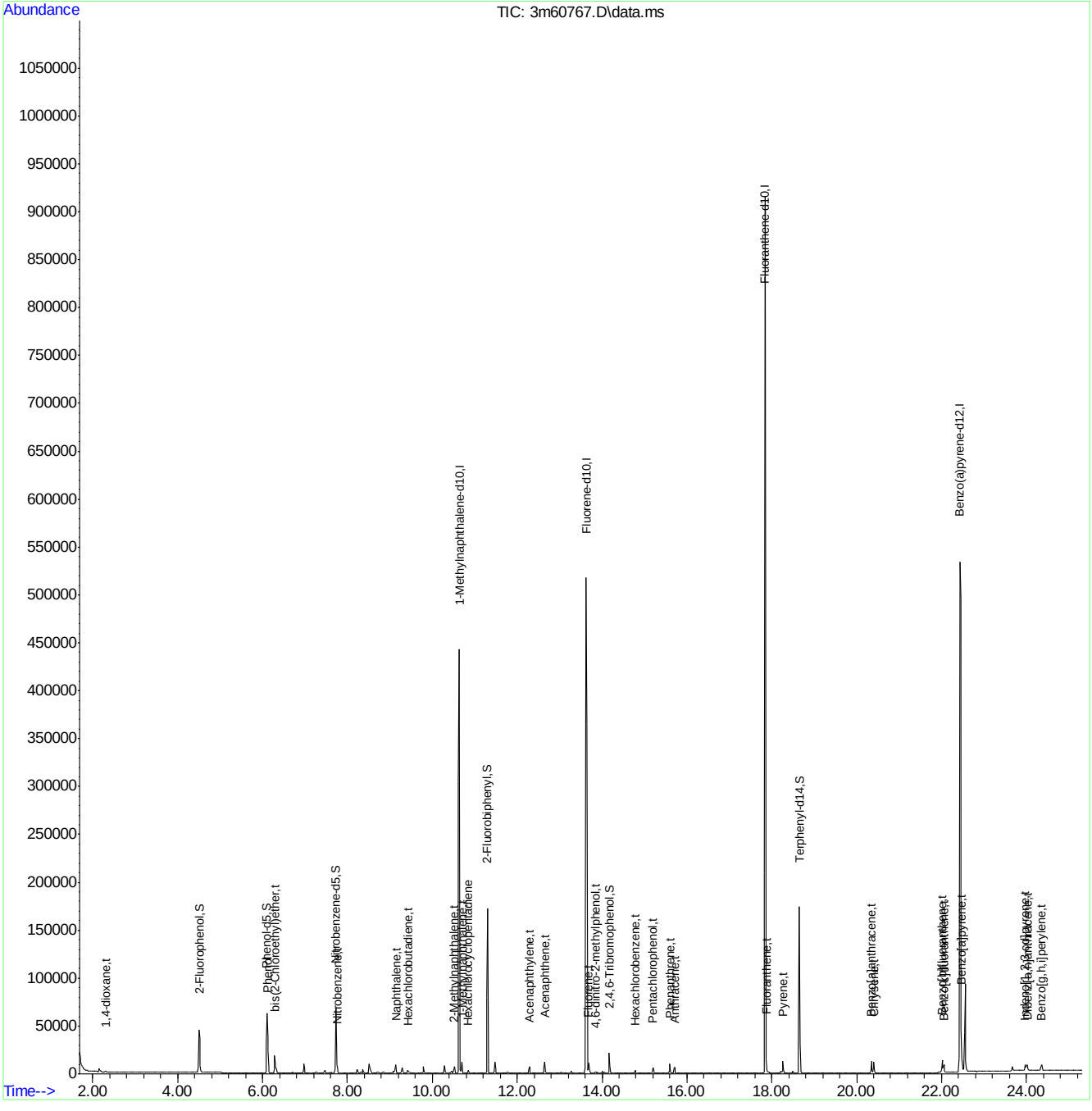
7

SGS ACCUTEST JC18649

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



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/22/16 12:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:29:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.640	150	345303	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	525823	4.00	ppm	0.02
21) Fluoranthene-d10	17.843	212	917656	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	713000	4.00	ppm	0.02
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	17018	0.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.78%	
4) Phenol-d5	6.104	99	28195	0.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.76%	
7) Nitrobenzene-d5	7.726	82	25103	0.37	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.74%	
15) 2-Fluorobiphenyl	11.303	172	57726	0.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.78%	
20) 2,4,6-Tribromophenol	14.172	330	4756	0.28	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.56%	
28) Terphenyl-d14	18.647	244	56137	0.41	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.82%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.305	88	245m	0.01	ppm	
5) Phenol	6.116	94	7474	0.09	ppm #	72
6) bis(2-Chloroethyl)ether	6.285	93	1201	0.02	ppm	90
8) Nitrobenzene	7.764	77	1406	0.02	ppm	86
9) Naphthalene	9.138	128	3866	0.02	ppm	100
10) Hexachlorobutadiene	9.421	225	661	0.02	ppm	97
11) 2-Methylnaphthalene	10.517	141	1996	0.02	ppm	93
12) 1-Methylnaphthalene	10.702	141	3332	0.03	ppm	91
13) Hexachlorocyclopentadiene	10.846	237	791	0.03	ppm	99
16) Acenaphthylene	12.293	152	3367	0.02	ppm	98
17) Acenaphthene	12.648	153	2382	0.02	ppm	98
18) 4,6-dinitro-2-methylph...	13.852	198	336	0.03	ppm	95
19) Fluorene	13.682	166	2916	0.02	ppm	97
22) Hexachlorobenzene	14.783	284	860	0.02	ppm	95
23) Pentachlorophenol	15.200	266	1647	0.07	ppm	97
24) Phenanthrene	15.602	178	4501	0.02	ppm	99
25) Anthracene	15.711	178	3476	0.02	ppm	96
26) Fluoranthene	17.874	202	6605	0.03	ppm	99
27) Pyrene	18.261	202	5085	0.02	ppm	97
29) Benzo[a]anthracene	20.346	228	5580	0.02	ppm	99
30) Chrysene	20.408	228	6534	0.03	ppm	99
32) Benzo[b]fluoranthene	22.015	252	5729	0.02	ppm	96
33) Benzo[k]fluoranthene	22.061	252	5167	0.02	ppm	95
34) Benzo[a]pyrene	22.463	252	4349m	0.02	ppm	
35) Indeno[1,2,3-cd]pyrene	23.963	276	4283	0.02	ppm	99
36) Dibenz[a,h]anthracene	24.020	278	3214	0.02	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	3711	0.02	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:29:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.63

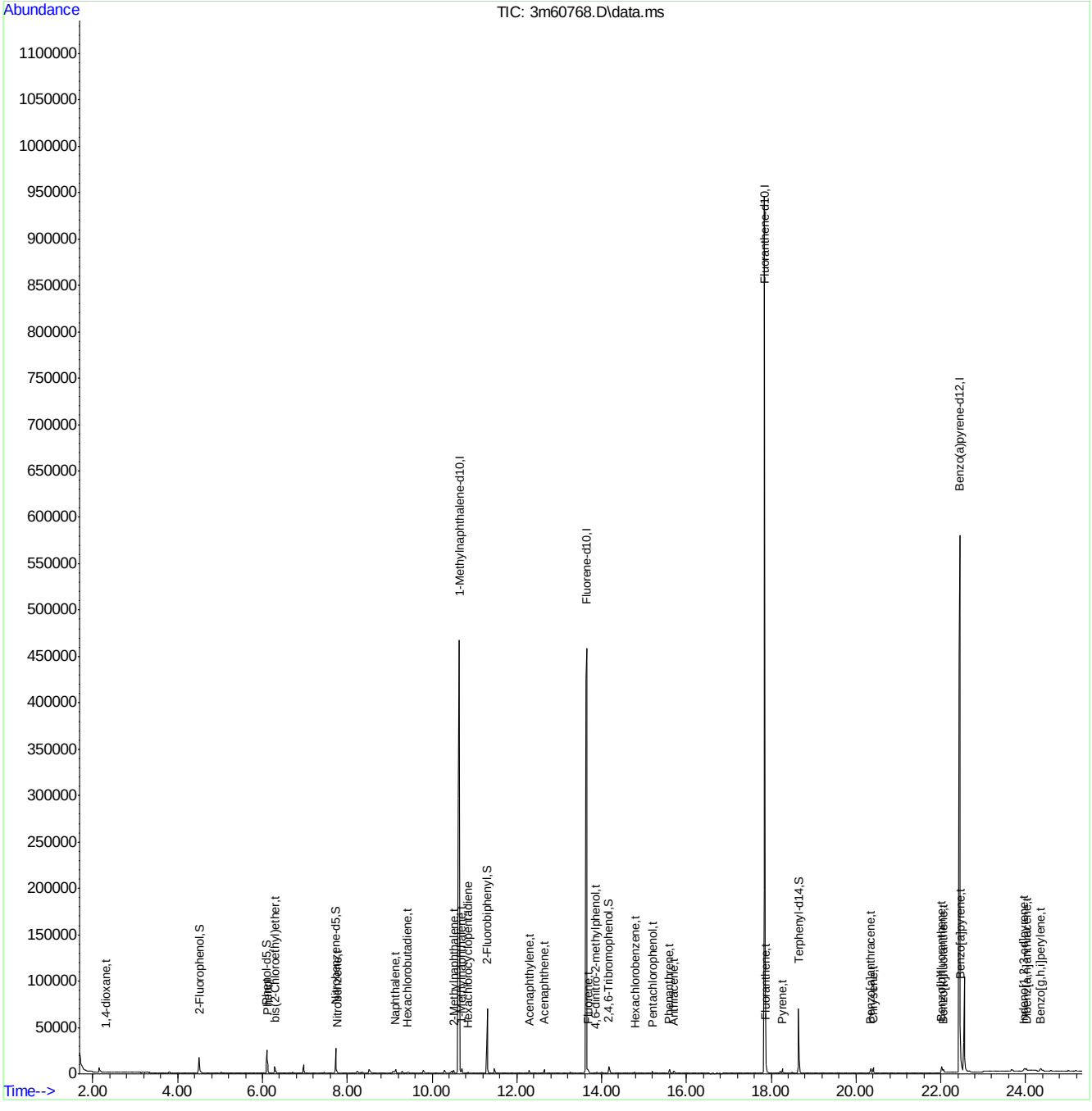
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:29:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration



Manual Integration Approval Summary

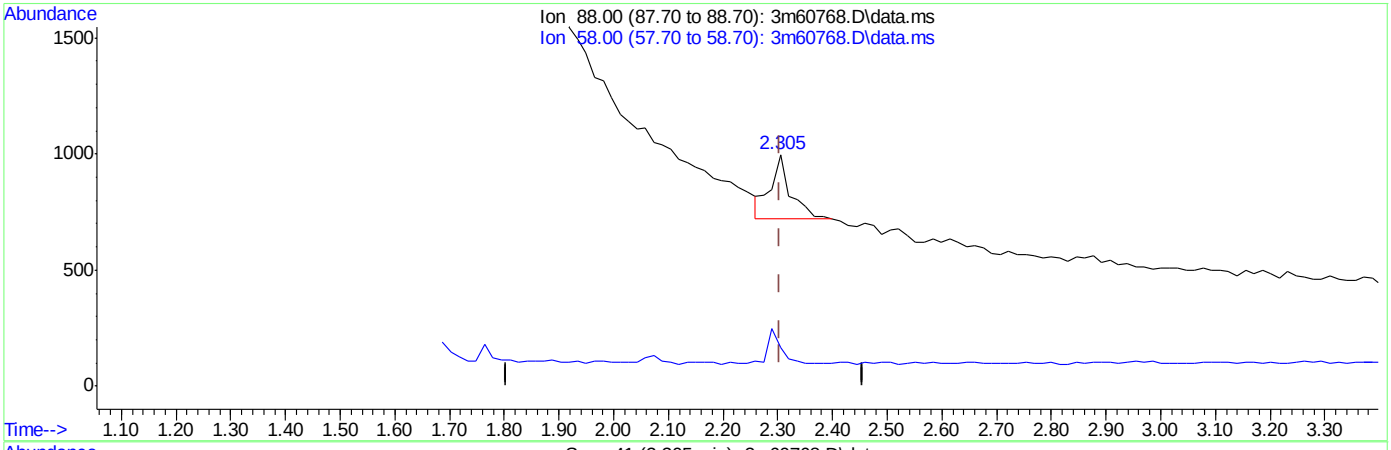
Sample Number:	E3M2855-IC2855	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M60768.D	**Analyst approved:**	04/22/16 09:15 Linsey Kirschmann
Injection Time:	04/21/16 17:17	**Supervisor approved:**	04/22/16 12:27 Nina Pandya

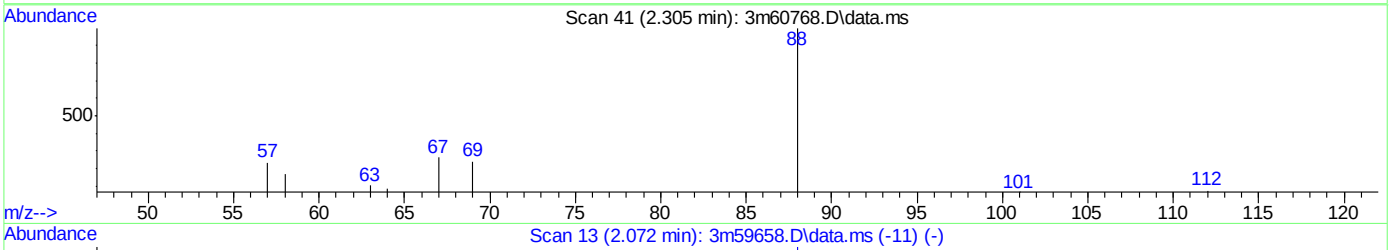
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.30	Baseline ripple
Benzo(a)pyrene	50-32-8		22.46	Baseline ripple

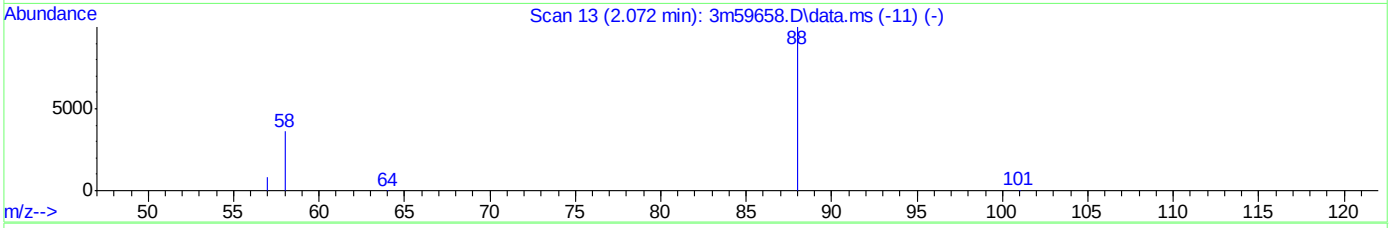
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:28:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration







TIC: 3m60768.D\data.ms

(2) 1,4-dioxane (t)

2.305min (-0.000) 0.04ppm

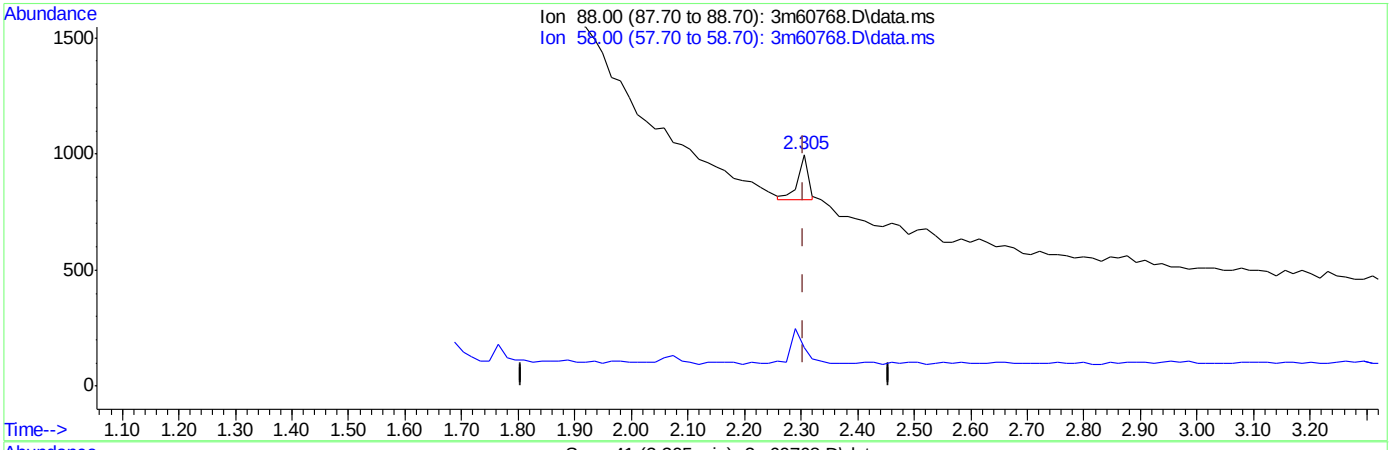
response 710

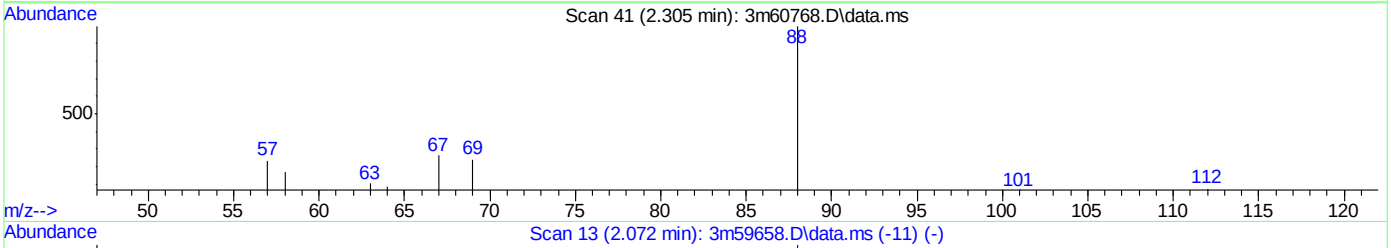
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	28.23
0.00	0.00	0.00
0.00	0.00	0.00

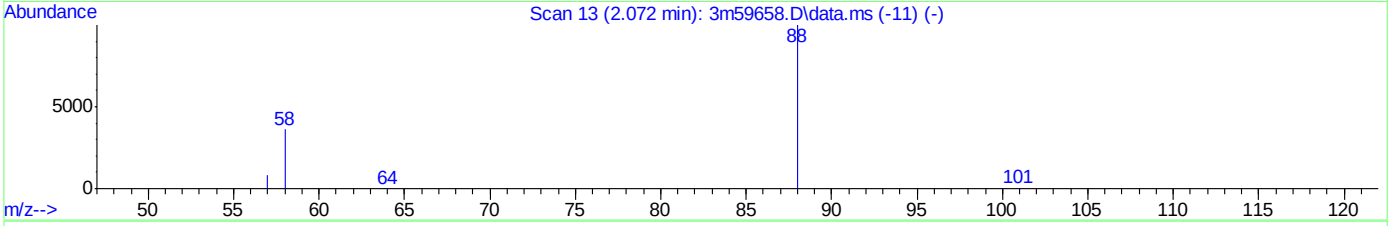
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:28:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration







TIC: 3m60768.D\data.ms

(2) 1,4-dioxane (t)

2.305min (-0.000) 0.01ppm m

response 245

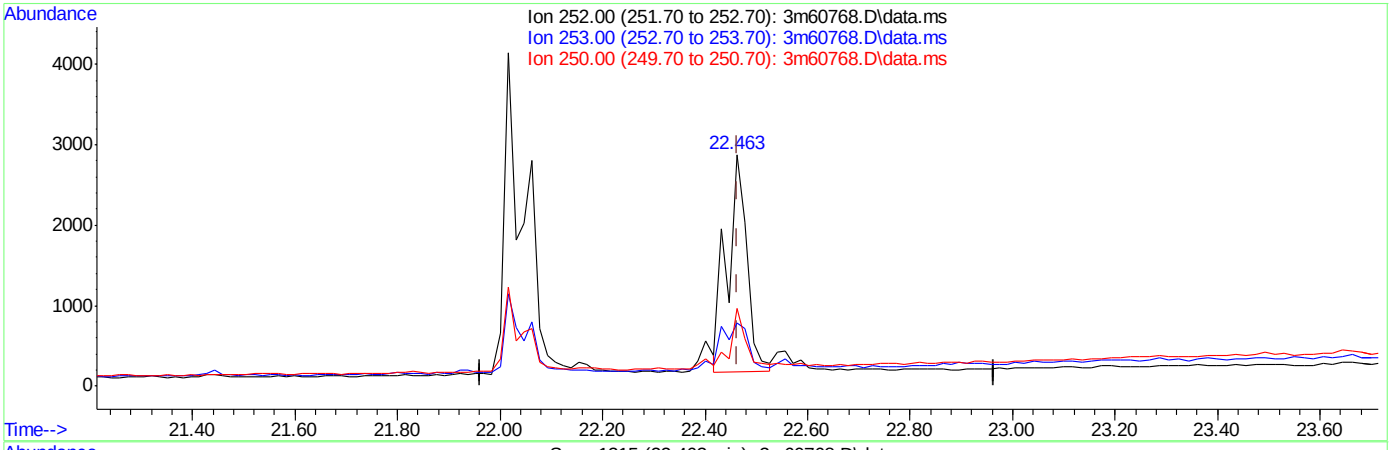
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	16.63
0.00	0.00	0.00
0.00	0.00	0.00

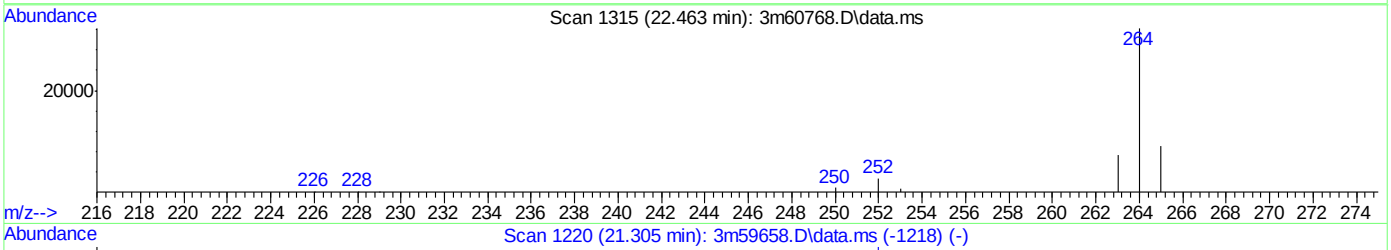
SGS ACCUTEST JC18649

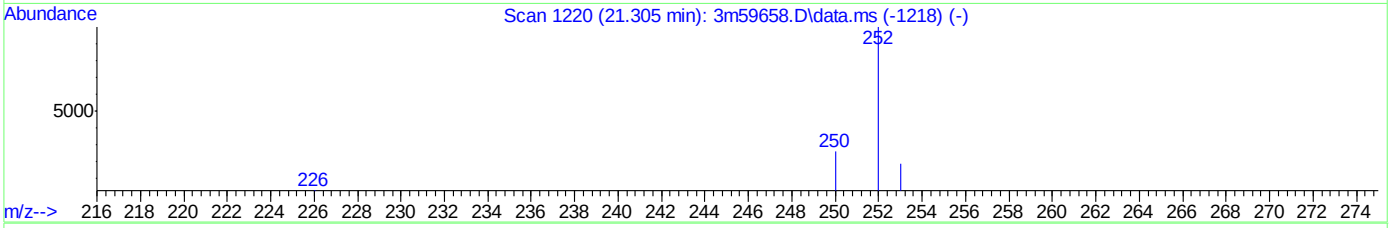
Quantitation Report (Qedit)

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

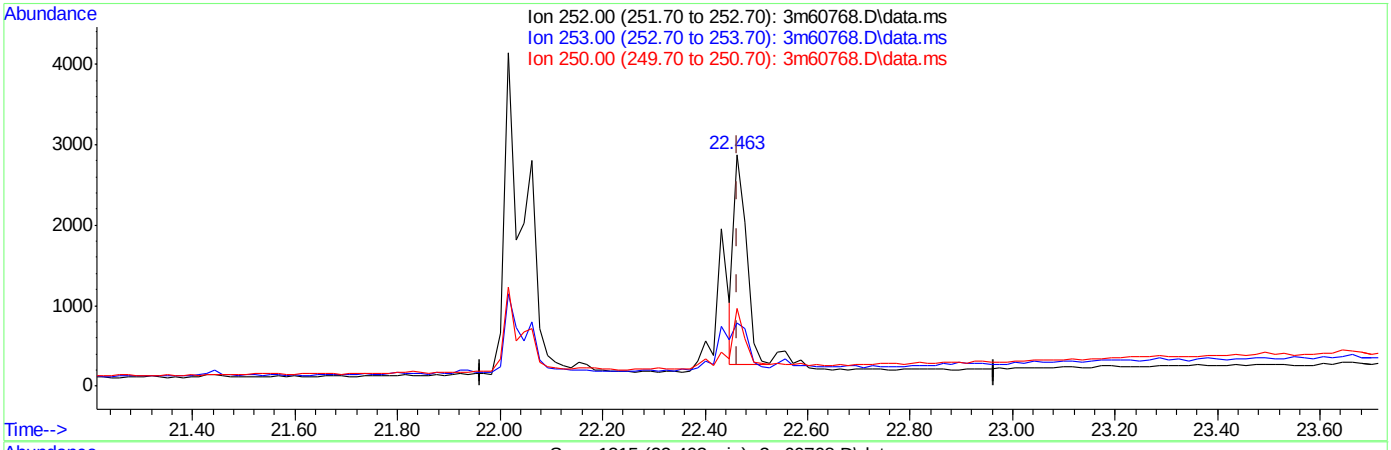
Ion	Exp%	Act%
252.00	100	100
253.00	18.80	20.93
250.00	26.10	27.47
0.00	0.00	0.00

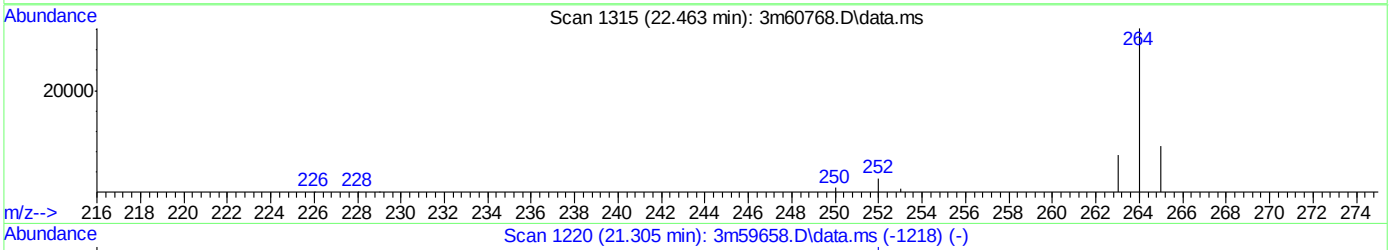
SGS ACCUTEST JC18649

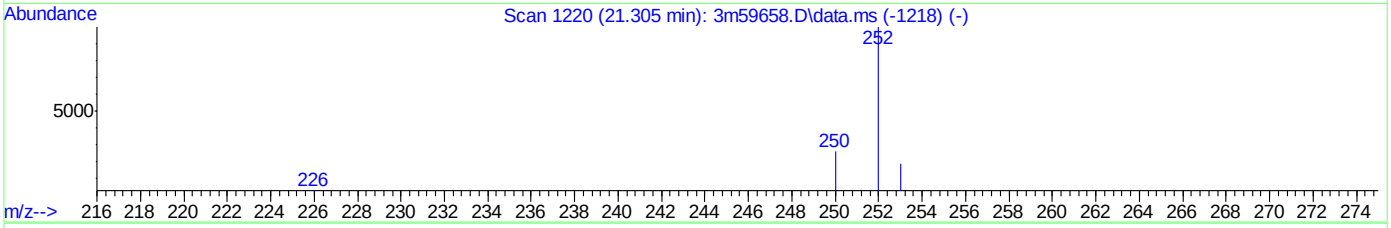
Quantitation Report (Qedit)

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 JC18649

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

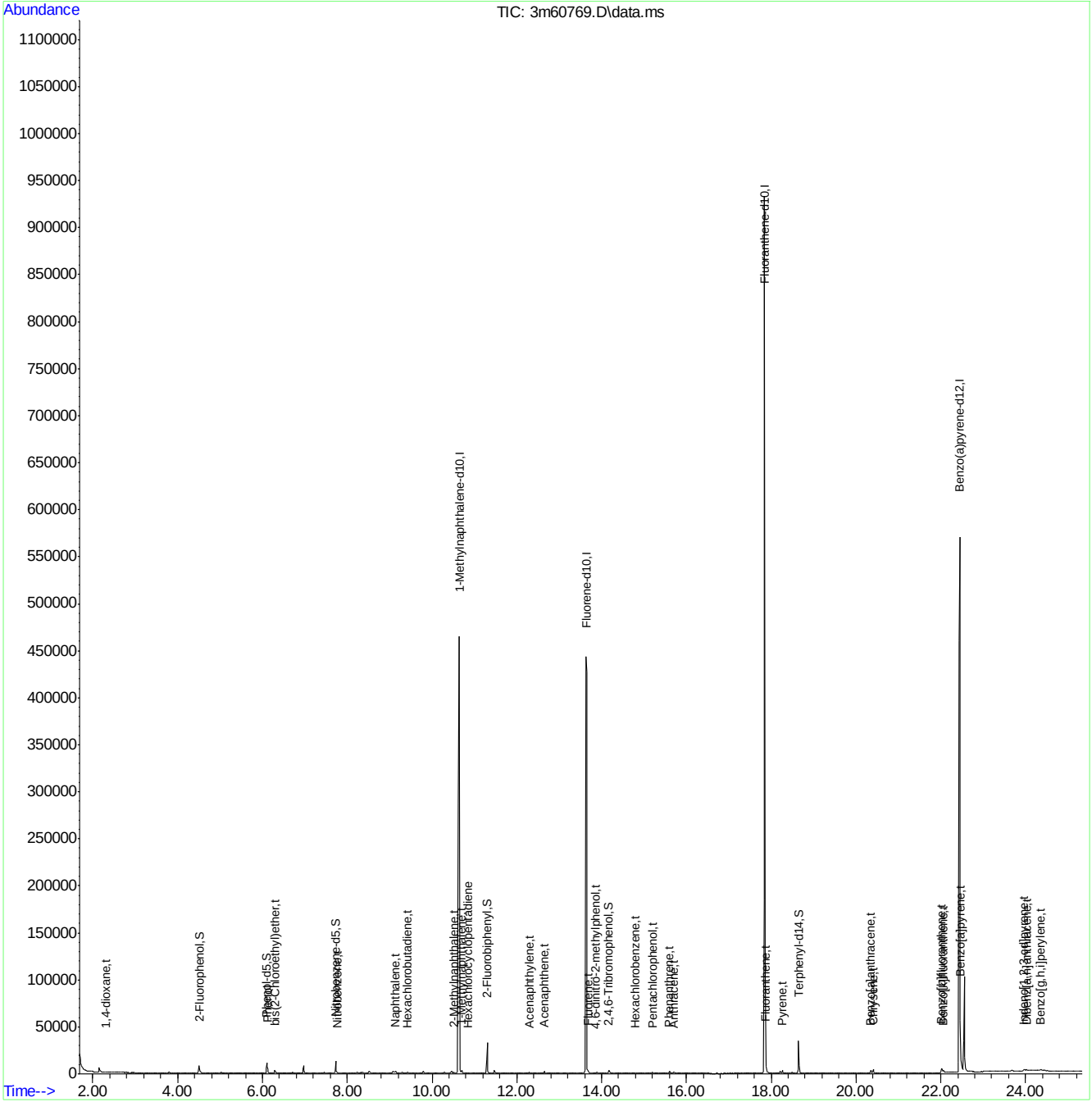
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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 JC18649

Manual Integration Approval Summary

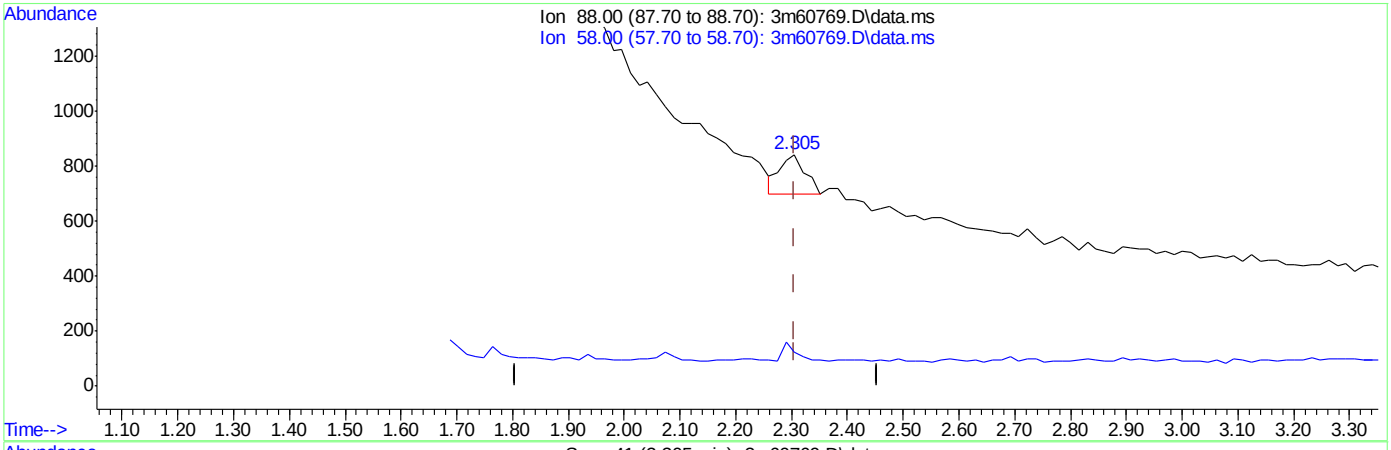
Sample Number:	E3M2855-IC2855	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M60769.D	**Analyst approved:**	04/22/16 09:15 Linsey Kirschmann
Injection Time:	04/21/16 17:49	**Supervisor approved:**	04/22/16 12:27 Nina Pandya

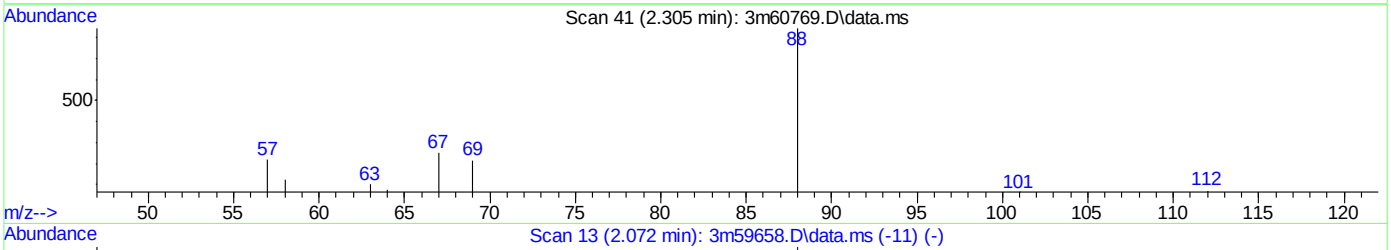
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.31	Baseline ripple

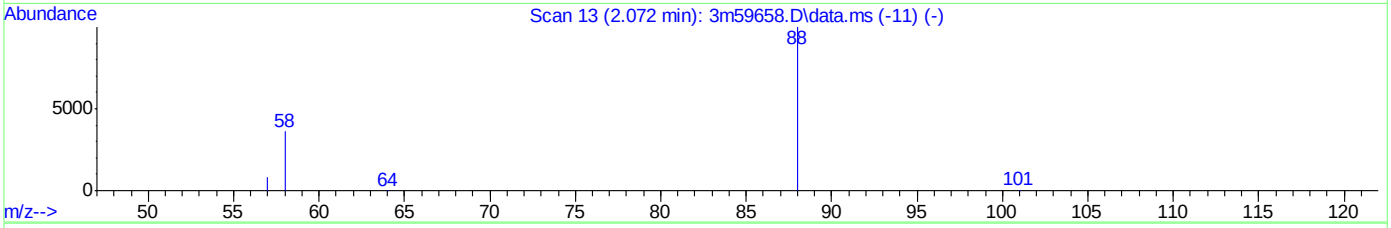
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60769.D
Acq On : 21 Apr 2016 5:49 pm
Operator : linseyk
Sample : ic2855-0.01
Misc : op93052a,e3m2855
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 08:30:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:05 2016
Response via : Initial Calibration







TIC: 3m60769.D\data.ms

(2) 1,4-dioxane (t)

2.305min (+0.000) 0.02ppm

response 450

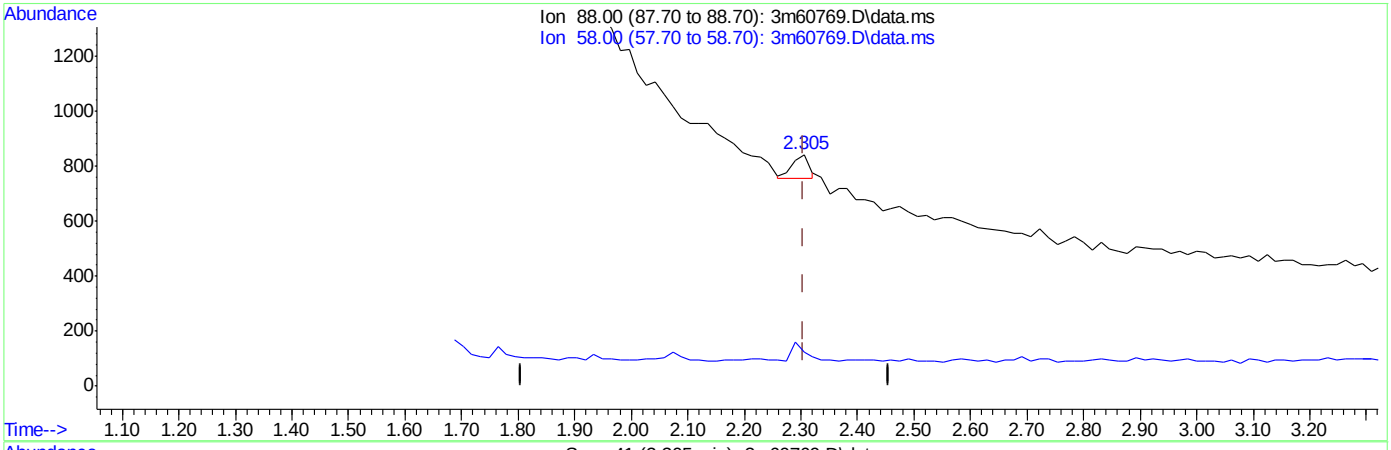
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	25.45
0.00	0.00	0.00
0.00	0.00	0.00

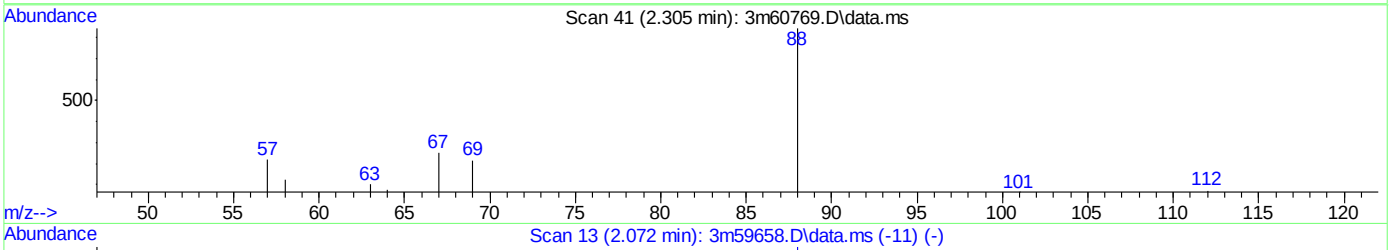
SGS ACCUTEST JC18649

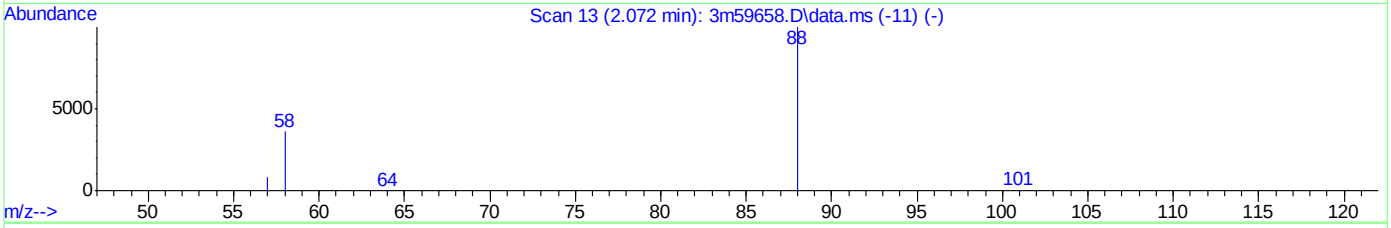
Quantitation Report (Qedit)

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 JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60770.D
Acq On : 21 Apr 2016 6:22 pm
Operator : linseyk
Sample : ic2855-5.0
Misc : op93052a,e3m2855
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 08:30:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.641	150	366417	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	628480	4.00	ppm	0.00
21) Fluoranthene-d10	17.844	212	939162	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	756981	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	4214444	90.43	ppm	0.00
Spiked Amount 50.000			Recovery	=	180.86%	
4) Phenol-d5	6.128	99	7328789	95.76	ppm	0.02
Spiked Amount 50.000			Recovery	=	191.52%	
7) Nitrobenzene-d5	7.745	82	7395086	102.34	ppm	0.02
Spiked Amount 50.000			Recovery	=	204.68%	
15) 2-Fluorobiphenyl	11.319	172	14347827	81.47	ppm	0.02
Spiked Amount 50.000			Recovery	=	162.94%	
20) 2,4,6-Tribromophenol	14.191	330	1892615	94.39	ppm	0.02
Spiked Amount 50.000			Recovery	=	188.78%	
28) Terphenyl-d14	18.662	244	11761490	83.98	ppm	0.02
Spiked Amount 50.000			Recovery	=	167.96%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.290	88	94789	4.85	ppm	75
5) Phenol	6.140	94	1983163	23.95	ppm #	79
6) bis(2-Chloroethyl)ether	6.298	93	266705	4.16	ppm #	60
8) Nitrobenzene	7.764	77	406472	5.38	ppm #	58
9) Naphthalene	9.139	128	1024731	5.04	ppm	98
10) Hexachlorobutadiene	9.421	225	174841	4.87	ppm	95
11) 2-Methylnaphthalene	10.517	141	553815	5.26	ppm	96
12) 1-Methylnaphthalene	10.702	141	647057	4.41	ppm	93
13) Hexachlorocyclopentadiene	10.846	237	345119	13.01	ppm	95
16) Acenaphthylene	12.293	152	1074573	4.94	ppm	99
17) Acenaphthene	12.648	153	680855	4.63	ppm	99
18) 4,6-dinitro-2-methylph...	13.852	198	689664	56.92	ppm	74
19) Fluorene	13.682	166	778408	4.36	ppm	94
22) Hexachlorobenzene	14.783	284	229525	5.21	ppm	94
23) Pentachlorophenol	15.201	266	786510	32.34	ppm	95
24) Phenanthrene	15.603	178	1190802	5.25	ppm	99
25) Anthracene	15.711	178	1181627	5.75	ppm	98
26) Fluoranthene	17.874	202	1318777	5.01	ppm	99
27) Pyrene	18.261	202	1382848	5.27	ppm	98
29) Benzo[a]anthracene	20.347	228	1195931	5.01	ppm	96
30) Chrysene	20.408	228	1263858	5.17	ppm	98
32) Benzo[b]fluoranthene	22.015	252	1201158	4.18	ppm	95
33) Benzo[k]fluoranthene	22.062	252	1191473	5.12	ppm	97
34) Benzo[a]pyrene	22.463	252	1113412	4.67	ppm	98
35) Indeno[1,2,3-cd]pyrene	23.982	276	1248948	5.29	ppm	89
36) Dibenz[a,h]anthracene	24.020	278	1051200	5.43	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	1074162	5.23	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60770.D
Acq On : 21 Apr 2016 6:22 pm
Operator : linseyk
Sample : ic2855-5.0
Misc : op93052a,e3m2855
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 08:30:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:48 2016
Response via : Initial Calibration

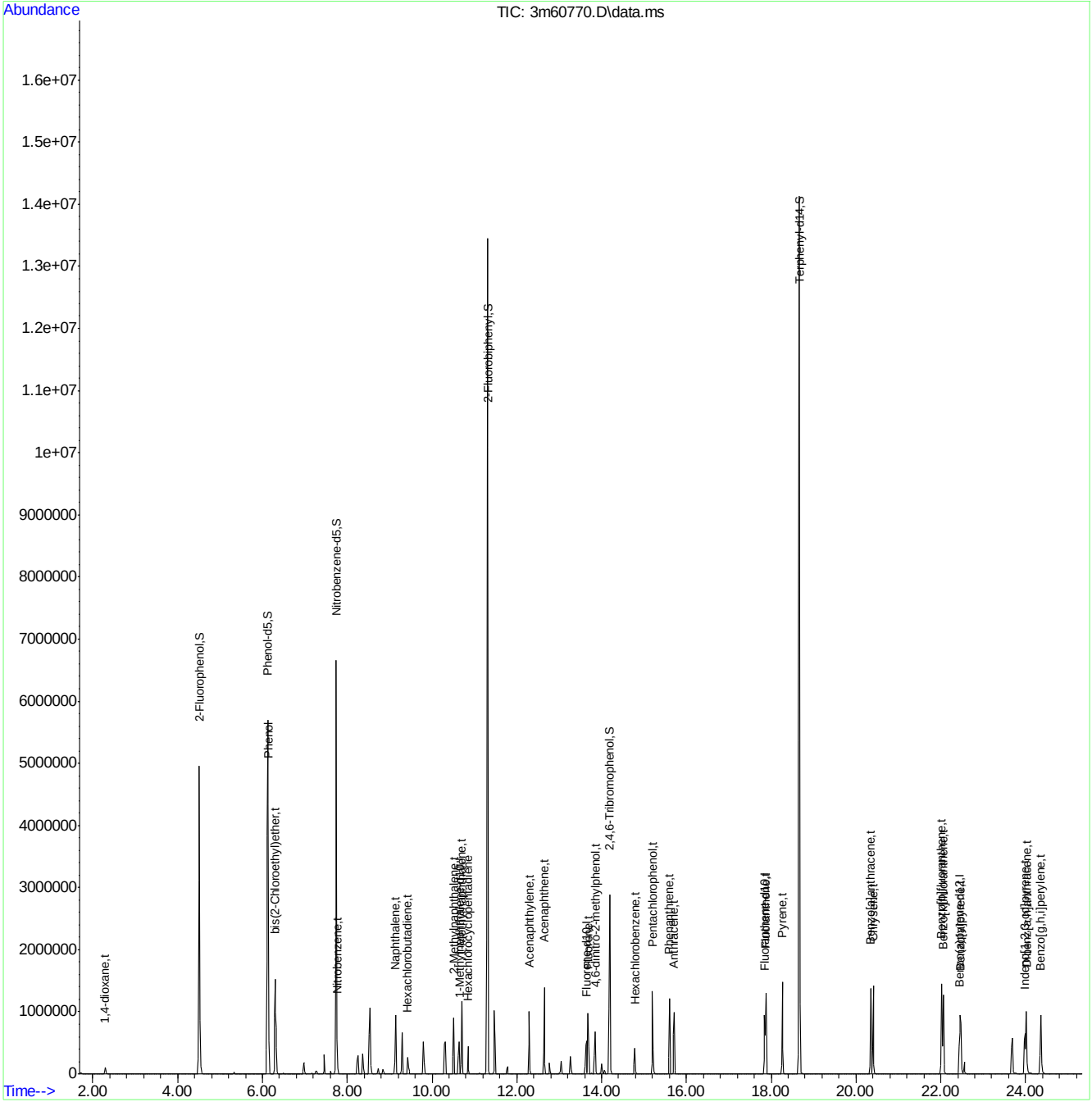
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60770.D
Acq On : 21 Apr 2016 6:22 pm
Operator : linseyk
Sample : ic2855-5.0
Misc : op93052a,e3m2855
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 08:30:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:48 2016
Response via : Initial Calibration



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

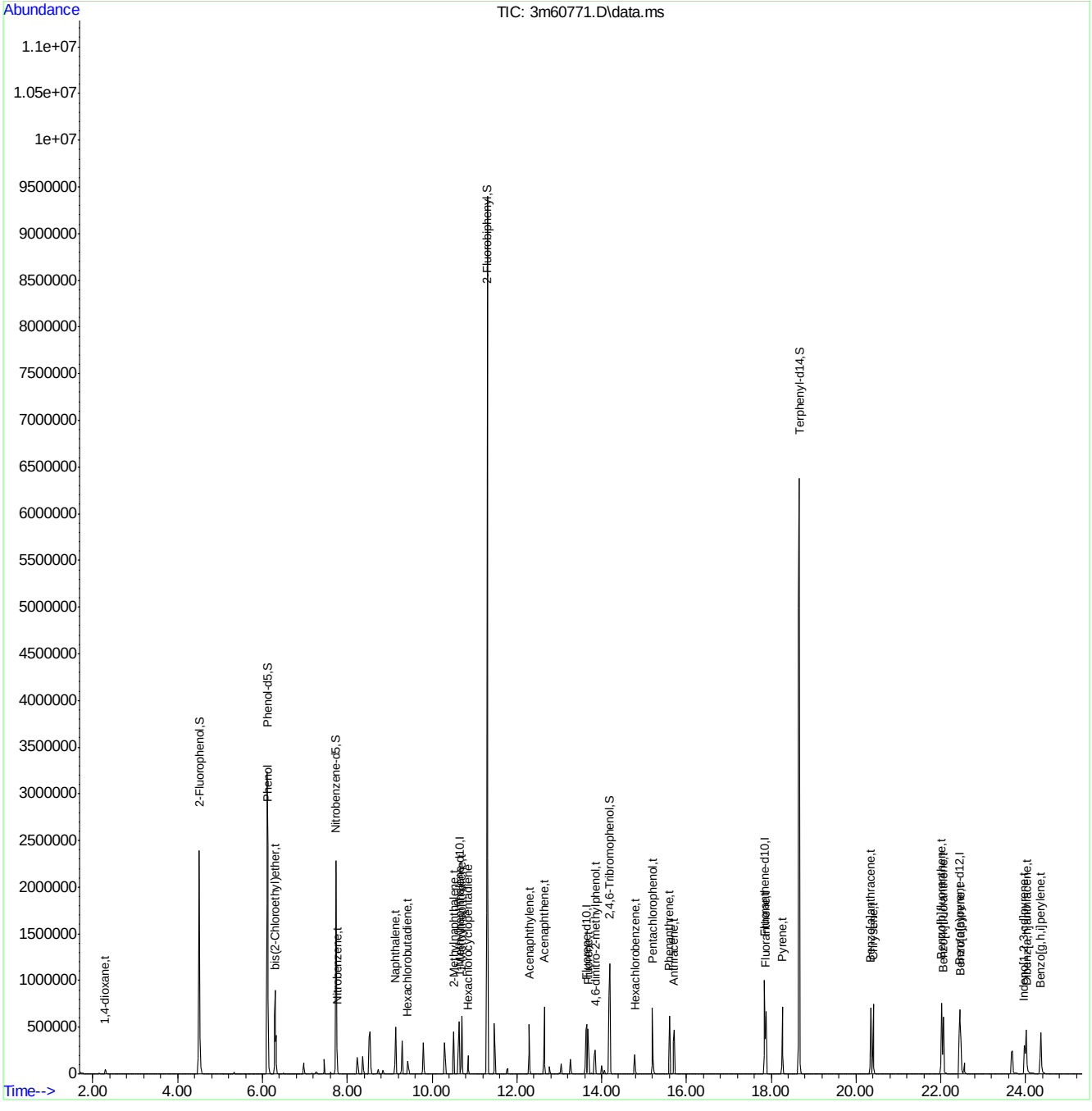
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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 JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60772.D
Acq On : 21 Apr 2016 7:27 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 22 08:56:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.641	150	468880	4.00 ppm	0.00
14) Fluorene-d10	13.644	176	745589	4.00 ppm	0.00
21) Fluoranthene-d10	17.844	212	1195677	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	940216	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	0.000	112	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
4) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
7) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
15) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
20) 2,4,6-Tribromophenol	0.000	330	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
28) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
5) Phenol	6.128	94	476638	4.56 ppm	99
18) 4,6-dinitro-2-methylph...	13.852	198	87949	3.84 ppm	95
23) Pentachlorophenol	15.201	266	168629	4.34 ppm	92

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

7.6.67

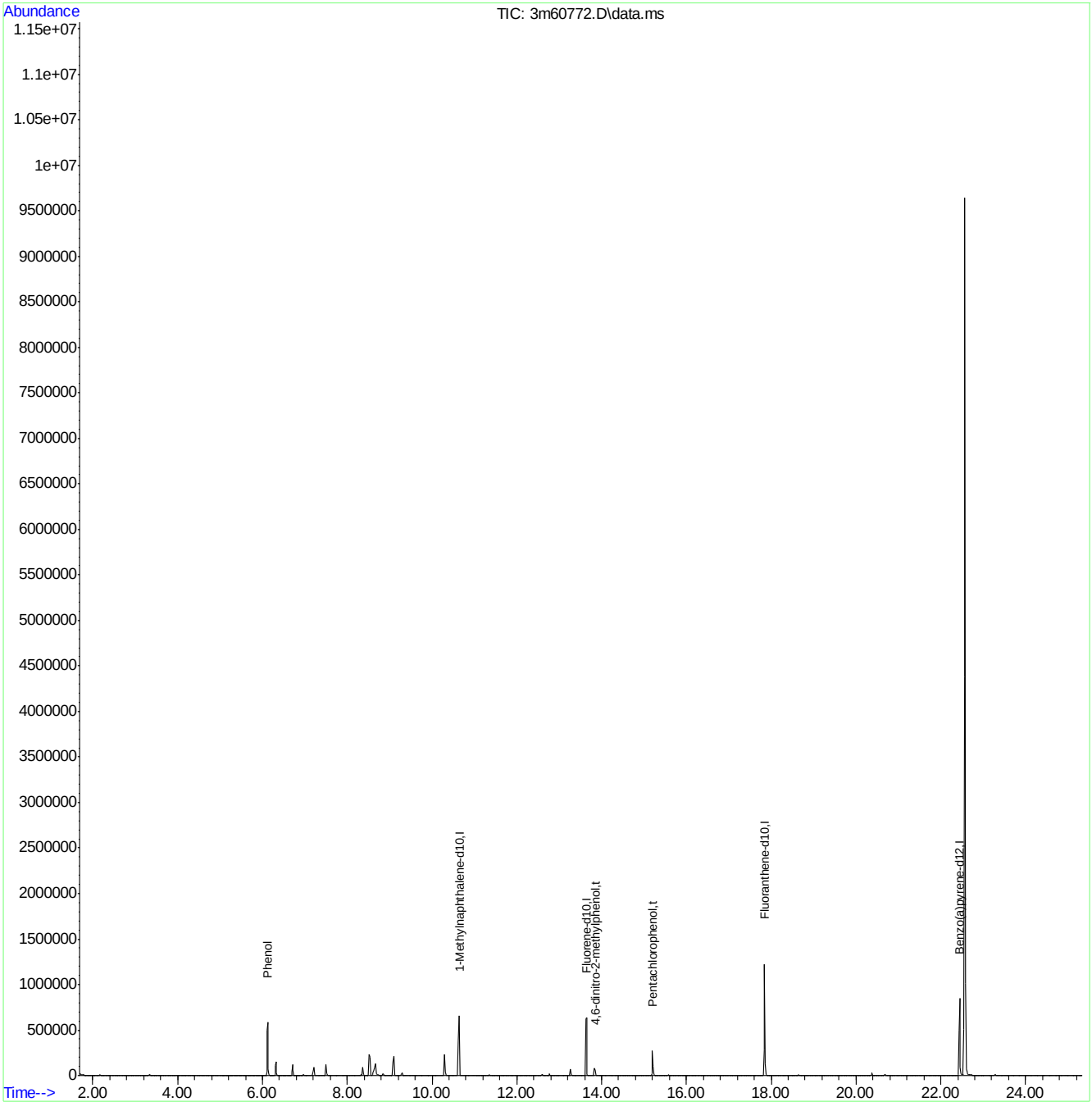
7

SGS ACCUTEST JC18649

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

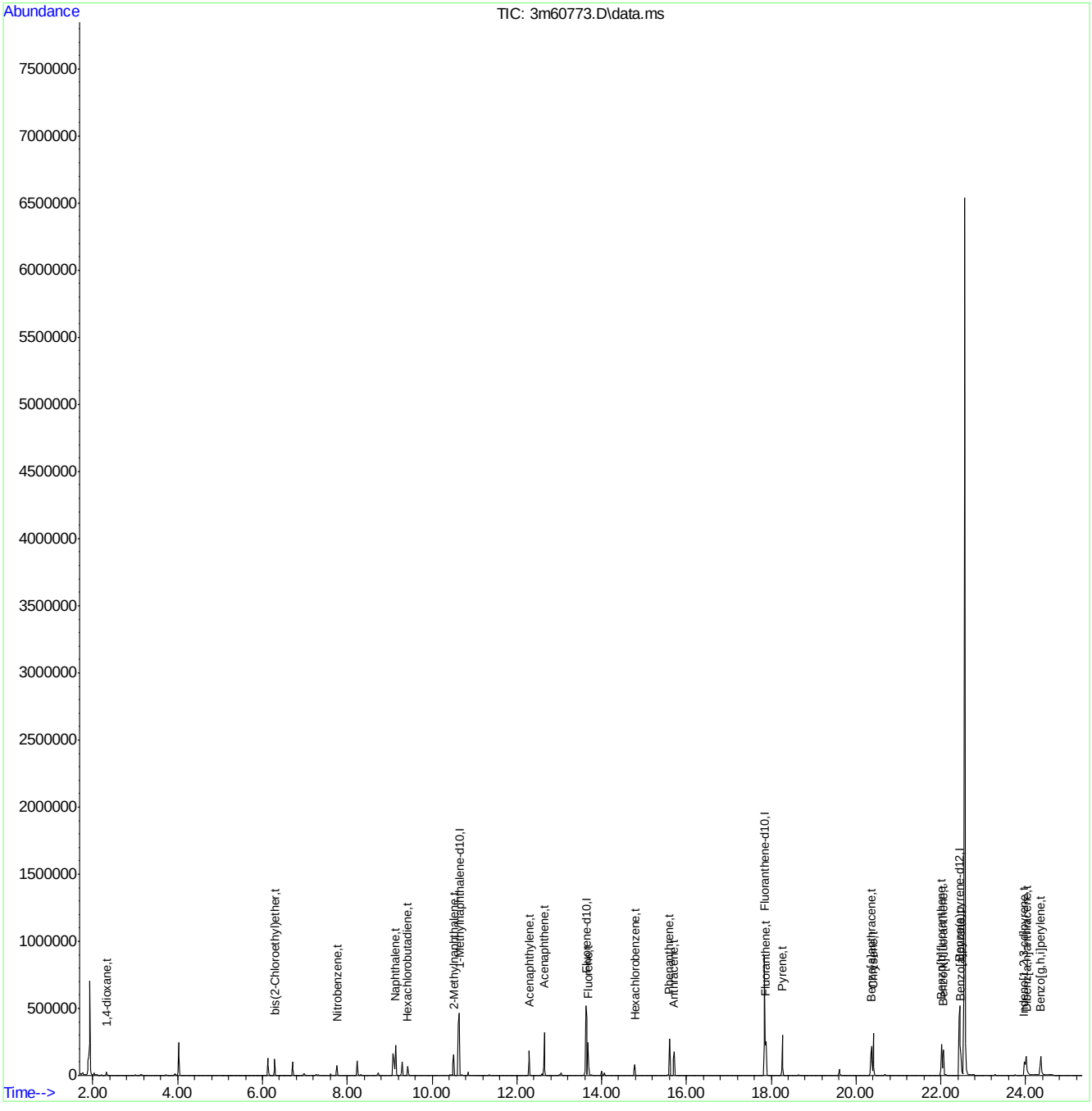
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.640	150	381667	4.00 ppm	0.00
14) Fluorene-d10	13.644	176	568016	4.00 ppm	0.00
21) Fluoranthene-d10	17.843	212	891736	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	666840	4.00 ppm	0.00
System Monitoring 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

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



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60774.D
Acq On : 21 Apr 2016 8:35 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 22 08:58:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.640	150	433101	4.00 ppm	0.00
14) Fluorene-d10	13.644	176	614407	4.00 ppm	0.00
21) Fluoranthene-d10	17.843	212	1087112	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	854436	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	0.000	112	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
4) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
7) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
15) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
20) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
28) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.289	88	25472	1.14 ppm	95
12) 1-Methylnaphthalene	10.702	141	161130	0.95 ppm	94
13) Hexachlorocyclopentadiene	10.845	237	34911	1.05 ppm	99

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

7.6.69

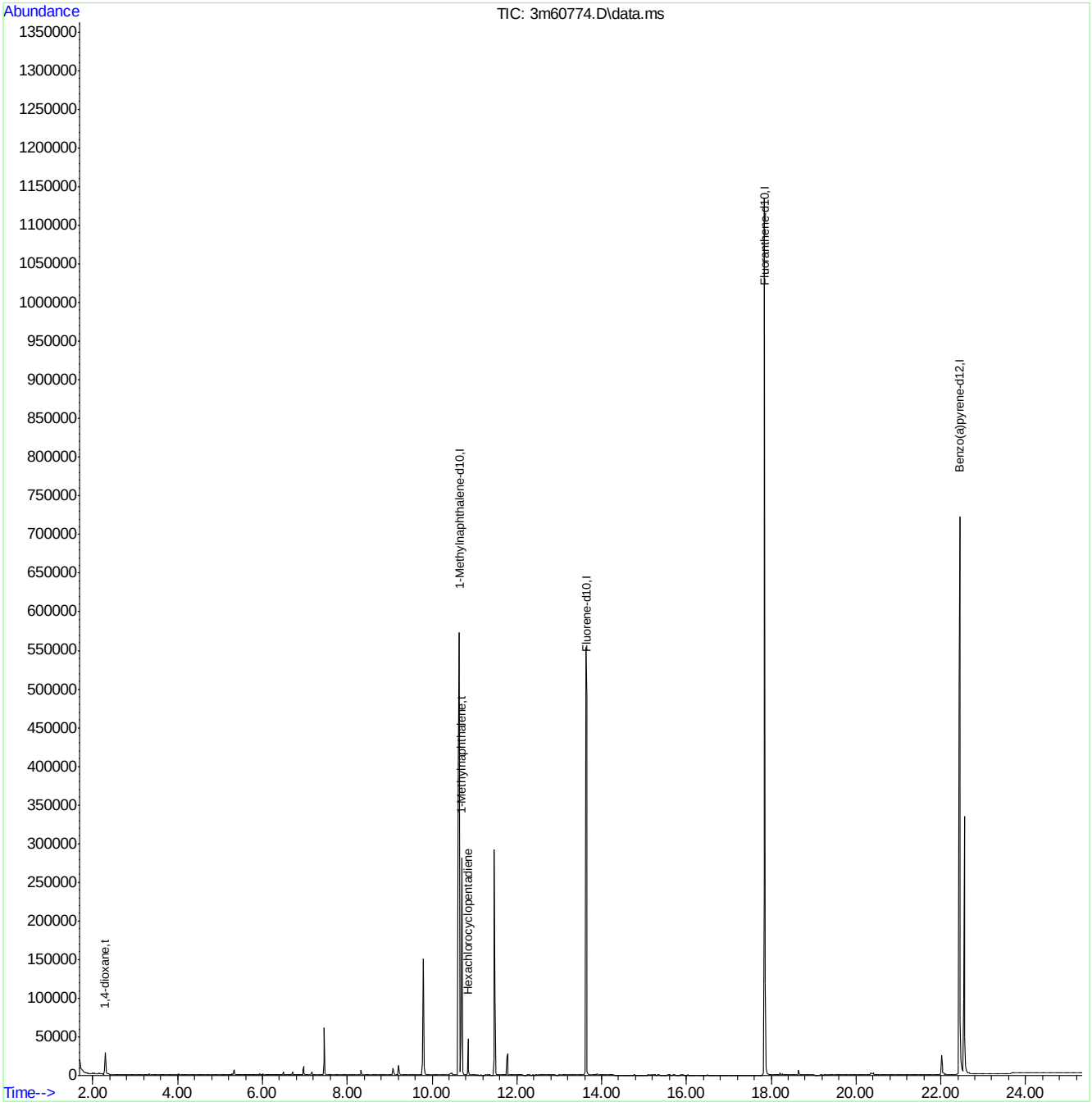
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60774.D
Acq On : 21 Apr 2016 8:35 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 22 08:58:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration



M3M2855SIM.M Fri Apr 22 08:58:16 2016 RPT1 Page: 2

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60776.D
Acq On : 22 Apr 2016 9:20 am
Operator : linseyk
Sample : cc2855-1
Misc : op93052a,e3m2856
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 09:44:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.641	150	477972	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	728628	4.00	ppm	0.00
21) Fluoranthene-d10	17.844	212	1228462	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	974953	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	1176138	19.67	ppm	0.00
Spiked Amount 50.000			Recovery = 39.34%			
4) Phenol-d5	6.104	99	1946961	19.68	ppm	0.00
Spiked Amount 50.000			Recovery = 39.36%			
7) Nitrobenzene-d5	7.726	82	1669162	18.14	ppm	0.00
Spiked Amount 50.000			Recovery = 36.28%			
15) 2-Fluorobiphenyl	11.303	172	3906551	19.51	ppm	0.00
Spiked Amount 50.000			Recovery = 39.02%			
20) 2,4,6-Tribromophenol	14.172	330	449991	19.73	ppm	0.00
Spiked Amount 50.000			Recovery = 39.46%			
28) Terphenyl-d14	18.647	244	3551614	19.93	ppm	0.00
Spiked Amount 50.000			Recovery = 39.86%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.290	88	23123	0.94	ppm #	28
5) Phenol	6.128	94	531432	4.98	ppm	92
6) bis(2-Chloroethyl)ether	6.285	93	73949	0.92	ppm #	65
8) Nitrobenzene	7.764	77	100732	1.01	ppm	83
9) Naphthalene	9.139	128	278039	1.05	ppm	98
10) Hexachlorobutadiene	9.421	225	45400	0.98	ppm	95
11) 2-Methylnaphthalene	10.517	141	146247	1.06	ppm	92
12) 1-Methylnaphthalene	10.702	141	172889	0.93	ppm	91
13) Hexachlorocyclopentadiene	10.846	237	77914	2.12	ppm	93
16) Acenaphthylene	12.293	152	264635	1.05	ppm	98
17) Acenaphthene	12.648	153	175401	1.04	ppm	95
18) 4,6-dinitro-2-methylph...	13.852	198	120620	5.07	ppm	94
19) Fluorene	13.682	166	204136	1.01	ppm	94
22) Hexachlorobenzene	14.783	284	60976	1.05	ppm	93
23) Pentachlorophenol	15.201	266	205480	5.11	ppm	97
24) Phenanthrene	15.602	178	305180	1.01	ppm	98
25) Anthracene	15.711	178	290381	1.09	ppm	97
26) Fluoranthene	17.874	202	356293	0.94	ppm	99
27) Pyrene	18.261	202	354438	1.01	ppm	96
29) Benzo[a]anthracene	20.347	228	319986	0.95	ppm	95
30) Chrysene	20.408	228	331617	1.03	ppm	98
32) Benzo[b]fluoranthene	22.015	252	387160	1.19	ppm	100
33) Benzo[k]fluoranthene	22.062	252	252987	0.84	ppm	98
34) Benzo[a]pyrene	22.479	252	293706	0.97	ppm	85
35) Indeno[1,2,3-cd]pyrene	23.982	276	307580	1.00	ppm	90
36) Dibenz[a,h]anthracene	24.020	278	262760	1.04	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	273492	1.03	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60776.D
Acq On : 22 Apr 2016 9:20 am
Operator : linseyk
Sample : cc2855-1
Misc : op93052a,e3m2856
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 09:44:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.70

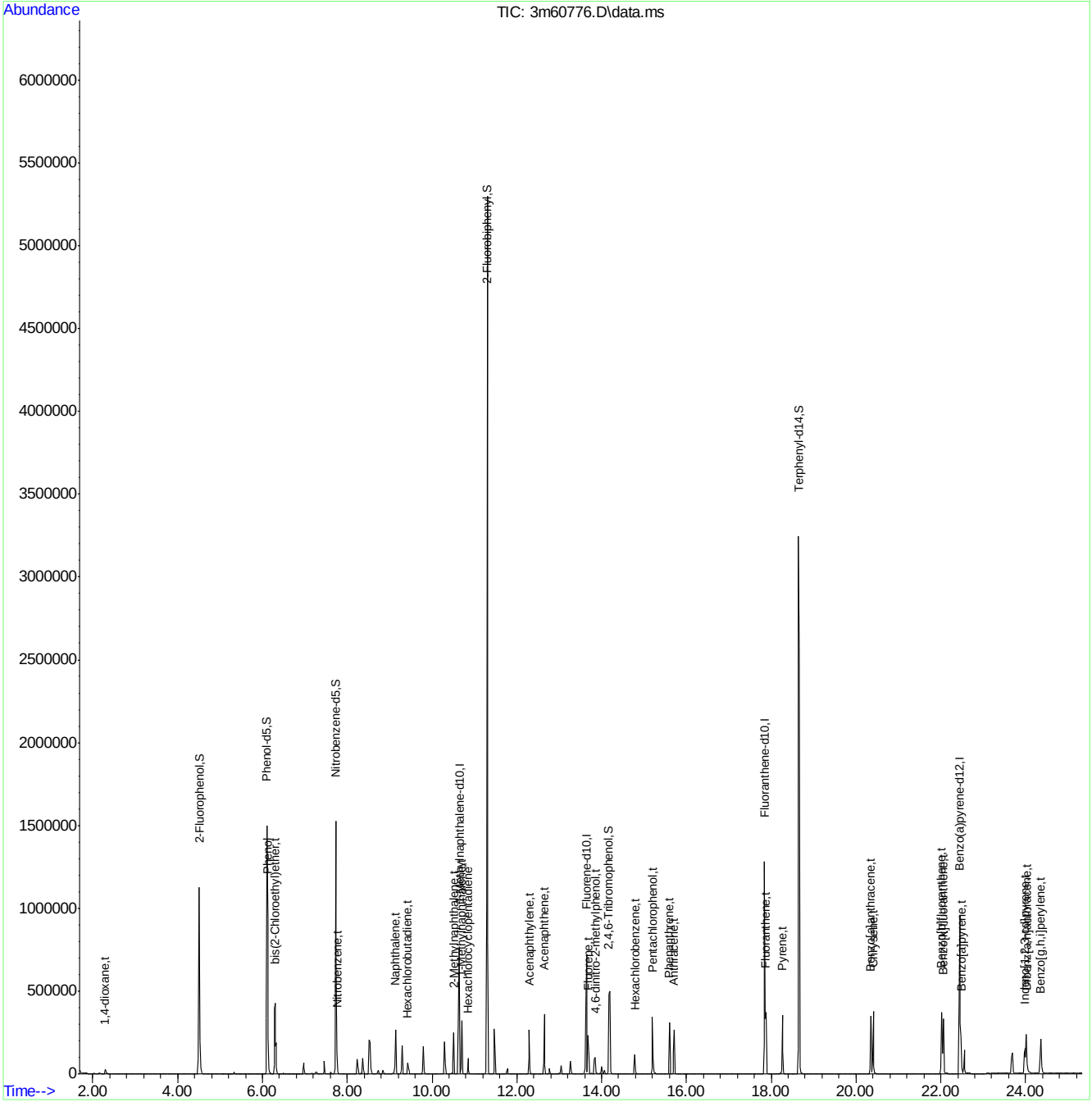
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60776.D
Acq On : 22 Apr 2016 9:20 am
Operator : linseyk
Sample : cc2855-1
Misc : op93052a,e3m2856
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 09:44:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60898.D
Acq On : 26 Apr 2016 10:09 pm
Operator : juliusj
Sample : cc2855-.5
Misc : op93292a,e3m2863
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 27 14:00:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 27 13:02:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.549	150	288205	4.00	ppm	-0.07
14) Fluorene-d10	13.562	176	458343	4.00	ppm	-0.08
21) Fluoranthene-d10	17.762	212	785052	4.00	ppm	-0.10
31) Benzo(a)pyrene-d12	22.367	264	651890	4.00	ppm	-0.08
System Monitoring Compounds						
3) 2-Fluorophenol	4.461	112	393756	10.92	ppm	-0.05
Spiked Amount 50.000			Recovery = 21.84%			
4) Phenol-d5	6.060	99	620454	10.40	ppm	-0.03
Spiked Amount 50.000			Recovery = 20.80%			
7) Nitrobenzene-d5	7.662	82	549146	9.90	ppm	-0.05
Spiked Amount 50.000			Recovery = 19.80%			
15) 2-Fluorobiphenyl	11.222	172	1256209	9.97	ppm	-0.08
Spiked Amount 50.000			Recovery = 19.94%			
20) 2,4,6-Tribromophenol	14.108	330	139485	9.72	ppm	-0.06
Spiked Amount 50.000			Recovery = 19.44%			
28) Terphenyl-d14	18.581	244	1170634	10.28	ppm	-0.08
Spiked Amount 50.000			Recovery = 20.56%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.251	88	7757	0.52	ppm #	41
5) Phenol	6.085	94	162566	2.53	ppm	96
6) bis(2-Chloroethyl)ether	6.218	93	23737	0.49	ppm #	52
8) Nitrobenzene	7.700	77	28009	0.47	ppm	84
9) Naphthalene	9.056	128	81643	0.51	ppm	92
10) Hexachlorobutadiene	9.357	225	14290	0.51	ppm	73
11) 2-Methylnaphthalene	10.426	141	42244	0.51	ppm #	53
12) 1-Methylnaphthalene	10.631	141	44078	0.39	ppm	90
13) Hexachlorocyclopentadiene	10.775	237	26159	1.18	ppm	88
16) Acenaphthylene	12.211	152	83968	0.53	ppm	95
17) Acenaphthene	12.567	153	54517	0.51	ppm	91
18) 4,6-dinitro-2-methylph...	13.769	198	20550	1.89	ppm #	1
19) Fluorene	13.618	166	62275	0.49	ppm	74
22) Hexachlorobenzene	14.702	284	18344	0.49	ppm	92
23) Pentachlorophenol	15.135	266	55570	2.26	ppm	94
24) Phenanthrene	15.521	178	93927	0.49	ppm #	56
25) Anthracene	15.629	178	86679	0.51	ppm	97
26) Fluoranthene	17.793	202	106142	0.44	ppm	94
27) Pyrene	18.195	202	109985	0.49	ppm	93
29) Benzo[a]anthracene	20.281	228	100796	0.47	ppm	94
30) Chrysene	20.327	228	99756	0.48	ppm	86
32) Benzo[b]fluoranthene	21.949	252	105172	0.48	ppm	93
33) Benzo[k]fluoranthene	21.980	252	92794	0.46	ppm	89
34) Benzo[a]pyrene	22.397	252	98729	0.49	ppm	94
35) Indeno[1,2,3-cd]pyrene	23.881	276	107134	0.52	ppm	100
36) Dibenz[a,h]anthracene	23.937	278	84645	0.50	ppm	100
37) Benzo[g,h,i]perylene	24.257	276	91294	0.51	ppm	98

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60898.D
Acq On : 26 Apr 2016 10:09 pm
Operator : juliusj
Sample : cc2855-.5
Misc : op93292a,e3m2863
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 27 14:00:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 27 13:02:22 2016
Response via : Initial Calibration

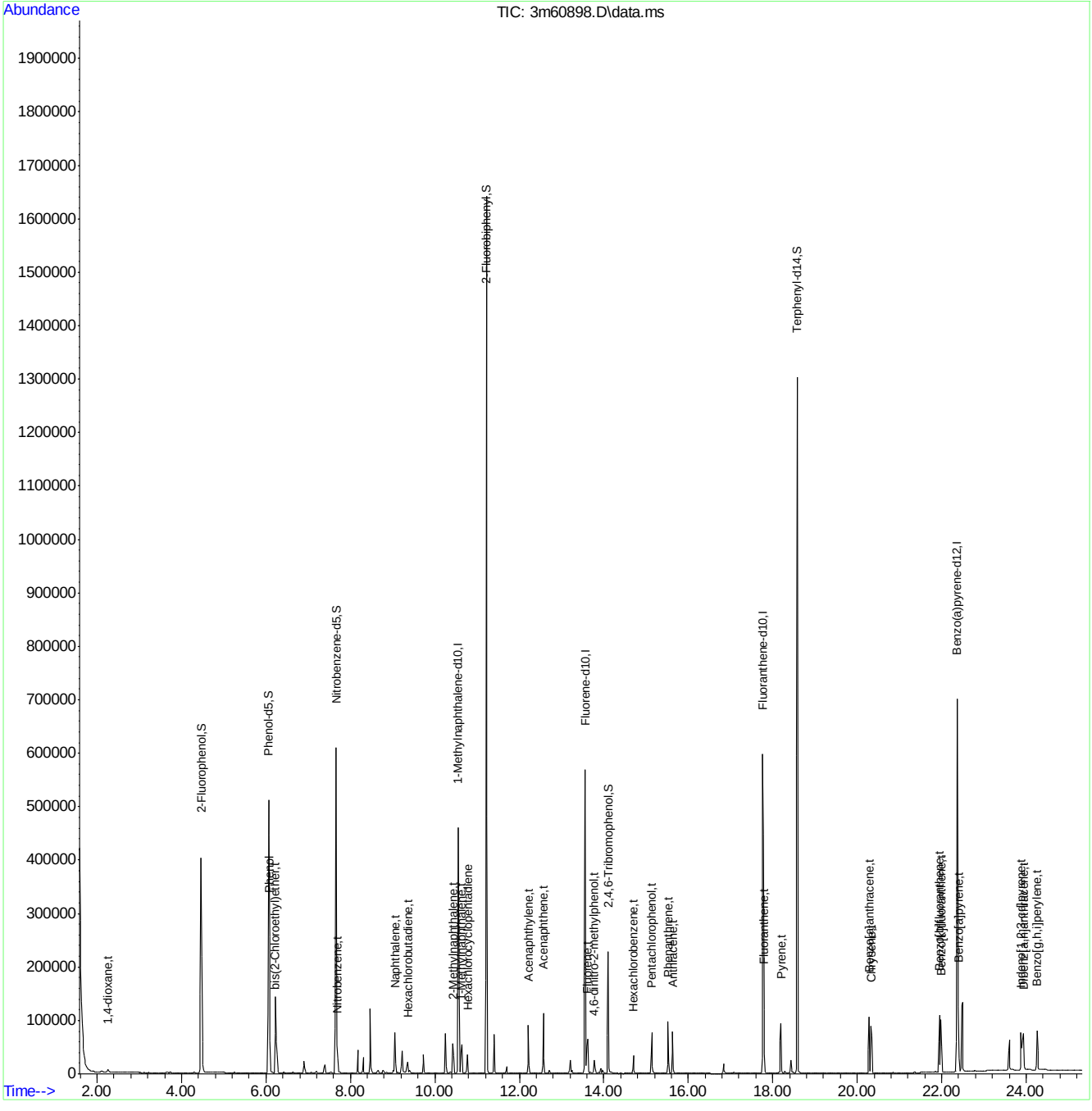
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2863\
Data File : 3m60898.D
Acq On : 26 Apr 2016 10:09 pm
Operator : juliusj
Sample : cc2855-.5
Misc : op93292a,e3m2863
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 27 14:00:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 27 13:02:22 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2864\
Data File : 3m60905.D
Acq On : 27 Apr 2016 9:19 am
Operator : linseyk
Sample : cc2855-1
Misc : op93292a,e3m2864
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 27 09:43:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 26 09:22:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	10.550	150	353655	4.00	ppm		-0.07
14) Fluorene-d10	13.543	176	561361	4.00	ppm		-0.10
21) Fluoranthene-d10	17.762	212	878134	4.00	ppm		-0.10
31) Benzo(a)pyrene-d12	22.351	264	704479	4.00	ppm		-0.10
System Monitoring Compounds							
3) 2-Fluorophenol	4.446	112	901401	20.37	ppm		-0.06
Spiked Amount 50.000			Recovery	=	40.74%		
4) Phenol-d5	6.048	99	1448676	19.79	ppm		-0.04
Spiked Amount 50.000			Recovery	=	39.58%		
7) Nitrobenzene-d5	7.644	82	1271014	18.67	ppm		-0.07
Spiked Amount 50.000			Recovery	=	37.34%		
15) 2-Fluorobiphenyl	11.222	172	2900057	18.80	ppm		-0.08
Spiked Amount 50.000			Recovery	=	37.60%		
20) 2,4,6-Tribromophenol	14.089	330	347770	19.79	ppm		-0.08
Spiked Amount 50.000			Recovery	=	39.58%		
28) Terphenyl-d14	18.566	244	2616769	20.54	ppm		-0.10
Spiked Amount 50.000			Recovery	=	41.08%		
Target Compounds							Qvalue
2) 1,4-dioxane	2.236	88	17915	0.98	ppm	#	41
5) Phenol	6.061	94	381778	4.84	ppm	#	58
6) bis(2-Chloroethyl)ether	6.206	93	52918	0.89	ppm		80
8) Nitrobenzene	7.681	77	71364	0.97	ppm		84
9) Naphthalene	9.056	128	174191	0.89	ppm		98
10) Hexachlorobutadiene	9.338	225	36771	1.07	ppm		90
11) 2-Methylnaphthalene	10.427	141	111231	1.09	ppm		86
12) 1-Methylnaphthalene	10.611	141	126701	0.92	ppm		85
13) Hexachlorocyclopentadiene	10.755	237	57246	2.11	ppm		92
16) Acenaphthylene	12.196	152	186685	0.96	ppm		92
17) Acenaphthene	12.552	153	123174	0.95	ppm		86
18) 4,6-dinitro-2-methylph...	13.769	198	73842	4.19	ppm		93
19) Fluorene	13.599	166	154470	0.99	ppm		84
22) Hexachlorobenzene	14.686	284	42827	1.03	ppm		88
23) Pentachlorophenol	15.119	266	123812	4.34	ppm		92
24) Phenanthrene	15.506	178	213884	0.99	ppm	#	57
25) Anthracene	15.614	178	195246	1.03	ppm		95
26) Fluoranthene	17.778	202	241072	0.89	ppm		92
27) Pyrene	18.180	202	239227	0.95	ppm		96
29) Benzo[a]anthracene	20.265	228	197858	0.82	ppm		100
30) Chrysene	20.327	228	211527	0.92	ppm		98
32) Benzo[b]fluoranthene	21.934	252	217564	0.93	ppm		99
33) Benzo[k]fluoranthene	21.980	252	198424	0.91	ppm		100
34) Benzo[a]pyrene	22.382	252	192970	0.88	ppm		99
35) Indeno[1,2,3-cd]pyrene	23.881	276	216164	0.97	ppm		89
36) Dibenz[a,h]anthracene	23.919	278	186585	1.02	ppm		100
37) Benzo[g,h,i]perylene	24.238	276	189801	0.98	ppm		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2864\
Data File : 3m60905.D
Acq On : 27 Apr 2016 9:19 am
Operator : linseyk
Sample : cc2855-1
Misc : op93292a,e3m2864
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 27 09:43:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 26 09:22:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.72

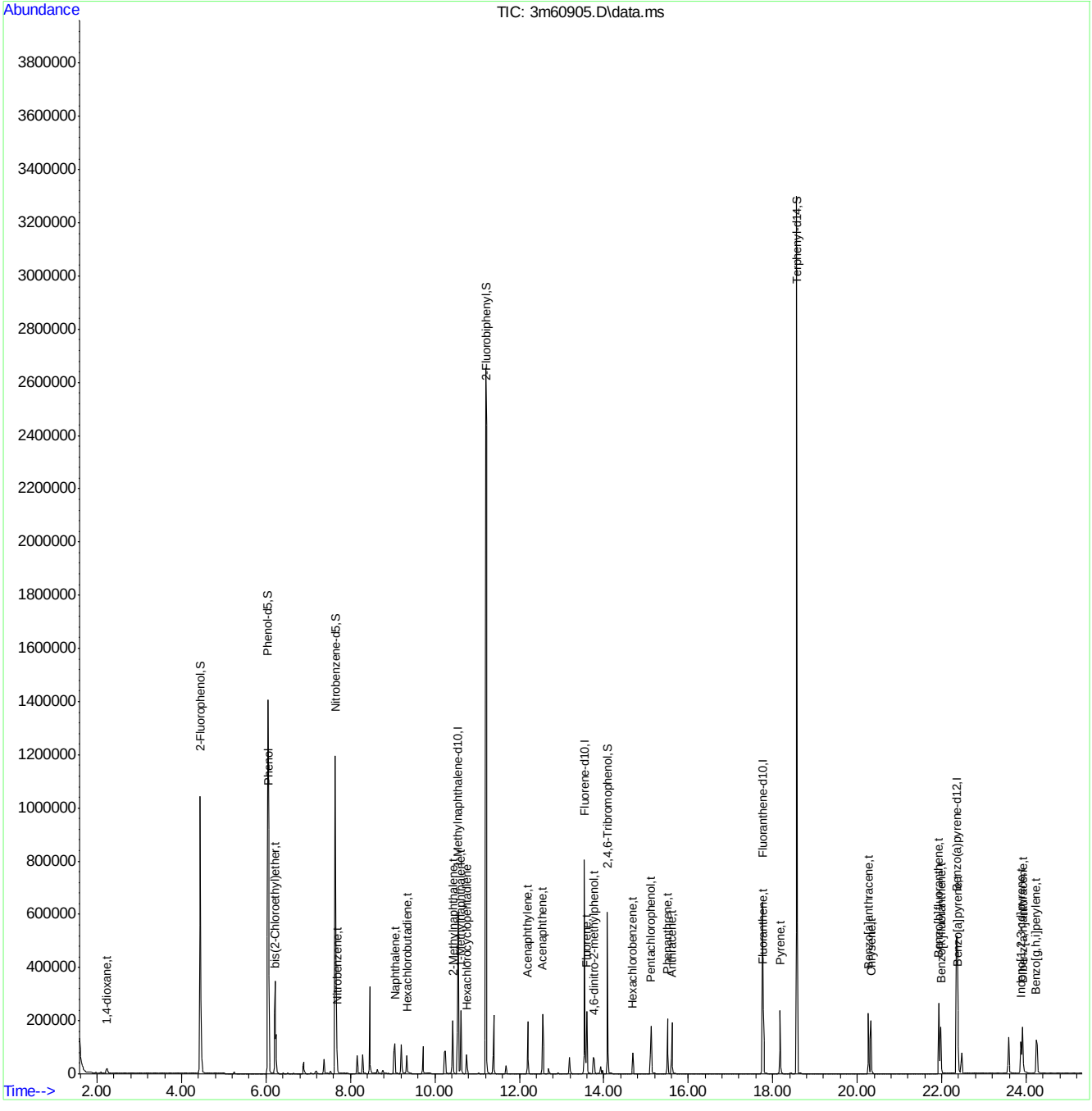
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2864\
Data File : 3m60905.D
Acq On : 27 Apr 2016 9:19 am
Operator : linseyk
Sample : cc2855-1
Misc : op93292a,e3m2864
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 27 09:43:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 26 09:22:28 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64723a.D
Acq On : 14 Apr 2016 10:42 am
Operator : linseyk
Sample : ic2881-0.5
Misc : op92998a,e4m2881
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 15:17:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:16:44 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	304949	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	506081	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	767119	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	581862	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	304949	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	506081	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.752	112	380175	9.47	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery	=	18.94%	
3) Phenol-d5	6.338	99	645414	9.51	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.02%	
6) Nitrobenzene-d5	7.864	82	590917	9.63	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.26%	
11) 2-Fluorobiphenyl	11.390	172	745134	9.45	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.90%	
17) 2,4,6-Tribromophenol	14.273	330	288798	9.78	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.56%	
25) Terphenyl-d14	18.713	244	1089277	10.22	ppm	0.00
Spiked Amount 50.000			Recovery	=	20.44%	
Target Compounds						Qvalue
4) Phenol	6.352	94	167829	2.37	ppm	81
5) bis(2-Chloroethyl)ether	6.434	93	24641	0.47	ppm	94
7) Naphthalene	9.256	128	81990	0.48	ppm	98
8) Hexachlorobutadiene	9.565	225	20318	0.48	ppm	70
9) 2-Methylnaphthalene	10.626	142	35852	0.49	ppm	97
10) Hexachlorocyclopentadiene	10.984	237	22364	0.98	ppm	97
13) Acenaphthylene	12.388	152	63175	0.52	ppm	98
14) Acenaphthene	12.743	153	39533	0.52	ppm	96
15) Dibenzofuran	13.097	168	57029	0.49	ppm	100
16) Fluorene	13.771	166	69734	0.49	ppm	96
18) Hexachlorobenzene	14.883	284	26922	0.50	ppm	97
19) Pentachlorophenol	15.316	266	62025	2.50	ppm	94
20) Phenanthrene	15.687	178	92171	0.50	ppm	90
21) Anthracene	15.780	178	91094	0.50	ppm	98
23) Fluoranthene	17.941	202	108295	0.53	ppm	96
24) Pyrene	18.318	202	103308	0.50	ppm	97
26) Benzo[a]anthracene	20.408	228	94498	0.50	ppm	97
27) Chrysene	20.464	228	91651	0.50	ppm	96
29) Benzo[b]fluoranthene	22.084	252	106371	0.50	ppm	87
30) Benzo[k]fluoranthene	22.112	252	89387	0.51	ppm	96
31) Benzo[a]pyrene	22.525	252	89044	0.50	ppm	97
32) Indeno[1,2,3-cd]pyrene	24.067	276	110300	0.50	ppm	95
33) Dibenz[a,h]anthracene	24.094	278	91024	0.53	ppm	96
34) Benzo[g,h,i]perylene	24.452	276	93565	0.50	ppm	100
36) 1,4-Dioxane	2.472	88	8856	0.54	ppm	95
37) 1-Methylnaphthalene	10.817	142	31583	0.48	ppm #	59
39) 4,6-dinitro-2-methylph...	13.963	198	26903	2.18	ppm #	29

SGS ACCUTEST JC18649

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

7.6.73

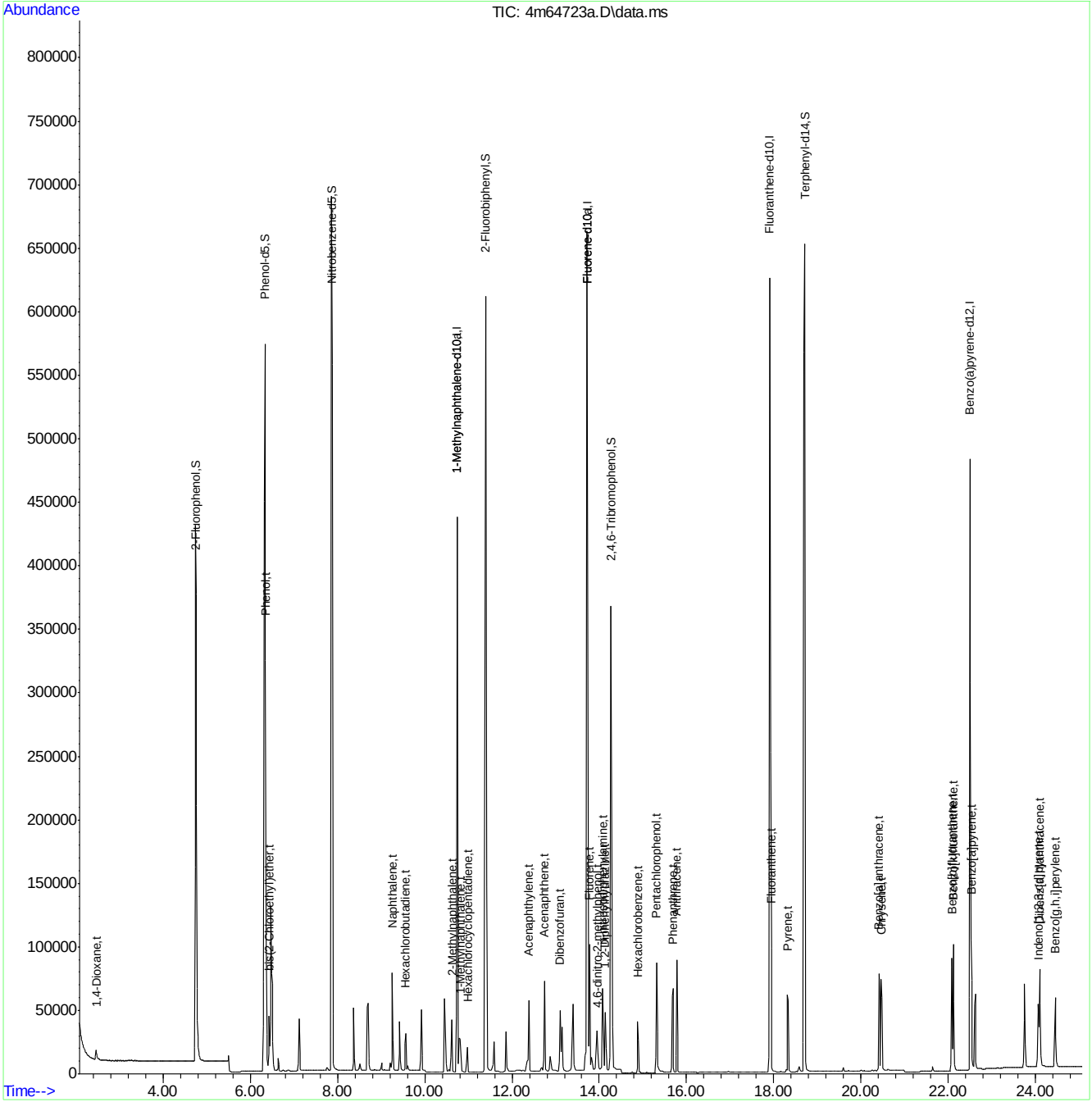
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64723a.D
Acq On : 14 Apr 2016 10:42 am
Operator : linseyk
Sample : ic2881-0.5
Misc : op92998a,e4m2881
ALS Vial : 2 Sample Multiplier: 1

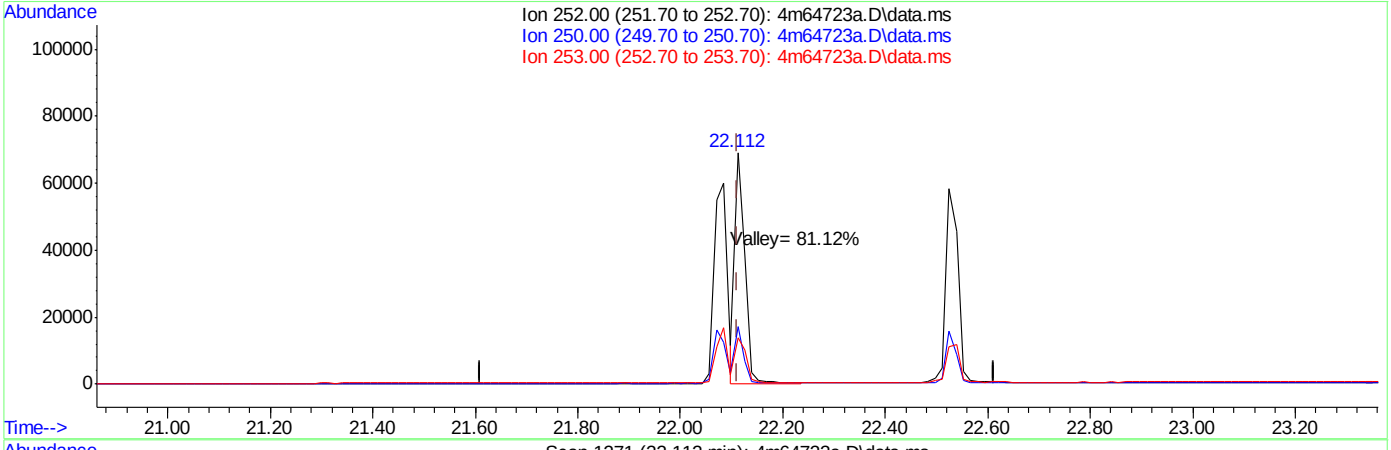
Quant Time: Apr 14 15:17:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:16:44 2016
Response via : Initial Calibration

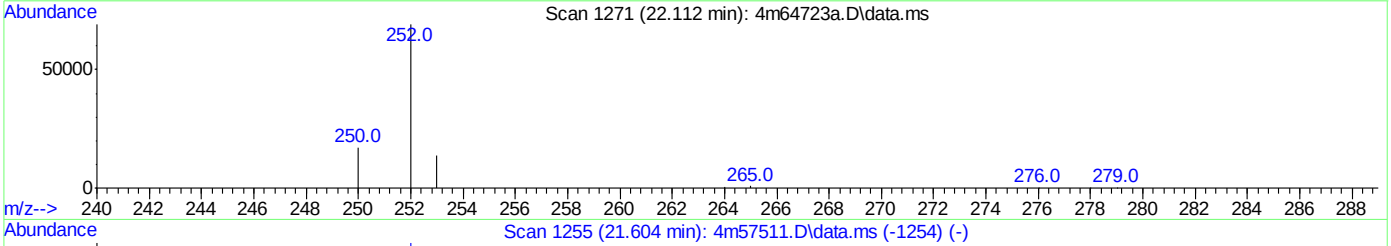


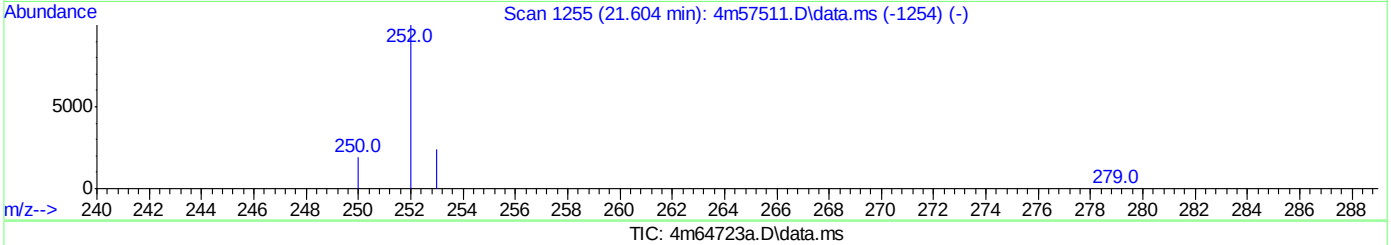
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64723a.D
Acq On : 14 Apr 2016 10:42 am
Operator : linseyk
Sample : ic2881-0.5
Misc : op92998a,e4m2881
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 15:11:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:11:05 2016
Response via : Initial Calibration







TIC: 4m64723a.D\data.ms

(30) Benzo[k]fluoranthene (t)

22.112min (0.000) 0.48ppm

response 89387

Ion	Exp%	Act%
252.00	100	100
250.00	24.80	24.21
253.00	19.80	18.89
0.00	0.00	0.00

SGS ACCUTEST JC18649

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

7.6.74

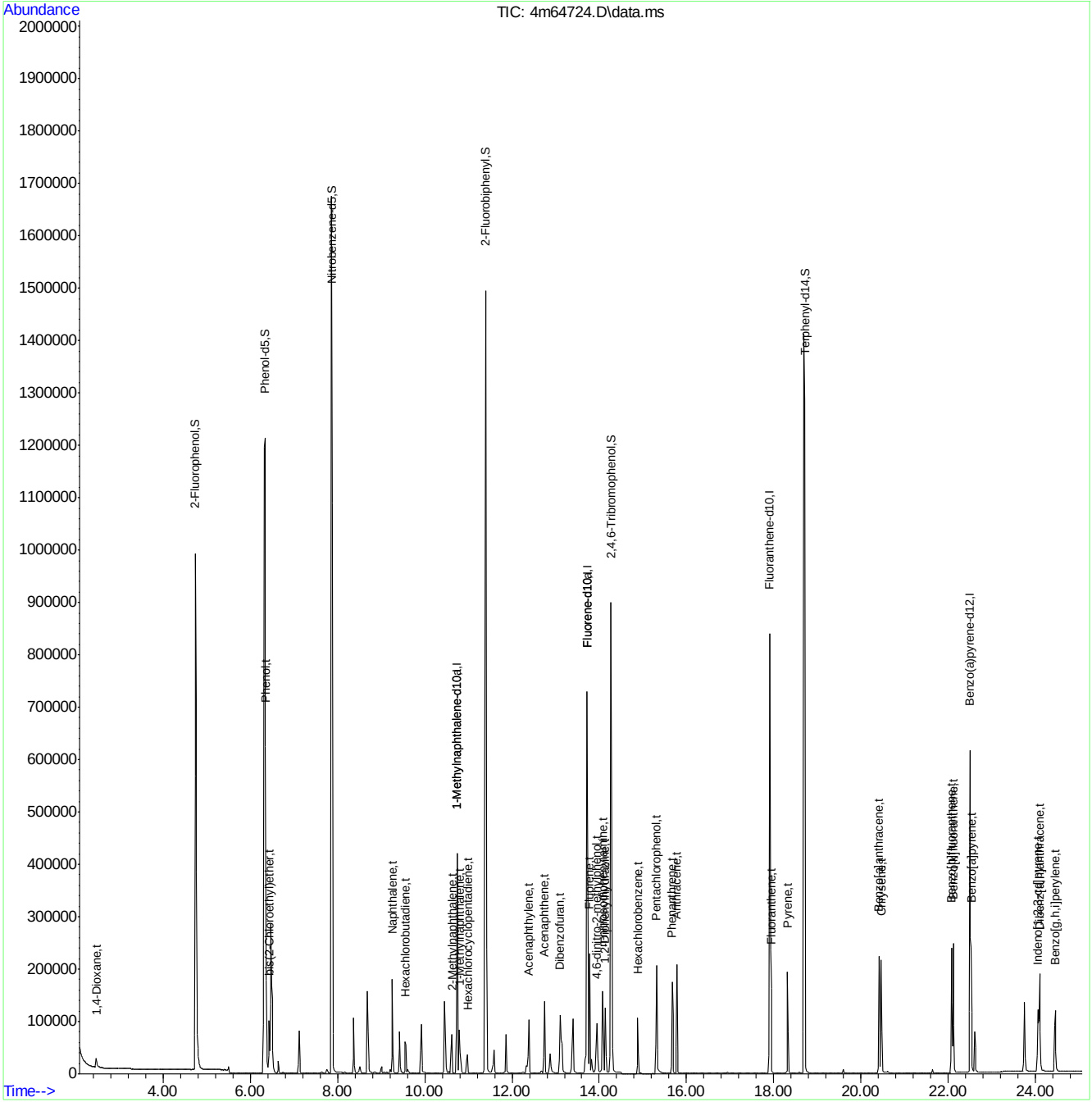
7

SGS ACCUTEST JC18649

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

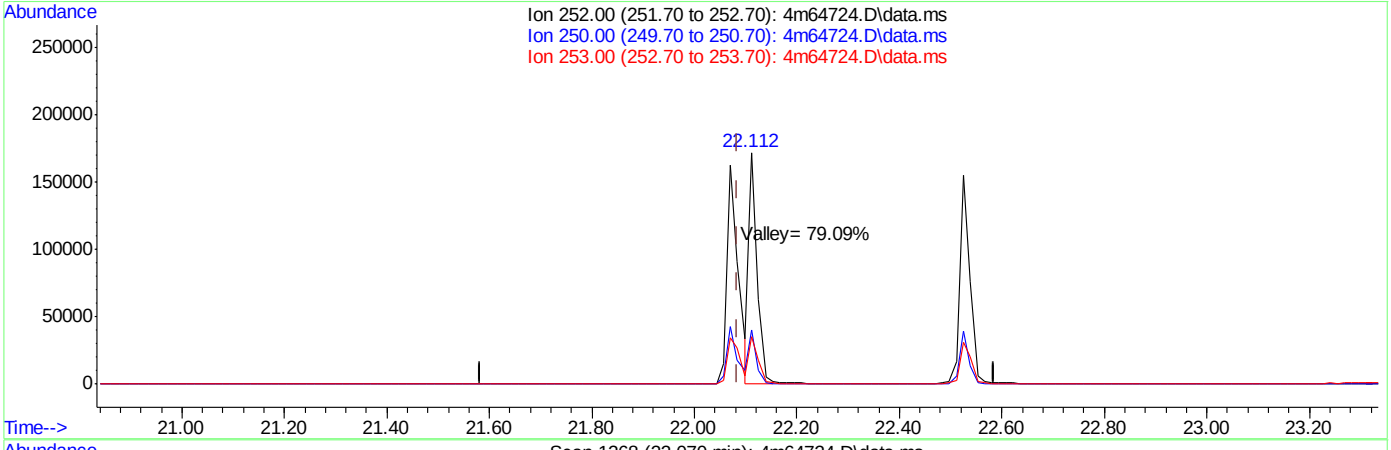
Quant Time: Apr 14 15:13:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:12:42 2016
Response via : Initial Calibration

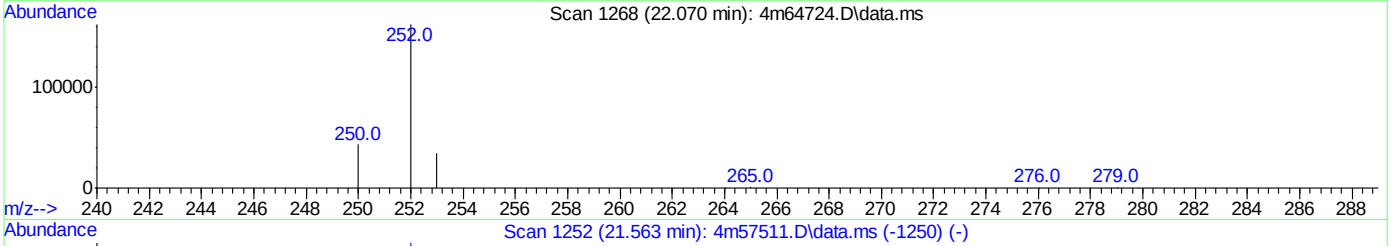


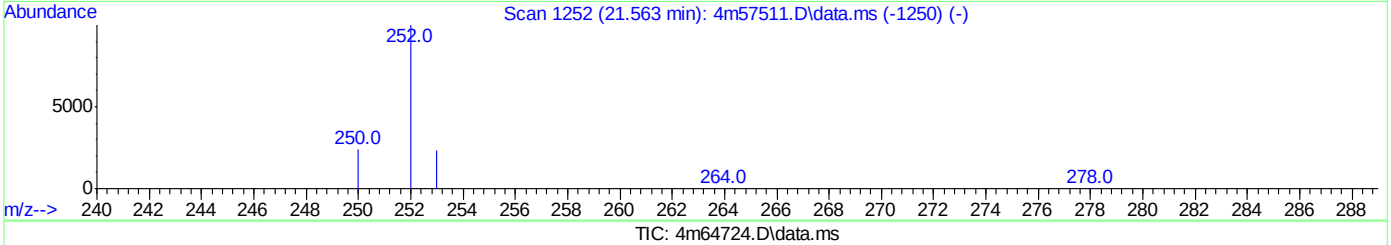
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64724.D
Acq On : 14 Apr 2016 11:13 am
Operator : linseyk
Sample : icc2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 15:12:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:12:00 2016
Response via : Initial Calibration







TIC: 4m64724.D\data.ms

(29) Benzo[b]fluoranthene (t)

22.070min (-0.014) 1.02ppm

response 249096

Ion	Exp%	Act%
252.00	100	100
250.00	19.90	25.97
253.00	27.70	21.20
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64725.D
Acq On : 14 Apr 2016 11:44 am
Operator : linseyk
Sample : ic2881-0.2
Misc : op92998a,e4m2881
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 15:28:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:28:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	284988	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	506257	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	790251	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	600983	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	284988	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	506257	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.741	112	154379	4.07	ppm	-0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 8.14%#			
3) Phenol-d5	6.338	99	261565	4.08	ppm	0.00
Spiked Amount 50.000			Recovery = 8.16%			
6) Nitrobenzene-d5	7.864	82	233647	4.07	ppm	0.00
Spiked Amount 50.000			Recovery = 8.14%			
11) 2-Fluorobiphenyl	11.390	172	352568	4.28	ppm	0.00
Spiked Amount 50.000			Recovery = 8.56%			
17) 2,4,6-Tribromophenol	14.273	330	121131	4.17	ppm	0.00
Spiked Amount 50.000			Recovery = 8.34%			
25) Terphenyl-d14	18.694	244	437958	4.00	ppm	0.00
Spiked Amount 50.000			Recovery = 8.00%			
Target Compounds						Qvalue
4) Phenol	6.352	94	66443	1.01	ppm	94
5) bis(2-Chloroethyl)ether	6.434	93	9934	0.20	ppm	94
7) Naphthalene	9.256	128	33060	0.20	ppm	99
8) Hexachlorobutadiene	9.565	225	7994	0.20	ppm	99
9) 2-Methylnaphthalene	10.626	142	13532	0.20	ppm	99
10) Hexachlorocyclopentadiene	10.984	237	6597	0.35	ppm	100
13) Acenaphthylene	12.388	152	22912	0.20	ppm	99
14) Acenaphthene	12.743	153	14986	0.20	ppm	98
15) Dibenzofuran	13.097	168	23893	0.20	ppm	97
16) Fluorene	13.771	166	28326	0.20	ppm	99
18) Hexachlorobenzene	14.883	284	10972	0.20	ppm	98
19) Pentachlorophenol	15.316	266	19930	0.97	ppm	97
20) Phenanthrene	15.671	178	37427	0.20	ppm	100
21) Anthracene	15.780	178	35181	0.20	ppm	99
23) Fluoranthene	17.941	202	41945	0.20	ppm	99
24) Pyrene	18.318	202	42201	0.20	ppm	99
26) Benzo[a]anthracene	20.408	228	39404	0.20	ppm	98
27) Chrysene	20.464	228	38354	0.20	ppm	99
29) Benzo[b]fluoranthene	22.070	252	44250	0.20	ppm	99
30) Benzo[k]fluoranthene	22.112	252	35796	0.20	ppm	98
31) Benzo[a]pyrene	22.525	252	36721	0.21	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.053	276	45470	0.20	ppm	94
33) Dibenz[a,h]anthracene	24.094	278	36670	0.20	ppm	99
34) Benzo[g,h,i]perylene	24.452	276	38801	0.20	ppm	100
36) 1,4-Dioxane	2.472	88	4064	0.17	ppm	80
37) 1-Methylnaphthalene	10.793	142	12503	0.20	ppm	99
39) 4,6-dinitro-2-methylph...	13.963	198	7678	0.88	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64725.D
Acq On : 14 Apr 2016 11:44 am
Operator : linseyk
Sample : ic2881-0.2
Misc : op92998a,e4m2881
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 15:28:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:28:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.130	77	25564	0.20	ppm	100
41) n-nitrosodiphenylamine	14.082	169	18939	0.20	ppm	99

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

7.6.75

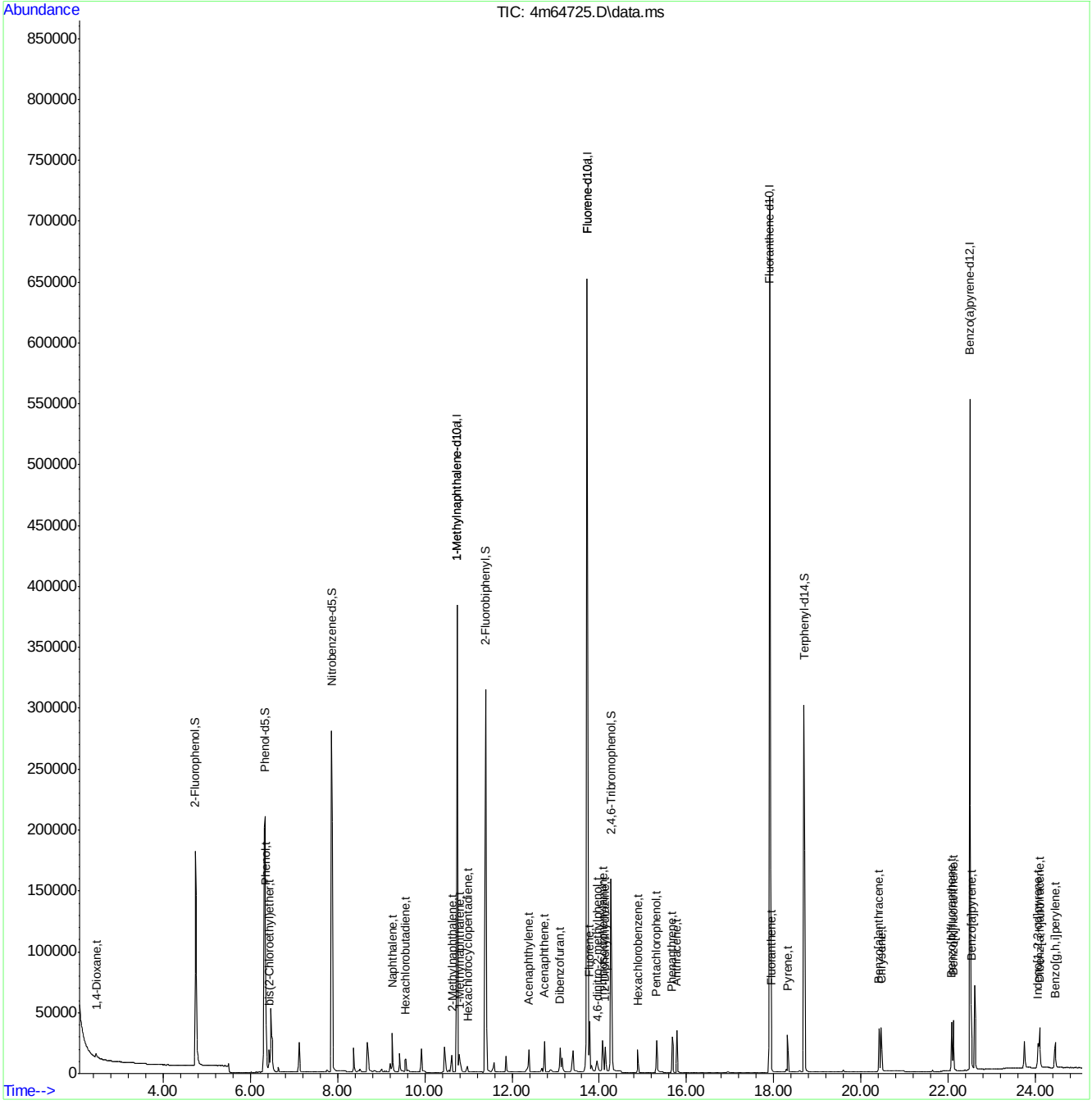
7

SGS ACCUTEST JC18649

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 JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64726.D
Acq On : 14 Apr 2016 12:15 pm
Operator : linseyk
Sample : ic2881-0.1
Misc : op92998a,e4m2881
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 15:28:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:25:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.745	152	282673	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	506012	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	798340	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	598363	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.745	152	282673	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	506012	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.752	112	73705	1.96	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	3.92%#	
3) Phenol-d5	6.338	99	124726	1.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.92%	
6) Nitrobenzene-d5	7.864	82	111828	1.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.92%	
11) 2-Fluorobiphenyl	11.390	172	169128	2.07	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.14%	
17) 2,4,6-Tribromophenol	14.273	330	57224	1.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.94%	
25) Terphenyl-d14	18.694	244	218853	1.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.96%	
Target Compounds						Qvalue
4) Phenol	6.352	94	31501	0.48	ppm	95
5) bis(2-Chloroethyl)ether	6.434	93	4753	0.10	ppm #	64
7) Naphthalene	9.256	128	16167	0.10	ppm	99
8) Hexachlorobutadiene	9.565	225	3842	0.10	ppm	97
9) 2-Methylnaphthalene	10.626	142	6570	0.10	ppm	100
10) Hexachlorocyclopentadiene	10.984	237	3033	0.16	ppm	98
13) Acenaphthylene	12.387	152	11490	0.10	ppm	98
14) Acenaphthene	12.742	153	7351	0.10	ppm	97
15) Dibenzofuran	13.097	168	11211	0.10	ppm	86
16) Fluorene	13.771	166	13581	0.10	ppm	98
18) Hexachlorobenzene	14.883	284	5347	0.10	ppm	96
19) Pentachlorophenol	15.316	266	8706	0.42	ppm	98
20) Phenanthrene	15.671	178	18048	0.10	ppm	99
21) Anthracene	15.780	178	16875	0.10	ppm	98
23) Fluoranthene	17.941	202	20368	0.10	ppm	98
24) Pyrene	18.318	202	20517	0.10	ppm	100
26) Benzo[a]anthracene	20.408	228	18521	0.09	ppm	97
27) Chrysene	20.464	228	18694	0.10	ppm	97
29) Benzo[b]fluoranthene	22.070	252	21229	0.10	ppm	99
30) Benzo[k]fluoranthene	22.112	252	17514	0.10	ppm	98
31) Benzo[a]pyrene	22.525	252	16991	0.10	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.067	276	21723	0.10	ppm	94
33) Dibenz[a,h]anthracene	24.094	278	17411	0.10	ppm	70
34) Benzo[g,h,i]perylene	24.452	276	18457	0.10	ppm	99
36) 1,4-Dioxane	2.461	88	3108	0.11	ppm	87
37) 1-Methylnaphthalene	10.793	142	6136	0.10	ppm	99
39) 4,6-dinitro-2-methylph...	13.962	198	3170	0.36	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64726.D
Acq On : 14 Apr 2016 12:15 pm
Operator : linseyk
Sample : ic2881-0.1
Misc : op92998a,e4m2881
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 15:28:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:25:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.130	77	12073	0.09	ppm	98
41) n-nitrosodiphenylamine	14.082	169	9095	0.10	ppm	95

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

7.6.76

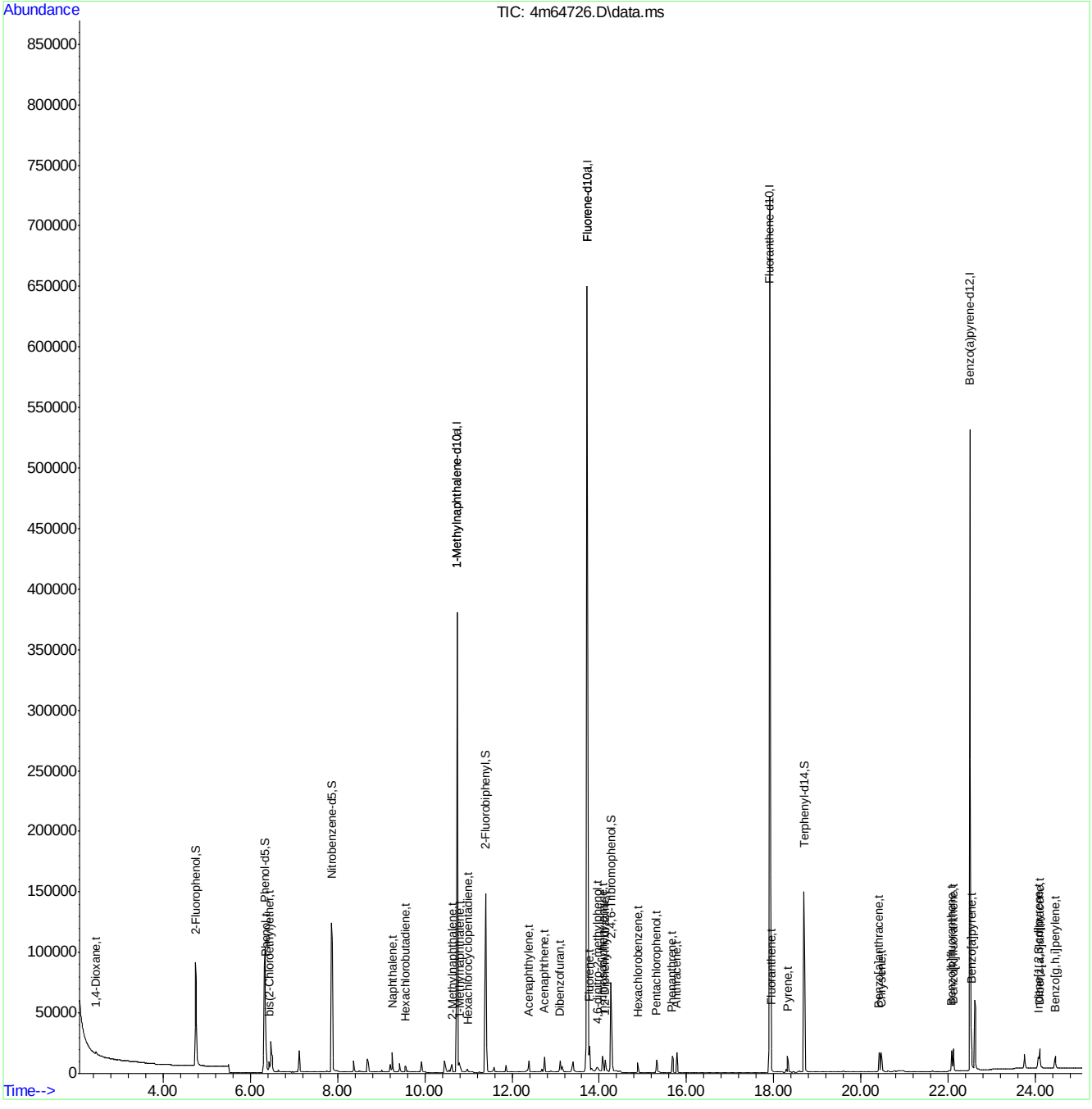
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64726.D
Acq On : 14 Apr 2016 12:15 pm
Operator : linseyk
Sample : ic2881-0.1
Misc : op92998a,e4m2881
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 15:28:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:25:00 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64727.D
Acq On : 14 Apr 2016 12:45 pm
Operator : linseyk
Sample : ic2881-0.05
Misc : op92998a,e4m2881
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 15:19:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:19:41 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	282253	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	531280	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	824889	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	597391	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	282253	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	531280	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.752	112	38504	1.03	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 2.06%#			
3) Phenol-d5	6.338	99	64951	1.03	ppm	0.00
Spiked Amount 50.000			Recovery = 2.06%			
6) Nitrobenzene-d5	7.864	82	56961	1.00	ppm	0.00
Spiked Amount 50.000			Recovery = 2.00%			
11) 2-Fluorobiphenyl	11.390	172	90764	1.14	ppm	0.00
Spiked Amount 50.000			Recovery = 2.28%			
17) 2,4,6-Tribromophenol	14.273	330	28553	0.92	ppm	0.00
Spiked Amount 50.000			Recovery = 1.84%			
25) Terphenyl-d14	18.695	244	114865	1.01	ppm	0.00
Spiked Amount 50.000			Recovery = 2.02%			
Target Compounds						Qvalue
4) Phenol	6.352	94	16247	0.25	ppm	95
5) bis(2-Chloroethyl)ether	6.435	93	2580	0.05	ppm #	69
7) Naphthalene	9.256	128	8387	0.05	ppm	99
8) Hexachlorobutadiene	9.566	225	2025	0.05	ppm	97
9) 2-Methylnaphthalene	10.626	142	3398	0.05	ppm	100
10) Hexachlorocyclopentadiene	10.984	237	1337	0.07	ppm	98
13) Acenaphthylene	12.388	152	5918	0.05	ppm	98
14) Acenaphthene	12.743	153	3857	0.05	ppm	97
15) Dibenzofuran	13.098	168	6123	0.05	ppm	89
16) Fluorene	13.772	166	7203	0.05	ppm	98
18) Hexachlorobenzene	14.883	284	2778	0.05	ppm	96
19) Pentachlorophenol	15.316	266	4171	0.18	ppm	98
20) Phenanthrene	15.672	178	9370	0.05	ppm	99
21) Anthracene	15.780	178	8817	0.05	ppm	98
23) Fluoranthene	17.941	202	11294	0.05	ppm	97
24) Pyrene	18.318	202	10604	0.05	ppm	100
26) Benzo[a]anthracene	20.408	228	10103	0.05	ppm	97
27) Chrysene	20.464	228	9648	0.05	ppm	97
29) Benzo[b]fluoranthene	22.070	252	10982	0.05	ppm	99
30) Benzo[k]fluoranthene	22.112	252	8686	0.05	ppm	99
31) Benzo[a]pyrene	22.525	252	8351	0.05	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.053	276	11120	0.05	ppm	92
33) Dibenz[a,h]anthracene	24.094	278	9277	0.05	ppm	100
34) Benzo[g,h,i]perylene	24.452	276	9354	0.05	ppm	99
37) 1-Methylnaphthalene	10.793	142	3386	0.06	ppm	99
39) 4,6-dinitro-2-methylph...	13.963	198	1330	0.13	ppm	96
40) 1,2-Diphenylhydrazine	14.130	77	6256	0.05	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64727.D
Acq On : 14 Apr 2016 12:45 pm
Operator : linseyk
Sample : ic2881-0.05
Misc : op92998a,e4m2881
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 15:19:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:19:41 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.082	169	4526	0.05	ppm	95

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

7.6.77

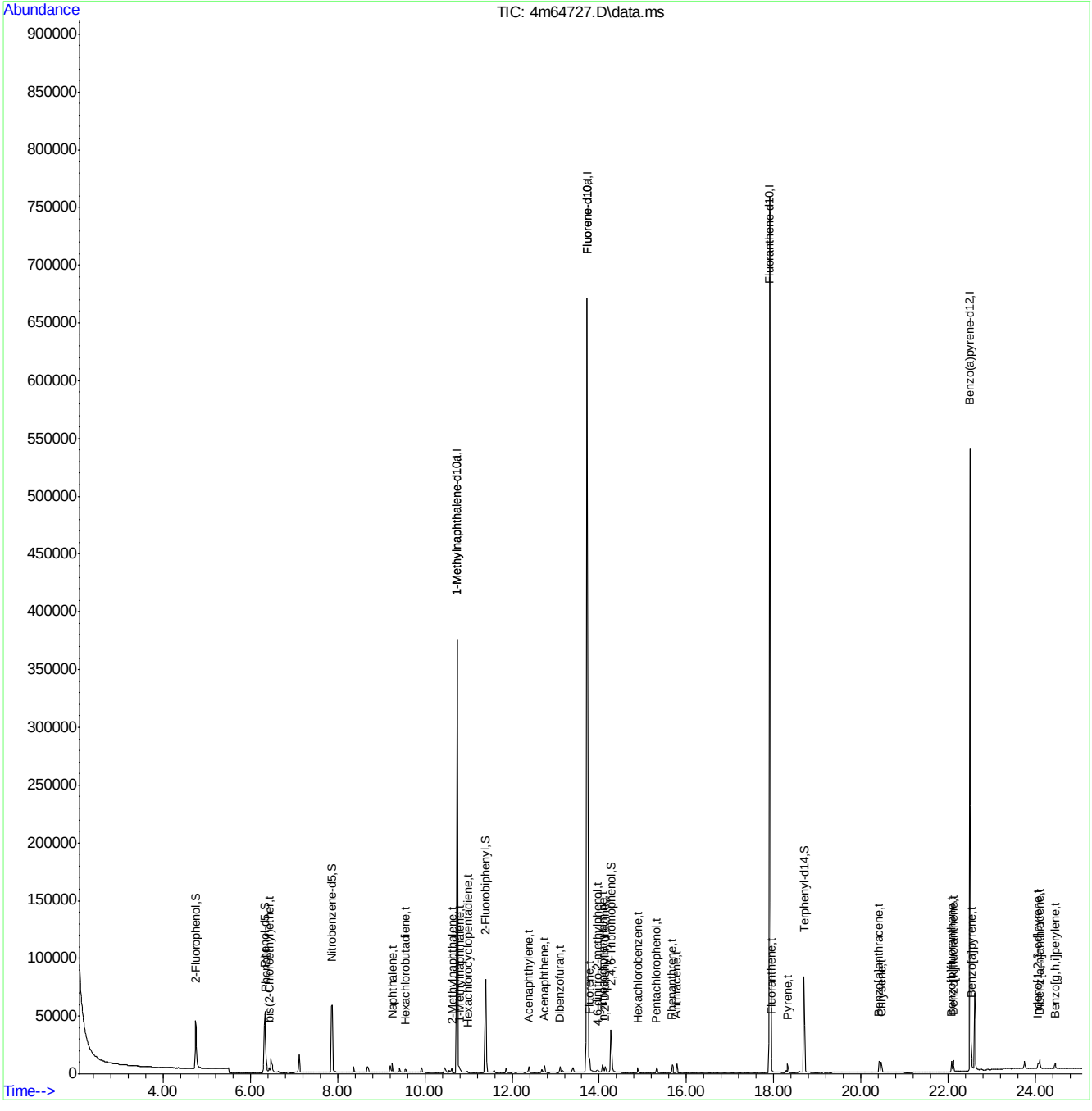
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64727.D
Acq On : 14 Apr 2016 12:45 pm
Operator : linseyk
Sample : ic2881-0.05
Misc : op92998a,e4m2881
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 15:19:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:19:41 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 15:24:57 2016 MANAGER Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64728.D
Acq On : 14 Apr 2016 1:16 pm
Operator : linseyk
Sample : ic2881-0.02
Misc : op92998a,e4m2881
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 15:30:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:29:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	280672	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	514038	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	790910	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	599819	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	280672	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	514038	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.752	112	15109	0.40	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.80%#			
3) Phenol-d5	6.338	99	24875	0.39	ppm	0.00
Spiked Amount 50.000			Recovery = 0.78%			
6) Nitrobenzene-d5	7.879	82	22009	0.39	ppm	0.02
Spiked Amount 50.000			Recovery = 0.78%			
11) 2-Fluorobiphenyl	11.390	172	35367	0.44	ppm	0.00
Spiked Amount 50.000			Recovery = 0.88%			
17) 2,4,6-Tribromophenol	14.273	330	10404	0.35	ppm	0.00
Spiked Amount 50.000			Recovery = 0.70%			
25) Terphenyl-d14	18.694	244	42409	0.39	ppm	0.00
Spiked Amount 50.000			Recovery = 0.78%			
Target Compounds						Qvalue
4) Phenol	6.352	94	6339	0.10	ppm	72
5) bis(2-Chloroethyl)ether	6.434	93	980	0.02	ppm	83
7) Naphthalene	9.256	128	3340	0.02	ppm	98
8) Hexachlorobutadiene	9.565	225	796	0.02	ppm	97
9) 2-Methylnaphthalene	10.626	142	1501	0.02	ppm	97
10) Hexachlorocyclopentadiene	10.984	237	450	0.02	ppm	95
13) Acenaphthylene	12.388	152	2239	0.02	ppm	98
14) Acenaphthene	12.743	153	1496	0.02	ppm	97
15) Dibenzofuran	13.097	168	2271	0.02	ppm	100
16) Fluorene	13.771	166	2703	0.02	ppm	97
18) Hexachlorobenzene	14.883	284	1113	0.02	ppm	99
19) Pentachlorophenol	15.316	266	1632	0.08	ppm	94
20) Phenanthrene	15.671	178	3896	0.02	ppm	96
21) Anthracene	15.780	178	3355	0.02	ppm	99
23) Fluoranthene	17.941	202	4884	0.02	ppm	99
24) Pyrene	18.318	202	4158	0.02	ppm	99
26) Benzo[a]anthracene	20.408	228	4066	0.02	ppm	99
27) Chrysene	20.464	228	3857	0.02	ppm	99
29) Benzo[b]fluoranthene	22.070	252	4712	0.02	ppm	95
30) Benzo[k]fluoranthene	22.112	252	3502	0.02	ppm	99
31) Benzo[a]pyrene	22.525	252	3641	0.02	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.067	276	4414	0.02	ppm	95
33) Dibenz[a,h]anthracene	24.094	278	3705	0.02	ppm	97
34) Benzo[g,h,i]perylene	24.452	276	3835	0.02	ppm	99
37) 1-Methylnaphthalene	10.793	142	1512	0.02	ppm	99
39) 4,6-dinitro-2-methylph...	13.963	198	582	0.07	ppm	79
40) 1,2-Diphenylhydrazine	14.130	77	2462	0.02	ppm	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64728.D
Acq On : 14 Apr 2016 1:16 pm
Operator : linseyk
Sample : ic2881-0.02
Misc : op92998a,e4m2881
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 15:30:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:29:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.082	169	1877	0.02	ppm	95

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

7.6.78

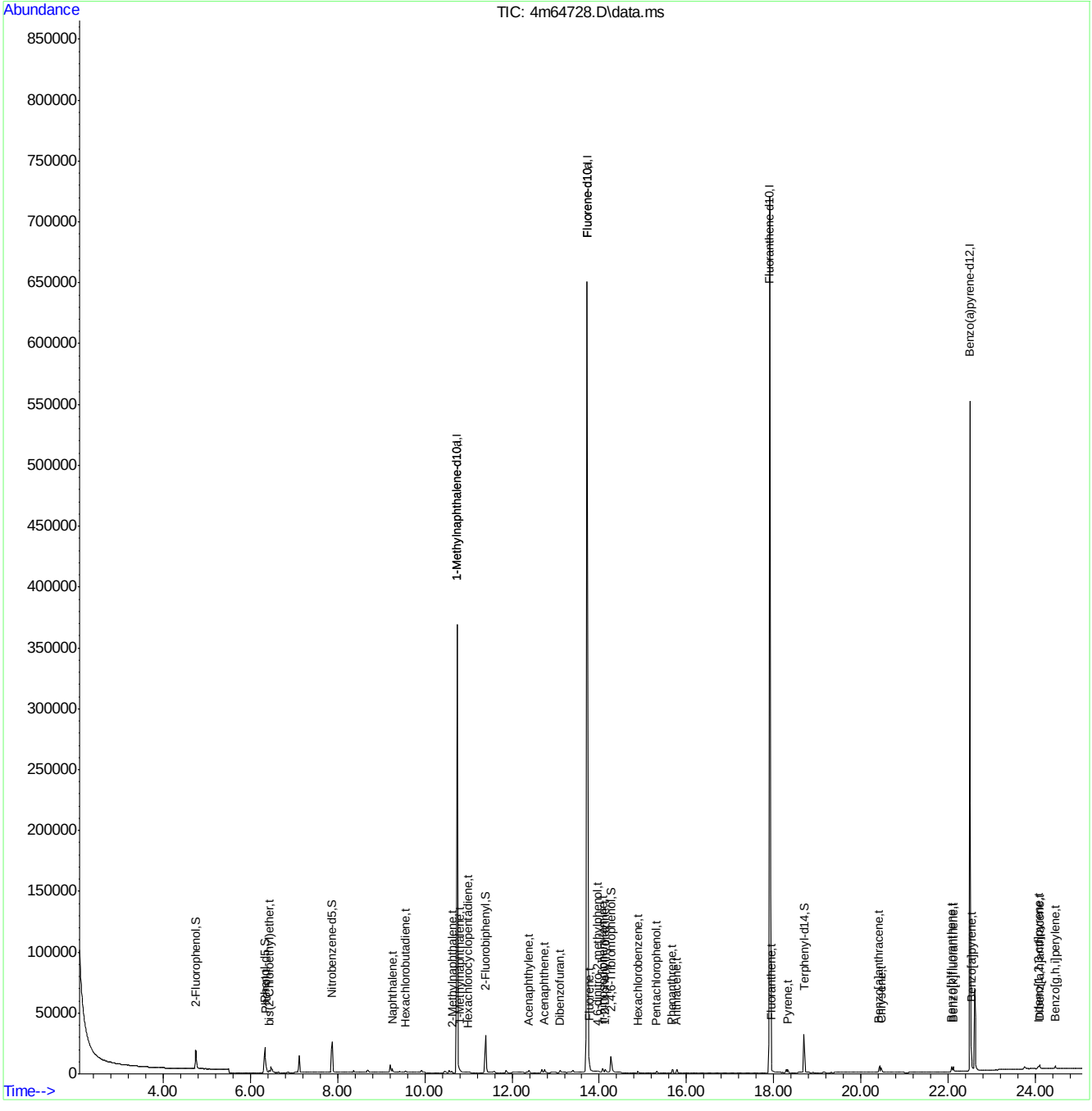
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64728.D
Acq On : 14 Apr 2016 1:16 pm
Operator : linseyk
Sample : ic2881-0.02
Misc : op92998a,e4m2881
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 15:30:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:29:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

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

7.6.79

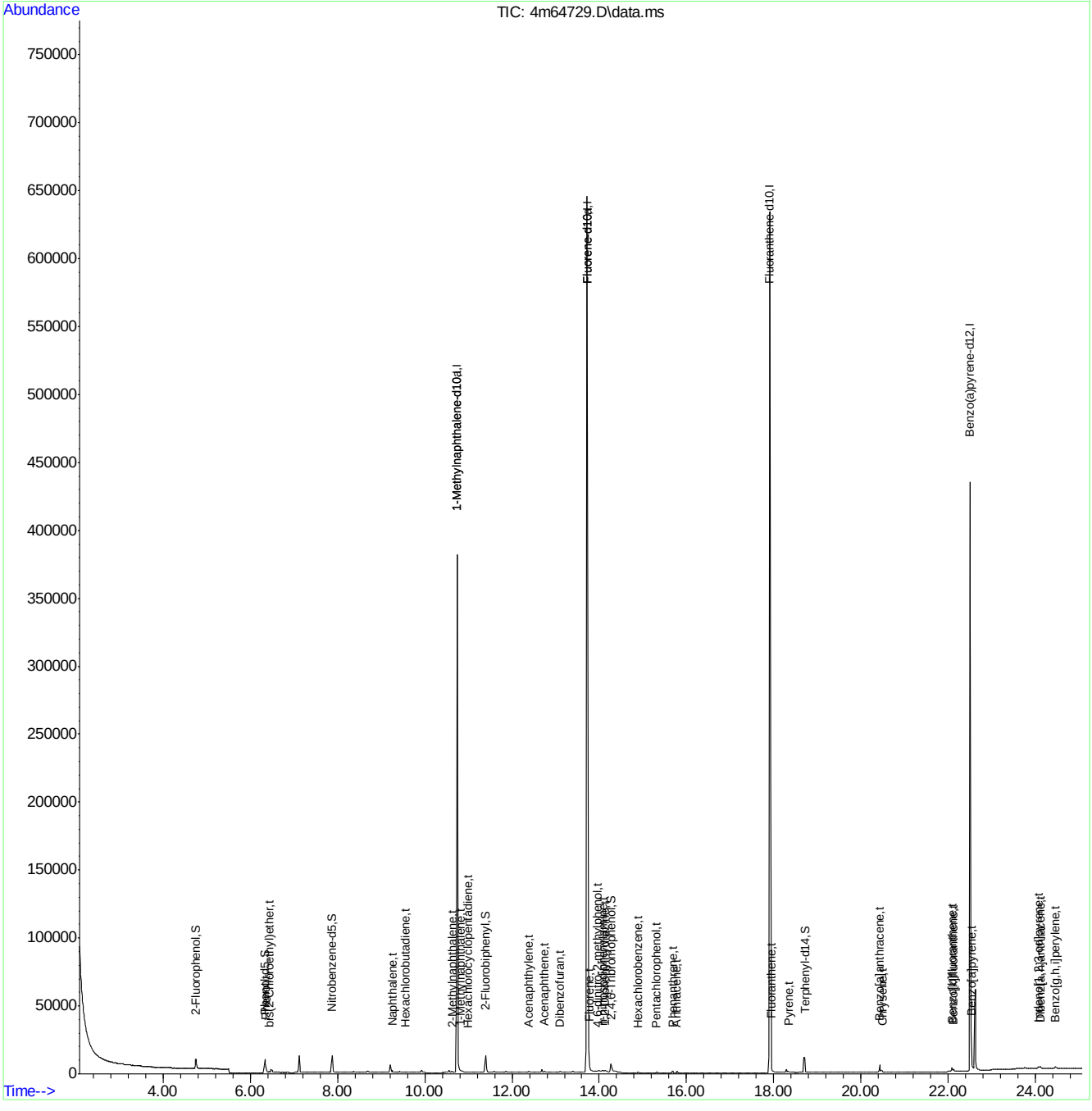
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64729.D
Acq On : 14 Apr 2016 1:48 pm
Operator : linseyk
Sample : ic2881-0.01
Misc : op92998a,e4m2881
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 14 15:53:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:30:56 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 15:53:40 2016 MANAGER Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64730.D
Acq On : 14 Apr 2016 2:20 pm
Operator : linseyk
Sample : ic2881-5.0
Misc : op92998a,e4m2881
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 15:53:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:53:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.745	152	294505	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	539967	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	760249	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.511	264	580666	4.00	ppm	0.01
35) 1-Methylnaphthalene-d10a	10.745	152	294505	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	539967	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.741	112	3610118	91.93	ppm	-0.01
Spiked Amount 50.000	Range 11 - 58		Recovery	=	183.86%#	
3) Phenol-d5	6.338	99	5956548	90.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	180.18%	
6) Nitrobenzene-d5	7.879	82	5414807	91.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	183.42%	
11) 2-Fluorobiphenyl	11.414	172	9016987	104.26	ppm	0.02
Spiked Amount 50.000			Recovery	=	208.52%	
17) 2,4,6-Tribromophenol	14.297	330	2295112	74.09	ppm	0.02
Spiked Amount 50.000			Recovery	=	148.18%	
25) Terphenyl-d14	18.713	244	9092042	86.79	ppm	0.00
Spiked Amount 50.000			Recovery	=	173.58%	
Target Compounds						Qvalue
4) Phenol	6.352	94	1528983	22.64	ppm	75
5) bis(2-Chloroethyl)ether	6.448	93	235976	4.65	ppm	70
7) Naphthalene	9.256	128	771791	4.58	ppm	99
8) Hexachlorobutadiene	9.565	225	190954	4.58	ppm	92
9) 2-Methylnaphthalene	10.626	142	361705	5.01	ppm	99
10) Hexachlorocyclopentadiene	10.984	237	271381	14.12	ppm	96
13) Acenaphthylene	12.387	152	618832	5.01	ppm	92
14) Acenaphthene	12.742	153	401217	5.04	ppm	97
15) Dibenzofuran	13.097	168	535298	4.40	ppm	50
16) Fluorene	13.771	166	639751	4.34	ppm	89
18) Hexachlorobenzene	14.883	284	258380	4.51	ppm	98
19) Pentachlorophenol	15.316	266	648135	29.53	ppm	93
20) Phenanthrene	15.687	178	889577	4.50	ppm	97
21) Anthracene	15.780	178	899214	4.88	ppm	97
23) Fluoranthene	17.941	202	1057860	5.23	ppm	99
24) Pyrene	18.337	202	1025148	5.11	ppm	97
26) Benzo[a]anthracene	20.426	228	956396	5.15	ppm	97
27) Chrysene	20.483	228	944067	5.22	ppm	99
29) Benzo[b]fluoranthene	22.084	252	995427	4.69	ppm	90
30) Benzo[k]fluoranthene	22.125	252	919603	5.35	ppm	85
31) Benzo[a]pyrene	22.538	252	893992	5.20	ppm	89
32) Indeno[1,2,3-cd]pyrene	24.067	276	1083965	4.99	ppm	98
33) Dibenz[a,h]anthracene	24.108	278	874305	5.02	ppm	97
34) Benzo[g,h,i]perylene	24.452	276	900771	4.90	ppm	92
36) 1,4-Dioxane	2.461	88	64218	2.90	ppm #	67
37) 1-Methylnaphthalene	10.817	142	312404	4.41	ppm	97
39) 4,6-dinitro-2-methylph...	13.962	198	605702	64.80	ppm	65

SGS ACCUTEST JC18649

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

7.6.80

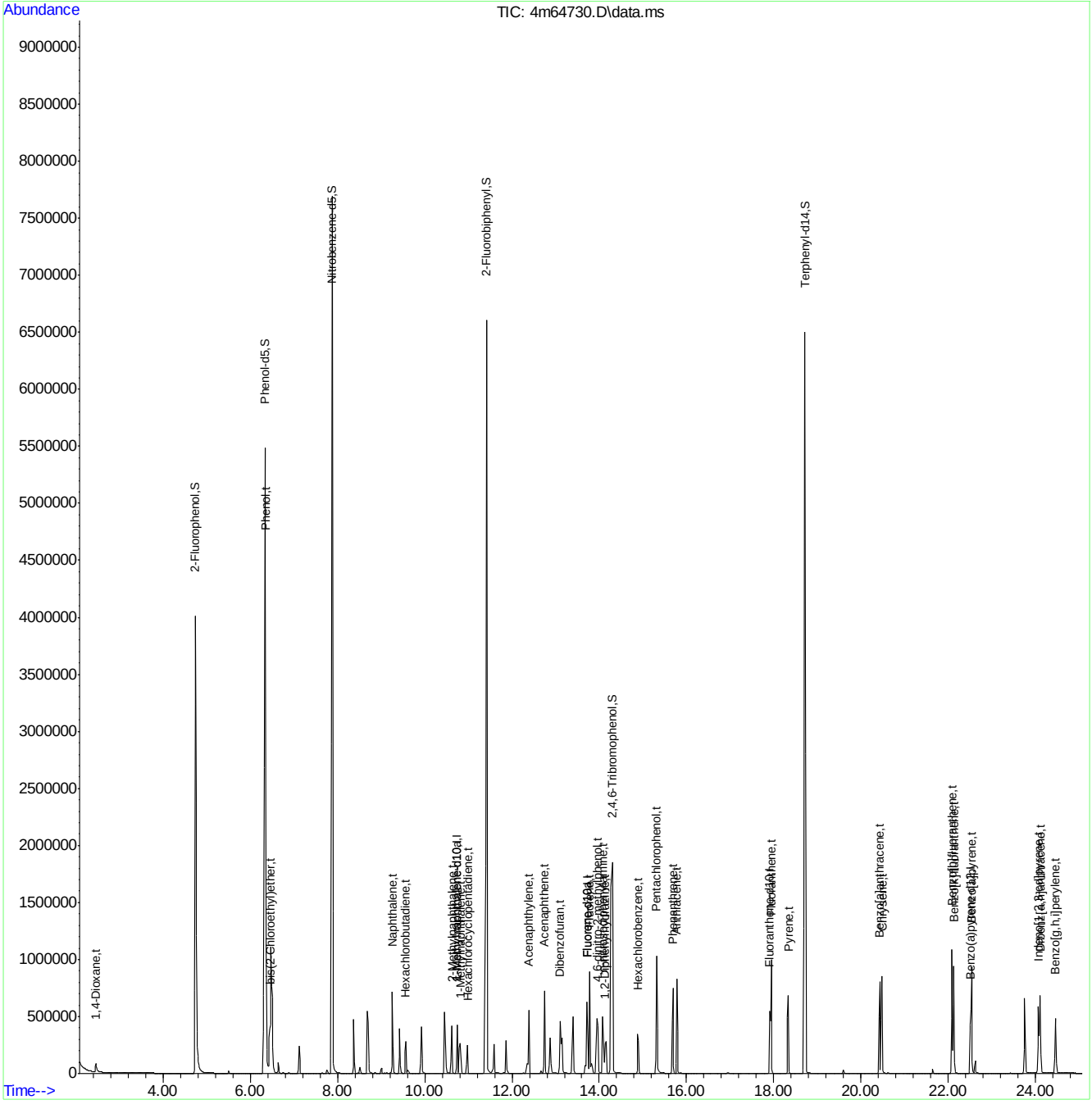
7

SGS ACCUTEST JC18649

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

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

7.6.81

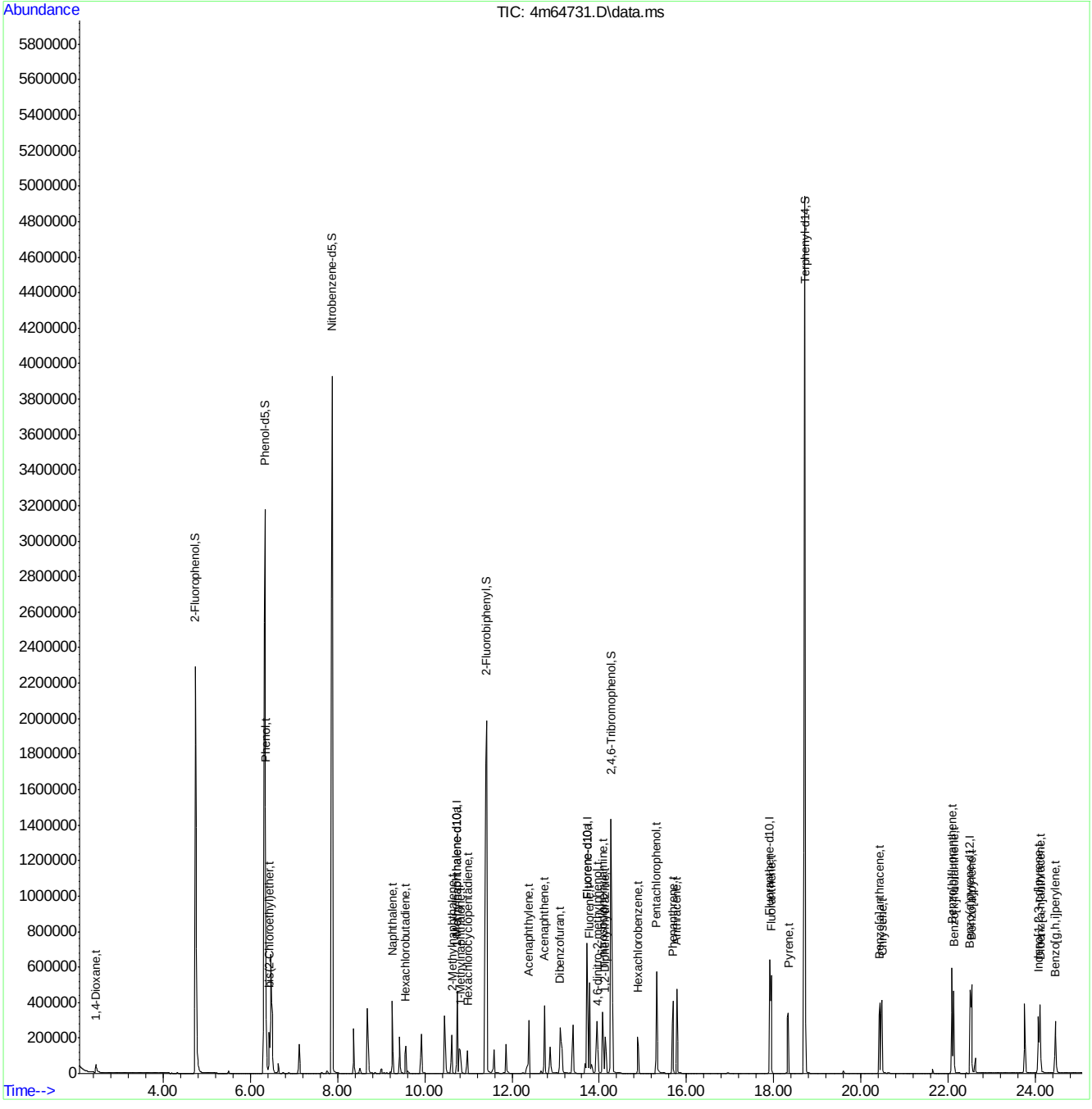
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64731.D
Acq On : 14 Apr 2016 2:53 pm
Operator : linseyk
Sample : ic2881-2.5
Misc : op92998a,e4m2881
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 14 15:54:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:24 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 15:54:53 2016 MANAGER Page: 3

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64732.D
Acq On : 14 Apr 2016 3:25 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 14 15:57:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:56:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	390727	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	664300	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	995159	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.511	264	771368	4.00	ppm	0.01
35) 1-Methylnaphthalene-d10a	10.746	152	390727	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	664300	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
3) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
6) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
11) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
17) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
4) Phenol	6.352	94	411546	4.67	ppm	79
19) Pentachlorophenol	15.316	266	135876	4.78	ppm	93
39) 4,6-dinitro-2-methylph...	13.963	198	89891	4.89	ppm	98

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

7.6.82

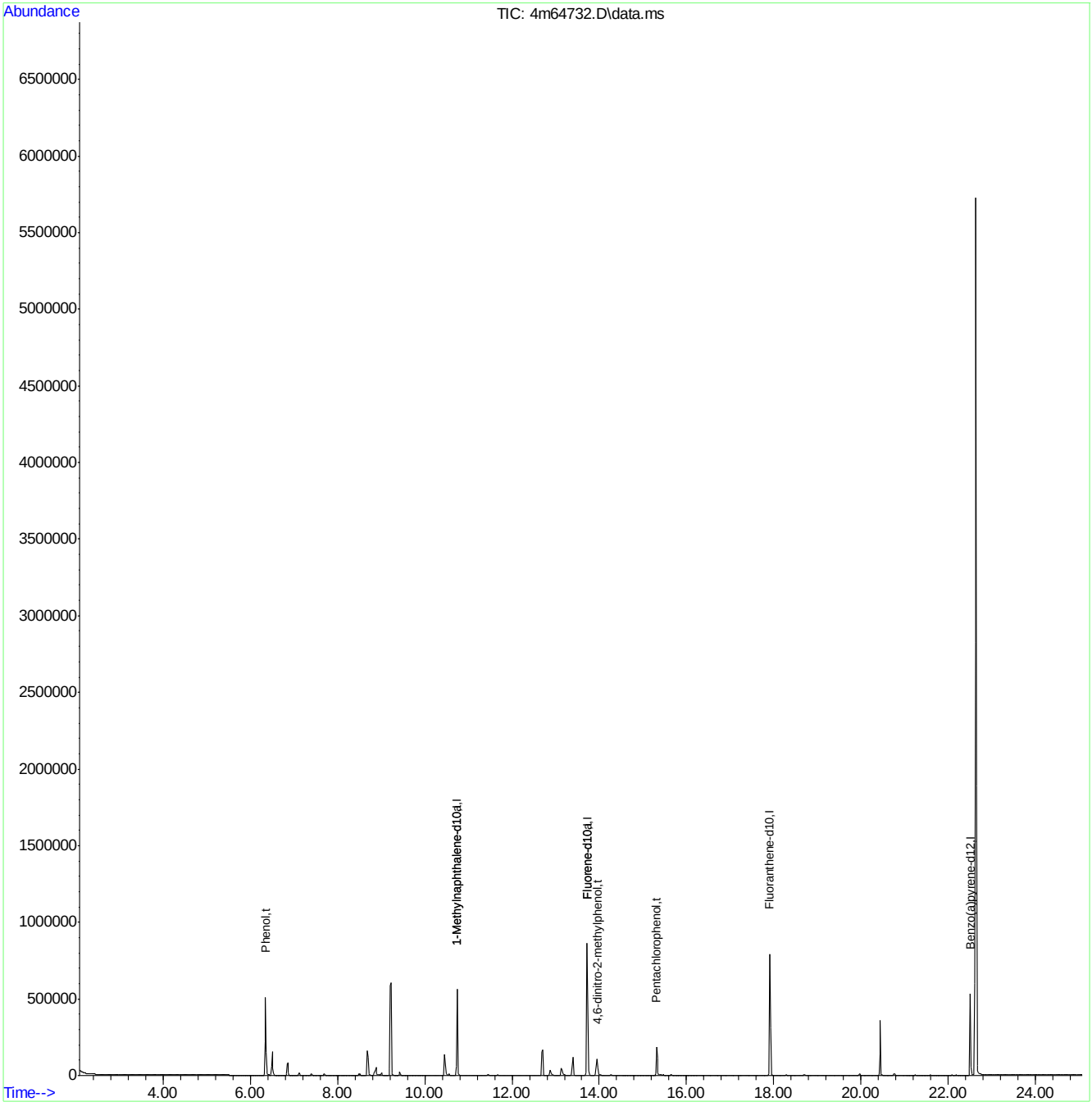
7

SGS ACCUTEST JC18649

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 JC18649

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 JC18649

Quantitation Report (QT Reviewed)

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Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64733.D
Acq On    : 14 Apr 2016   3:57 pm
Operator  : linseyk
Sample    : icv2881-1.0
Misc      : op92998a,e4m2881
ALS Vial  : 12   Sample Multiplier: 1

Quant Time: Apr 14 16:31:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title  : Semi Volatile  GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration

        Compound                  R.T. QIon  Response  Conc Units Dev(Min)
 ---------------------------------------------------------------------------
 (#) = qualifier out of range (m) = manual integration (+) = signals summed
```
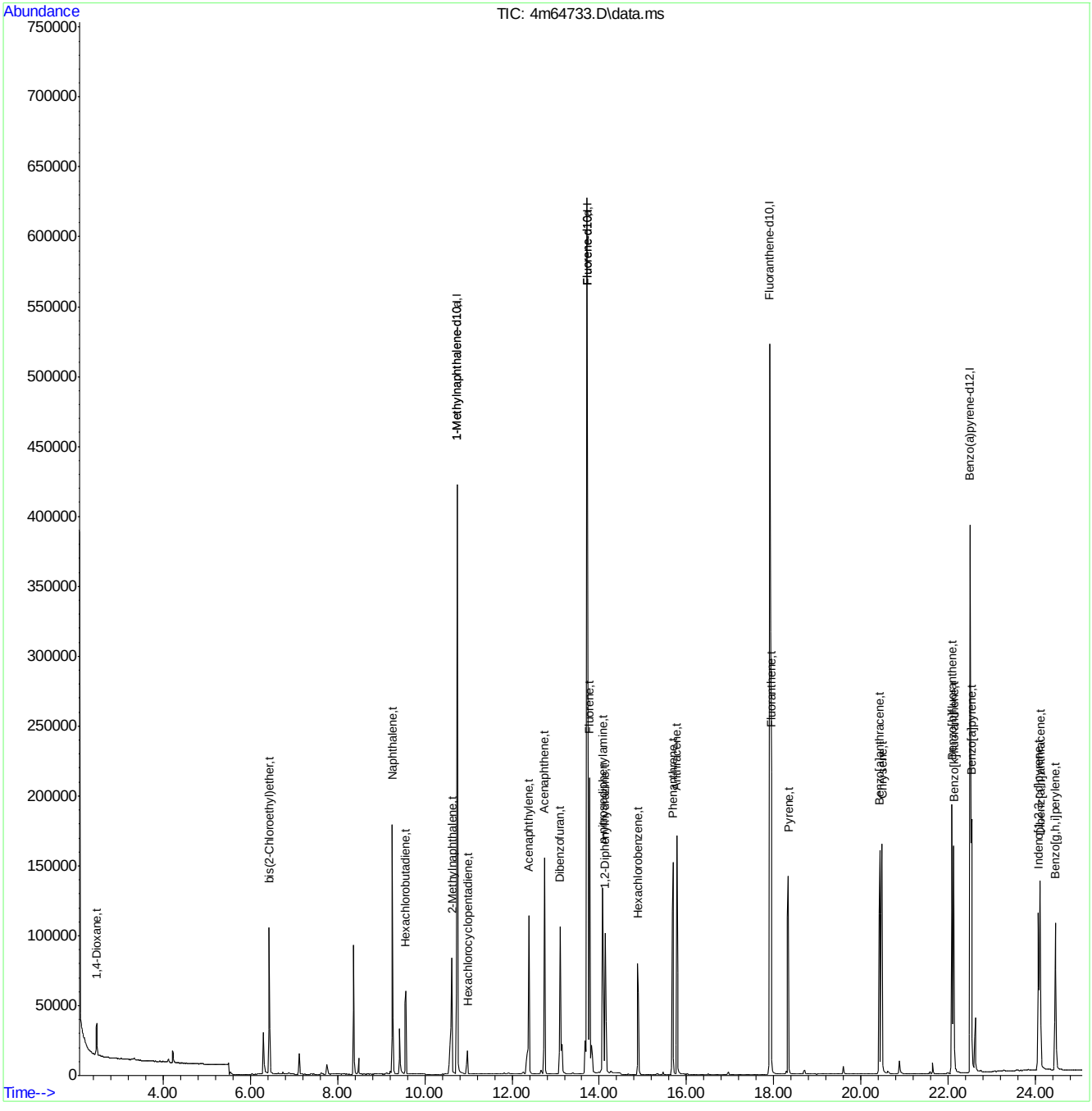

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64733.D
Acq On : 14 Apr 2016 3:57 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 14 16:31:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64734.D
Acq On : 14 Apr 2016 4:28 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 14 17:01:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration

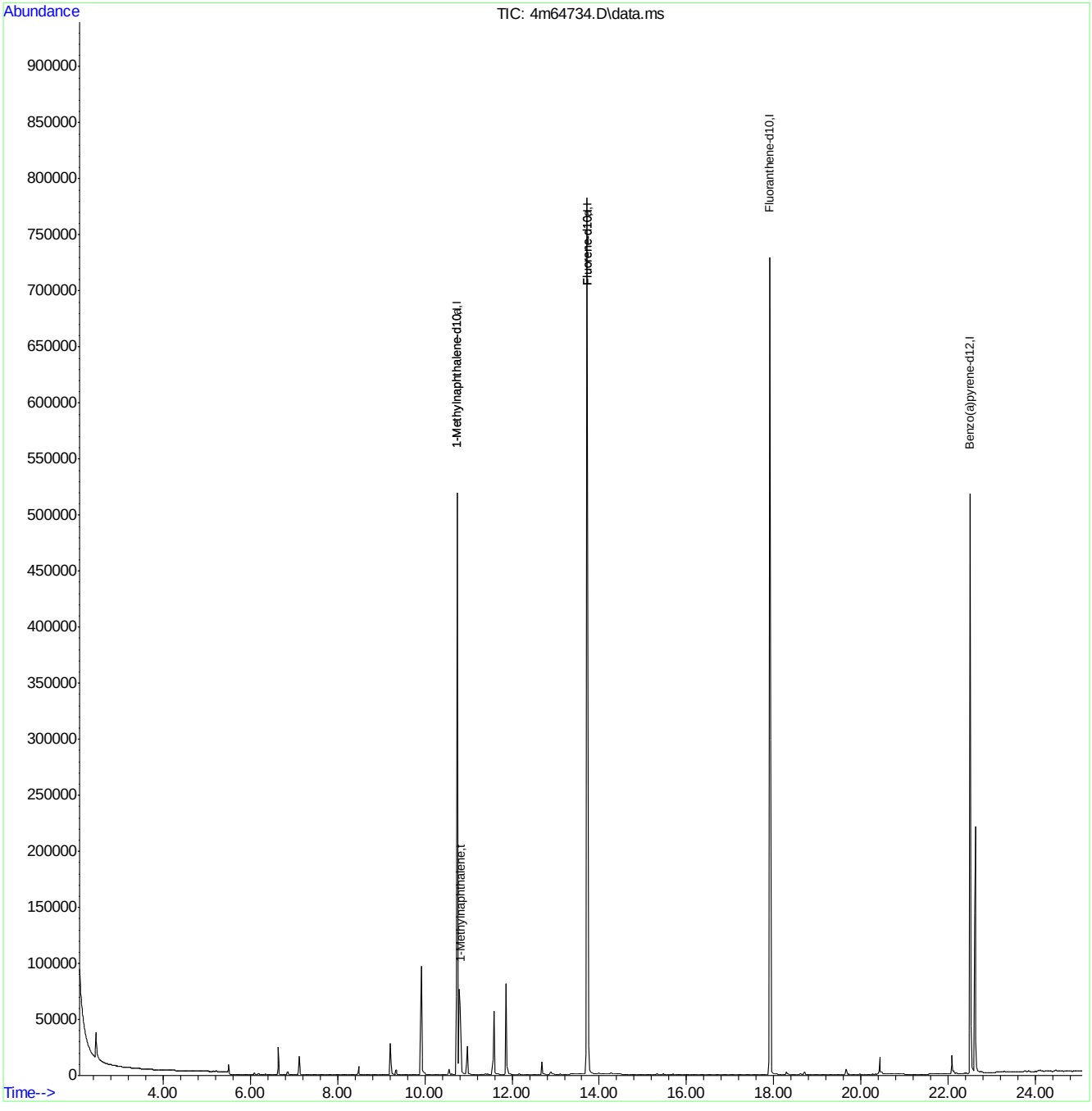
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.745	152	371893	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	603684	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	922186	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	751295	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.745	152	371893	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	603684	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
3) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
6) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
11) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
17) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
37) 1-Methylnaphthalene	10.817	142	82253	0.95	ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64734.D
Acq On : 14 Apr 2016 4:28 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 14 17:01:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER

Page: 2

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64879.D
Acq On : 21 Apr 2016 10:20 am
Operator : linseyk
Sample : cc2881-.5
Misc : op90303a,e4m2889
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 10:45:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	360426	4.00	ppm	# 0.05
12) Fluorene-d10	13.748	176	590004	4.00	ppm	0.07
22) Fluoranthene-d10	17.923	212	1224264	4.00	ppm	0.06
28) Benzo(a)pyrene-d12	22.525	264	917249	4.00	ppm	0.05
35) 1-Methylnaphthalene-d10a	10.746	152	360426	4.00	ppm	# 0.05
38) Fluorene-d10a	13.748	176	590004	4.00	ppm	# 0.07
System Monitoring Compounds						
2) 2-Fluorophenol	4.773	112	584031	12.38	ppm	0.05
Spiked Amount 50.000	Range 11 - 58		Recovery = 24.76%			
3) Phenol-d5	6.352	99	989570	12.47	ppm	0.04
Spiked Amount 50.000			Recovery = 24.94%			
6) Nitrobenzene-d5	7.879	82	917305	12.89	ppm	0.04
Spiked Amount 50.000			Recovery = 25.78%			
11) 2-Fluorobiphenyl	11.414	172	1553123	14.93	ppm	0.05
Spiked Amount 50.000			Recovery = 29.86%			
17) 2,4,6-Tribromophenol	14.297	330	435445	13.84	ppm	0.07
Spiked Amount 50.000			Recovery = 27.68%			
25) Terphenyl-d14	18.713	244	1626096	9.83	ppm	0.04
Spiked Amount 50.000			Recovery = 19.66%			
Target Compounds						Qvalue
4) Phenol	6.379	94	250321	3.08	ppm	70
5) bis(2-Chloroethyl)ether	6.462	93	34954	0.57	ppm #	32
7) Naphthalene	9.271	128	125690	0.62	ppm	99
8) Hexachlorobutadiene	9.565	225	32236	0.64	ppm	78
9) 2-Methylnaphthalene	10.626	142	65829	0.75	ppm	75
10) Hexachlorocyclopentadiene	10.984	237	40620	1.43	ppm	80
13) Acenaphthylene	12.388	152	96149	0.71	ppm	90
14) Acenaphthene	12.742	153	56348	0.65	ppm	78
15) Dibenzofuran	13.120	168	80665	0.62	ppm	71
16) Fluorene	13.795	166	84750	0.54	ppm	78
18) Hexachlorobenzene	14.898	284	42802	0.69	ppm	92
19) Pentachlorophenol	15.331	266	115136	4.56	ppm	99
20) Phenanthrene	15.687	178	146364	0.69	ppm	91
21) Anthracene	15.795	178	147204	0.73	ppm	98
23) Fluoranthene	17.960	202	156057	0.47	ppm	94
24) Pyrene	18.337	202	179309	0.55	ppm	86
26) Benzo[a]anthracene	20.427	228	160255	0.53	ppm	96
27) Chrysene	20.483	228	151946	0.51	ppm	82
29) Benzo[b]fluoranthene	22.098	252	161767	0.49	ppm	96
30) Benzo[k]fluoranthene	22.139	252	148126	0.54	ppm	97
31) Benzo[a]pyrene	22.552	252	143034	0.52	ppm	96
32) Indeno[1,2,3-cd]pyrene	24.094	276	175234	0.51	ppm	95
33) Dibenz[a,h]anthracene	24.122	278	132575	0.48	ppm	75
34) Benzo[g,h,i]perylene	24.480	276	149425	0.52	ppm	100
37) 1-Methylnaphthalene	10.817	142	71284	0.85	ppm	75
39) 4,6-dinitro-2-methylph...	13.962	198	60061	3.86	ppm	73
40) 1,2-Diphenylhydrazine	14.154	77	95878	0.69	ppm	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64879.D
Acq On : 21 Apr 2016 10:20 am
Operator : linseyk
Sample : cc2881-.5
Misc : op90303a,e4m2889
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 10:45:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.106	169	62988	0.61	ppm	77

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

7.6.85

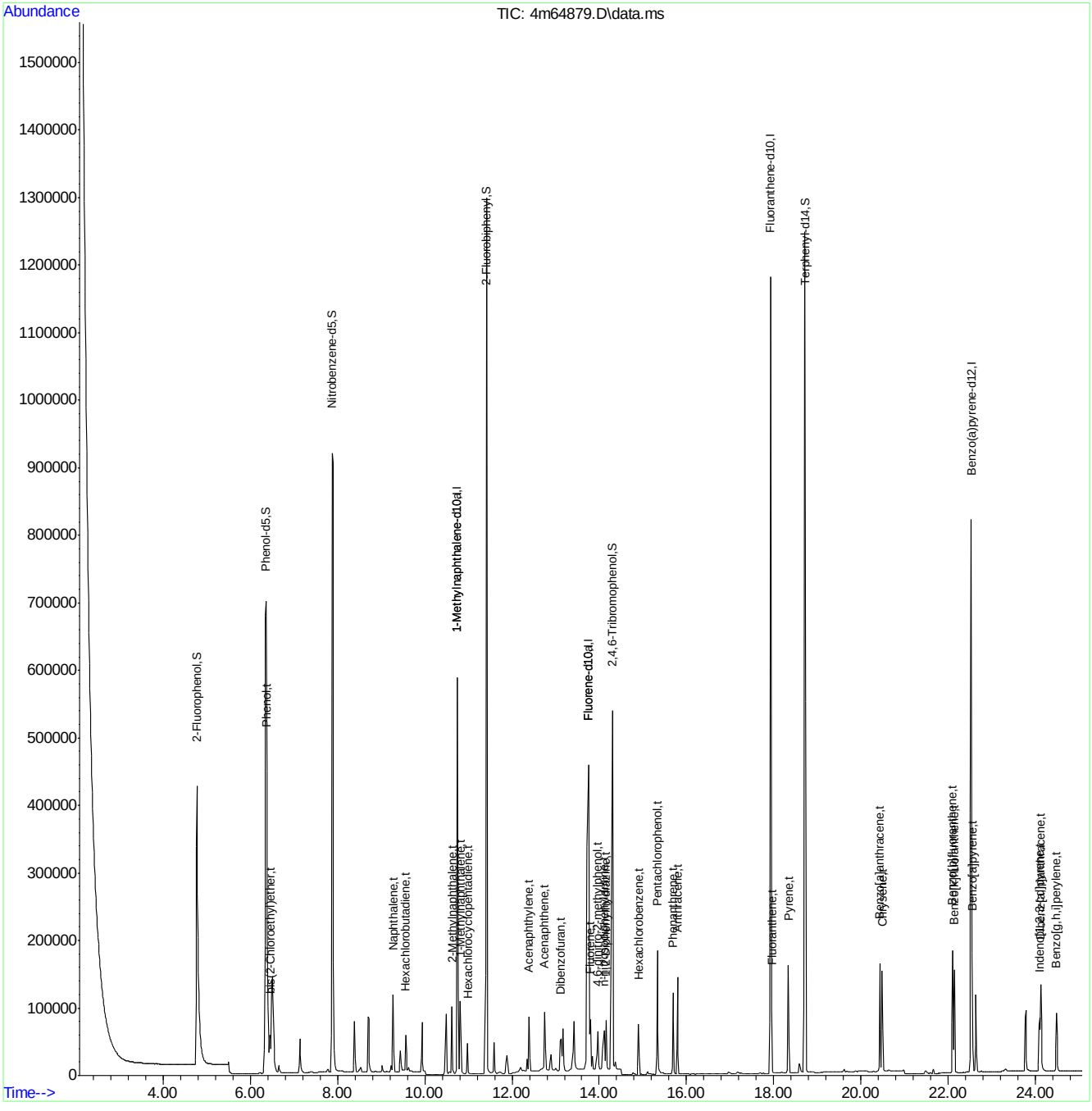
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2889\
Data File : 4m64879.D
Acq On : 21 Apr 2016 10:20 am
Operator : linseyk
Sample : cc2881-.5
Misc : op90303a,e4m2889
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 10:45:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 16:29:18 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2890\
Data File : 4m64888.D
Acq On : 21 Apr 2016 3:11 pm
Operator : linseyk
Sample : cc2881-1
Misc : op93236a,e4m2890
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 15:22:14 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	231636	4.00	ppm		0.05
12) Fluorene-d10	13.724	176	338668	4.00	ppm		0.05
22) Fluoranthene-d10	17.923	212	714801	4.00	ppm		0.06
28) Benzo(a)pyrene-d12	22.511	264	526465	4.00	ppm		0.04
35) 1-Methylnaphthalene-d10a	10.746	152	231636	4.00	ppm	#	0.05
38) Fluorene-d10a	13.724	176	338668	4.00	ppm		0.05
System Monitoring Compounds							
2) 2-Fluorophenol	4.752	112	622779	20.53	ppm		0.03
Spiked Amount 50.000	Range 11 - 58		Recovery	=	41.06%		
3) Phenol-d5	6.352	99	1062922	20.84	ppm		0.04
Spiked Amount 50.000			Recovery	=	41.68%		
6) Nitrobenzene-d5	7.879	82	1010004	22.08	ppm		0.04
Spiked Amount 50.000			Recovery	=	44.16%		
11) 2-Fluorobiphenyl	11.414	172	1503892	22.49	ppm		0.05
Spiked Amount 50.000			Recovery	=	44.98%		
17) 2,4,6-Tribromophenol	14.297	330	446128	24.70	ppm		0.07
Spiked Amount 50.000			Recovery	=	49.40%		
25) Terphenyl-d14	18.713	244	1852700	19.19	ppm		0.04
Spiked Amount 50.000			Recovery	=	38.38%		
Target Compounds							Qvalue
4) Phenol	6.366	94	277705	5.32	ppm		92
5) bis(2-Chloroethyl)ether	6.448	93	40055	1.02	ppm	#	41
7) Naphthalene	9.272	128	135900	1.04	ppm		96
8) Hexachlorobutadiene	9.566	225	34513	1.07	ppm		85
9) 2-Methylnaphthalene	10.626	142	77352	1.36	ppm		83
10) Hexachlorocyclopentadiene	10.984	237	54611	2.81	ppm		87
13) Acenaphthylene	12.388	152	112756	1.45	ppm		92
14) Acenaphthene	12.743	153	64586	1.29	ppm		81
15) Dibenzofuran	13.120	168	86235	1.16	ppm		71
16) Fluorene	13.795	166	91162	1.01	ppm		76
18) Hexachlorobenzene	14.899	284	47719	1.35	ppm		89
19) Pentachlorophenol	15.331	266	126487	8.72	ppm		95
20) Phenanthrene	15.687	178	164539	1.35	ppm		92
21) Anthracene	15.795	178	162840	1.41	ppm		95
23) Fluoranthene	17.942	202	184452	0.96	ppm		90
24) Pyrene	18.337	202	206096	1.08	ppm		89
26) Benzo[a]anthracene	20.427	228	194873	1.11	ppm		100
27) Chrysene	20.483	228	184454	1.07	ppm		85
29) Benzo[b]fluoranthene	22.098	252	191008	1.01	ppm		91
30) Benzo[k]fluoranthene	22.126	252	166891	1.05	ppm		91
31) Benzo[a]pyrene	22.552	252	164384	1.05	ppm		99
32) Indeno[1,2,3-cd]pyrene	24.081	276	203395	1.04	ppm		99
33) Dibenz[a,h]anthracene	24.122	278	166652	1.05	ppm		99
34) Benzo[g,h,i]perylene	24.480	276	172534	1.04	ppm		100
36) 1,4-Dioxane	2.472	88	11563	0.94	ppm	#	78
37) 1-Methylnaphthalene	10.817	142	74998	1.39	ppm		85
39) 4,6-dinitro-2-methylph...	13.963	198	98668	9.14	ppm		86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2890\
Data File : 4m64888.D
Acq On : 21 Apr 2016 3:11 pm
Operator : linseyk
Sample : cc2881-1
Misc : op93236a,e4m2890
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 15:22:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:56:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 1,2-Diphenylhydrazine	14.154	77	99303	1.24	ppm		85
41) n-nitrosodiphenylamine	14.106	169	65277	1.10	ppm	#	74

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

7.6.86

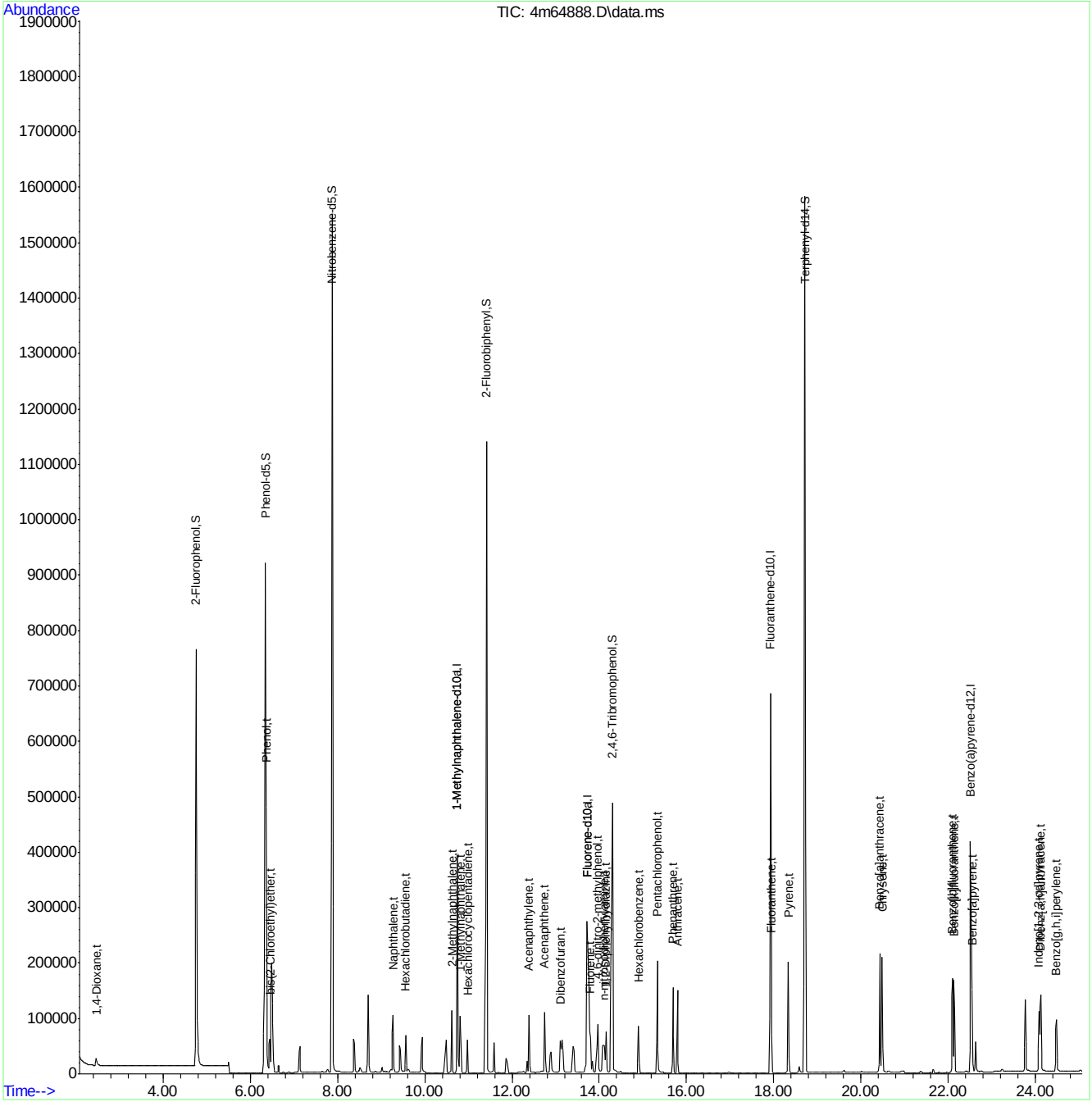
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2890\
Data File : 4m64888.D
Acq On : 21 Apr 2016 3:11 pm
Operator : linseyk
Sample : cc2881-1
Misc : op93236a,e4m2890
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 15:22:14 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



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 JC18649

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

7.6.87

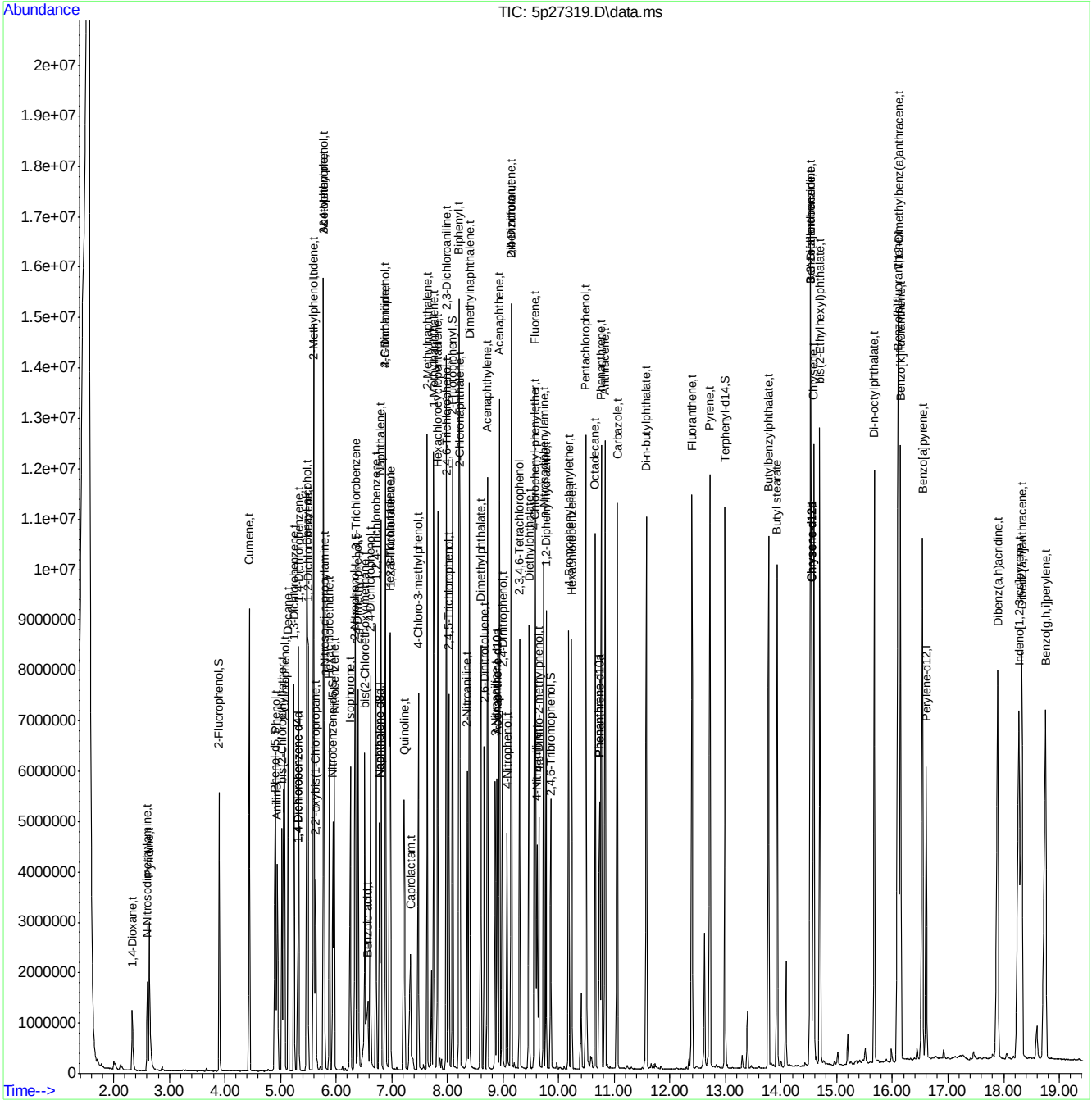
7

SGS ACCUTEST JC18649

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 JC18649

Manual Integration Approval Summary

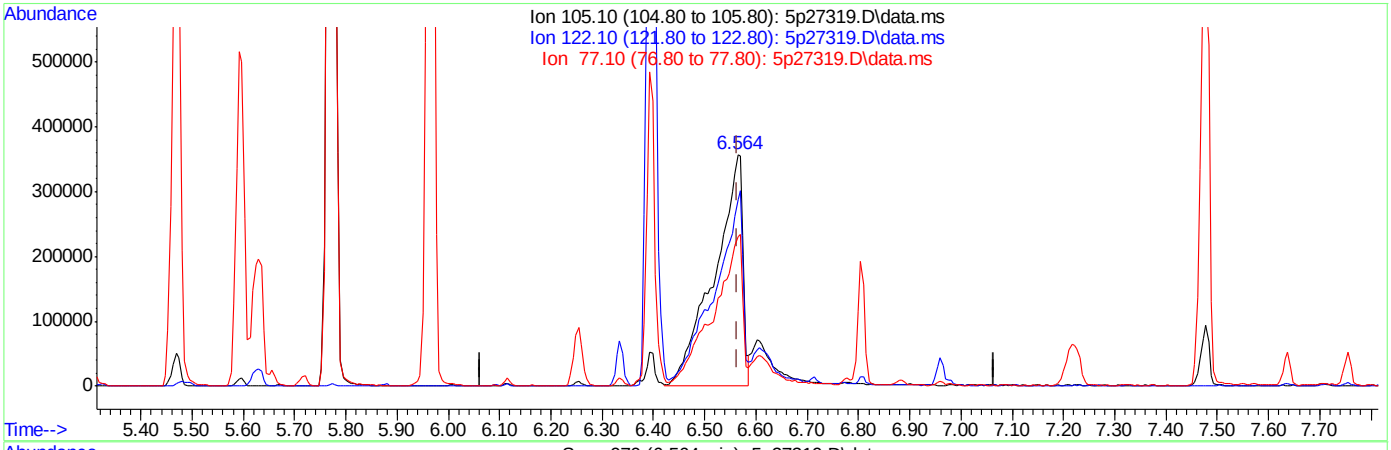
Sample Number:	E5P1382-IC1382	**Method:**	SW846 8270D
Lab FileID:	5P27319.D	**Analyst approved:**	04/12/16 09:05 Ashley Dye
Injection Time:	04/11/16 10:29	**Supervisor approved:**	04/12/16 12:29 Nina Pandya

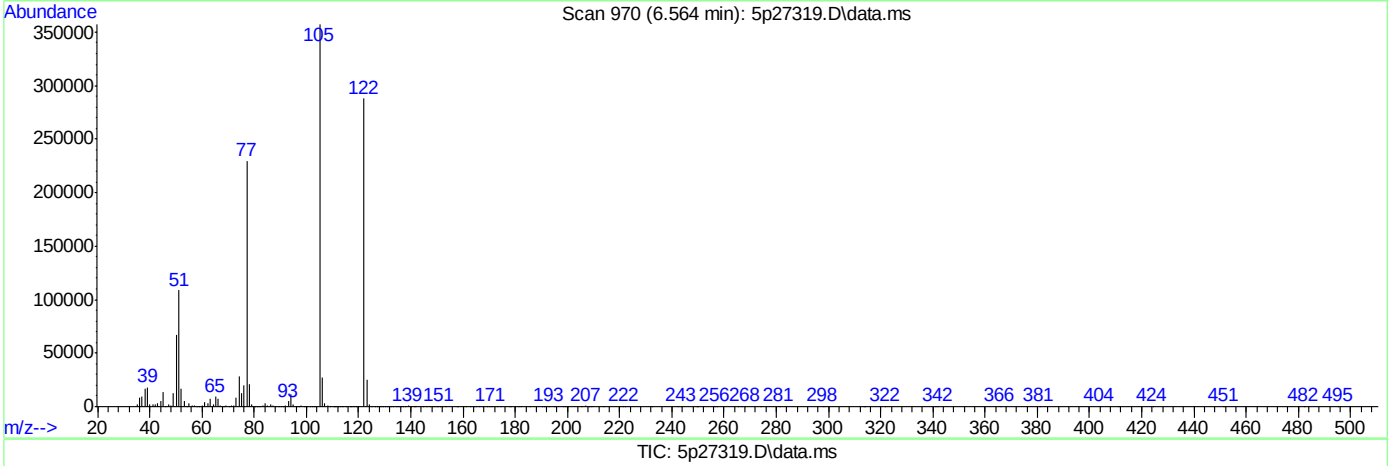
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.56	Split peak

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

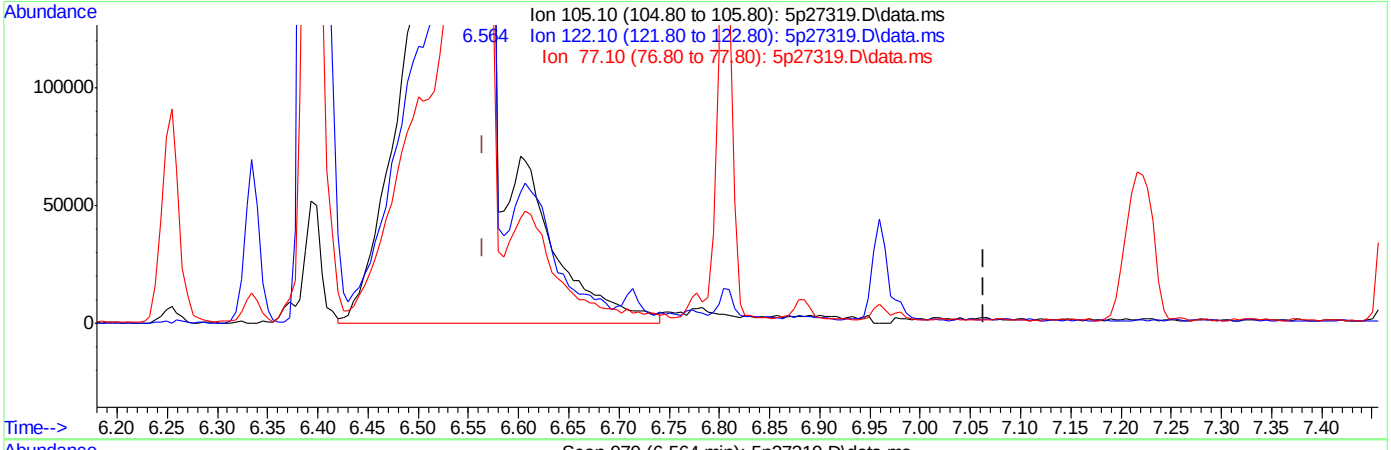
response 1381121

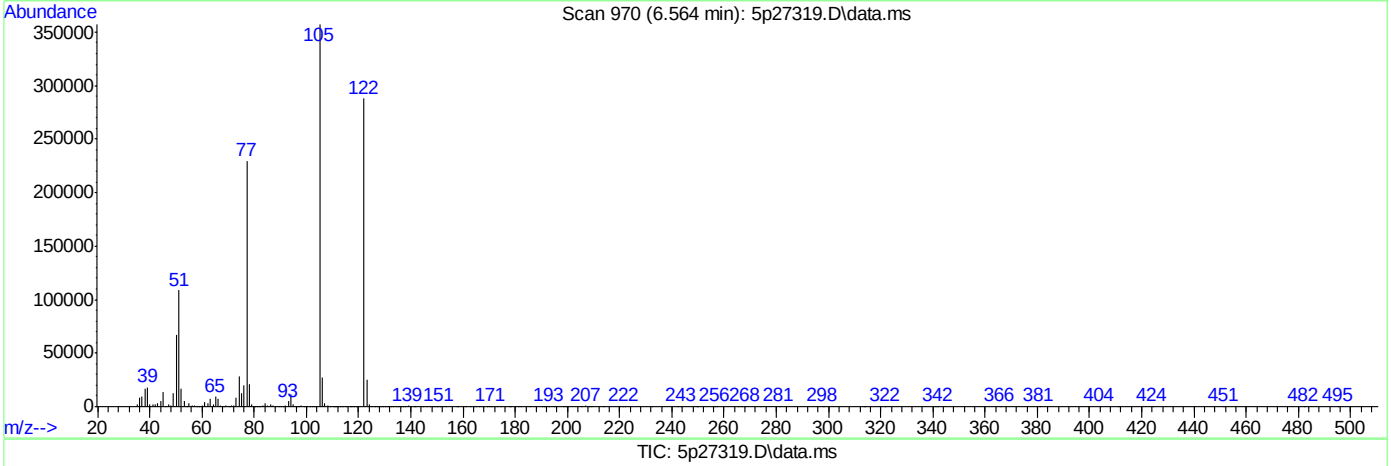
Ion	Exp%	Act%
105.10	100	100
122.10	75.40	75.35
77.10	62.90	62.94
0.00	0.00	0.00

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 JC18649

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 JC18649

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

7.6.88

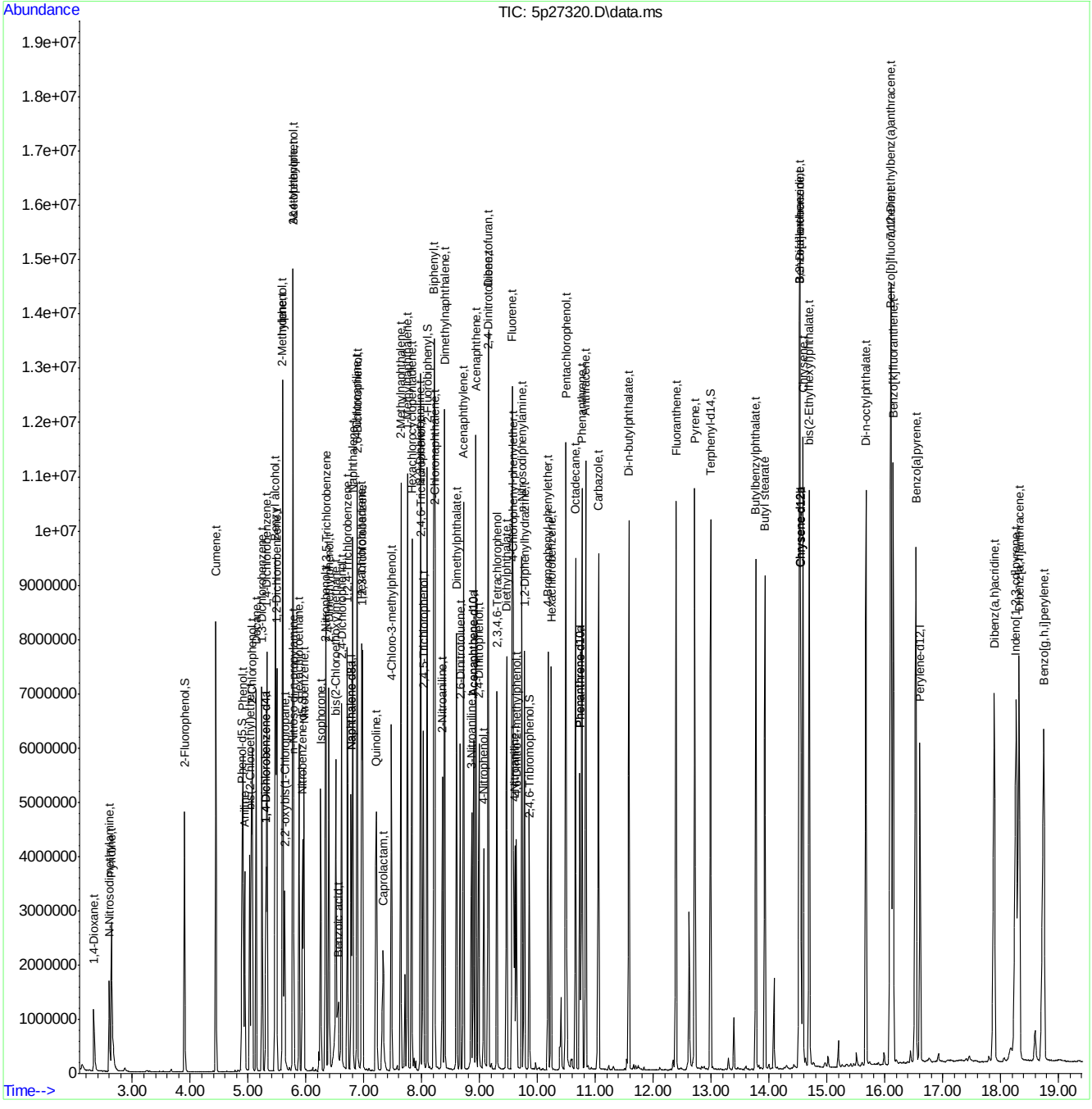
7

SGS ACCUTEST JC18649

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 JC18649

Manual Integration Approval Summary

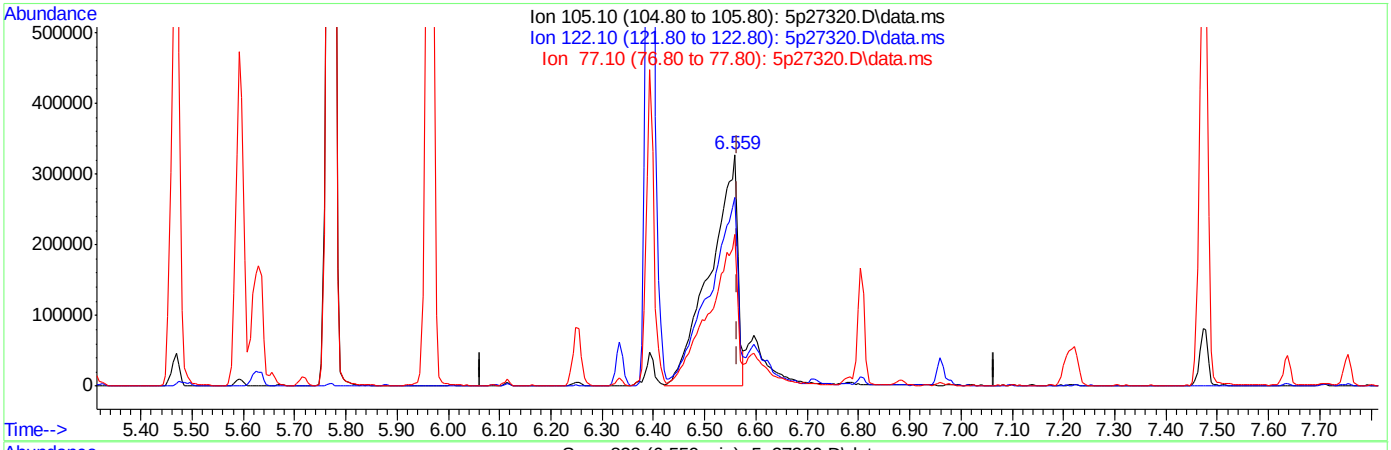
Sample Number:	E5P1382-IC1382	**Method:**	SW846 8270D
Lab FileID:	5P27320.D	**Analyst approved:**	04/12/16 09:05 Ashley Dye
Injection Time:	04/11/16 11:06	**Supervisor approved:**	04/12/16 12:29 Nina Pandya

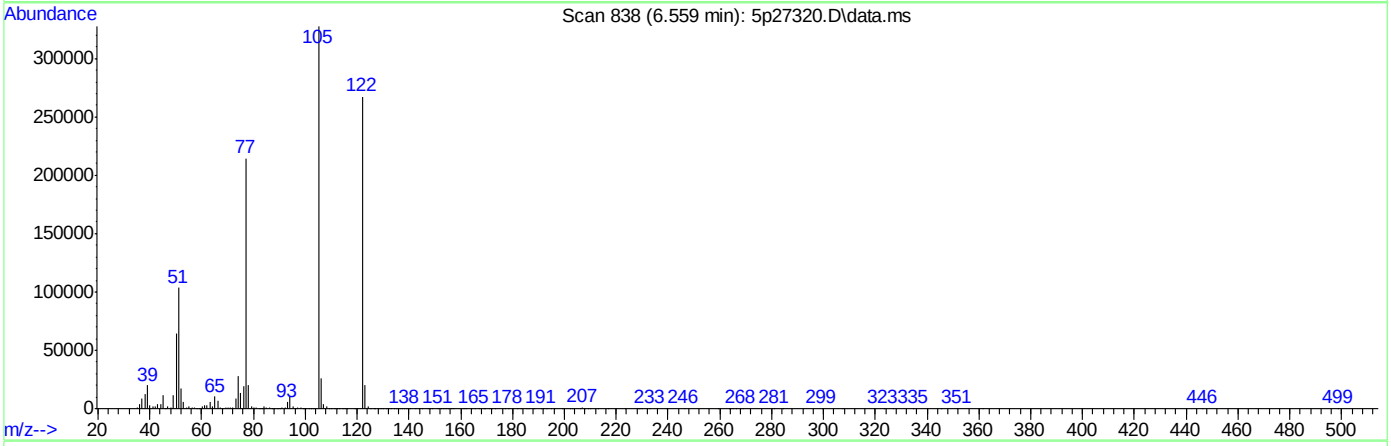
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.56	Split peak

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

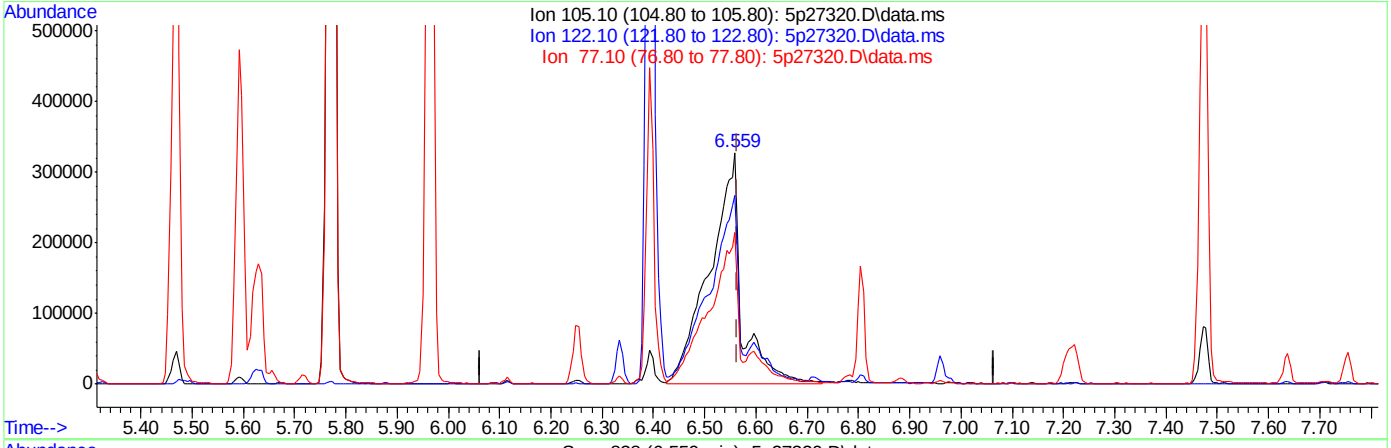
Ion	Exp%	Act%
105.10	100	100
122.10	80.60	77.85
77.10	64.40	64.60
0.00	0.00	0.00

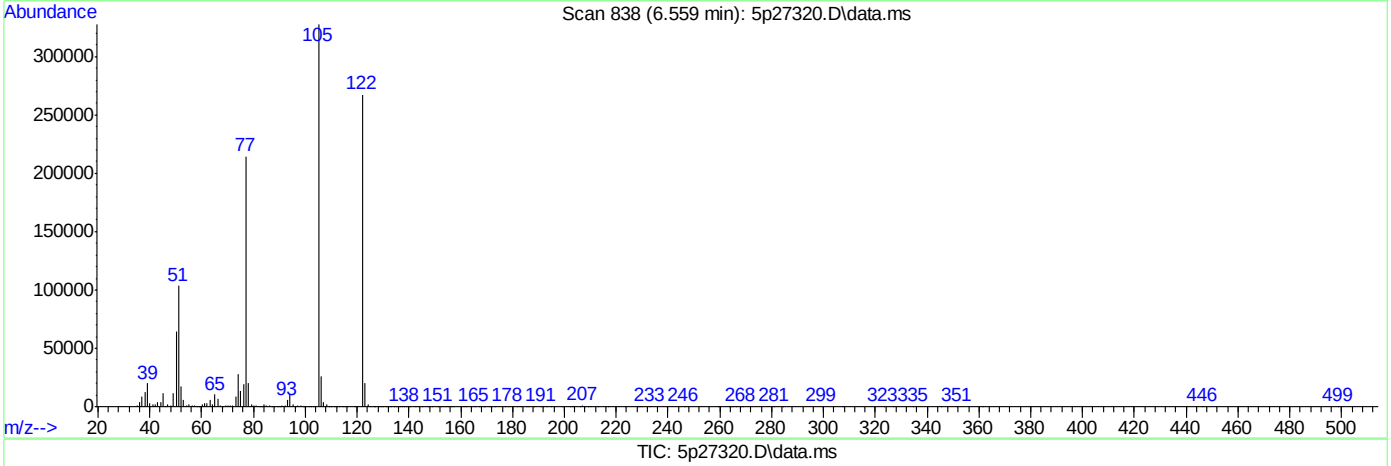
SGS ACCUTEST JC18649

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

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

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

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

7.6.89

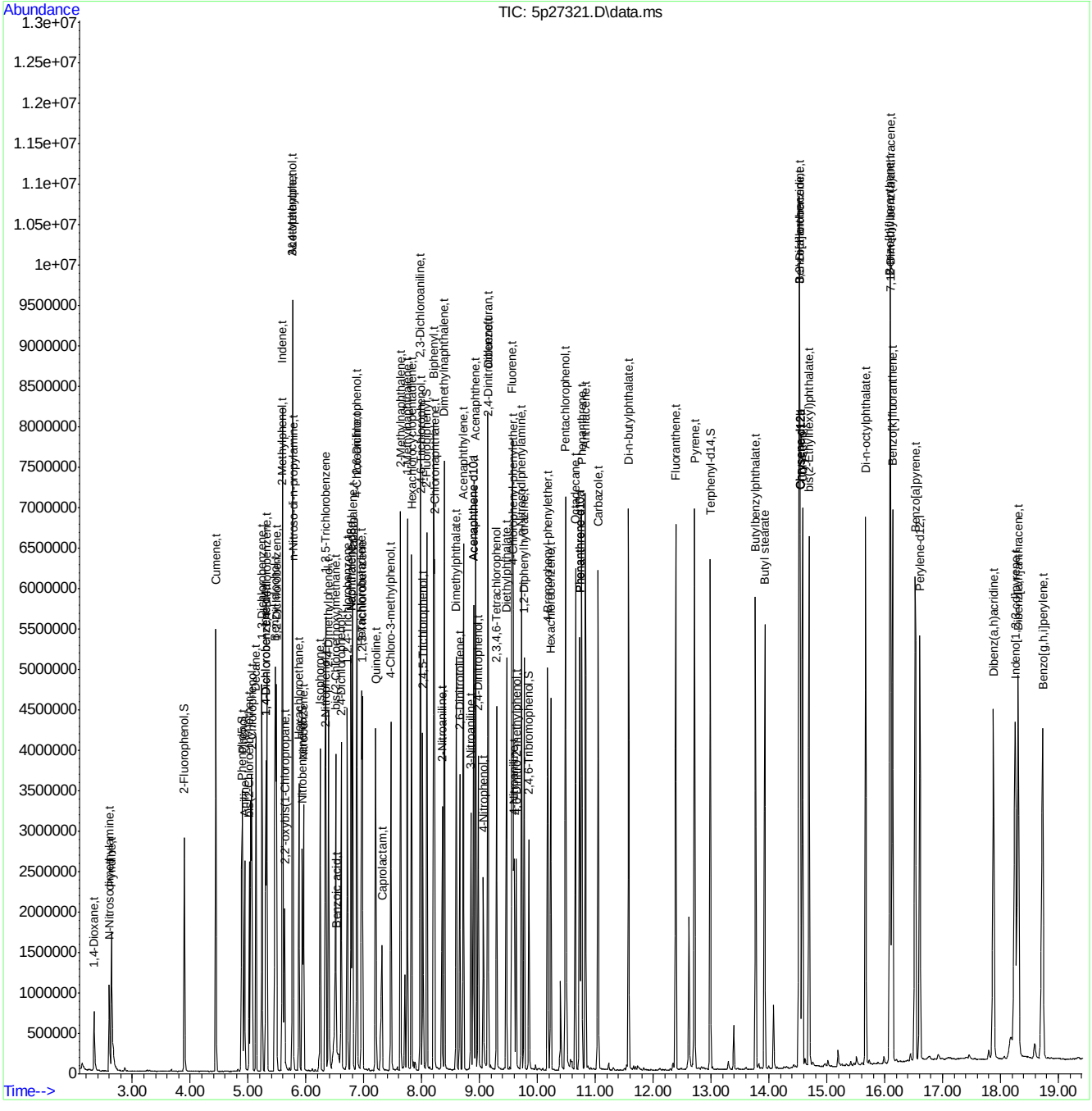
7

SGS ACCUTEST JC18649

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 JC18649

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

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 JC18649

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

7.6.90

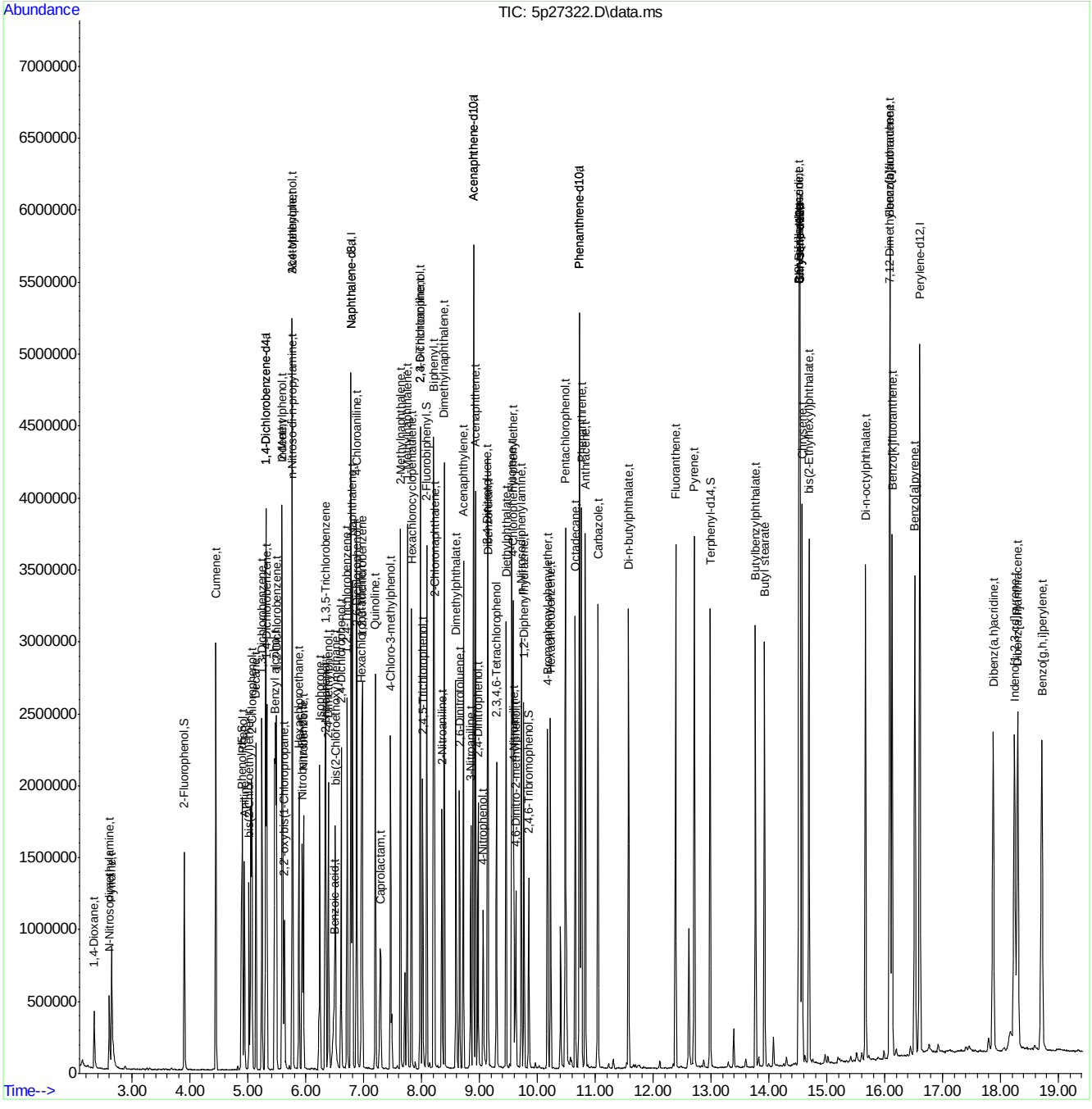
7

SGS ACCUTEST JC18649

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 JC18649

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

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

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

7.6.91

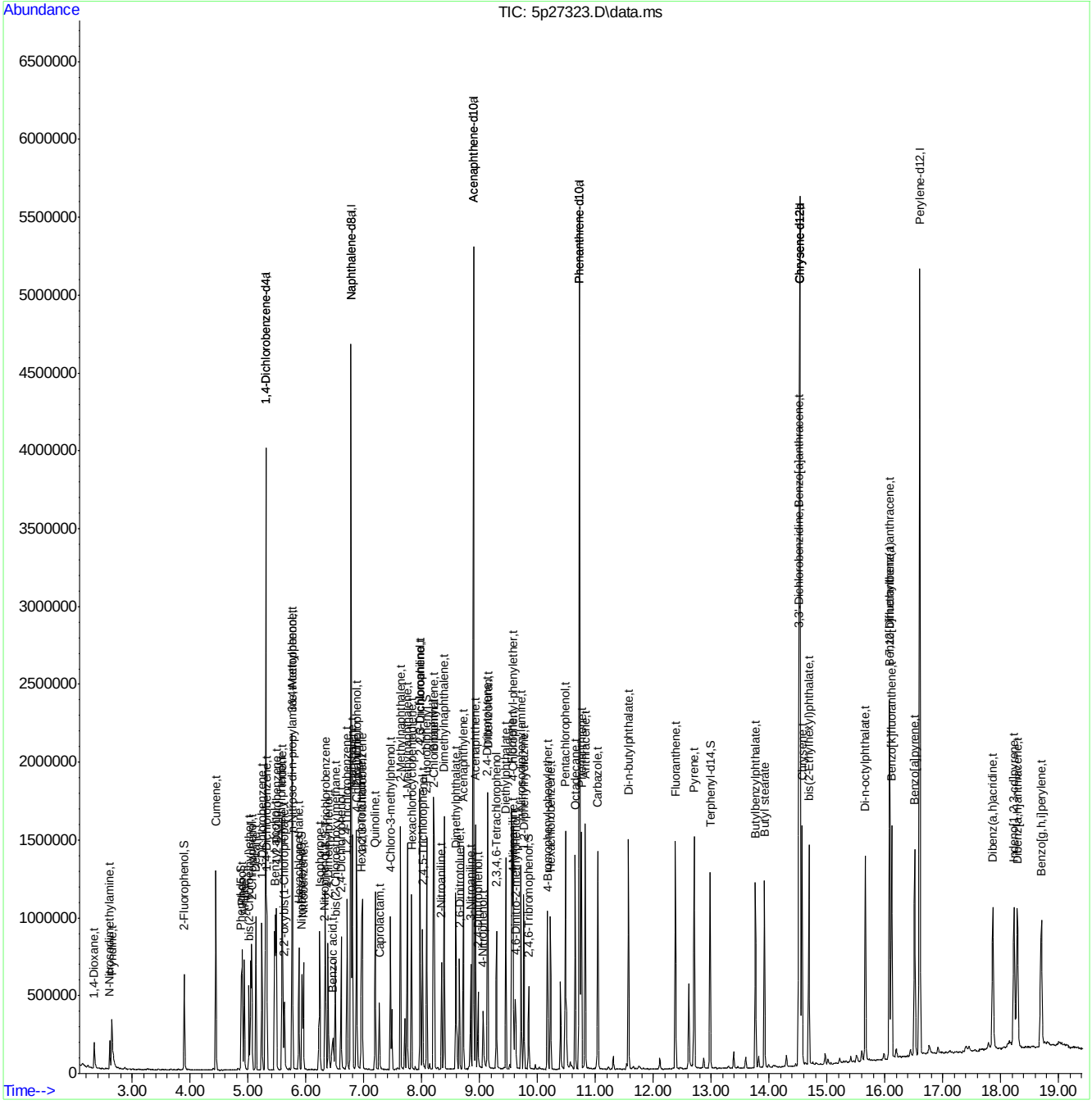
7

SGS ACCUTEST JC18649

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 JC18649

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

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 JC18649

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

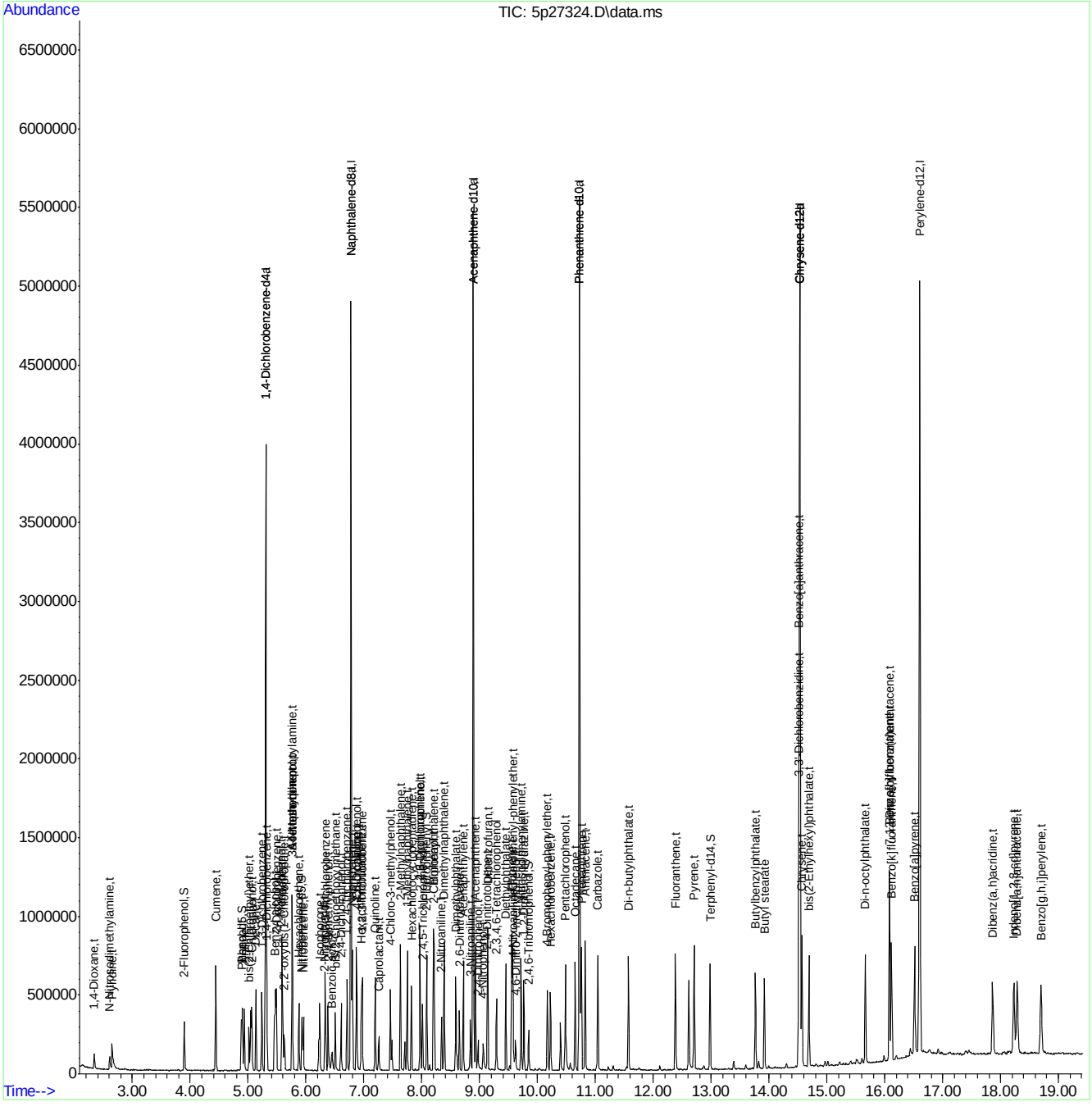
7.6.92

7

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

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

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

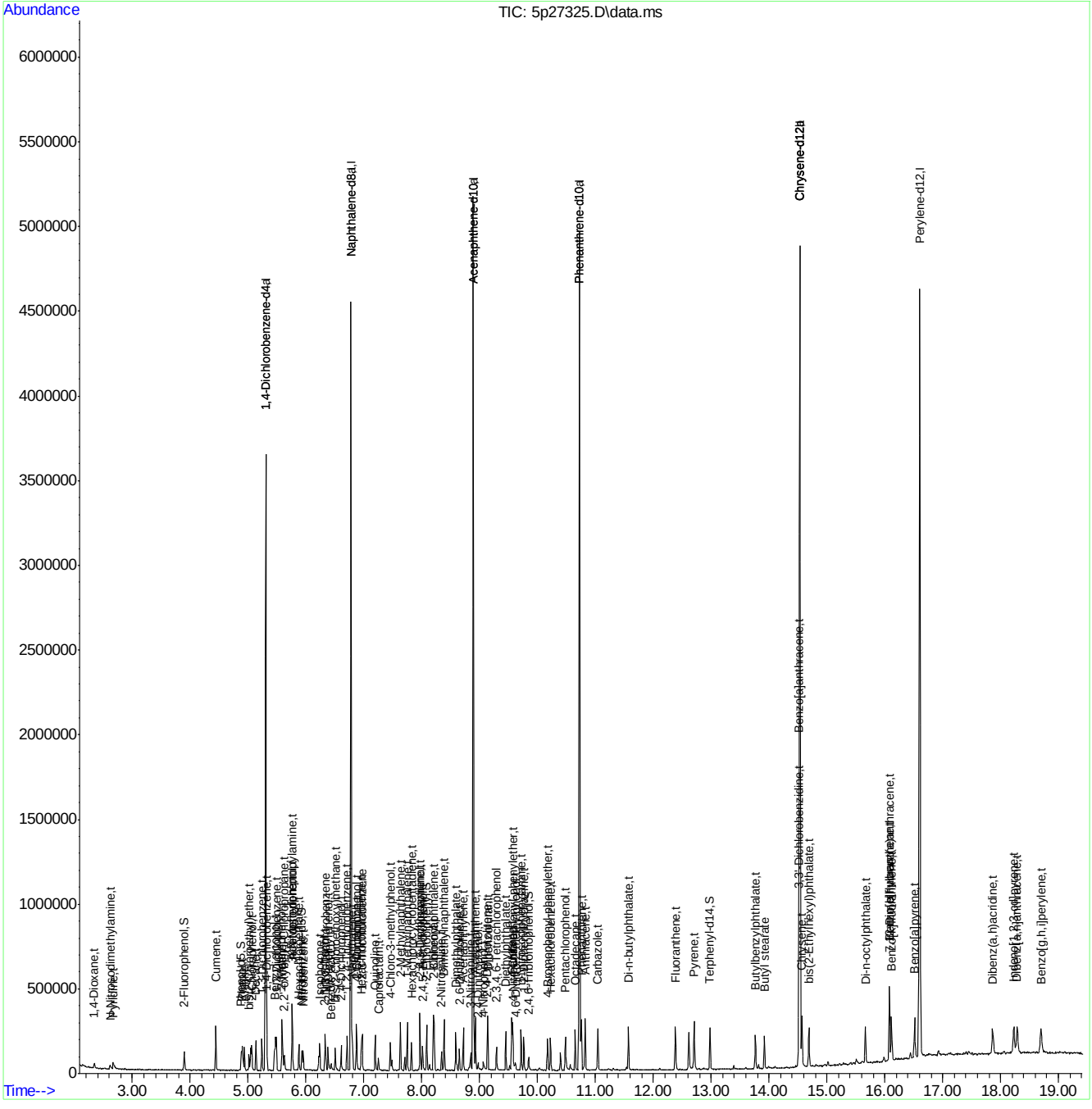
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

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



SGS ACCUTEST JC18649

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

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 JC18649

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

7.6.94

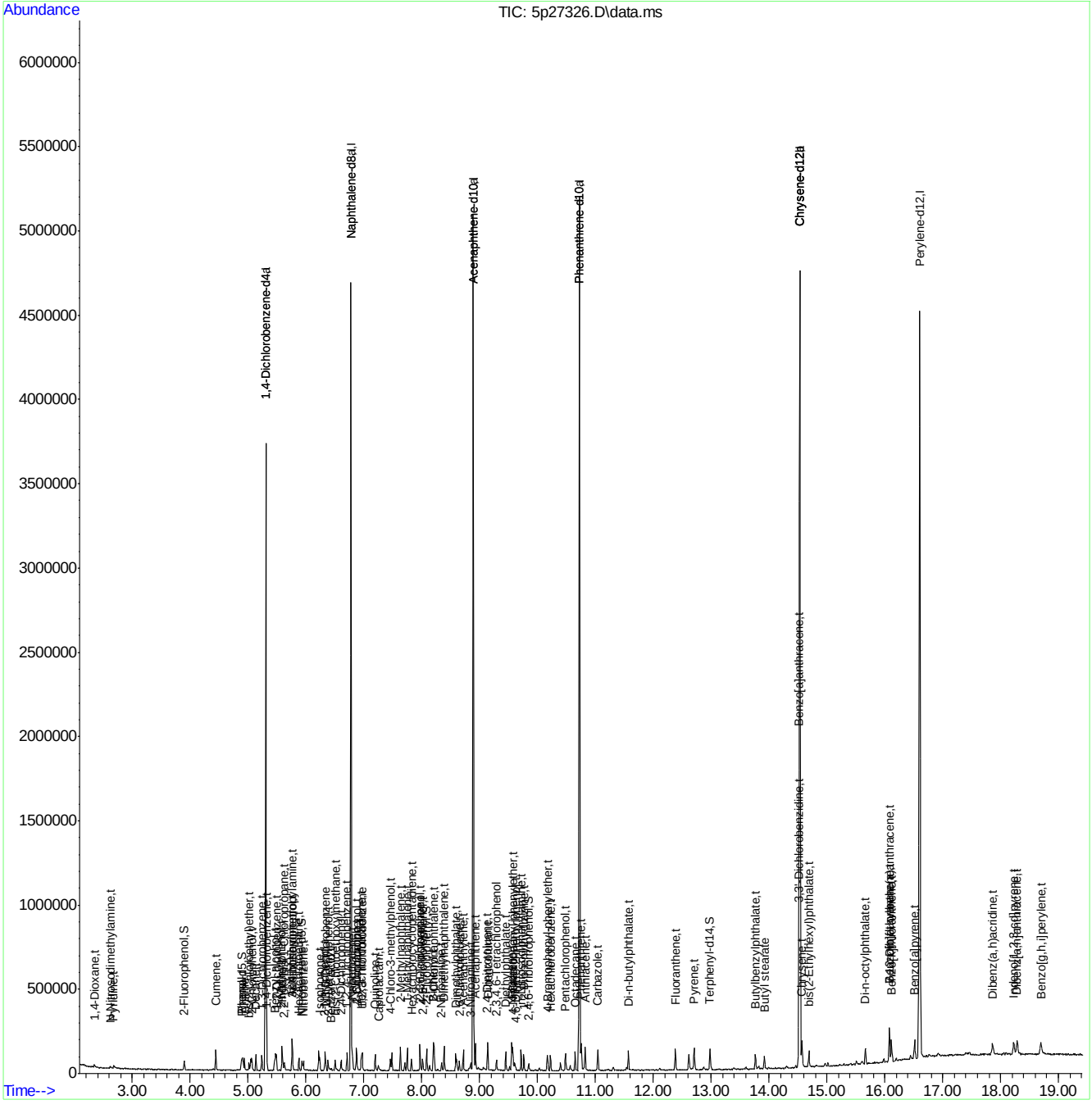
7

SGS ACCUTEST JC18649

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 JC18649

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

7.6.95

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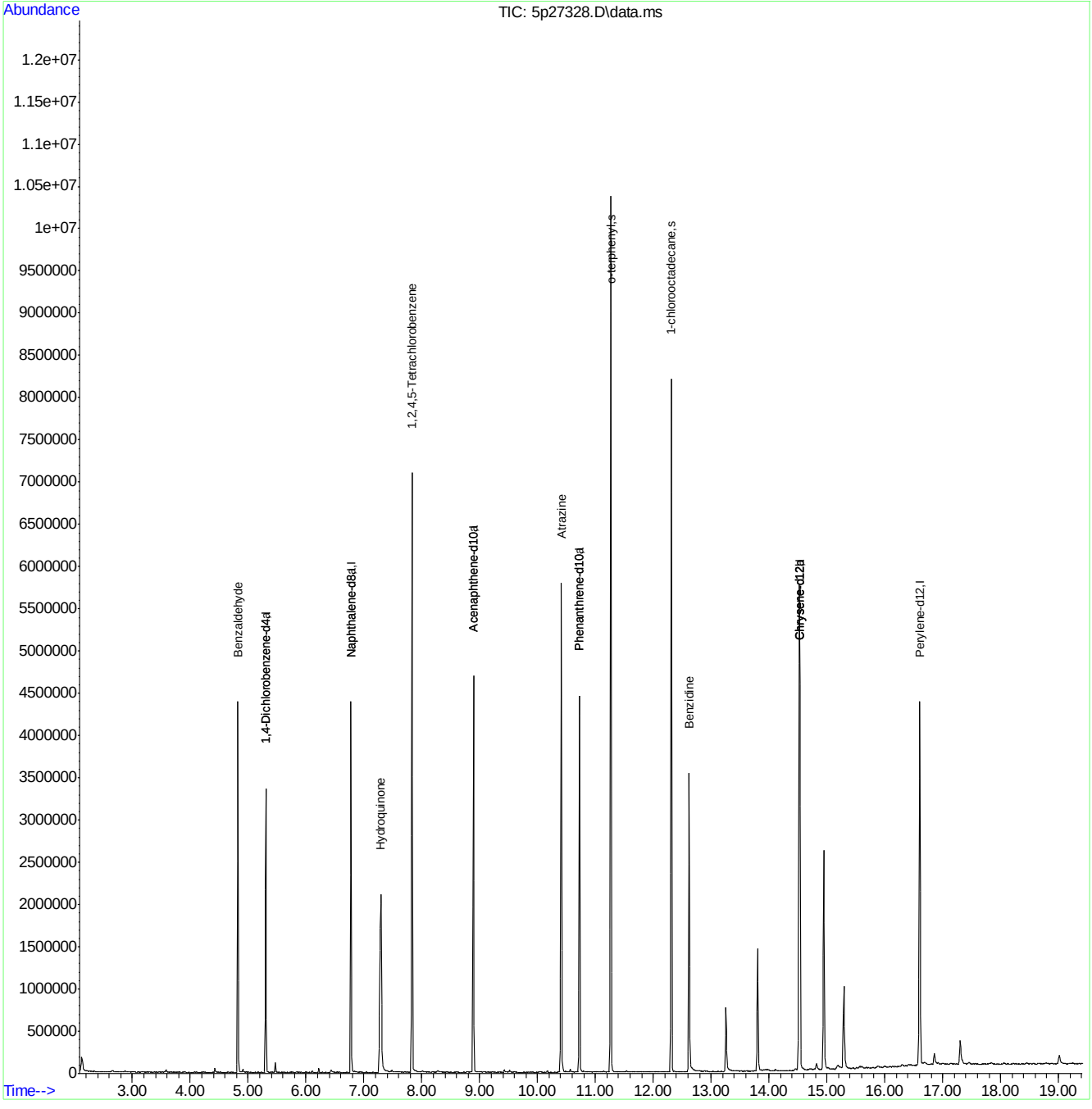
SGS ACCUTEST JC18649

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



SGS ACCUTEST JC18649

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

7.6.96

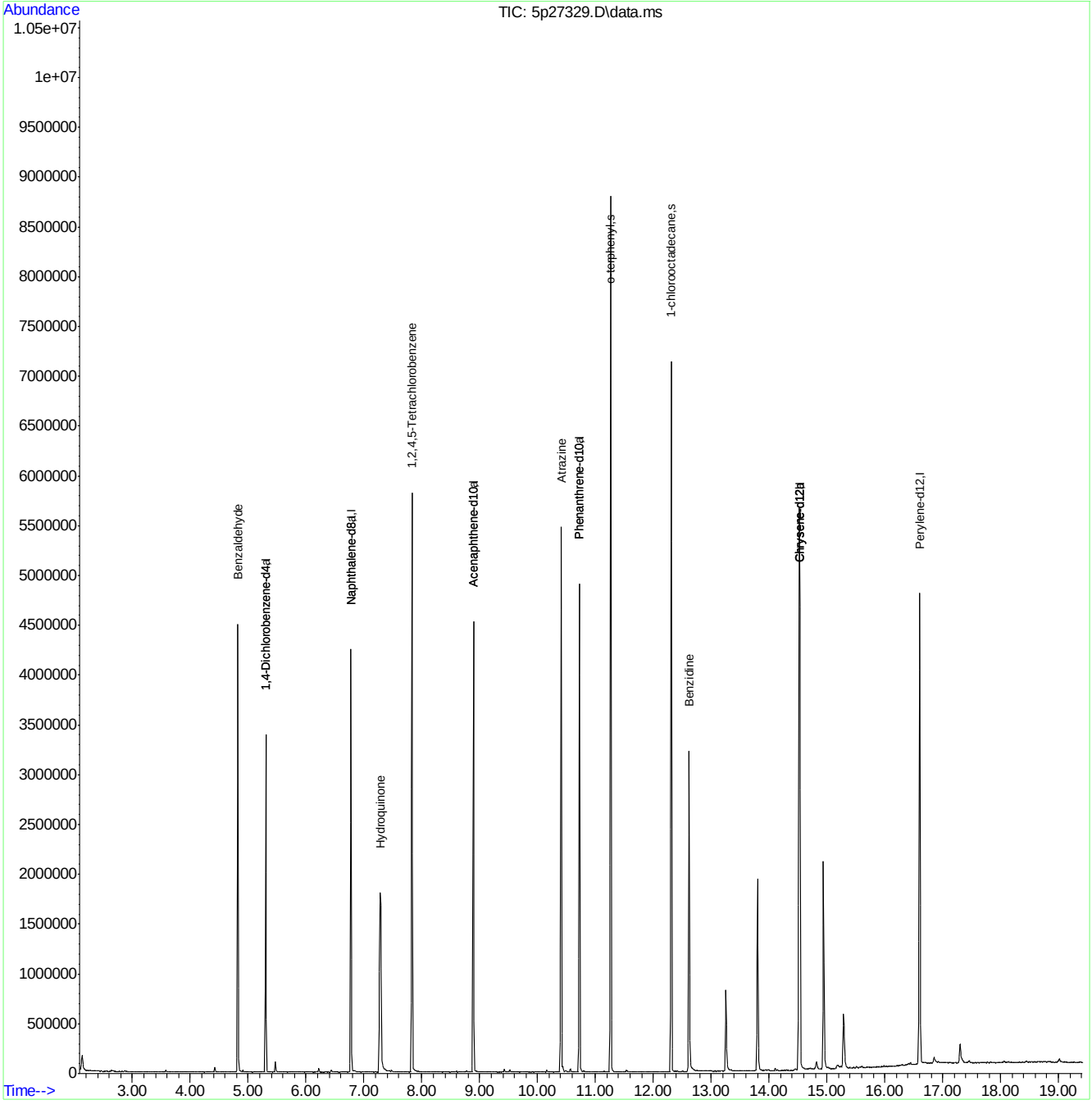
7

SGS ACCUTEST JC18649

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



SGS ACCUTEST JC18649

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

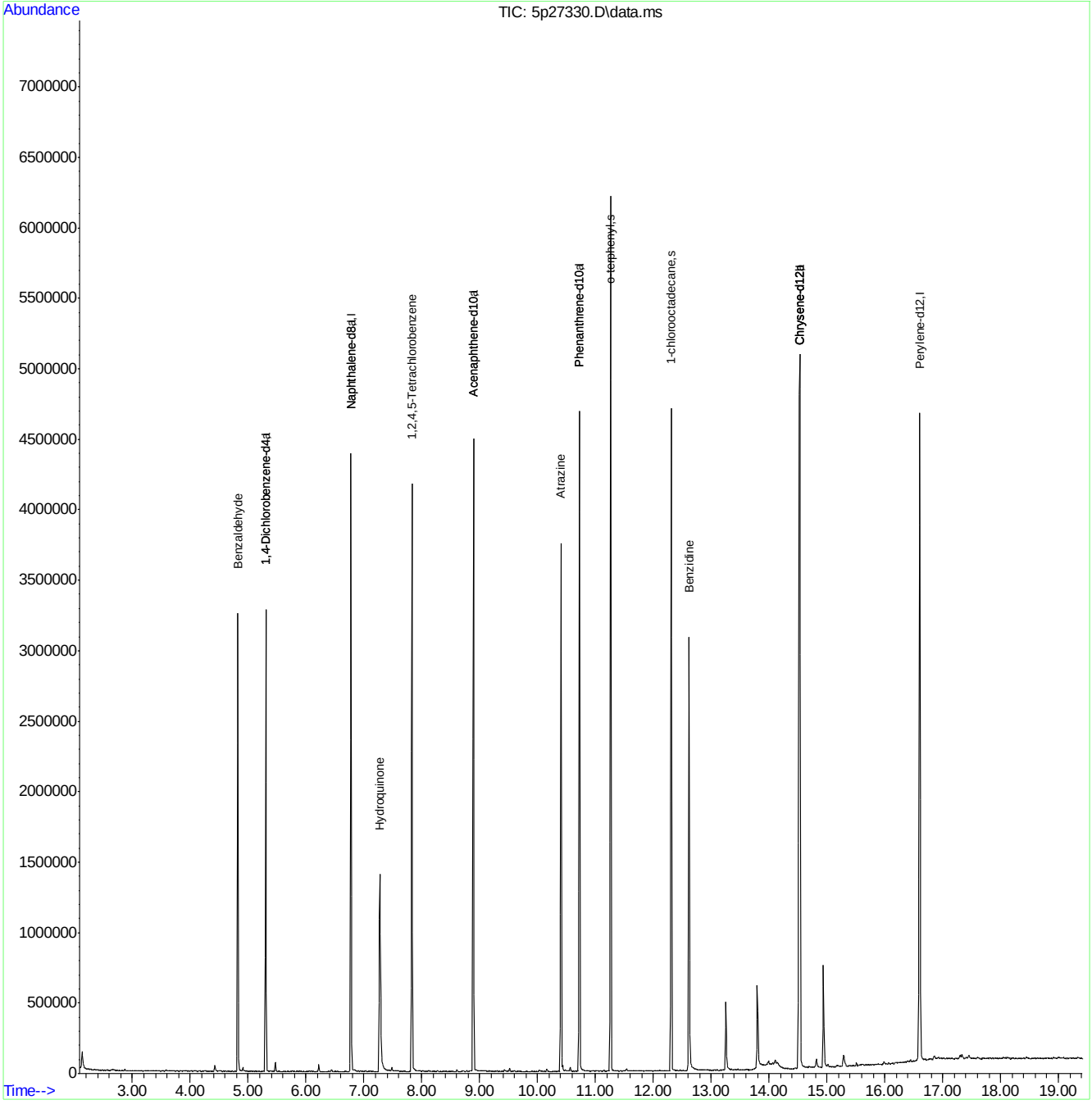
7.6.97

7

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 JC18649

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

7.6.98

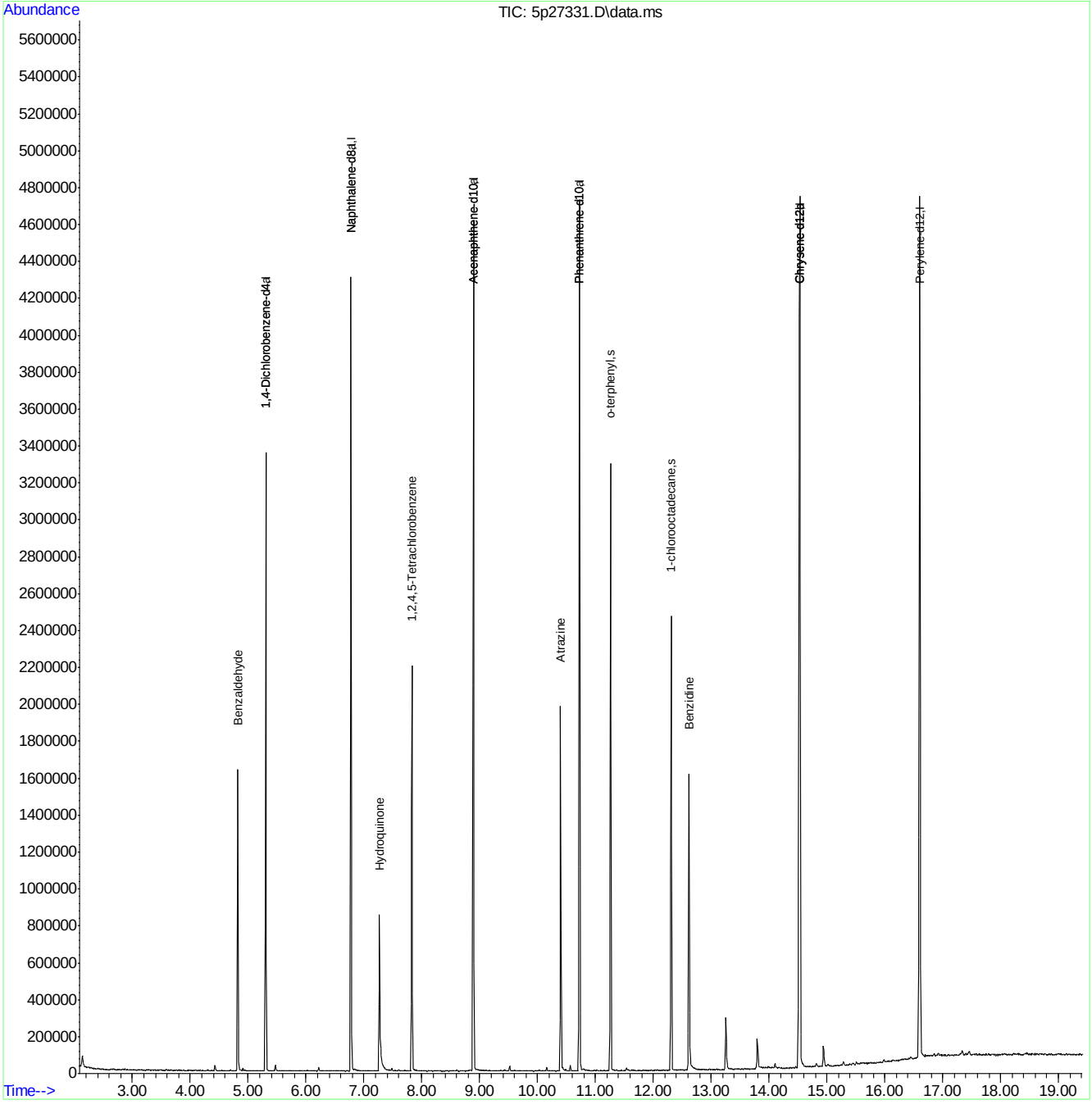
7

SGS ACCUTEST JC18649

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 JC18649

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

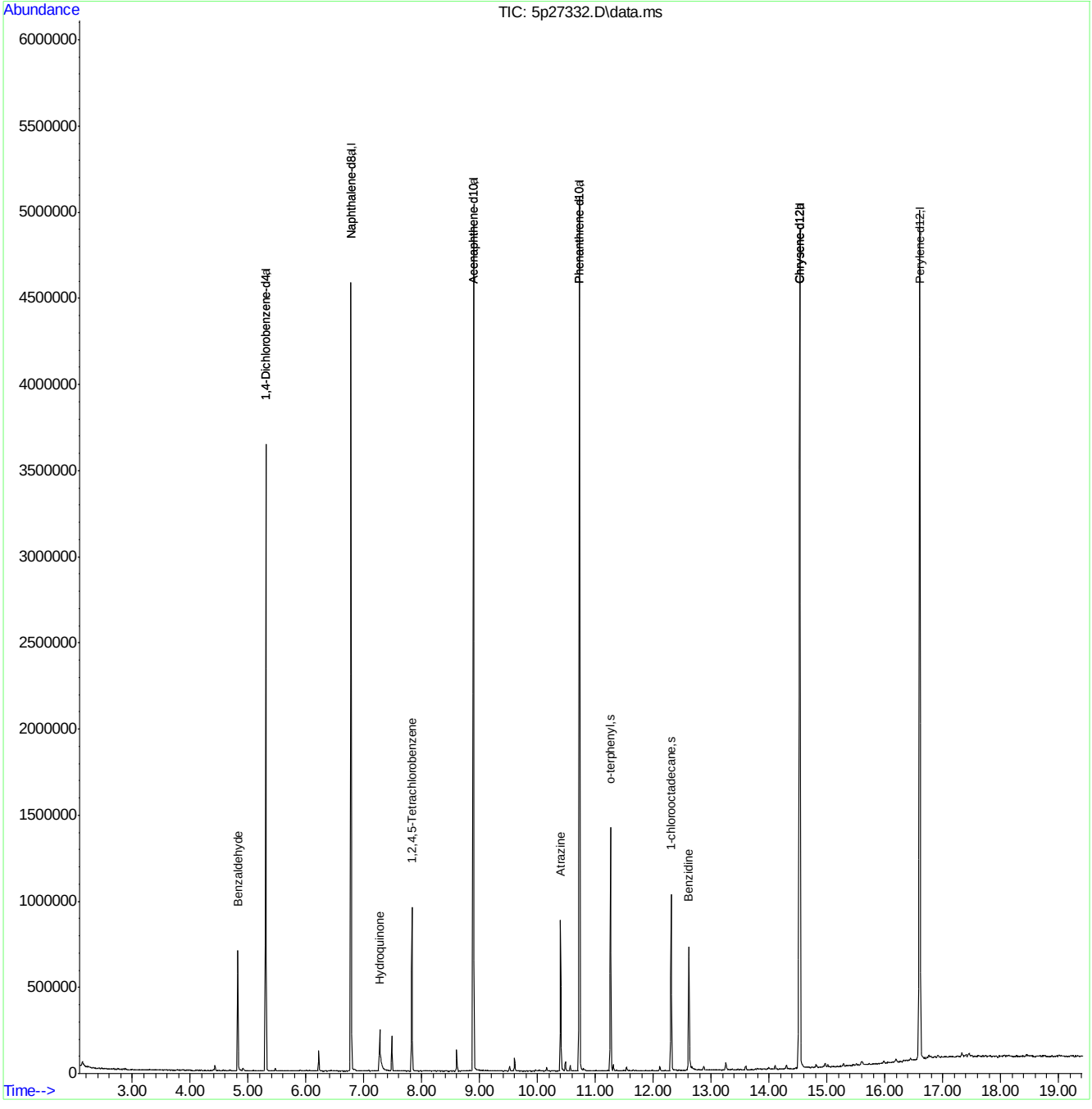
7.6.99

7

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



SGS ACCUTEST JC18649

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

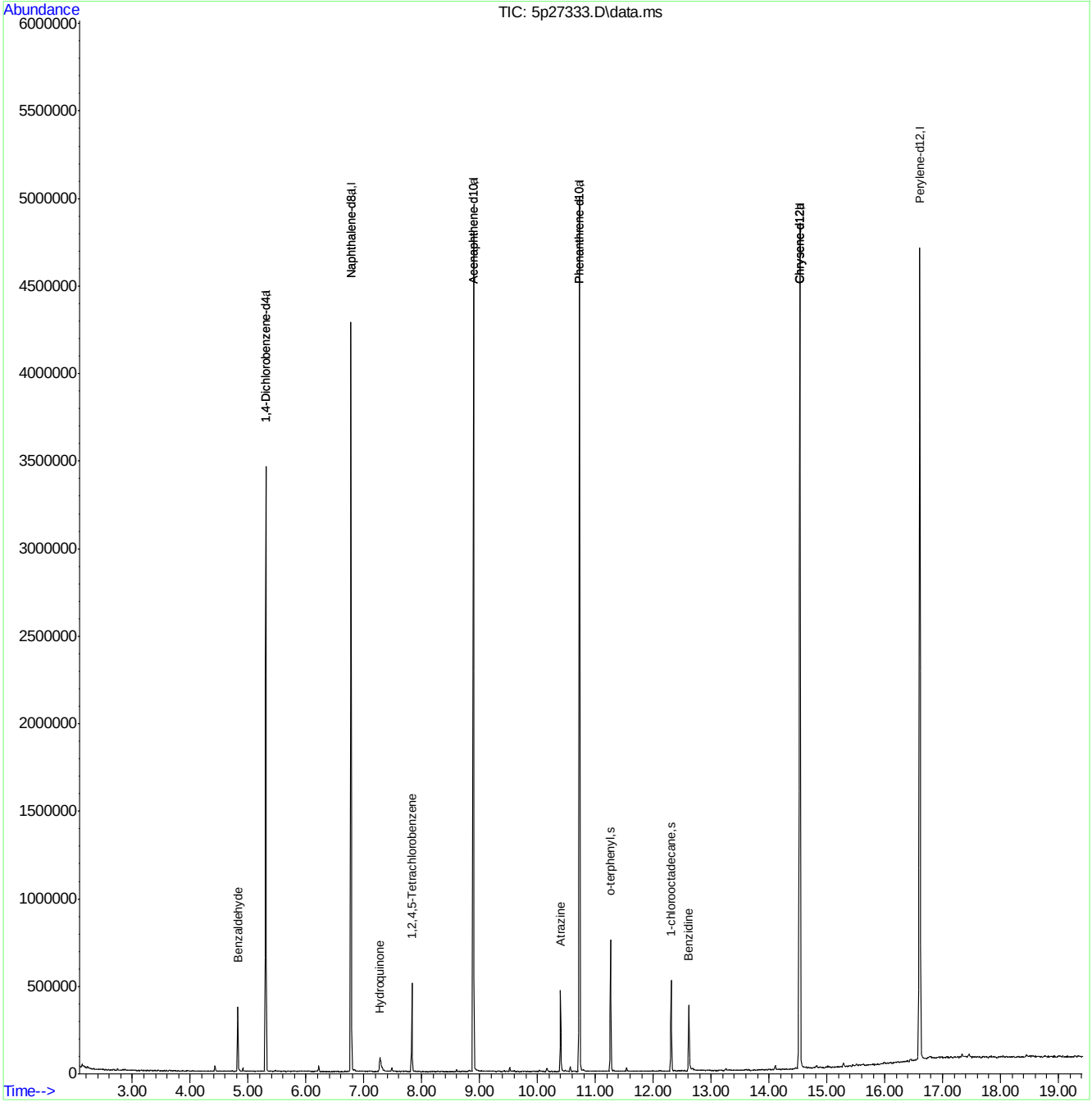
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

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 JC18649

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

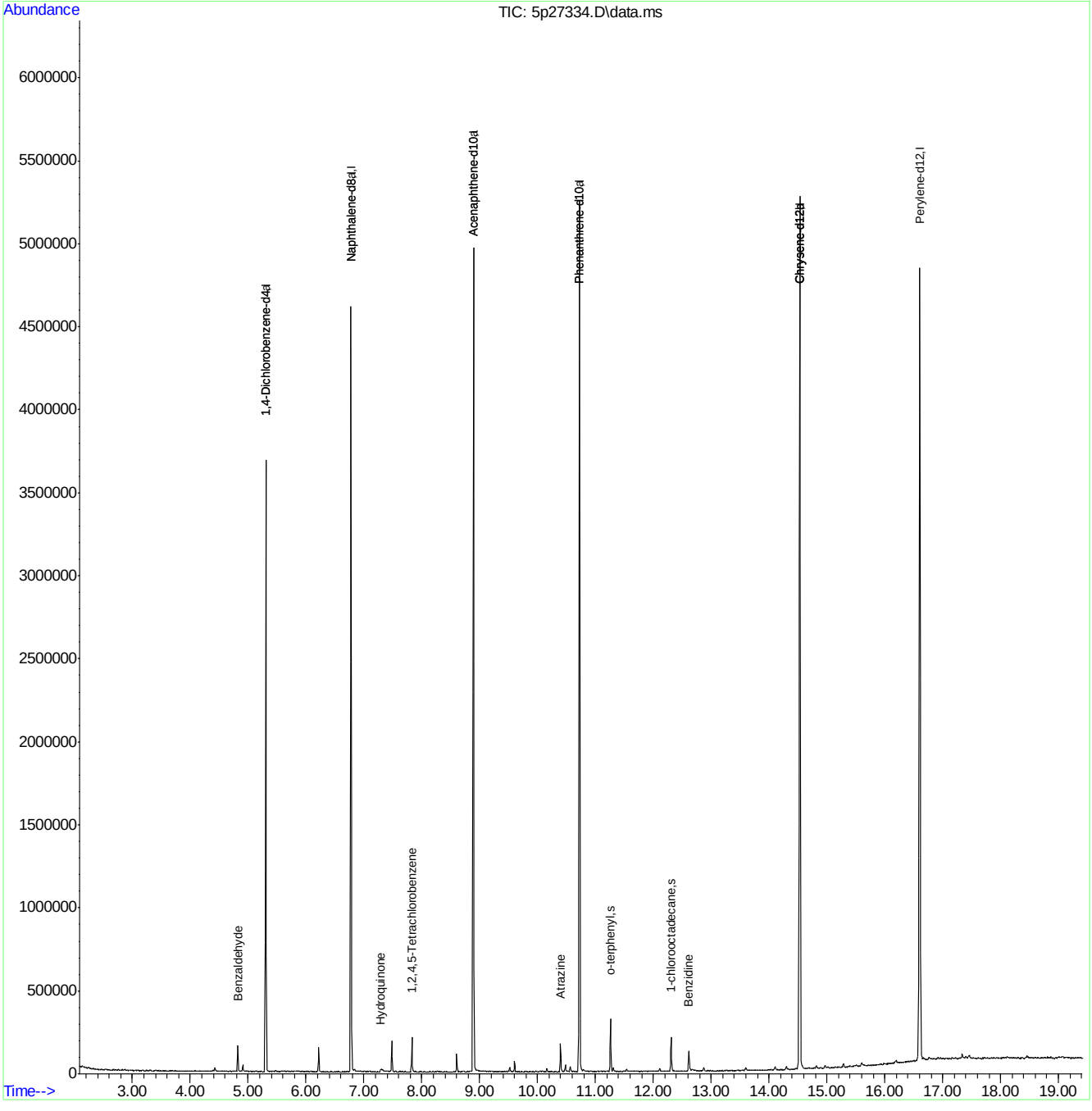
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	578363	40.00	ppm	0.00
24) Naphthalene-d8	6.772	136	2243926	40.00	ppm	0.00
47) Acenaphthene-d10	8.888	164	1166321	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	2145928	40.00	ppm	0.00
83) Chrysene-d12	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

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



SGS ACCUTEST JC18649

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

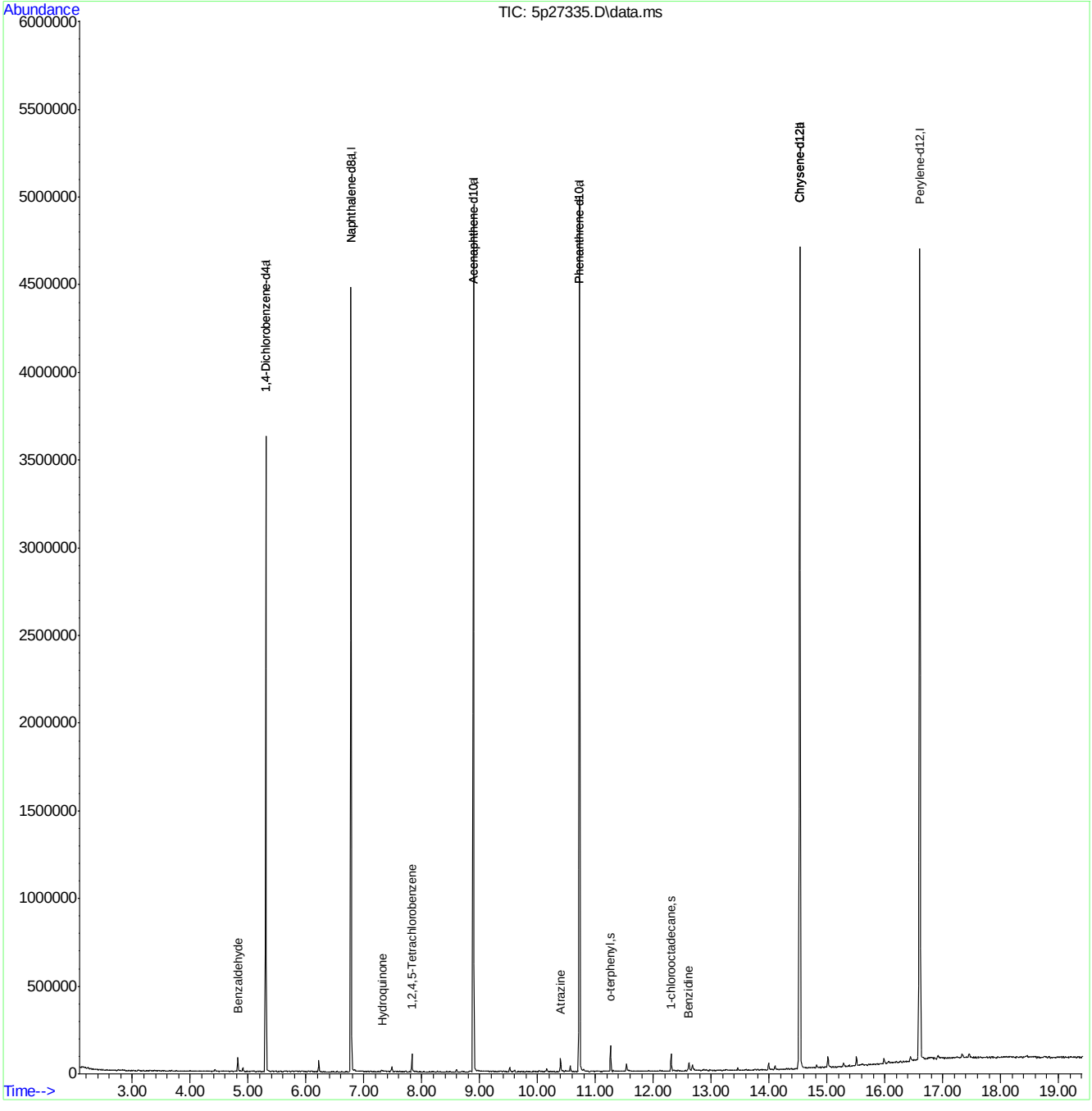
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	535631	40.00	ppm	0.00
24) Naphthalene-d8	6.772	136	2118721	40.00	ppm	0.00
47) Acenaphthene-d10	8.893	164	1106413	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	2038573	40.00	ppm	0.00
83) Chrysene-d12	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

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



M5P1382.M Mon Apr 11 18:46:28 2016 RPT1 Page: 2

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

7.6.103

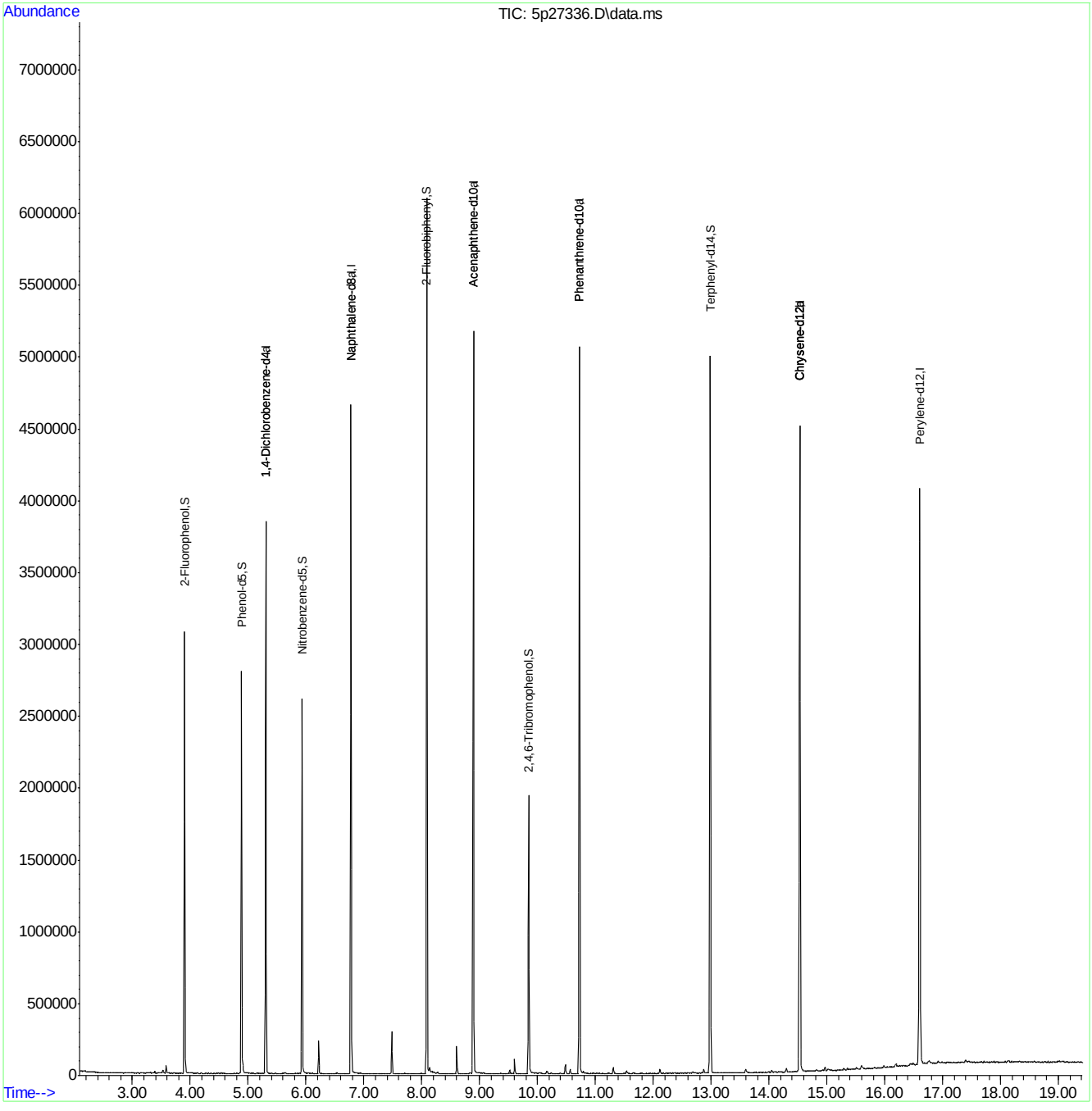
7

SGS ACCUTEST JC18649

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



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

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

7.6.104

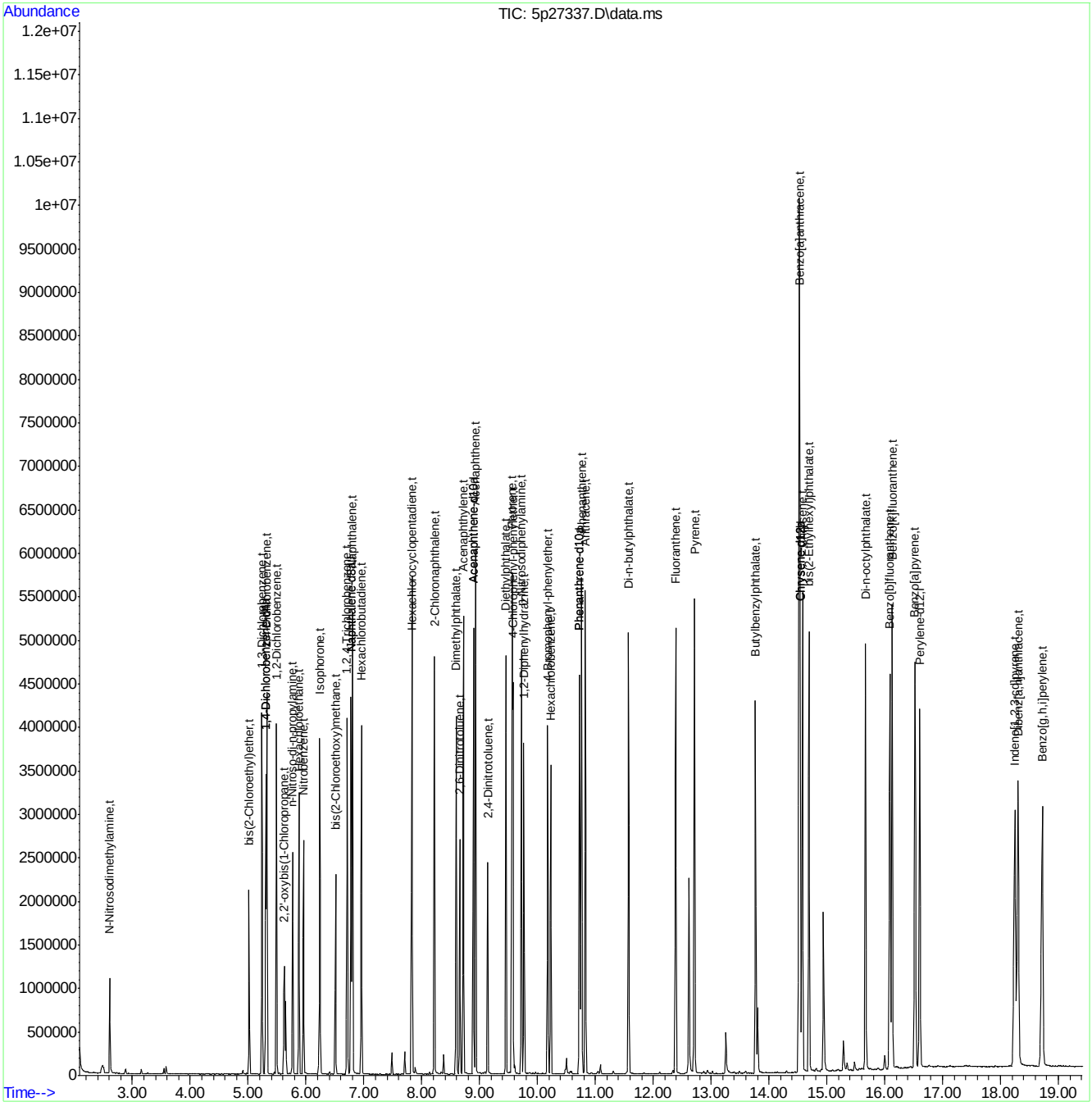
7

SGS ACCUTEST JC18649

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



SGS ACCUTEST JC18649

Manual Integration Approval Summary

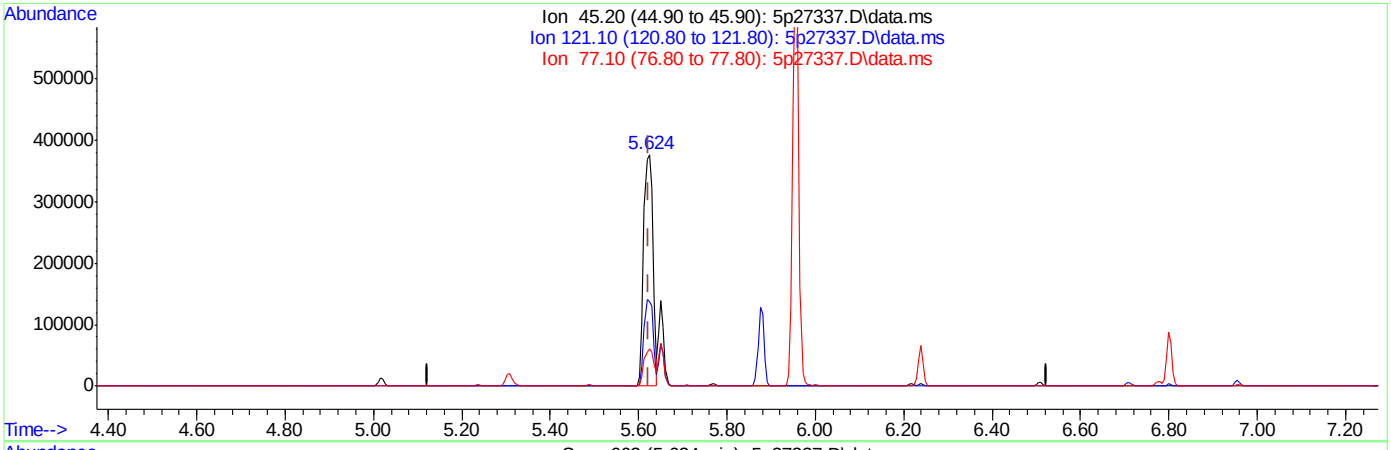
Sample Number:	E5P1383-ICV1382	**Method:**	SW846 8270D
Lab FileID:	5P27337.D	**Analyst approved:**	04/11/16 19:34 Sara Davis
Injection Time:	04/11/16 18:59	**Supervisor approved:**	04/12/16 12:30 Nina Pandya

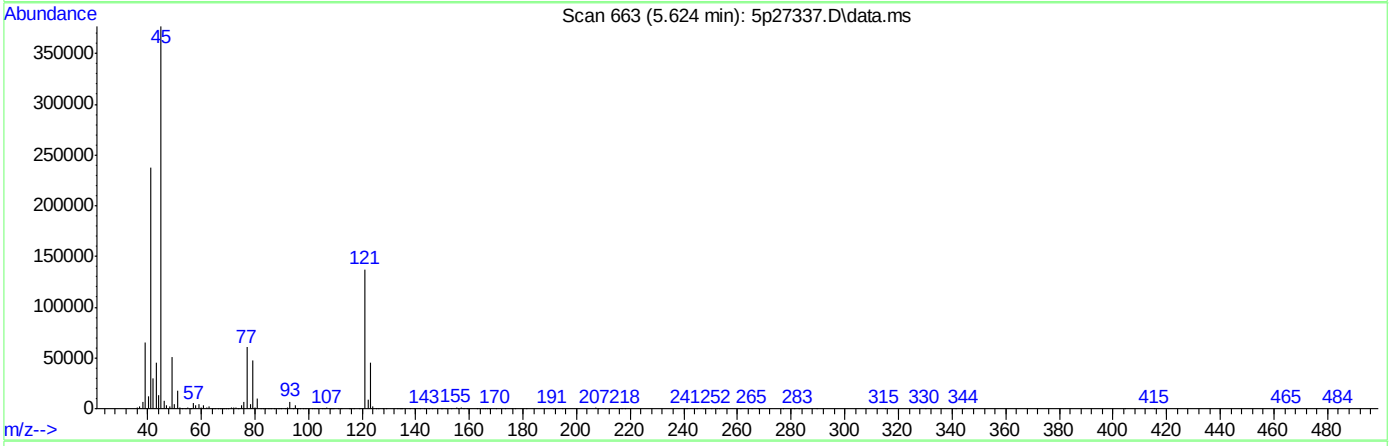
Parameter	CAS	Sig#	R.T. (min.)	Reason
bis(2-Chloroisopropyl)ether	108-60-1		5.62	Split peak

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

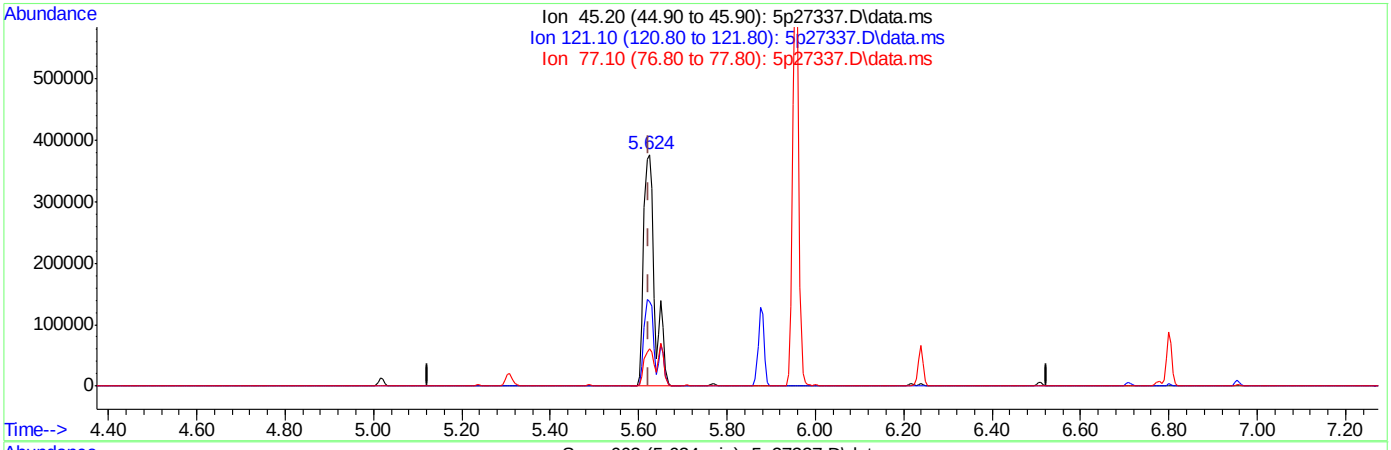
Ion	Exp%	Act%
45.20	100	100
121.10	35.00	35.93
77.10	2.00	13.90
0.00	0.00	0.00

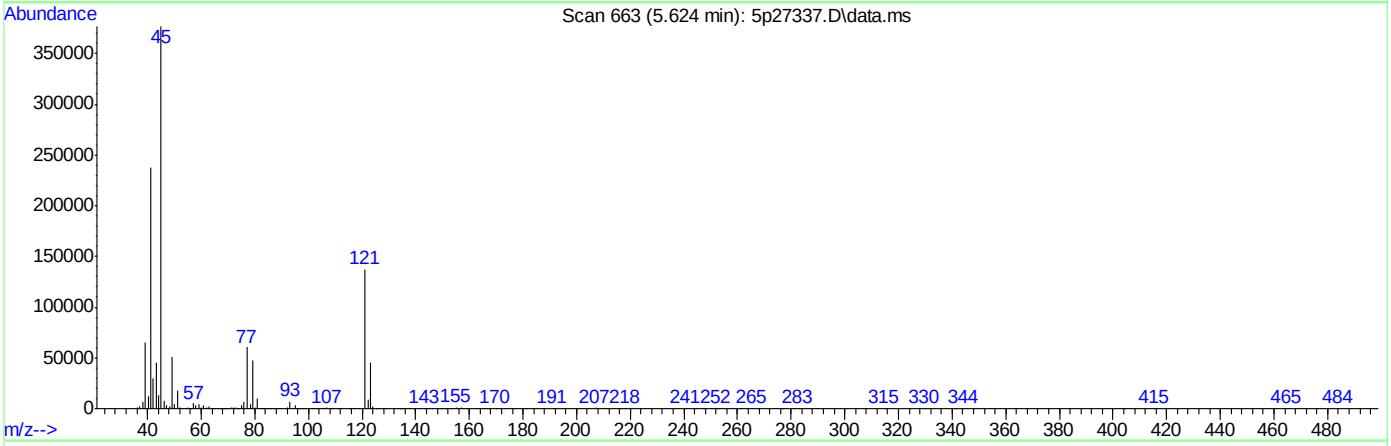
SGS ACCUTEST JC18649

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 JC18649

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

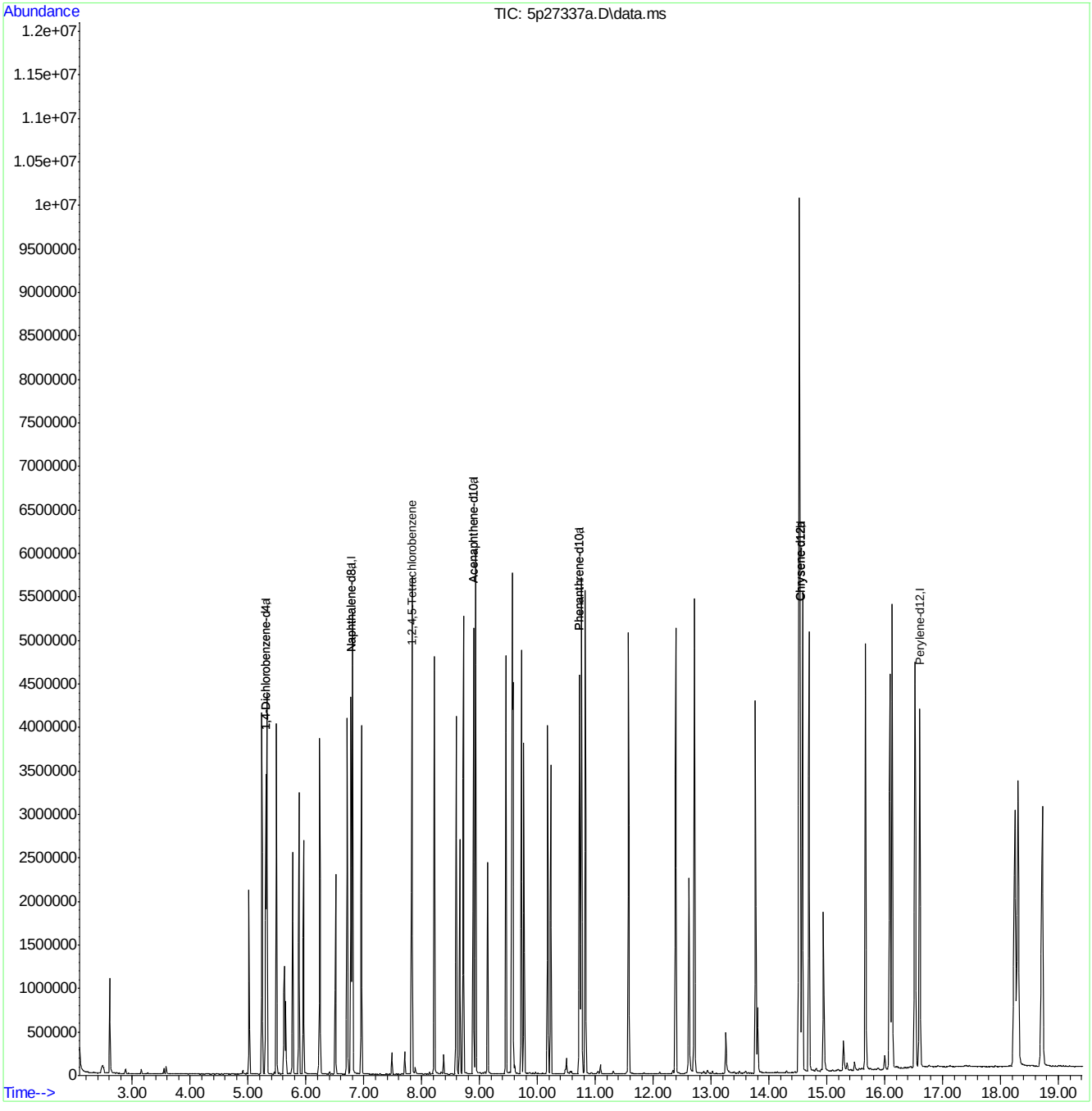
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

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



M5P1382.M Mon Apr 11 19:28:15 2016 RPT1 Page: 2

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

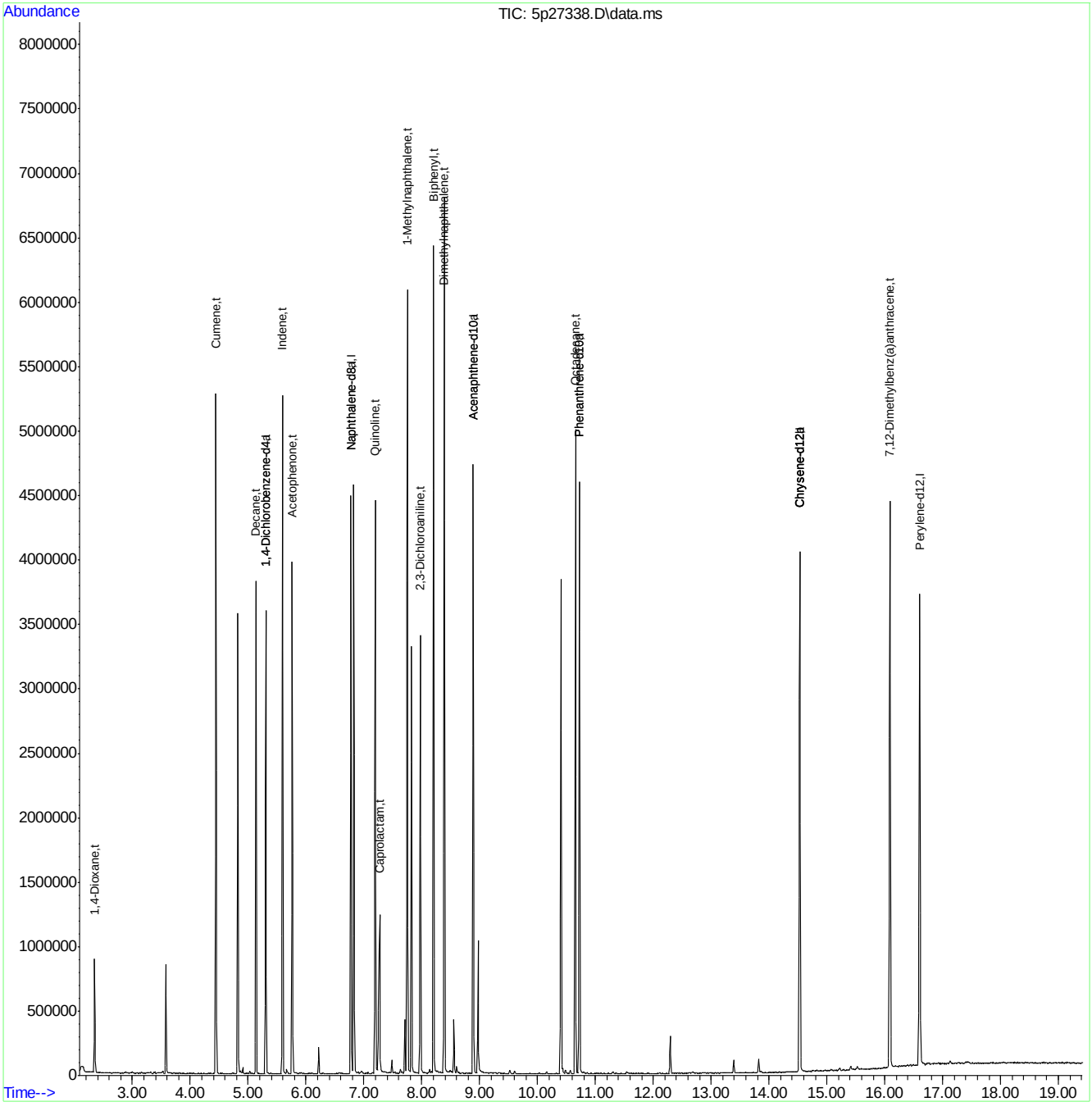
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

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 JC18649

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

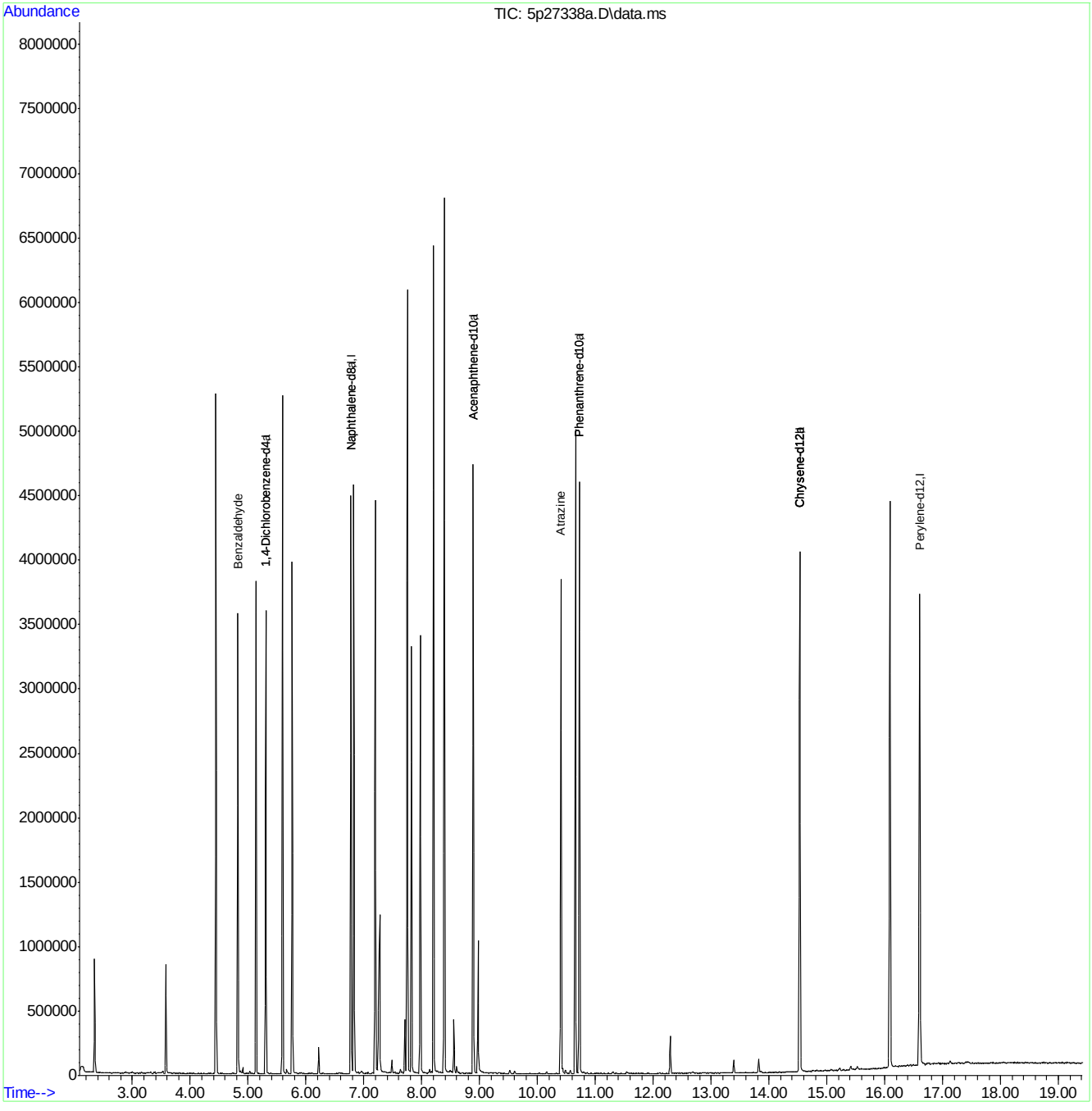
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

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 JC18649

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

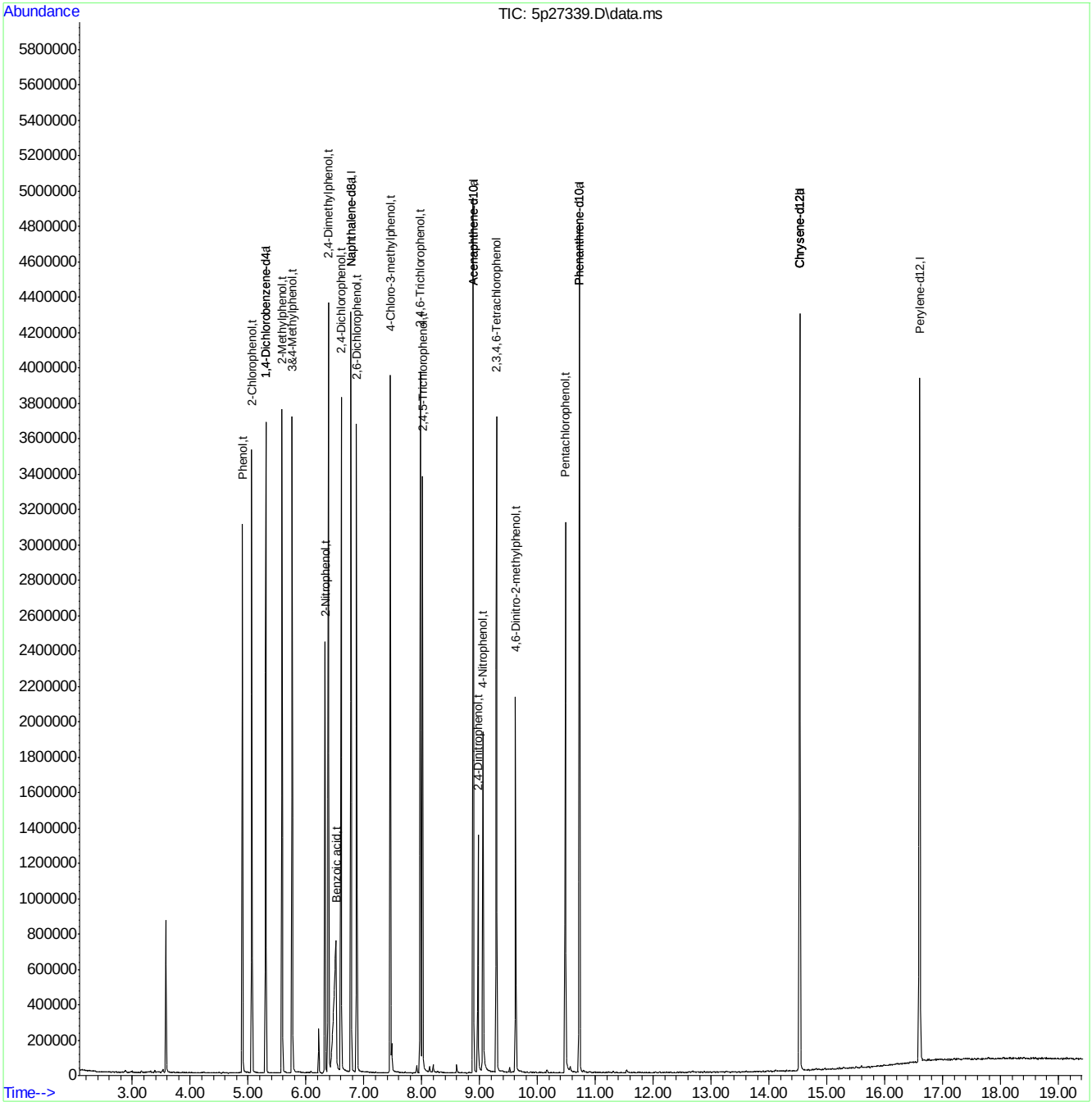
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

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 JC18649

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

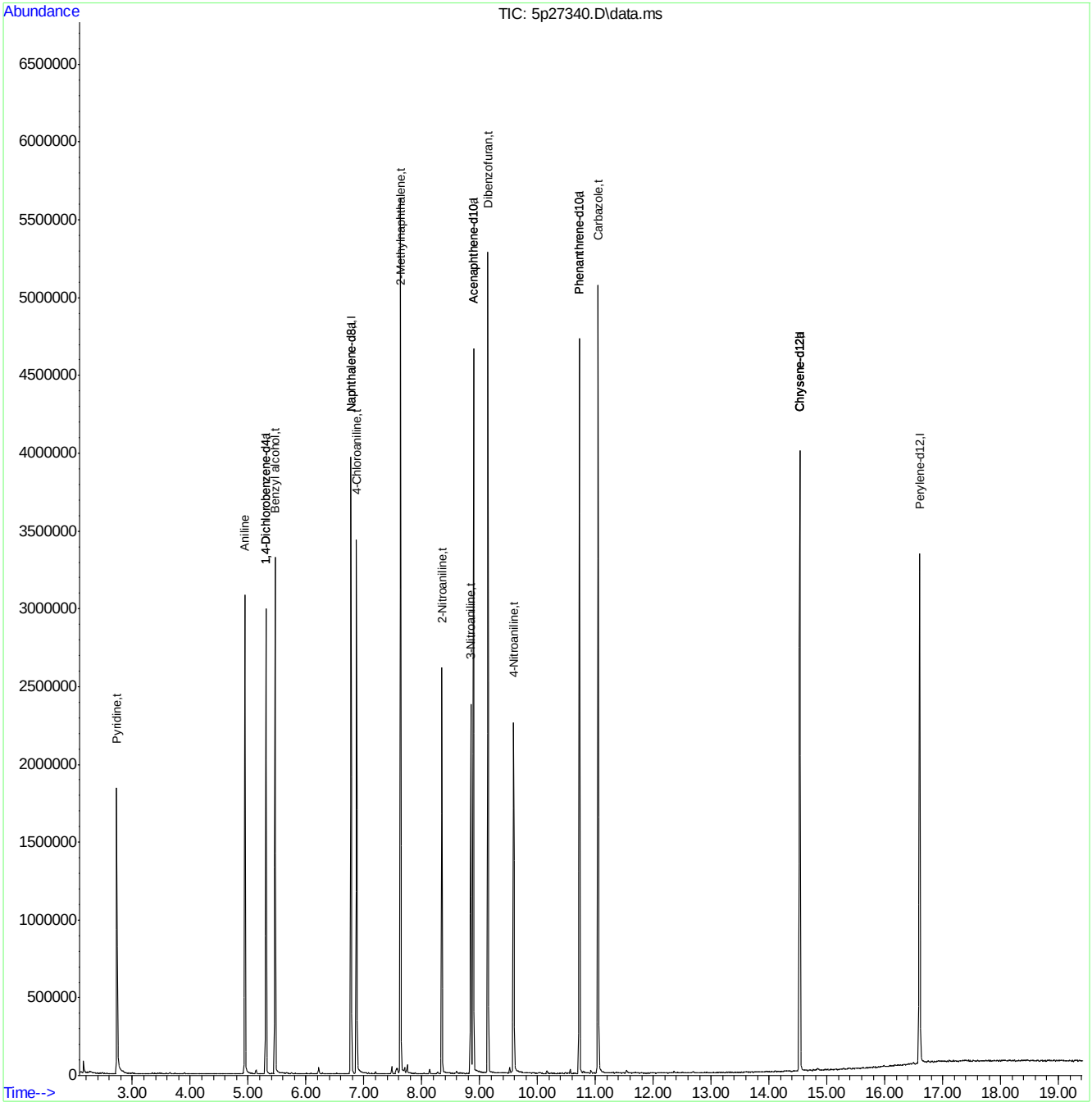
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

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 JC18649

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

7.6.110

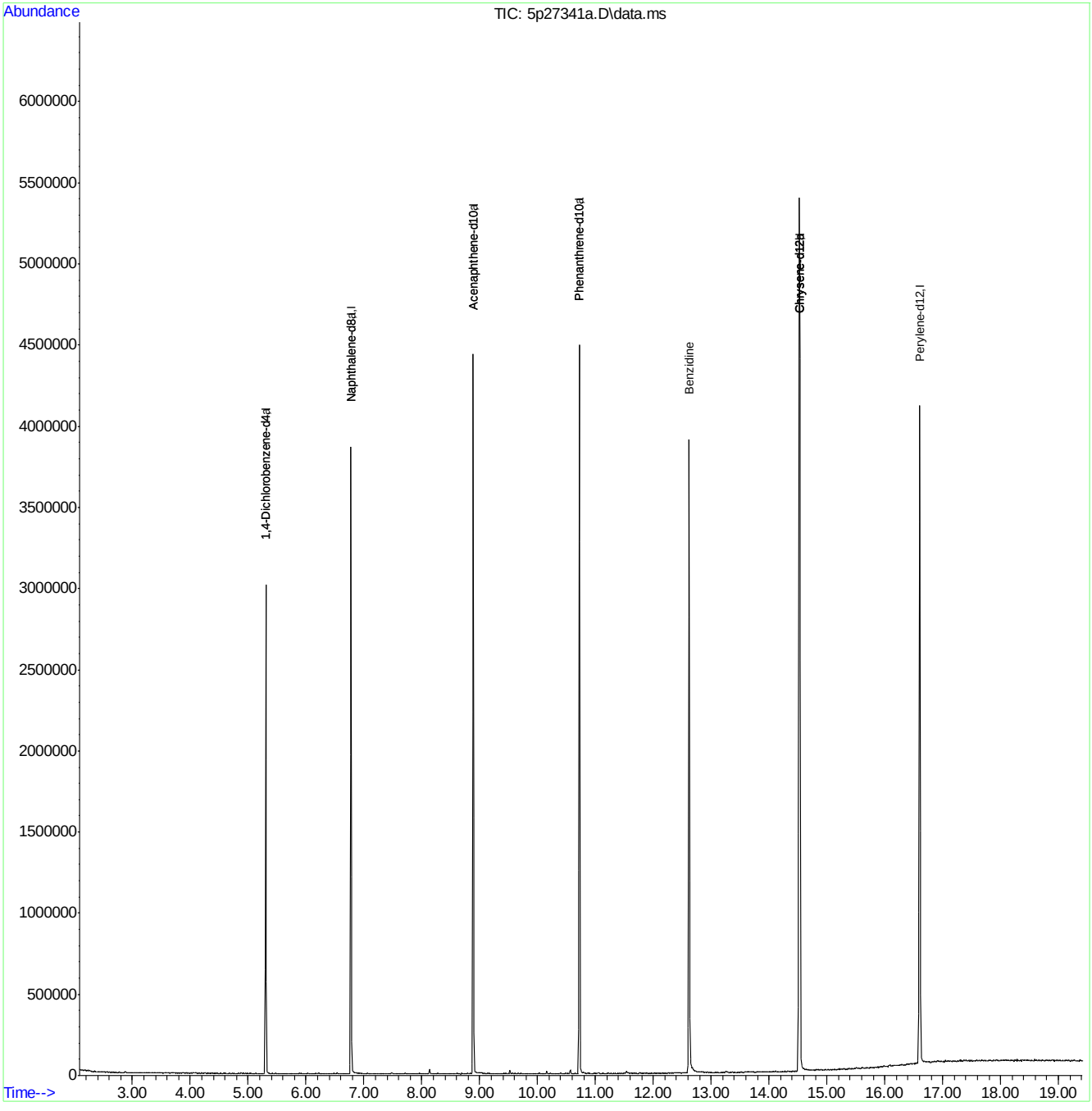
7

SGS ACCUTEST JC18649

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



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

7.6.111

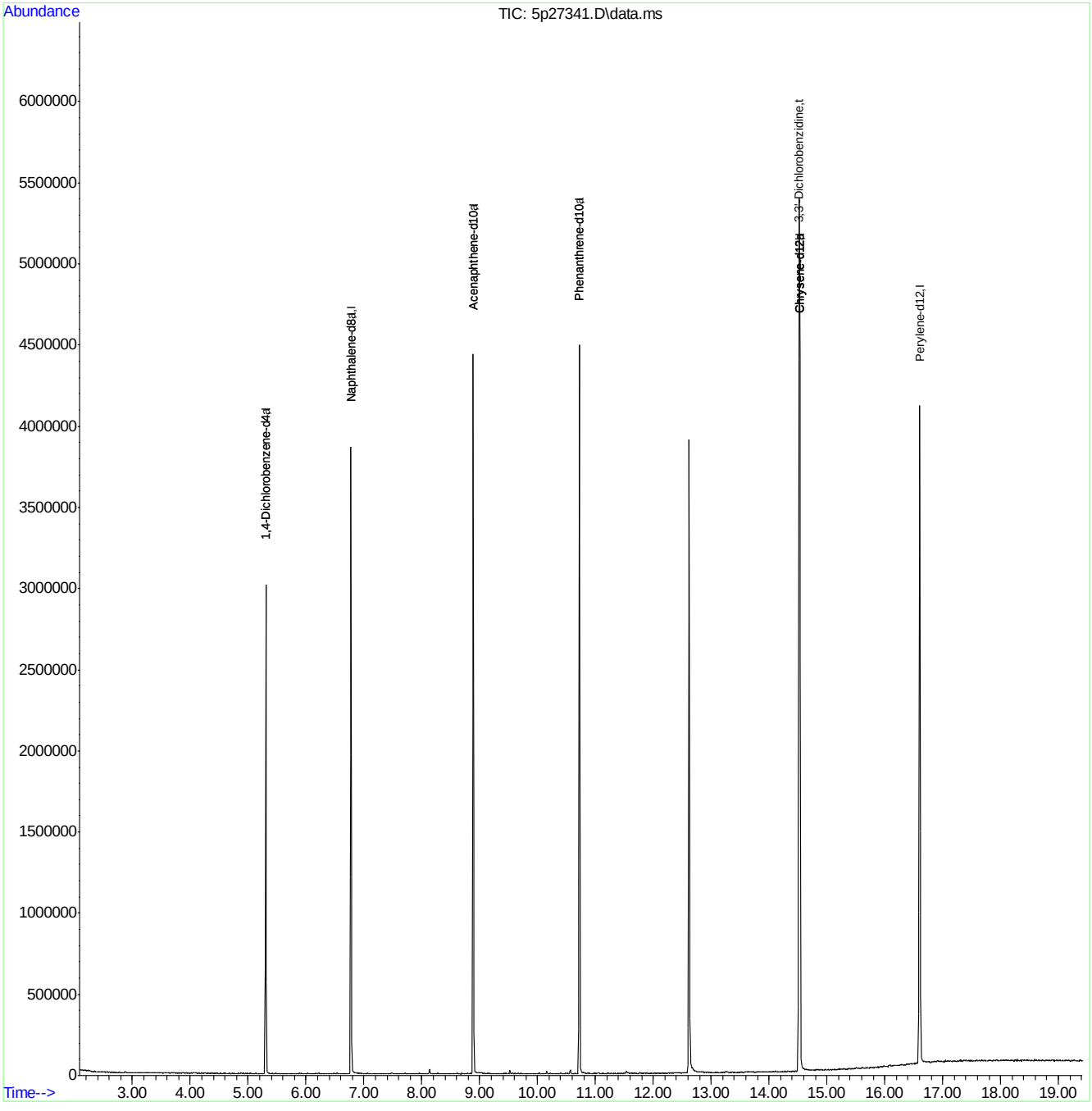
7

SGS ACCUTEST JC18649

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



SGS ACCUTEST JC18649

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

7.6.112

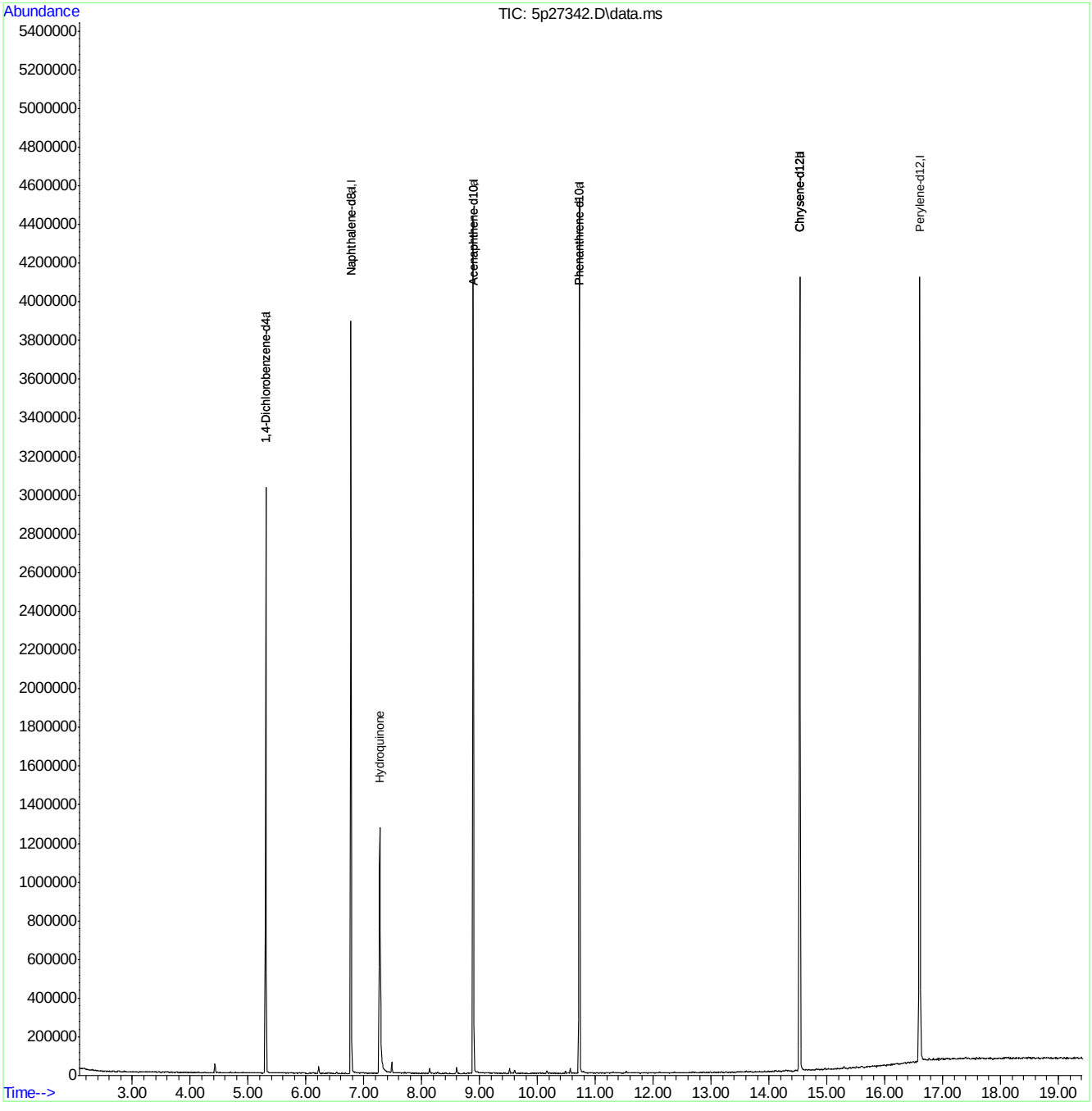
7

SGS ACCUTEST JC18649

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)
Nina Pandya
04/21/16 10:32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27663.D
Acq On : 20 Apr 2016 9:04 pm
Operator : juliusj
Sample : cc1382-25
Misc : op92466,e5p1400
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 07:33:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue Apr 19 22:36:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	5.303	152	464420	40.00 ppm	0.17
24) Naphthalene-d8	6.772	136	1766090	40.00 ppm	0.18
47) Acenaphthene-d10	8.883	164	1010334	40.00 ppm	0.18
69) Phenanthrene-d10	10.720	188	1589454	40.00 ppm	0.19
83) Chrysene-d12	14.519	240	1459728	40.00 ppm	0.20
92) Perylene-d12	16.586	264	1385312	40.00 ppm	0.19
102) 1,4-Dichlorobenzene-d4a	5.303	152	464420	40.00 ppm	0.17
104) Acenaphthene-d10a	8.883	164	1010334	40.00 ppm	0.18
106) Chrysene-d12a	14.519	240	1459728	40.00 ppm	0.20
109) Phenanthrene-d10a	10.720	188	1589454	40.00 ppm	0.19
112) Naphthalene-d8a	6.772	136	1766090	40.00 ppm	0.18
114) Chrysene-d12b	14.519	240	1459728	40.00 ppm	0.20
System Monitoring Compounds					
5) 2-Fluorophenol	3.946	112	350121	24.60 ppm	0.13
Spiked Amount 50.000			Recovery	= 49.20%	
8) Phenol-d5	4.951	99	381814	23.61 ppm	0.14
Spiked Amount 50.000			Recovery	= 47.22%	
25) Nitrobenzene-d5	5.944	82	314463	23.46 ppm	0.17
Spiked Amount 50.000			Recovery	= 46.92%	
51) 2-Fluorobiphenyl	8.081	172	821117	25.53 ppm	0.16
Spiked Amount 50.000			Recovery	= 51.06%	
73) 2,4,6-Tribromophenol	9.850	330	104795	27.31 ppm	0.17
Spiked Amount 50.000			Recovery	= 54.62%	
85) Terphenyl-d14	12.959	244	809653	27.60 ppm	0.18
Spiked Amount 50.000			Recovery	= 55.20%	
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	2.360	88	119934	22.02 ppm	96
3) Pyridine	2.680	79	238085	19.86 ppm	96
4) N-Nitrosodimethylamine	2.643	74	146618	21.82 ppm	91
6) Indene	5.592	116	665603	26.19 ppm	99
7) Cumene	4.427	105	865571	25.26 ppm	98
9) Phenol	4.961	94	414366	24.78 ppm	65
10) Aniline	4.961	93	333617	18.41 ppm #	47
11) bis(2-Chloroethyl)ether	5.026	93	283557	22.85 ppm	99
12) 2-Chlorophenol	5.084	128	410718	25.52 ppm	96
13) Decane	5.106	43	382793	35.93 ppm	80
14) 1,3-Dichlorobenzene	5.234	146	461737	25.85 ppm	98
15) 1,4-Dichlorobenzene	5.319	146	463479	25.73 ppm	98
16) Benzyl alcohol	5.485	108	205037	22.25 ppm	87
17) 1,2-Dichlorobenzene	5.490	146	432185	25.25 ppm	94
18) Acetophenone	5.768	105	500391	25.07 ppm	93
19) 2-Methylphenol	5.629	108	312677	25.51 ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.619	45	488119	34.24 ppm	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27663.D
Acq On : 20 Apr 2016 9:04 pm
Operator : juliusj
Sample : cc1382-25
Misc : op92466,e5p1400
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 07:33:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue Apr 19 22:36:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.805	108	322661	24.75	ppm		89
22) n-Nitroso-di-n-propyla...	5.768	70	212827	23.96	ppm		97
23) Hexachloroethane	5.870	201	140617	24.23	ppm		91
26) Nitrobenzene	5.966	77	310844	23.52	ppm		74
27) Quinoline	7.205	129	762364	24.61	ppm		97
28) Isophorone	6.238	82	539807	23.38	ppm		98
29) 2-Nitrophenol	6.334	139	227863	27.50	ppm		90
30) 2,4-Dimethylphenol	6.414	107	336694	25.90	ppm		93
31) Benzoic acid	6.559	105	214865m	20.23	ppm		
32) bis(2-Chloroethoxy)met...	6.505	93	348008	23.06	ppm		94
33) 2,4-Dichlorophenol	6.634	162	329156	26.16	ppm		91
34) 2,6-Dichlorophenol	6.890	162	315496	25.50	ppm	#	1
35) 1,3,5-Trichlorobenzene	6.329	180	371419	25.63	ppm		97
36) 1,2,4-Trichlorobenzene	6.703	180	354484	25.05	ppm		93
37) 1,2,3-Trichlorobenzene	6.970	180	338527	24.27	ppm		92
38) Naphthalene	6.799	128	1174826	26.25	ppm		97
39) 4-Chloroaniline	6.890	127	410262	21.89	ppm		98
40) 2,3-Dichloroaniline	7.985	161	397432	25.35	ppm		99
41) Caprolactam	7.323	55	148847	29.59	ppm		82
42) Hexachlorobutadiene	6.943	225	183966	25.25	ppm		95
43) 4-Chloro-3-methylphenol	7.510	107	339163	25.23	ppm		96
44) 2-Methylnaphthalene	7.627	141	698935	27.08	ppm		90
45) 1-Methylnaphthalene	7.745	141	728084	27.16	ppm		92
46) Dimethylnaphthalene	8.380	156	713860	25.40	ppm		94
48) Hexachlorocyclopentadiene	7.809	237	337263	53.27	ppm		98
49) 2,4,6-Trichlorophenol	7.990	196	226744	26.36	ppm		98
50) 2,4,5-Trichlorophenol	8.044	196	233653	25.16	ppm		98
52) 2-Chloronaphthalene	8.215	162	723053	25.40	ppm		92
53) Biphenyl	8.193	154	971504	26.35	ppm		97
54) 2-Nitroaniline	8.375	65	204938	28.63	ppm		81
55) Dimethylphthalate	8.594	163	859101	25.46	ppm		99
56) Acenaphthylene	8.712	152	1209651	26.74	ppm		97
57) 2,6-Dinitrotoluene	8.664	165	184464	26.55	ppm		94
58) 3-Nitroaniline	8.877	138	198415	24.56	ppm		89
59) Acenaphthene	8.920	153	749327	25.90	ppm		96
60) 2,4-Dinitrophenol	8.995	184	159308	40.10	ppm		91
61) 4-Nitrophenol	9.144	109	111642	27.22	ppm	#	6
62) Dibenzofuran	9.134	168	1030865	26.18	ppm		98
63) 2,4-Dinitrotoluene	9.150	165	266403	28.70	ppm		100
64) 2,3,4,6-Tetrachlorophenol	9.305	232	173912	23.74	ppm		84
65) Diethylphthalate	9.444	149	912964	26.48	ppm		95
66) Fluorene	9.550	166	839185	25.86	ppm		97
67) 4-Chlorophenyl-phenyle...	9.561	204	366666	23.99	ppm		83
68) 4-Nitroaniline	9.625	138	187527	22.96	ppm		95
70) 4,6-Dinitro-2-methylph...	9.636	198	122498	24.11	ppm		92
71) n-Nitrosodiphenylamine	9.716	169	617333	26.95	ppm		96
72) 1,2-Diphenylhydrazine	9.753	77	583135	24.54	ppm		72
74) 4-Bromophenyl-phenylether	10.159	248	216843	24.63	ppm		88
75) Hexachlorobenzene	10.213	284	231290	25.87	ppm		98
76) Pentachlorophenol	10.491	266	279455	51.25	ppm		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27663.D
Acq On : 20 Apr 2016 9:04 pm
Operator : juliusj
Sample : cc1382-25
Misc : op92466,e5p1400
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 07:33:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue Apr 19 22:36:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.747	178	1124225	25.18	ppm	98
78) Anthracene	10.817	178	1141833	25.45	ppm	99
79) Carbazole	11.057	167	1096539	25.96	ppm	94
80) Di-n-butylphthalate	11.538	149	1494375	27.92	ppm	99
81) Fluoranthene	12.371	202	1156403	25.06	ppm	96
82) Octadecane	10.592	57	539764	36.66	ppm	75
84) Pyrene	12.697	202	1190609	26.50	ppm	98
86) Butylbenzylphthalate	13.728	149	633935	28.76	ppm	79
87) Butyl stearate	13.835	56	350111	39.03	ppm	74
88) Benzo[a]anthracene	14.503	228	1067861	26.45	ppm	97
89) 3,3'-Dichlorobenzidine	14.508	252	404867	27.38	ppm	94
90) Chrysene	14.556	228	1053826	25.57	ppm	100
91) bis(2-Ethylhexyl)phtha...	14.615	149	887873	28.41	ppm	99
93) Di-n-octylphthalate	15.582	149	1557979	32.42	ppm	99
94) Benzo[b]fluoranthene	16.063	252	1150629	28.47	ppm	96
95) Benzo[k]fluoranthene	16.105	252	1070828	27.72	ppm	97
96) Benzo[a]pyrene	16.506	252	985630	27.20	ppm	96
97) Indeno[1,2,3-cd]pyrene	18.210	276	1025388	28.85	ppm	94
98) Dibenz(a,h)acridine	17.836	279	923430	29.37	ppm	98
99) Dibenz[a,h]anthracene	18.253	278	1069754	28.80	ppm	95
100) 7,12-Dimethylbenz(a)an...	16.063	256	472211	30.36	ppm	97
101) Benzo[g,h,i]perylene	18.686	276	1048478	27.76	ppm	98

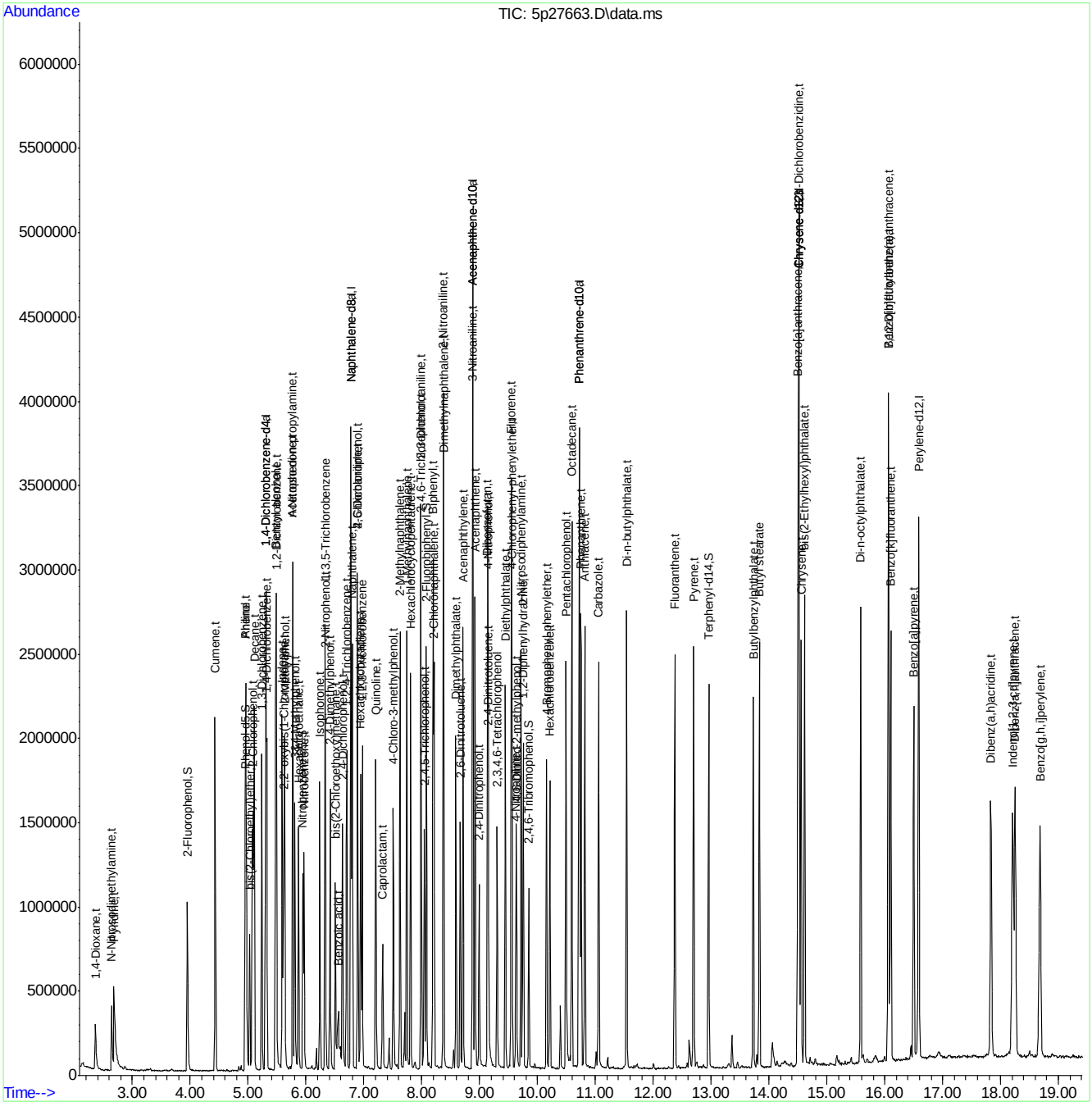
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27663.D
Acq On : 20 Apr 2016 9:04 pm
Operator : juliusj
Sample : cc1382-25
Misc : op92466,e5p1400
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 21 07:33:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue Apr 19 22:36:29 2016
Response via : Initial Calibration



Manual Integration Approval Summary

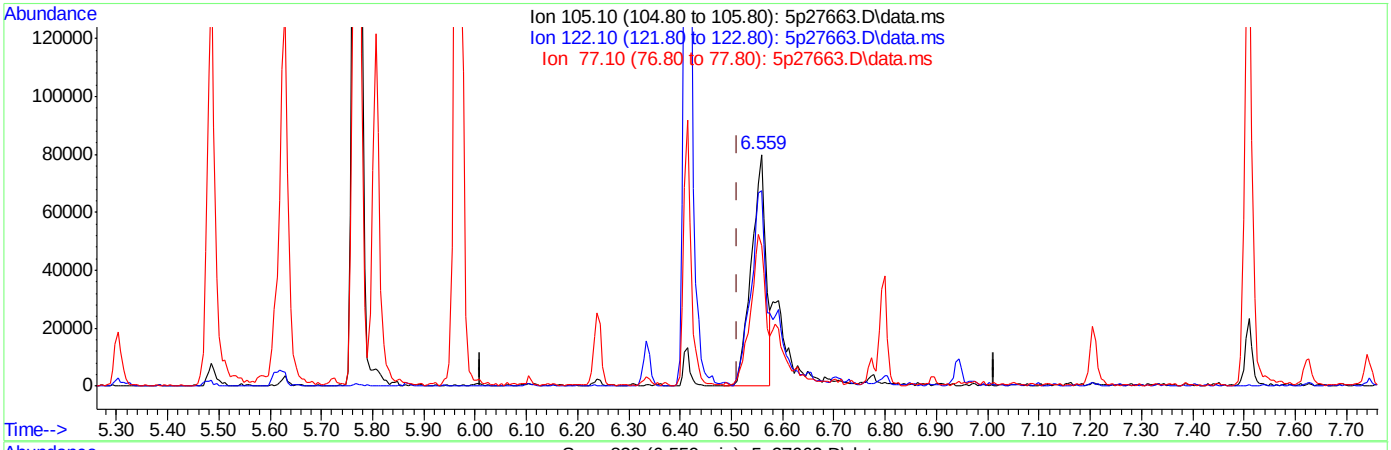
Sample Number:	E5P1400-CC1382	**Method:**	SW846 8270D
Lab FileID:	5P27663.D	**Analyst approved:**	04/21/16 09:06 Kristi Schollenberger
Injection Time:	04/20/16 21:04	**Supervisor approved:**	04/21/16 10:32 Nina Pandya

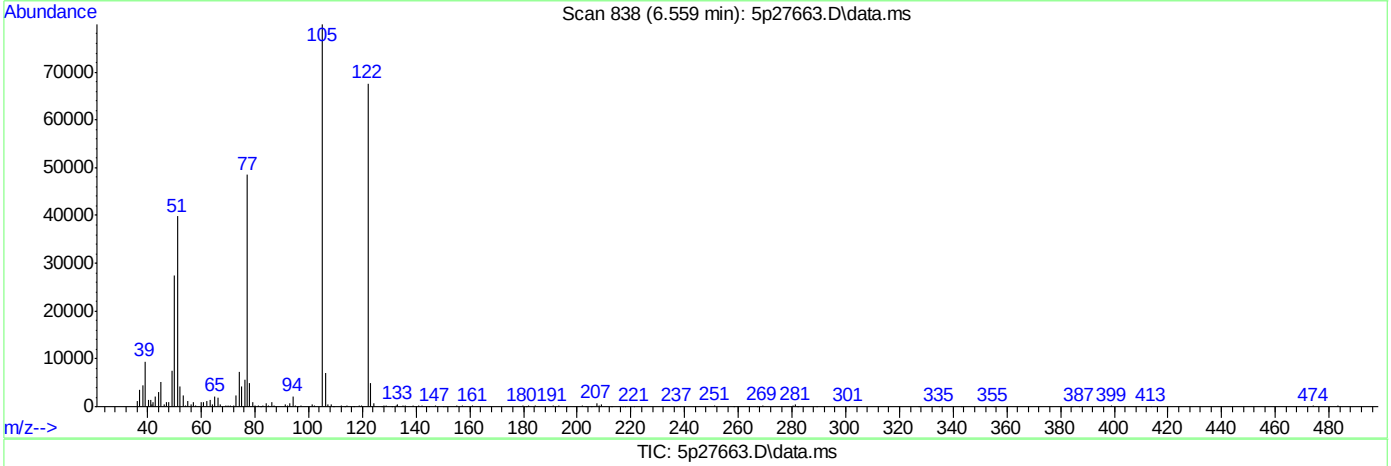
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.56	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27663.D
Acq On : 20 Apr 2016 9:04 pm
Operator : juliusj
Sample : cc1382-25
Misc : op92466,e5p1400
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 21:24:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue Apr 19 22:36:29 2016
Response via : Initial Calibration





(31) Benzoic acid (t)

6.559min (+0.047) 14.78ppm

response 156982

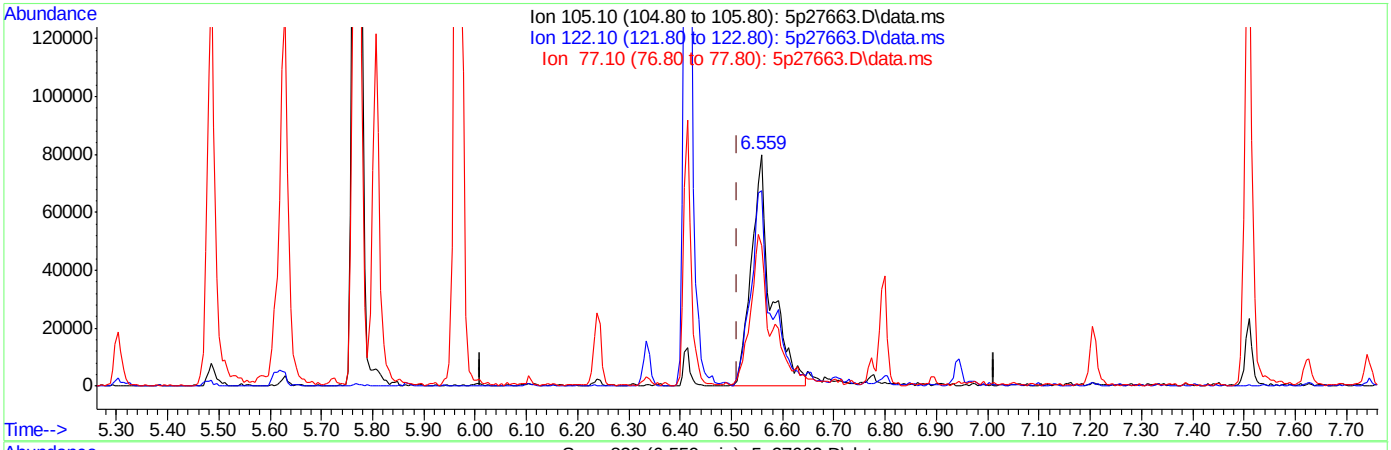
Ion	Exp%	Act%
105.10	100	100
122.10	68.20	81.36
77.10	77.50	59.20
0.00	0.00	0.00

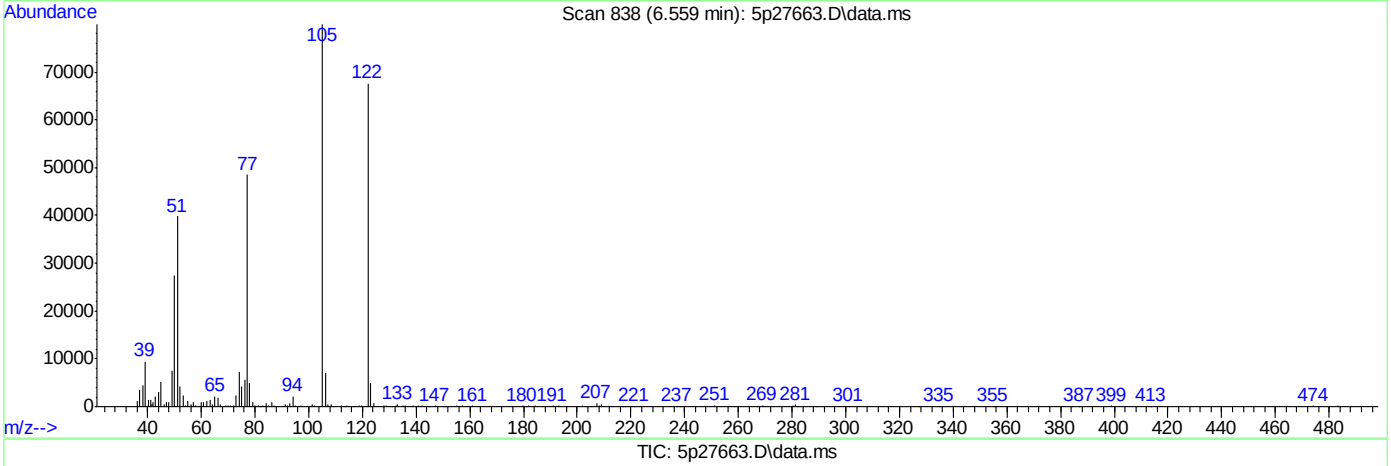
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27663.D
Acq On : 20 Apr 2016 9:04 pm
Operator : juliusj
Sample : cc1382-25
Misc : op92466,e5p1400
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 21:24:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue Apr 19 22:36:29 2016
Response via : Initial Calibration





TIC: 5p27663.D\data.ms

(31) Benzoic acid (t)

6.559min (+0.047) 20.23ppm m

response 214865

Ion	Exp%	Act%
105.10	100	100
122.10	68.20	84.52
77.10	77.50	60.59
0.00	0.00	0.00

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27664.D
Acq On : 20 Apr 2016 9:32 pm
Operator : juliusj
Sample : cc1383-25
Misc : op92466,e5p1400
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 07:39:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue Apr 19 22:36:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	437760	40.00	ppm	0.17
24) Naphthalene-d8	6.772	136	1679669	40.00	ppm	0.18
47) Acenaphthene-d10	8.883	164	887565	40.00	ppm	0.18
69) Phenanthrene-d10	10.720	188	1519707	40.00	ppm	0.19
83) Chrysene-d12	14.513	240	1472437	40.00	ppm	0.19
92) Perylene-d12	16.581	264	1416501	40.00	ppm	0.19
102) 1,4-Dichlorobenzene-d4a	5.303	152	437760	40.00	ppm	0.17
104) Acenaphthene-d10a	8.883	164	887565	40.00	ppm	0.18
106) Chrysene-d12a	14.513	240	1472437	40.00	ppm	0.19
109) Phenanthrene-d10a	10.720	188	1519707	40.00	ppm	0.19
112) Naphthalene-d8a	6.772	136	1679669	40.00	ppm	0.18
114) Chrysene-d12b	14.513	240	1472437	40.00	ppm	0.19
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	12.238	57	330813	39.41	ppm	0.11
Spiked Amount 50.000			Recovery	=	78.82%	
110) o-terphenyl	11.244	230	538638	25.83	ppm	0.18
Spiked Amount 50.000			Recovery	=	51.66%	
Target Compounds						Qvalue
103) Benzaldehyde	4.833	105	256973	24.18	ppm	91
105) 1,2,4,5-Tetrachloroben...	7.819	216	285775	23.30	ppm	98
107) Benzidine	12.622	184	363488	18.58	ppm	97
111) Atrazine	10.394	215	103211	26.37	ppm	88
113) Hydroquinone	7.355	110	286964	24.10	ppm	93

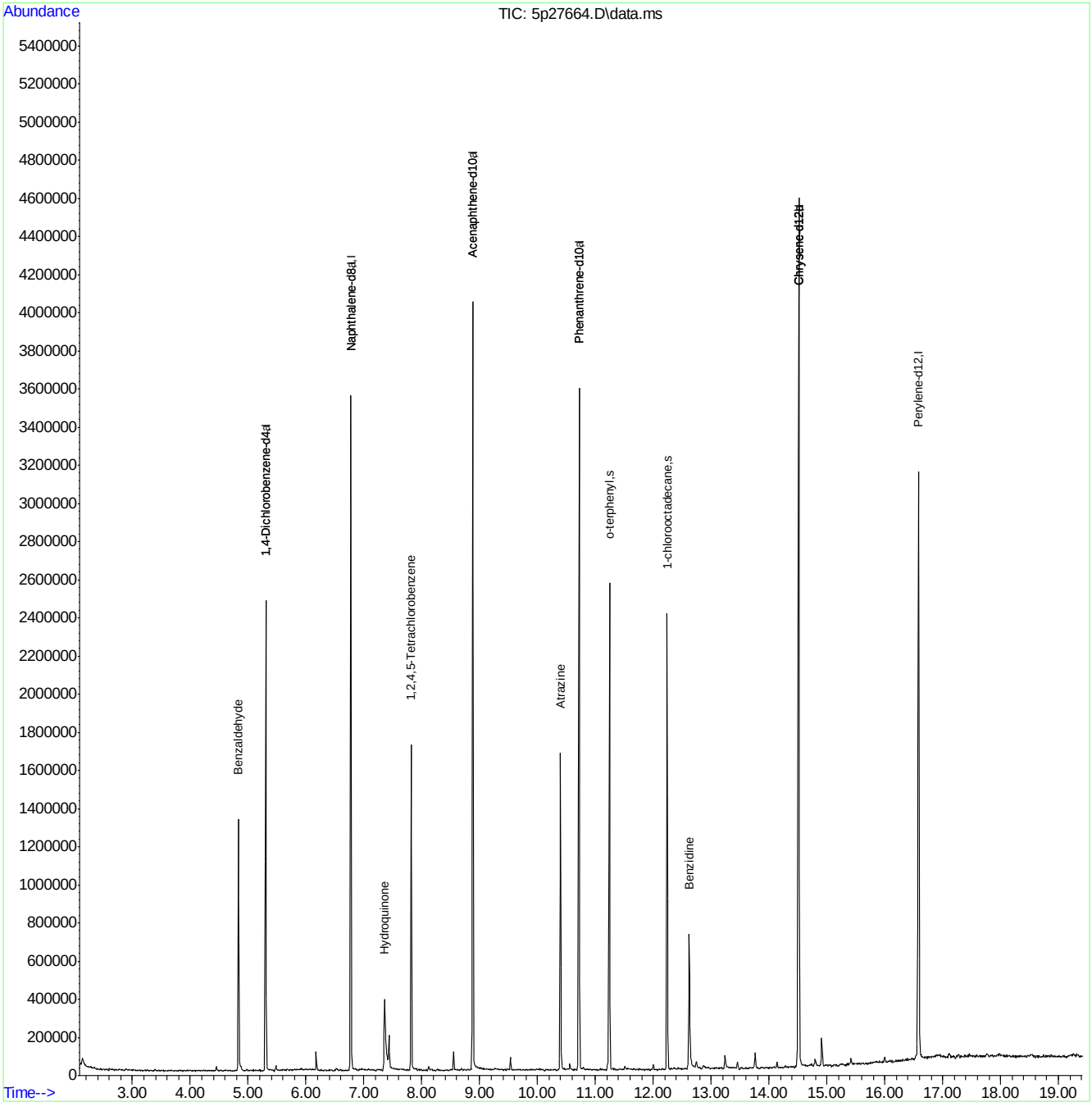
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1400\
Data File : 5p27664.D
Acq On : 20 Apr 2016 9:32 pm
Operator : juliusj
Sample : cc1383-25
Misc : op92466,e5p1400
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 21 07:39:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue Apr 19 22:36:29 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/14/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109741.D
Acq On : 13 Apr 2016 9:35 pm
Operator : sarad
Sample : ic5485-2
Misc : op92825,ez5485
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 08:37:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:35:11 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.333	152	286261	40.00	ppm	0.00
24) Naphthalene-d8	5.257	136	1144798	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	617652	40.00	ppm	0.00
69) Phenanthrene-d10	8.222	188	975213	40.00	ppm	0.00
83) Chrysene-d12	13.217	240	885274	40.00	ppm	0.00
92) Perylene-d12	16.214	264	884518	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.333	152	286261	40.00	ppm	0.00
104) Phenanthrene-d10a	8.222	188	975213	40.00	ppm	0.00
108) Chrysene-d12a	13.217	240	885274	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	617652	40.00	ppm	0.00
112) Naphthalene-d8a	5.257	136	1144798	40.00	ppm	0.00
114) Chrysene-d12b	13.217	240	885274	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.414	112	21197	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
8) Phenol-d5	4.162	99	24198	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
25) Nitrobenzene-d5	4.755	82	20232	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
51) 2-Fluorobiphenyl	6.021	172	42388	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
73) 2,4,6-Tribromophenol	7.351	330	6212	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
86) Terphenyl-d14	11.064	244	42565	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
105) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.811	88	10640m	2.89	ppm	
4) N-Nitrosodimethylamine	2.169	74	14977	2.00	ppm	100
6) Indene	4.520	116	41978	2.00	ppm	100
7) Cumene	3.719	105	48964	2.00	ppm	100
9) Phenol	4.167	94	25718	2.00	ppm	100
10) Aniline	4.125	93	30934	2.00	ppm	100
11) bis(2-Chloroethyl)ether	4.151	93	17569	2.00	ppm	100
12) 2-Chlorophenol	4.210	128	25488	2.00	ppm	100
13) Decane	4.194	43	22450	2.01	ppm	99
14) 1,3-Dichlorobenzene	4.290	146	27059	2.00	ppm	100
15) 1,4-Dichlorobenzene	4.344	146	22438	2.00	ppm	100
16) Benzyl alcohol	4.472	108	10226	2.00	ppm	100
17) 1,2-Dichlorobenzene	4.461	146	24838	2.00	ppm	100
18) Acetophenone	4.643	105	29110	2.00	ppm	100
19) 2-Methylphenol	4.584	108	19331	2.03	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.536	121	7208	2.00	ppm	100
21) 3&4-Methylphenol	4.701	108	20762	1.90	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109741.D
Acq On : 13 Apr 2016 9:35 pm
Operator : sarad
Sample : ic5485-2
Misc : op92825,ez5485
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 08:37:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:35:11 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
22) n-Nitroso-di-n-propyla...	4.637	70	15383	2.00	ppm	100
23) Hexachloroethane	4.701	201	6799	2.00	ppm	100
26) Nitrobenzene	4.771	77	22037	2.00	ppm	100
27) Quinoline	5.519	129	47137	2.00	ppm	100
28) Isophorone	4.931	82	34760	2.00	ppm	100
29) 2-Nitrophenol	4.995	139	12532	2.00	ppm	100
30) 2,4-Dimethylphenol	5.059	107	20048	2.00	ppm	100
31) Benzoic Acid	5.150	105	13376	2.00	ppm	100
32) bis(2-Chloroethoxy)met...	5.091	93	21069	2.00	ppm	100
33) 2,4-Dichlorophenol	5.188	162	16347	2.00	ppm	100
34) 2,6-Dichlorophenol	5.337	162	16112	2.00	ppm	100
35) 1,3,5-Trichlorobenzene	4.985	180	19369	2.00	ppm	100
36) 1,2,4-Trichlorobenzene	5.214	180	18522	2.00	ppm	100
37) 1,2,3-Trichlorobenzene	5.375	180	17178	2.00	ppm	100
38) Naphthalene	5.268	128	68942	2.00	ppm	100
39) 4-Chloroaniline	5.343	127	28262	1.96	ppm	99
40) 2,3-Dichloroaniline	5.984	161	22813	2.00	ppm	100
41) Caprolactam	5.583	55	9675	1.72	ppm	90
42) Hexachlorobutadiene	5.353	225	8416	2.00	ppm	100
43) 4-Chloro-3-methylphenol	5.716	107	17465	2.00	ppm	100
44) 2-Methylnaphthalene	5.759	141	36266	2.00	ppm	100
45) 1-Methylnaphthalene	5.829	141	37685	2.00	ppm	100
46) Dimethylnaphthalene	6.208	156	39639	2.00	ppm	100
48) Hexachlorocyclopentadiene	5.866	237	15305	4.00	ppm	100
49) 2,4,6-Trichlorophenol	5.984	196	10613	2.00	ppm	100
50) 2,4,5-Trichlorophenol	6.026	196	13099	2.00	ppm	99
52) 2-Chloronaphthalene	6.106	162	41686	2.00	ppm	100
53) Biphenyl	6.096	154	54722	2.00	ppm	100
54) 2-Nitroaniline	6.224	65	11367	2.00	ppm	100
55) Dimethylphthalate	6.342	163	43560	2.00	ppm	100
56) Acenaphthylene	6.438	152	65346	2.00	ppm	100
57) 2,6-Dinitrotoluene	6.395	165	7690	2.00	ppm	100
58) 3-Nitroaniline	6.571	138	11022	2.00	ppm	100
59) Acenaphthene	6.582	153	40224	2.00	ppm	100
60) 2,4-Dinitrophenol	6.641	184	6002	4.00	ppm	100
61) 4-Nitrophenol	6.806	109	5454	1.68	ppm	95
62) Dibenzofuran	6.742	168	55423	2.00	ppm	100
63) 2,4-Dinitrotoluene	6.753	165	13534	2.00	ppm	100
64) 2,3,4,6-Tetrachlorophenol	6.892	232	9675	2.00	ppm	100
65) Diethylphthalate	6.972	149	45133	2.00	ppm	100
66) Fluorene	7.073	166	45951	2.00	ppm	100
67) 4-Chlorophenyl-phenyle...	7.073	204	19867	2.00	ppm	100
68) 4-Nitroaniline	7.175	138	10404	2.00	ppm	100
70) 4,6-Dinitro-2-methylph...	7.159	198	4297	2.00	ppm	100
71) n-Nitrosodiphenylamine	7.218	169	34126	2.00	ppm	100
72) 1,2-Diphenylhydrazine	7.250	77	36836	1.95	ppm	99
74) 4-Bromophenyl-phenylether	7.629	248	10962	2.00	ppm	100
75) Hexachlorobenzene	7.704	284	11633	2.00	ppm	100
76) Pentachlorophenol	8.014	266	10894	4.00	ppm	100
77) Phenanthrene	8.254	178	59966	2.00	ppm	100

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109741.D
Acq On : 13 Apr 2016 9:35 pm
Operator : sarad
Sample : ic5485-2
Misc : op92825,ez5485
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 08:37:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:35:11 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Anthracene	8.324	178	64540	2.00	ppm	100
79)	Carbazole	8.628	167	61115	2.00	ppm	100
80)	Di-n-butylphthalate	9.216	149	74944	2.00	ppm	100
81)	Fluoranthene	10.236	202	62248	2.00	ppm	100
82)	Octadecane	8.072	57	28331	2.00	ppm	100
84)	Pyrene	10.658	202	68216	2.00	ppm	100
85)	Butyl stearate	12.400	56	17853	2.00	ppm	100
87)	Butylbenzylphthalate	12.202	149	29961	2.00	ppm	100
88)	Benzo[a]anthracene	13.196	228	57075	2.00	ppm	100
89)	3,3'-Dichlorobenzidine	13.297	252	20108	2.00	ppm	100
90)	Chrysene	13.265	228	60233	2.00	ppm	100
91)	bis(2-Ethylhexyl)phtha...	13.538	149	42974	2.00	ppm	100
93)	Di-n-octylphthalate	14.937	149	70494	2.00	ppm	100
94)	Benzo[b]fluoranthene	15.455	252	58924	1.99	ppm	98
95)	Benzo[k]fluoranthene	15.509	252	54977	2.00	ppm	100
96)	Benzo[a]pyrene	16.086	252	52791	2.00	ppm	100
97)	Indeno[1,2,3-cd]pyrene	18.110	276	53287	2.00	ppm	100
98)	Dibenz(a,h)acridine	17.758	279	53236	2.00	ppm	100
99)	Dibenz[a,h]anthracene	18.169	278	58532	2.02	ppm	98
100)	7,12-Dimethylbenz(a)an...	15.461	256	27728	2.00	ppm	100
101)	Benzo[g,h,i]perylene	18.538	276	59171	2.00	ppm	100

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

7.6.115

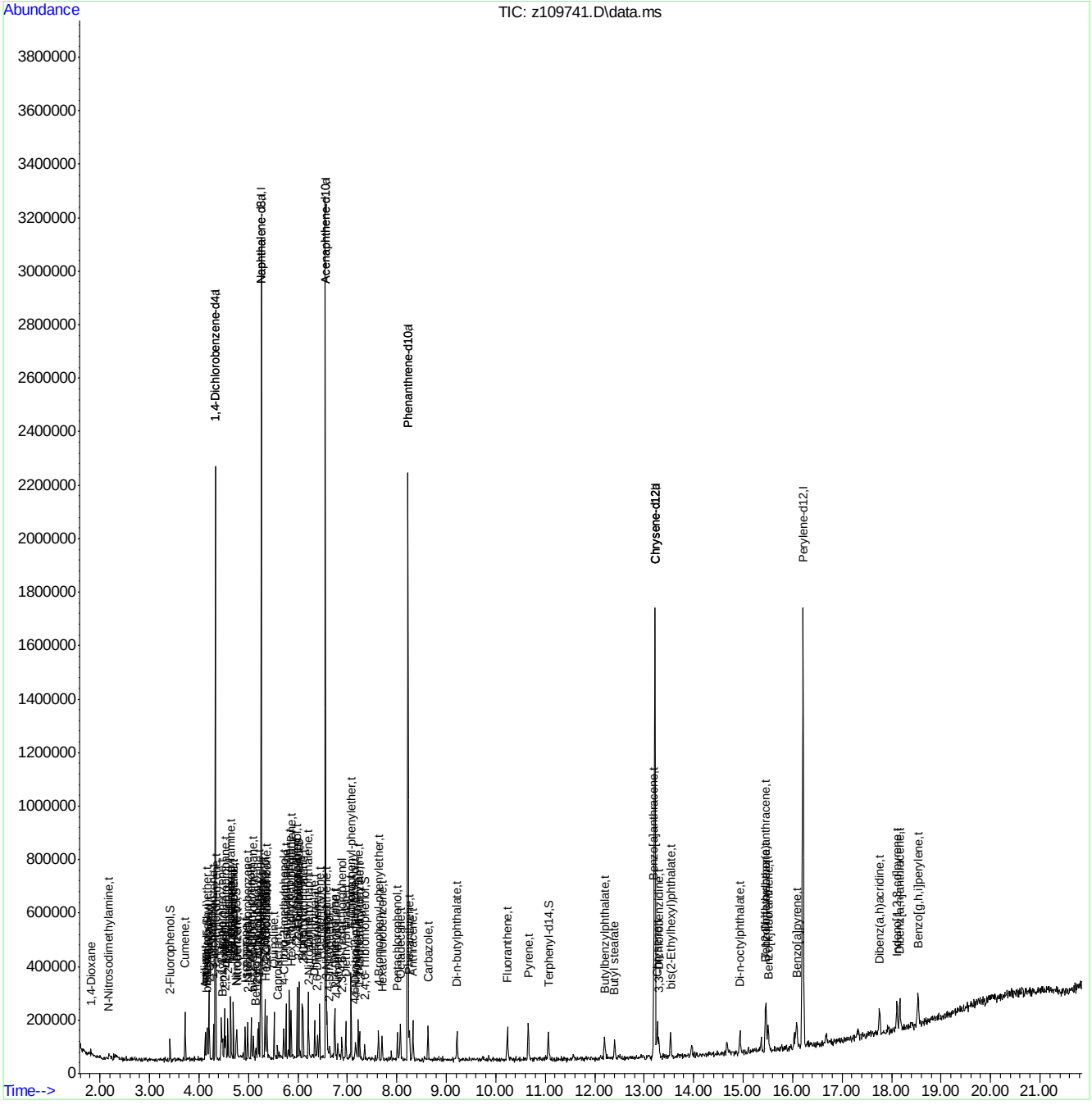
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109741.D
Acq On : 13 Apr 2016 9:35 pm
Operator : sarad
Sample : ic5485-2
Misc : op92825,ez5485
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 08:37:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:35:11 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 08:37:52 2016 RTE

Page: 4

Manual Integration Approval Summary

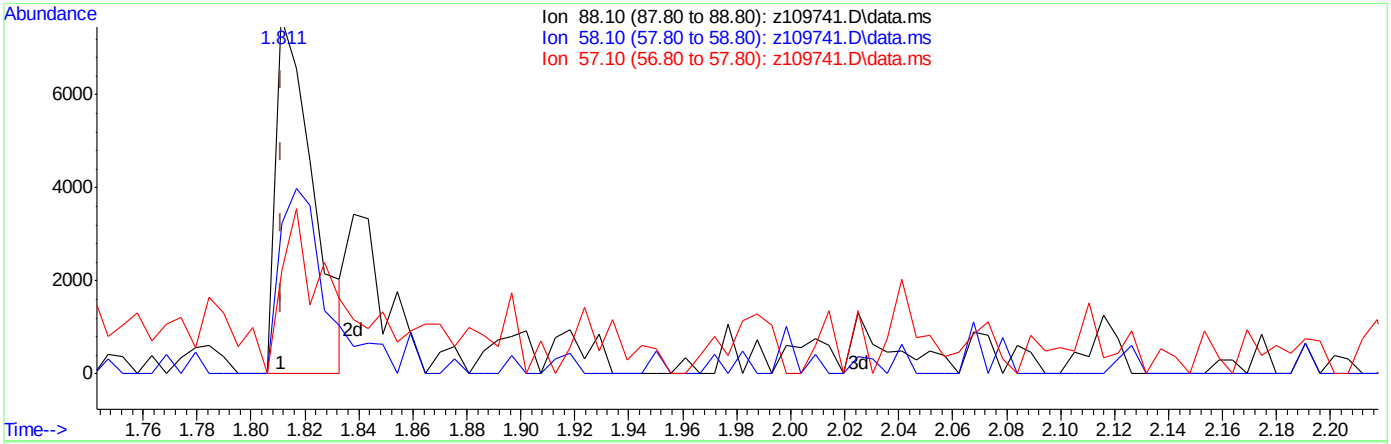
Sample Number:	EZ5485-IC5485	**Method:**	SW846 8270D
Lab FileID:	Z109741.D	**Analyst approved:**	04/14/16 09:34 Arielle Cocozza
Injection Time:	04/13/16 21:35	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

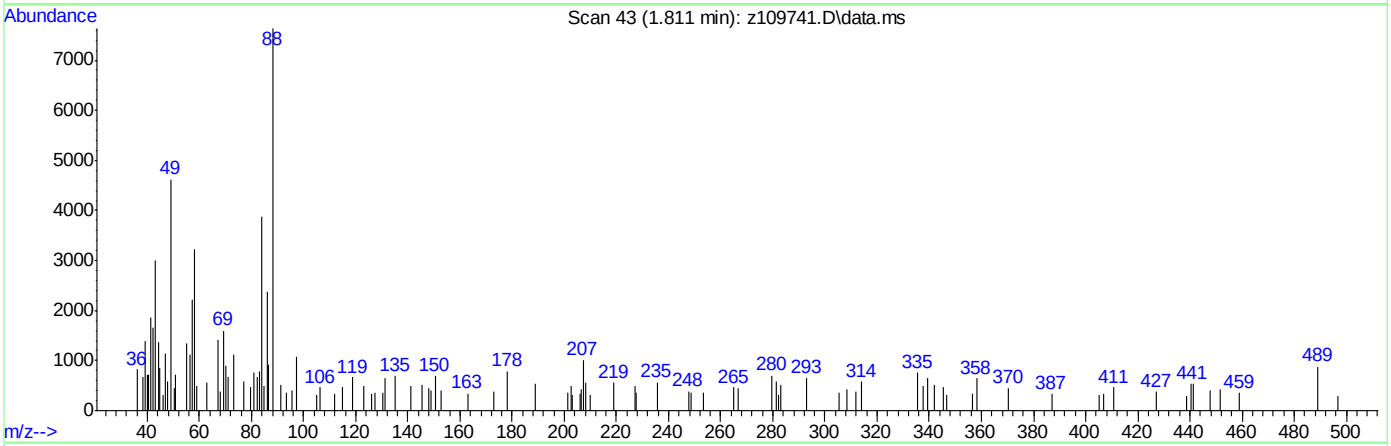
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		1.81	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109741.D
Acq On : 13 Apr 2016 9:35 pm
Operator : sarad
Sample : ic5485-2
Misc : op92825,ez5485
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 08:35:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:35:11 2016
Response via : Initial Calibration





TIC: z109741.D\data.ms

(2) 1,4-Dioxane

1.811min (0.000) 2.00ppm

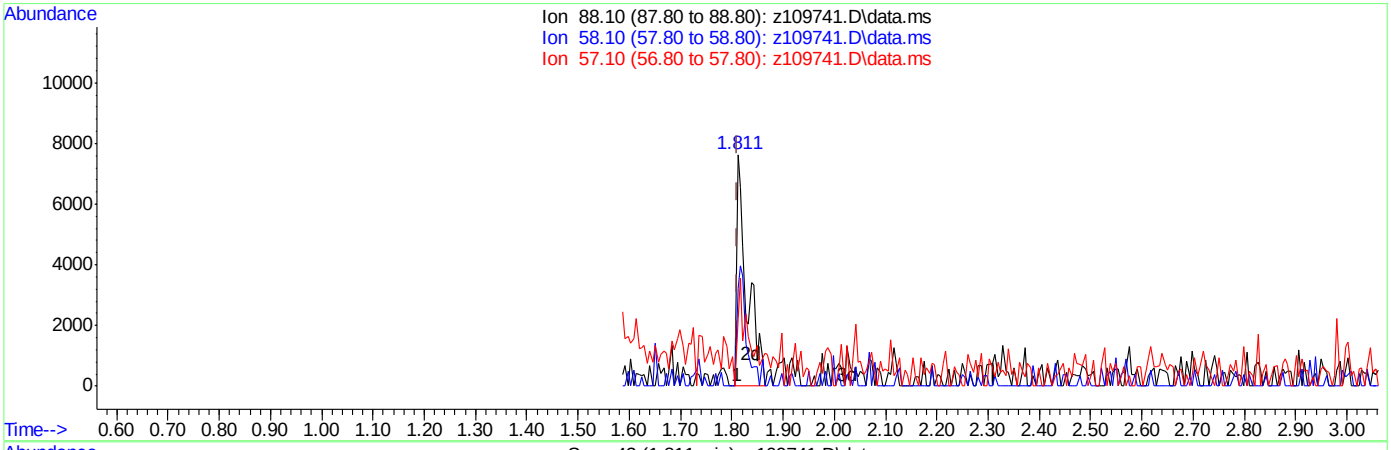
response 7365

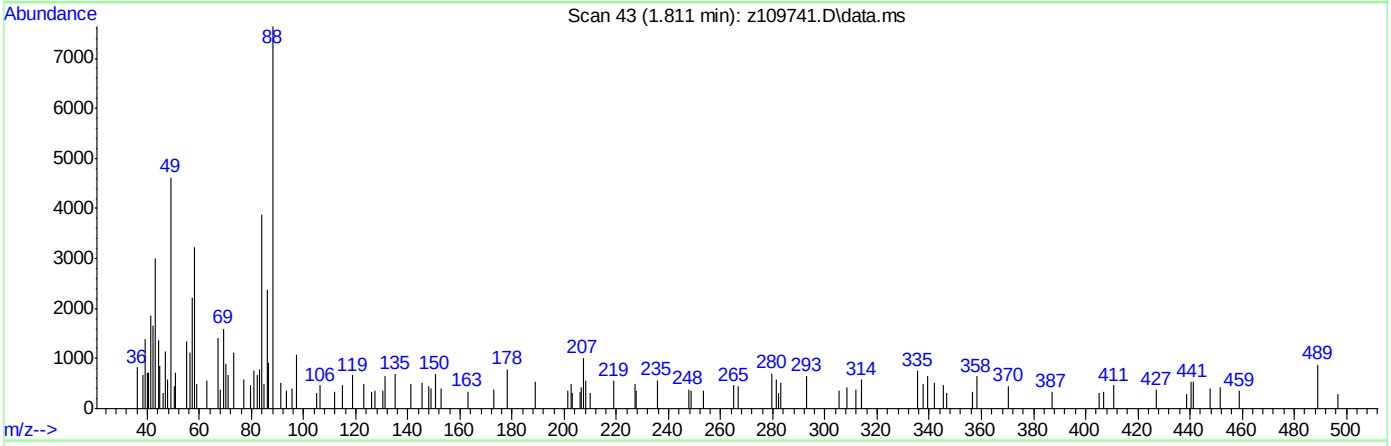
Ion	Exp%	Act%
88.10	100	100
58.10	40.80	40.79
57.10	21.10	21.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109741.D
Acq On : 13 Apr 2016 9:35 pm
Operator : sarad
Sample : ic5485-2
Misc : op92825,ez5485
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 08:37:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:35:11 2016
Response via : Initial Calibration





TIC: z109741.D\data.ms

(2) 1,4-Dioxane

1.811min (0.000) 2.89ppm m

response 10640

Ion	Exp%	Act%
88.10	100	100
58.10	40.80	42.24
57.10	21.10	29.03
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/14/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:59:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:57:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.333	152	262993	40.00	ppm	0.00
24) Naphthalene-d8	5.257	136	1012466	40.00	ppm	0.00
47) Acenaphthene-d10	6.561	164	586535	40.00	ppm	0.00
69) Phenanthrene-d10	8.228	188	925949	40.00	ppm	0.00
83) Chrysene-d12	13.233	240	837089	40.00	ppm	0.00
92) Perylene-d12	16.220	264	848153	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.333	152	262993	40.00	ppm	0.00
104) Phenanthrene-d10a	8.228	188	925949	40.00	ppm	0.00
108) Chrysene-d12a	13.233	240	837089	40.00	ppm	0.00
110) Acenaphthene-d10a	6.561	164	586535	40.00	ppm	0.00
112) Naphthalene-d8a	5.257	136	1012466	40.00	ppm	0.00
114) Chrysene-d12b	13.233	240	837089	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.409	112	877711	95.33	ppm	0.00
Spiked Amount 50.000			Recovery	=	190.66%	
8) Phenol-d5	4.162	99	976751	91.18	ppm	0.00
Spiked Amount 50.000			Recovery	=	182.36%	
25) Nitrobenzene-d5	4.760	82	754621	87.11	ppm	0.00
Spiked Amount 50.000			Recovery	=	174.22%	
51) 2-Fluorobiphenyl	6.027	172	1565164	81.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	162.18%	
73) 2,4,6-Tribromophenol	7.362	330	261370	84.99	ppm	0.00
Spiked Amount 50.000			Recovery	=	169.98%	
86) Terphenyl-d14	11.075	244	1627342	88.08	ppm	0.00
Spiked Amount 50.000			Recovery	=	176.16%	
105) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.790	88	360049	89.83	ppm	100
3) Pyridine	2.153	79	778261	86.59	ppm	99
4) N-Nitrosodimethylamine	2.121	74	471376	89.74	ppm	100
6) Indene	4.520	116	1461506	83.10	ppm	100
7) Cumene	3.719	105	1927710	88.83	ppm	100
9) Phenol	4.173	94	972145	87.63	ppm	100
10) Aniline	4.119	93	1097036	85.81	ppm	100
11) bis(2-Chloroethyl)ether	4.151	93	666294	86.34	ppm	100
12) 2-Chlorophenol	4.210	128	850131	79.20	ppm	100
13) Decane	4.200	43	757770	76.29	ppm	100
14) 1,3-Dichlorobenzene	4.290	146	947466	84.70	ppm	100
15) 1,4-Dichlorobenzene	4.344	146	921201	88.96	ppm	100
16) Benzyl alcohol	4.477	108	448928	96.41	ppm	100
17) 1,2-Dichlorobenzene	4.461	146	852709	80.28	ppm	100
18) Acetophenone	4.643	105	1054011	89.37	ppm	100
19) 2-Methylphenol	4.590	108	784401	90.09	ppm	100
20) 2,2'-oxybis(1-Chloropr...	4.541	121	223879	80.05	ppm	100

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:59:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:57:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.702	108	757841	84.33	ppm	100
22) n-Nitroso-di-n-propyla...	4.654	70	514729	80.67	ppm	100
23) Hexachloroethane	4.702	201	262273	90.60	ppm	100
26) Nitrobenzene	4.771	77	718859	81.09	ppm	100
27) Quinoline	5.530	129	1788460	88.68	ppm	100
28) Isophorone	4.937	82	1368998	93.07	ppm	100
29) 2-Nitrophenol	5.001	139	481809	90.06	ppm	100
30) 2,4-Dimethylphenol	5.065	107	770835	93.29	ppm	100
31) Benzoic Acid	5.215	105	634926m	103.43	ppm	
32) bis(2-Chloroethoxy)met...	5.097	93	798600	84.63	ppm	100
33) 2,4-Dichlorophenol	5.188	162	680309	97.30	ppm	100
34) 2,6-Dichlorophenol	5.343	162	652097	93.74	ppm	100
35) 1,3,5-Trichlorobenzene	4.985	180	716845	91.17	ppm	100
36) 1,2,4-Trichlorobenzene	5.215	180	657004	86.26	ppm	100
37) 1,2,3-Trichlorobenzene	5.380	180	629870	85.69	ppm	100
38) Naphthalene	5.273	128	2470777	83.60	ppm	100
39) 4-Chloroaniline	5.343	127	923258	78.21	ppm	100
40) 2,3-Dichloroaniline	5.984	161	789941	83.16	ppm	100
41) Caprolactam	5.626	55	355543m	100.75	ppm	
42) Hexachlorobutadiene	5.359	225	310162	95.81	ppm	100
43) 4-Chloro-3-methylphenol	5.722	107	706257	93.17	ppm	100
44) 2-Methylnaphthalene	5.759	141	1383922	90.42	ppm	100
45) 1-Methylnaphthalene	5.829	141	1429739	82.16	ppm	100
46) Dimethylnaphthalene	6.214	156	1474309	89.00	ppm	100
48) Hexachlorocyclopentadiene	5.872	237	736159	208.20	ppm	100
49) 2,4,6-Trichlorophenol	5.989	196	425630	90.67	ppm	100
50) 2,4,5-Trichlorophenol	6.032	196	449458	82.05	ppm	100
52) 2-Chloronaphthalene	6.117	162	1364612	77.11	ppm	100
53) Biphenyl	6.101	154	1949465	79.89	ppm	100
54) 2-Nitroaniline	6.230	65	409245	91.46	ppm	100
55) Dimethylphthalate	6.352	163	1665699	87.43	ppm	100
56) Acenaphthylene	6.443	152	2532751	85.76	ppm	100
57) 2,6-Dinitrotoluene	6.406	165	385466	96.06	ppm	100
58) 3-Nitroaniline	6.577	138	454966	90.61	ppm	100
59) Acenaphthene	6.588	153	1513994	84.45	ppm	100
60) 2,4-Dinitrophenol	6.652	184	457546	246.48	ppm	100
61) 4-Nitrophenol	6.807	109	201033	84.14	ppm	100
62) Dibenzofuran	6.748	168	2083550	83.49	ppm	100
63) 2,4-Dinitrotoluene	6.764	165	502814	94.18	ppm	100
64) 2,3,4,6-Tetrachlorophenol	6.892	232	371290	85.51	ppm	100
65) Diethylphthalate	6.983	149	1634570	80.17	ppm	100
66) Fluorene	7.084	166	1654799	80.70	ppm	100
67) 4-Chlorophenyl-phenyle...	7.079	204	710313	83.93	ppm	100
68) 4-Nitroaniline	7.202	138	480323	102.01	ppm	100
70) 4,6-Dinitro-2-methylph...	7.175	198	320984	122.28	ppm	100
71) n-Nitrosodiphenylamine	7.229	169	1205905	87.30	ppm	100
72) 1,2-Diphenylhydrazine	7.255	77	1412011	85.61	ppm	100
74) 4-Bromophenyl-phenylether	7.640	248	428314	85.37	ppm	100
75) Hexachlorobenzene	7.715	284	472683	83.18	ppm	100
76) Pentachlorophenol	8.019	266	618213	220.50	ppm	100

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:59:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:57:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	8.265	178	2377720	86.35	ppm	100
78) Anthracene	8.340	178	2445080	86.90	ppm	100
79) Carbazole	8.639	167	2369418	89.40	ppm	100
80) Di-n-butylphthalate	9.227	149	2986496	91.62	ppm	100
81) Fluoranthene	10.252	202	2529527	84.76	ppm	100
82) Octadecane	8.078	57	1004489	84.10	ppm	100
84) Pyrene	10.674	202	2520664	86.06	ppm	100
85) Butyl stearate	12.411	56	753115	100.13	ppm	100
87) Butylbenzylphthalate	12.208	149	1321498	97.84	ppm	100
88) Benzo[a]anthracene	13.212	228	2280004	89.23	ppm	100
89) 3,3'-Dichlorobenzidine	13.308	252	810906	92.32	ppm	100
90) Chrysene	13.292	228	2109373	83.45	ppm	100
91) bis(2-Ethylhexyl)phtha...	13.543	149	1851863	97.72	ppm	100
93) Di-n-octylphthalate	14.953	149	3244891	102.03	ppm	100
94) Benzo[b]fluoranthene	15.493	252	2400305	85.43	ppm	100
95) Benzo[k]fluoranthene	15.552	252	2112038	86.42	ppm	100
96) Benzo[a]pyrene	16.113	252	2172466	88.10	ppm	100
97) Indeno[1,2,3-cd]pyrene	18.148	276	2133478	87.17	ppm	100
98) Dibenz(a,h)acridine	17.785	279	1983581	82.15	ppm	100
99) Dibenz[a,h]anthracene	18.202	278	2285569	88.52	ppm	100
100) 7,12-Dimethylbenz(a)an...	15.504	256	1079127	82.00	ppm	100
101) Benzo[g,h,i]perylene	18.581	276	2182260	79.66	ppm	100

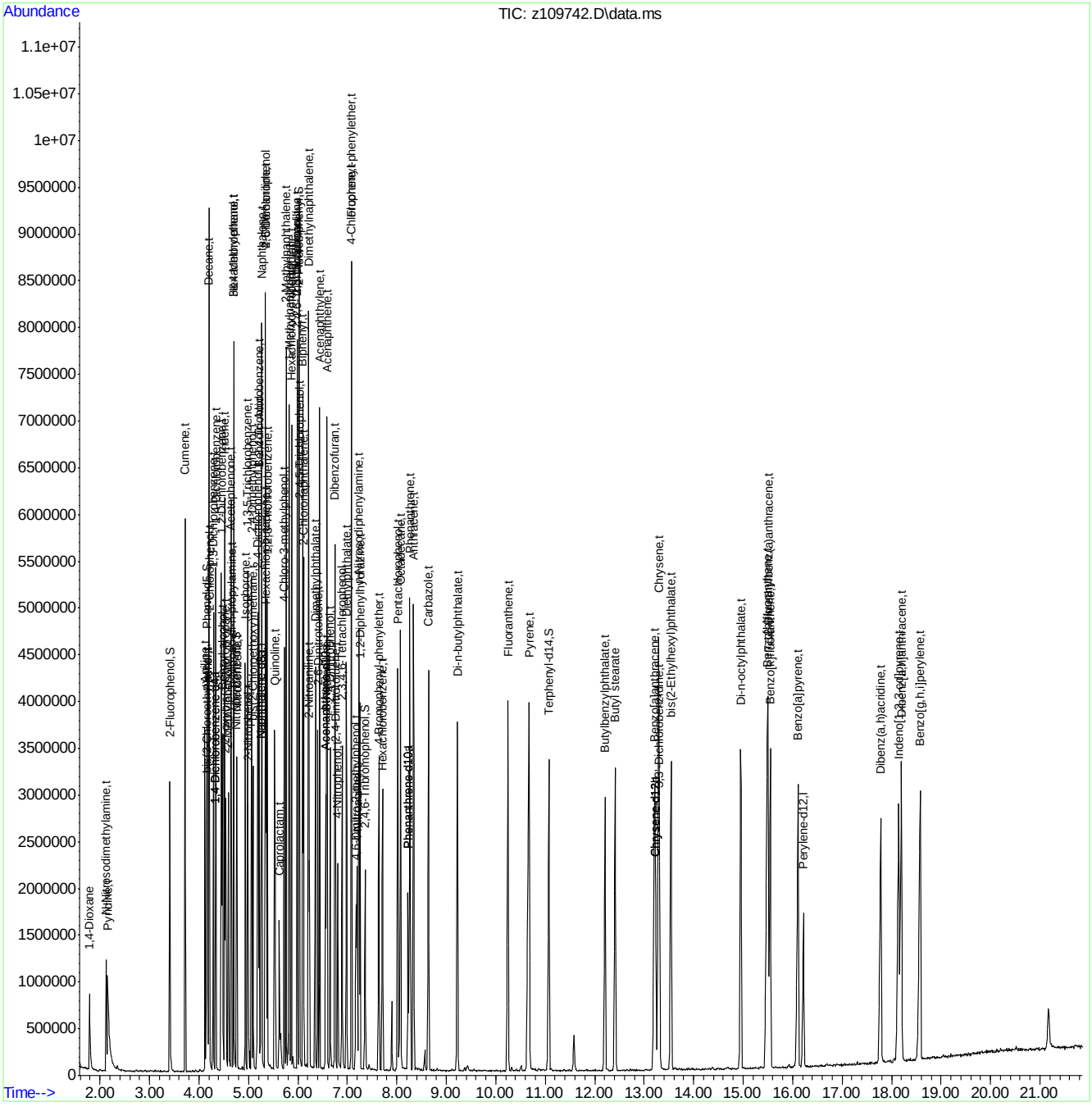
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:59:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:57:34 2016
Response via : Initial Calibration



Manual Integration Approval Summary

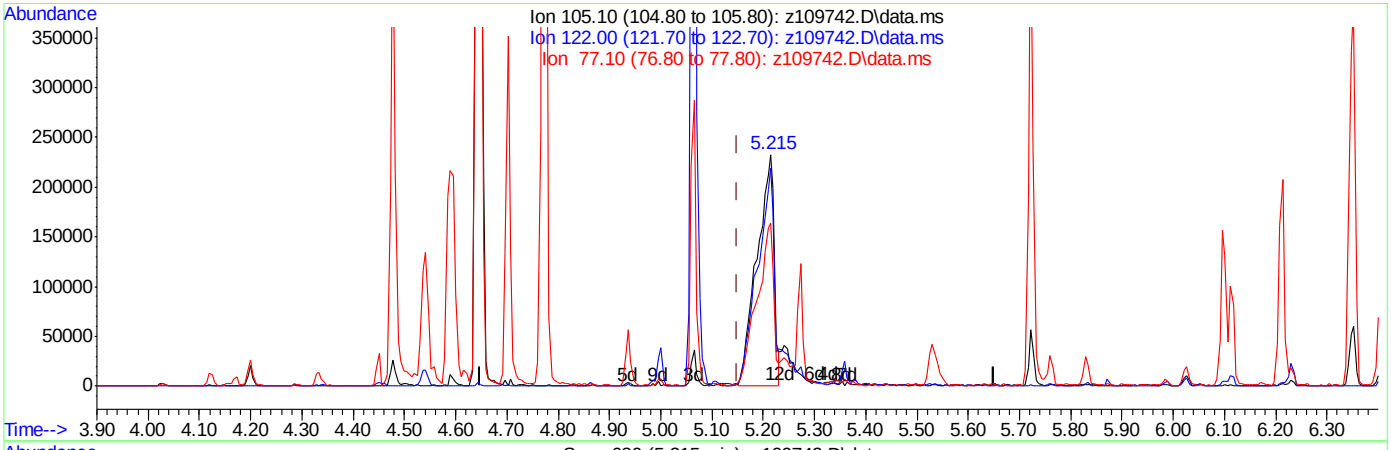
Sample Number:	EZ5485-IC5485	**Method:**	SW846 8270D
Lab FileID:	Z109742.D	**Analyst approved:**	04/14/16 09:34 Arielle Cocozza
Injection Time:	04/13/16 22:06	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

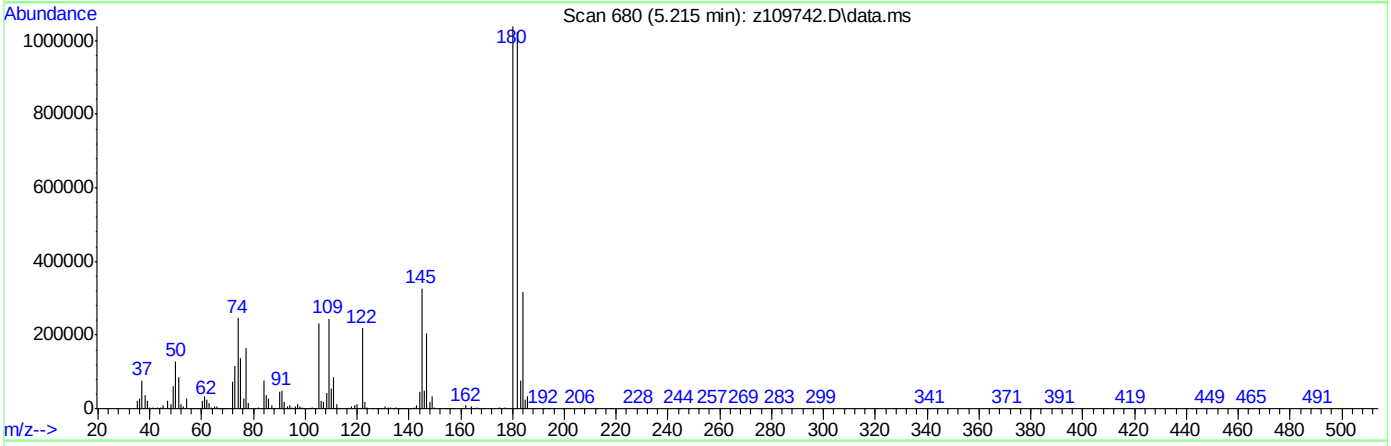
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.21	Poor instrument integration
Caprolactam	105-60-2		5.63	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:51:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:51:08 2016
Response via : Initial Calibration





(31) Benzoic Acid

5.215min (+0.065) 92.20ppm

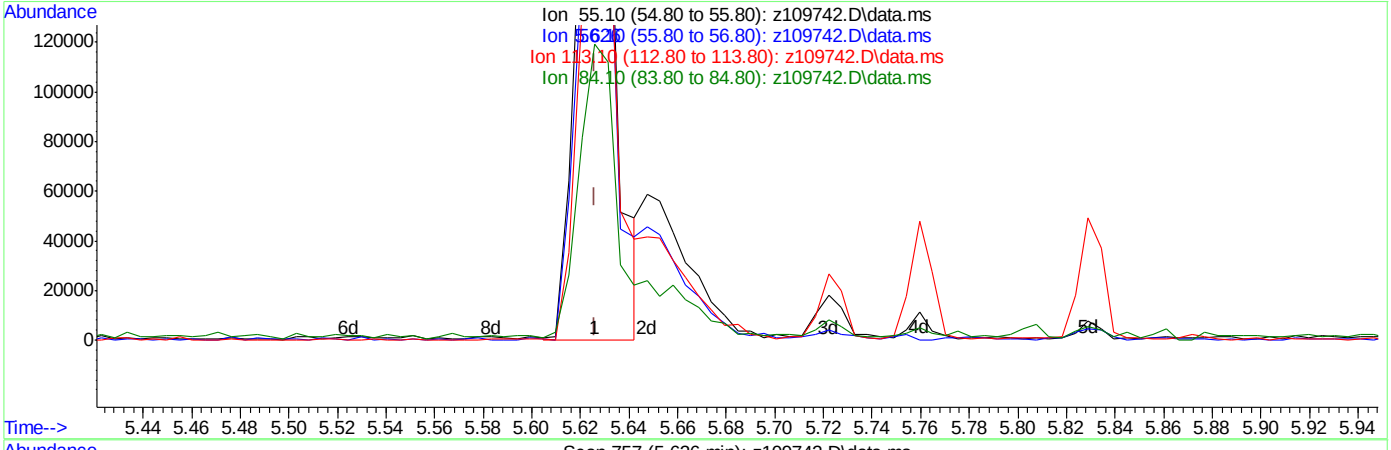
response 546611

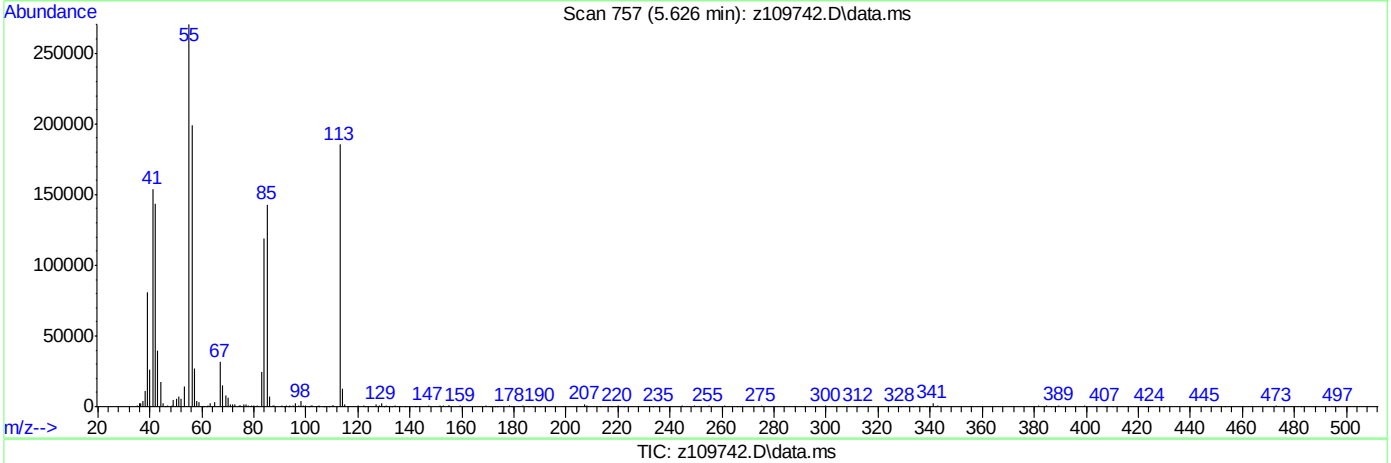
Ion	Exp%	Act%
105.10	100	100
122.00	65.80	92.34#
77.10	70.30	70.25
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:57:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:57:34 2016
Response via : Initial Calibration





TIC: z109742.D\data.ms

(41) Caprolactam (t)

5.626min (0.000) 77.53ppm

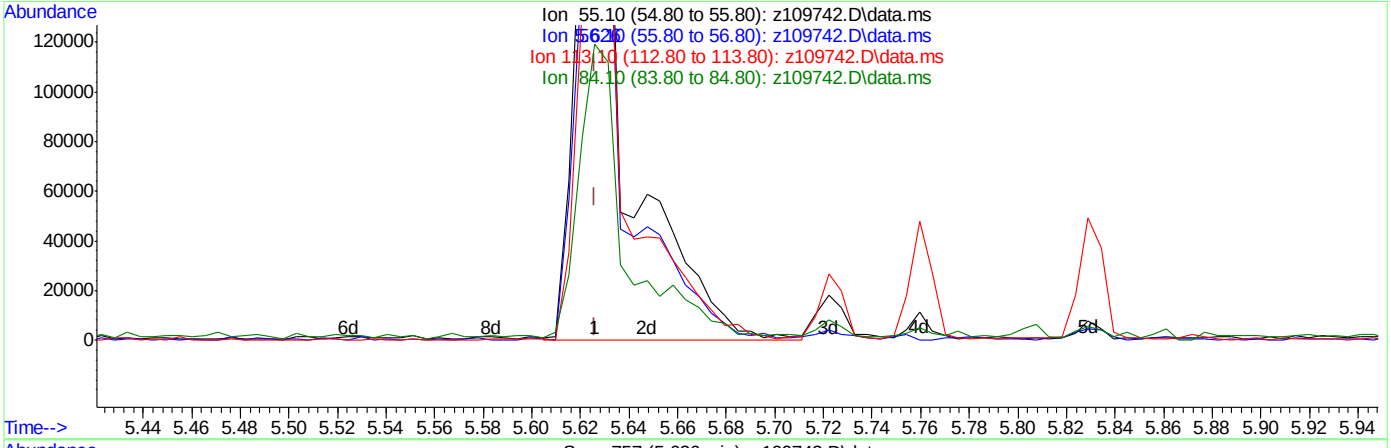
response 273580

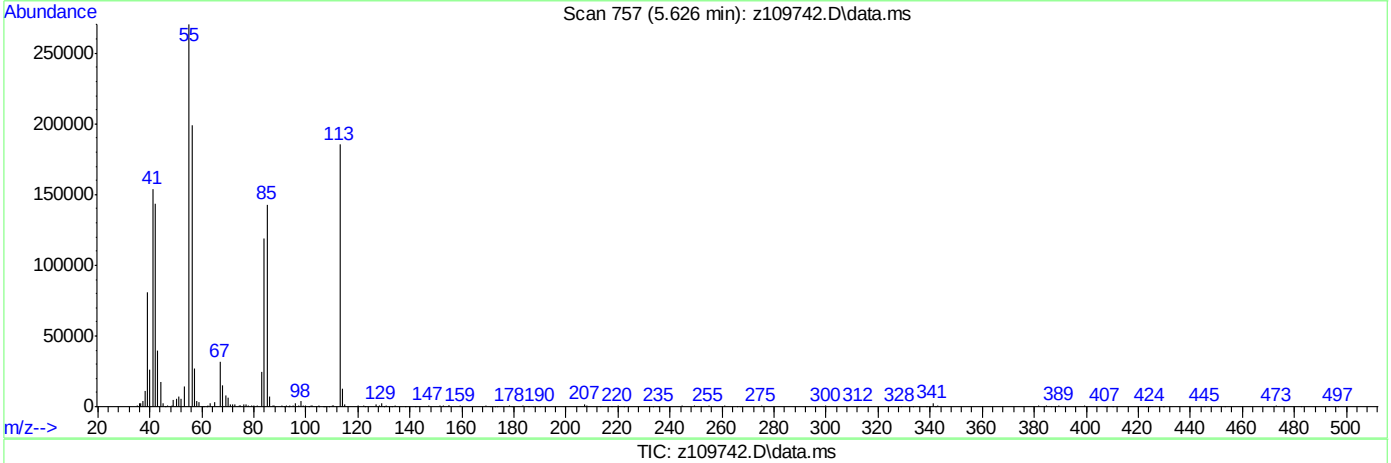
Ion	Exp%	Act%
55.10	100	100
56.10	72.40	72.44
113.10	67.30	67.26
84.10	43.90	43.86

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:57:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:57:34 2016
Response via : Initial Calibration





TIC: z109742.D\data.ms

(41) Caprolactam (t)

5.626min (0.000) 100.75ppm m

response 355543

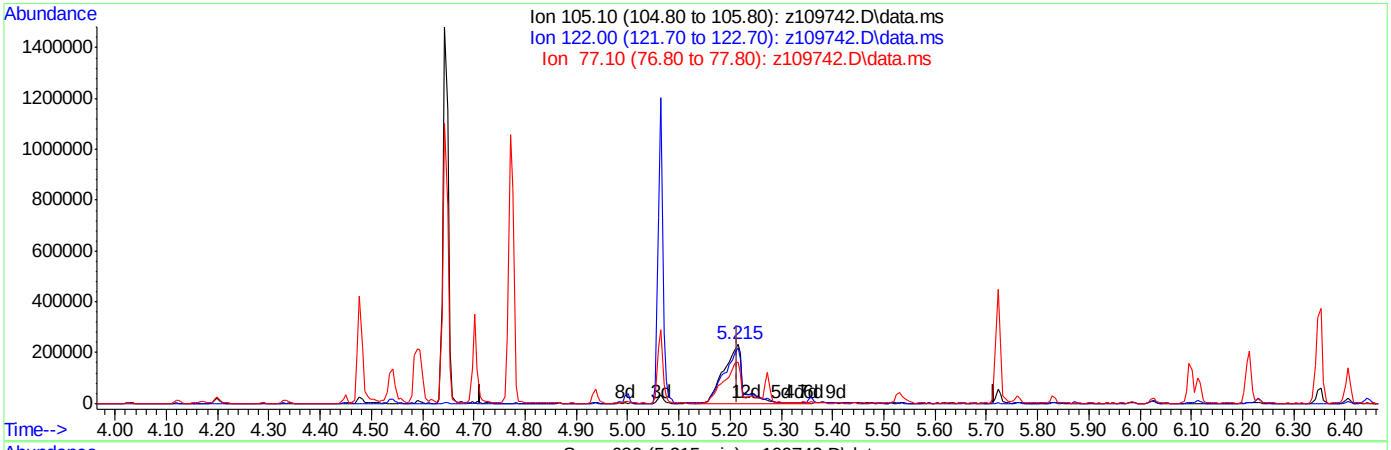
Ion	Exp%	Act%
55.10	100	100
56.10	72.40	73.48
113.10	67.30	68.58
84.10	43.90	44.12

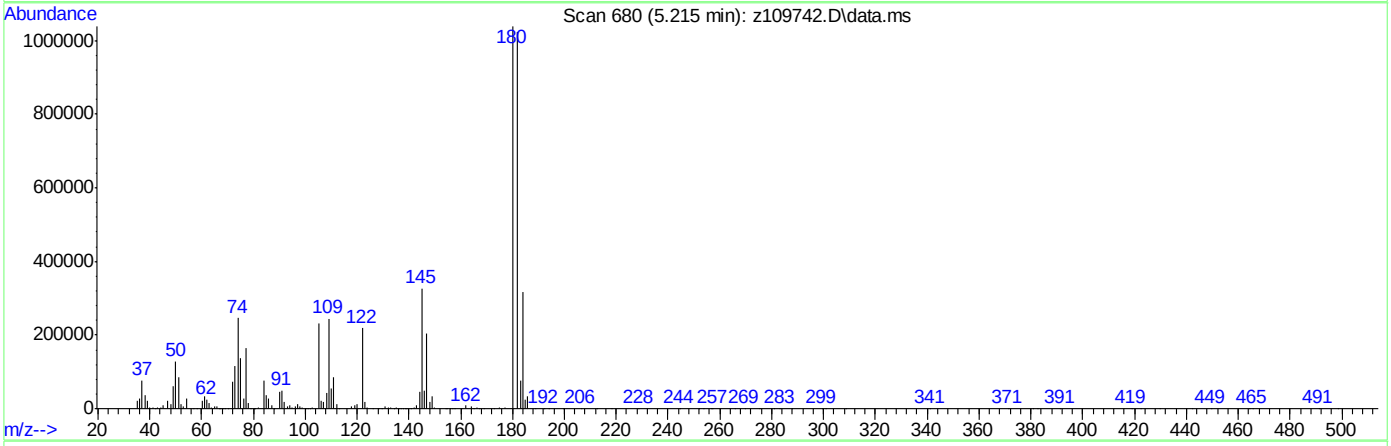
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109742.D
Acq On : 13 Apr 2016 10:06 pm
Operator : sarad
Sample : ic5485-100
Misc : op92825,ez5485
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 08:57:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:57:34 2016
Response via : Initial Calibration





TIC: z109742.D\data.ms

(31) Benzoic Acid

5.215min (0.000) 103.43ppm m

response 634926

Ion	Exp%	Act%
105.10	100	100
122.00	94.00	93.95
77.10	70.50	70.48
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/14/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:03:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.333	152	258285	40.00	ppm	0.00
24) Naphthalene-d8	5.257	136	1014560	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	565384	40.00	ppm	0.00
69) Phenanthrene-d10	8.227	188	900035	40.00	ppm	0.00
83) Chrysene-d12	13.222	240	805741	40.00	ppm	-0.01
92) Perylene-d12	16.209	264	820789	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.333	152	258285	40.00	ppm	0.00
104) Phenanthrene-d10a	8.227	188	900035	40.00	ppm	0.00
108) Chrysene-d12a	13.222	240	805741	40.00	ppm	-0.01
110) Acenaphthene-d10a	6.555	164	565384	40.00	ppm	0.00
112) Naphthalene-d8a	5.257	136	1014560	40.00	ppm	0.00
114) Chrysene-d12b	13.222	240	805741	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.409	112	709376	78.45	ppm	0.00
Spiked Amount 50.000			Recovery	=	156.90%	
8) Phenol-d5	4.157	99	806274	76.64	ppm	0.00
Spiked Amount 50.000			Recovery	=	153.28%	
25) Nitrobenzene-d5	4.755	82	607952	70.03	ppm	0.00
Spiked Amount 50.000			Recovery	=	140.06%	
51) 2-Fluorobiphenyl	6.021	172	1292625	69.47	ppm	0.00
Spiked Amount 50.000			Recovery	=	138.94%	
73) 2,4,6-Tribromophenol	7.357	330	206696	69.15	ppm	0.00
Spiked Amount 50.000			Recovery	=	138.30%	
86) Terphenyl-d14	11.069	244	1290655	72.58	ppm	0.00
Spiked Amount 50.000			Recovery	=	145.16%	
105) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.790	88	290060	73.69	ppm	95
3) Pyridine	2.153	79	591571	77.40	ppm	97
4) N-Nitrosodimethylamine	2.121	74	356877	69.18	ppm	99
6) Indene	4.520	116	1212997	70.22	ppm	99
7) Cumene	3.719	105	1586089	74.42	ppm	100
9) Phenol	4.167	94	793059	72.79	ppm	96
10) Aniline	4.119	93	904003	72.00	ppm	100
11) bis(2-Chloroethyl)ether	4.151	93	538931	71.11	ppm	99
12) 2-Chlorophenol	4.210	128	687188	65.19	ppm	94
13) Decane	4.199	43	624374	64.01	ppm	97
14) 1,3-Dichlorobenzene	4.290	146	780253	71.02	ppm	98
15) 1,4-Dichlorobenzene	4.344	146	768325	75.55	ppm	98
16) Benzyl alcohol	4.477	108	383798	83.92	ppm	89
17) 1,2-Dichlorobenzene	4.461	146	711393	68.19	ppm	98
18) Acetophenone	4.643	105	870526	75.16	ppm	96
19) 2-Methylphenol	4.589	108	637963	74.60	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.536	121	183592	66.84	ppm	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:03:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.702	108	639173	72.42	ppm	95
22) n-Nitroso-di-n-propyla...	4.648	70	414398	66.13	ppm	99
23) Hexachloroethane	4.696	201	220115	77.42	ppm	85
26) Nitrobenzene	4.771	77	583971	65.74	ppm	93
27) Quinoline	5.524	129	1441118	71.31	ppm	98
28) Isophorone	4.931	82	1100242	74.64	ppm	97
29) 2-Nitrophenol	4.995	139	384575	71.74	ppm	81
30) 2,4-Dimethylphenol	5.059	107	619586	74.83	ppm	98
31) Benzoic Acid	5.204	105	518620m	84.40	ppm	
32) bis(2-Chloroethoxy)met...	5.092	93	652548	69.01	ppm	99
33) 2,4-Dichlorophenol	5.188	162	557623	79.59	ppm	97
34) 2,6-Dichlorophenol	5.343	162	531511	76.25	ppm	98
35) 1,3,5-Trichlorobenzene	4.985	180	578470	73.42	ppm	97
36) 1,2,4-Trichlorobenzene	5.214	180	531338	69.62	ppm	99
37) 1,2,3-Trichlorobenzene	5.380	180	512158	69.53	ppm	97
38) Naphthalene	5.273	128	2054161	69.36	ppm	100
39) 4-Chloroaniline	5.343	127	758322	64.11	ppm	96
40) 2,3-Dichloroaniline	5.984	161	635911	66.81	ppm	99
41) Caprolactam	5.620	55	271772m	71.33	ppm	
42) Hexachlorobutadiene	5.359	225	252173	77.74	ppm	97
43) 4-Chloro-3-methylphenol	5.722	107	593128	78.08	ppm	89
44) 2-Methylnaphthalene	5.759	141	1130401	73.70	ppm	97
45) 1-Methylnaphthalene	5.829	141	1164883	66.81	ppm	98
46) Dimethylnaphthalene	6.208	156	1203944	72.53	ppm	100
48) Hexachlorocyclopentadiene	5.866	237	619137	181.65	ppm	96
49) 2,4,6-Trichlorophenol	5.984	196	353907	78.21	ppm	99
50) 2,4,5-Trichlorophenol	6.026	196	361146	68.40	ppm	93
52) 2-Chloronaphthalene	6.112	162	1126830	66.06	ppm	95
53) Biphenyl	6.096	154	1601083	68.07	ppm	98
54) 2-Nitroaniline	6.229	65	339315	78.67	ppm	93
55) Dimethylphthalate	6.347	163	1338542	72.89	ppm	99
56) Acenaphthylene	6.443	152	2101227	73.81	ppm	99
57) 2,6-Dinitrotoluene	6.406	165	305573	79.00	ppm	95
58) 3-Nitroaniline	6.577	138	365741	75.56	ppm	90
59) Acenaphthene	6.587	153	1228182	71.07	ppm	99
60) 2,4-Dinitrophenol	6.646	184	360816	201.64	ppm	98
61) 4-Nitrophenol	6.801	109	166854	72.45	ppm	97
62) Dibenzofuran	6.748	168	1691555	70.32	ppm	99
63) 2,4-Dinitrotoluene	6.758	165	399730	77.67	ppm	98
64) 2,3,4,6-Tetrachlorophenol	6.892	232	298441	71.30	ppm	95
65) Diethylphthalate	6.977	149	1319563	67.14	ppm	99
66) Fluorene	7.079	166	1341353	67.86	ppm	99
67) 4-Chlorophenyl-phenyle...	7.079	204	573029	70.24	ppm	93
68) 4-Nitroaniline	7.191	138	377040	83.07	ppm	91
70) 4,6-Dinitro-2-methylph...	7.170	198	247625	97.05	ppm	88
71) n-Nitrosodiphenylamine	7.223	169	964899	71.87	ppm	99
72) 1,2-Diphenylhydrazine	7.250	77	1147428	71.57	ppm	96
74) 4-Bromophenyl-phenylether	7.634	248	341909	70.11	ppm	97
75) Hexachlorobenzene	7.709	284	380919	68.96	ppm	98
76) Pentachlorophenol	8.014	266	491527	180.37	ppm	99

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:03:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.259	178	1924726	71.91	ppm	98
78)	Anthracene	8.334	178	1967060	71.92	ppm	99
79)	Carbazole	8.633	167	1934892	75.11	ppm	99
80)	Di-n-butylphthalate	9.221	149	2402258	75.82	ppm	100
81)	Fluoranthene	10.247	202	1965351	67.75	ppm	97
82)	Octadecane	8.072	57	801617	69.04	ppm	98
84)	Pyrene	10.669	202	2021823	71.71	ppm	98
85)	Butyl stearate	12.405	56	606765	83.81	ppm	98
87)	Butylbenzylphthalate	12.202	149	1060797	81.59	ppm	95
88)	Benzo[a]anthracene	13.201	228	1836324	74.67	ppm	98
89)	3,3'-Dichlorobenzidine	13.303	252	658541	77.89	ppm	94
90)	Chrysene	13.281	228	1711519	70.35	ppm	99
91)	bis(2-Ethylhexyl)phtha...	13.532	149	1485711	81.45	ppm	98
93)	Di-n-octylphthalate	14.943	149	2597489	84.40	ppm	99
94)	Benzo[b]fluoranthene	15.477	252	1963861	72.22	ppm	97
95)	Benzo[k]fluoranthene	15.541	252	1686384	71.30	ppm	100
96)	Benzo[a]pyrene	16.097	252	1731239	72.55	ppm	96
97)	Indeno[1,2,3-cd]pyrene	18.132	276	1722800	72.74	ppm	98
98)	Dibenz(a,h)acridine	17.774	279	1621595	69.40	ppm	99
99)	Dibenz[a,h]anthracene	18.191	278	1838785	73.59	ppm	99
100)	7,12-Dimethylbenz(a)an...	15.488	256	877172	68.88	ppm	96
101)	Benzo[g,h,i]perylene	18.565	276	1789885	67.52	ppm	98

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

7.6.117

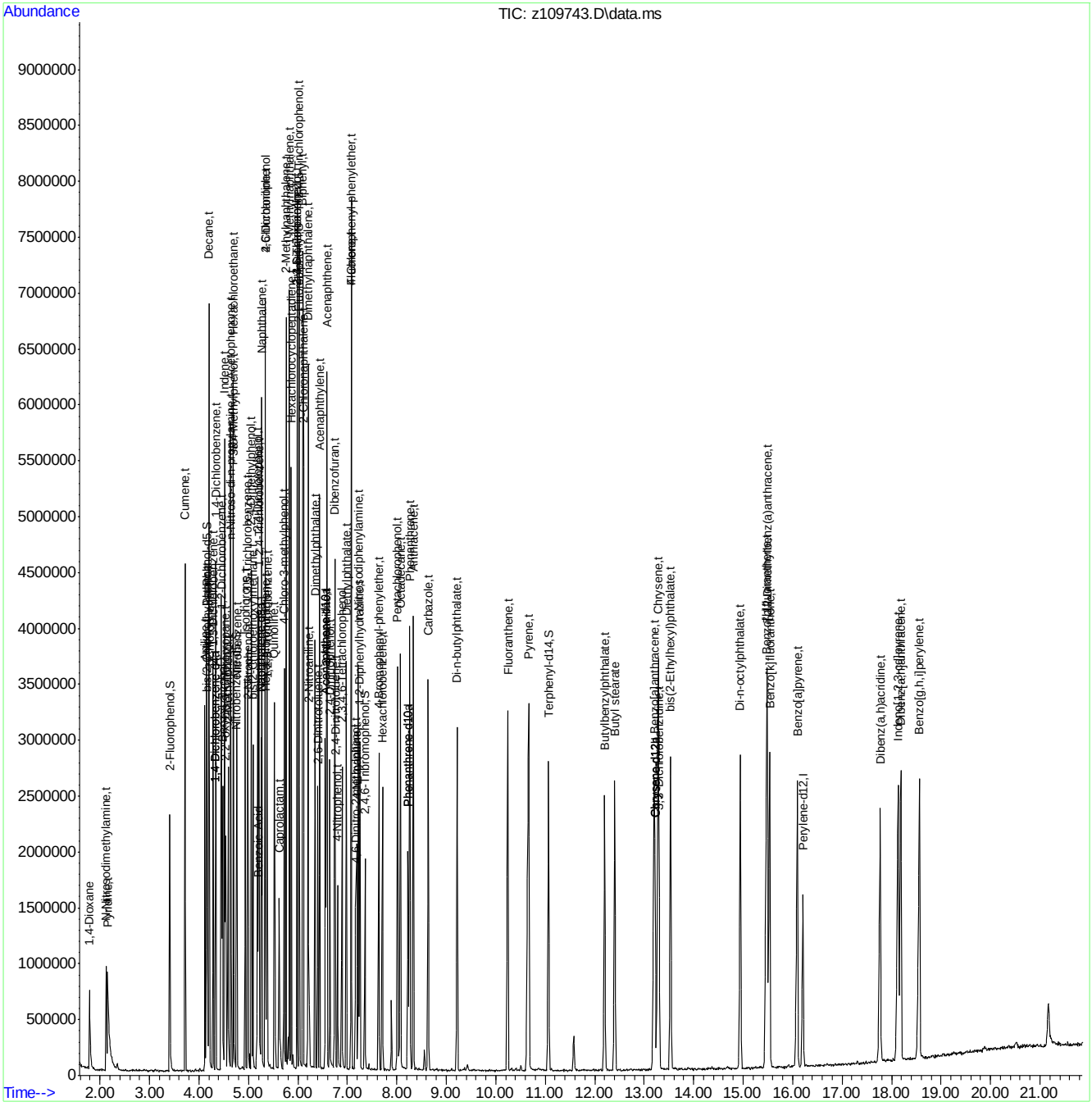
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:03:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Manual Integration Approval Summary

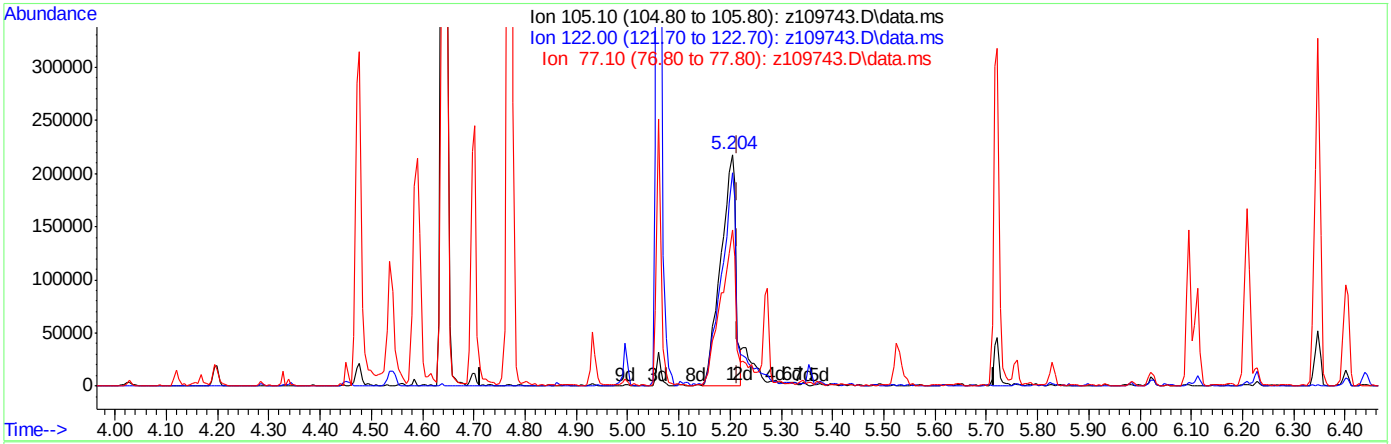
Sample Number:	EZ5485-IC5485	**Method:**	SW846 8270D
Lab FileID:	Z109743.D	**Analyst approved:**	04/14/16 09:34 Arielle Cocozza
Injection Time:	04/13/16 22:38	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

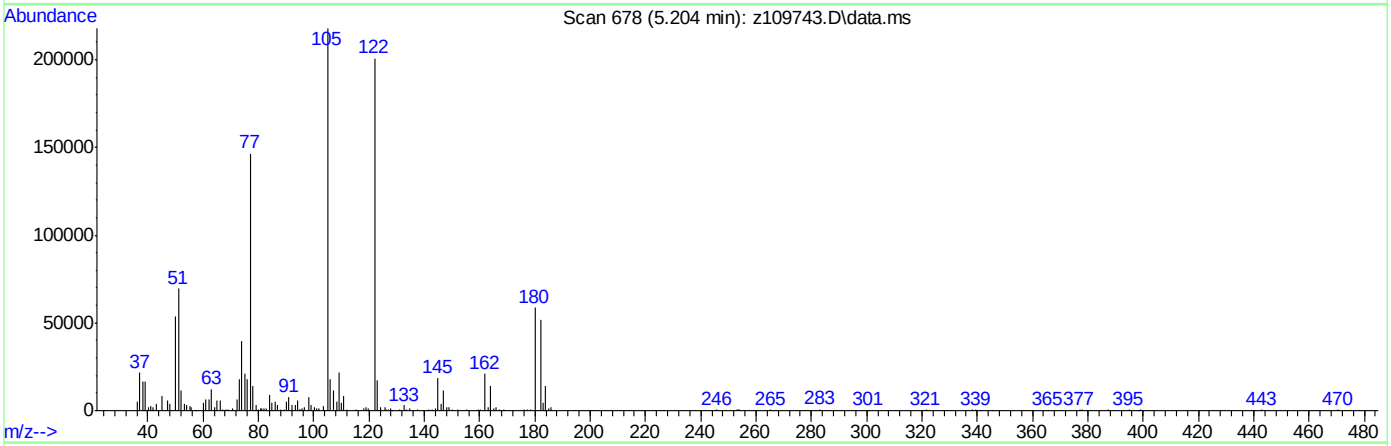
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.20	Poor instrument integration
Caprolactam	105-60-2		5.62	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:02:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration





TIC: z109743.D\data.ms

(31) Benzoic Acid

5.204min (-0.011) 72.83ppm

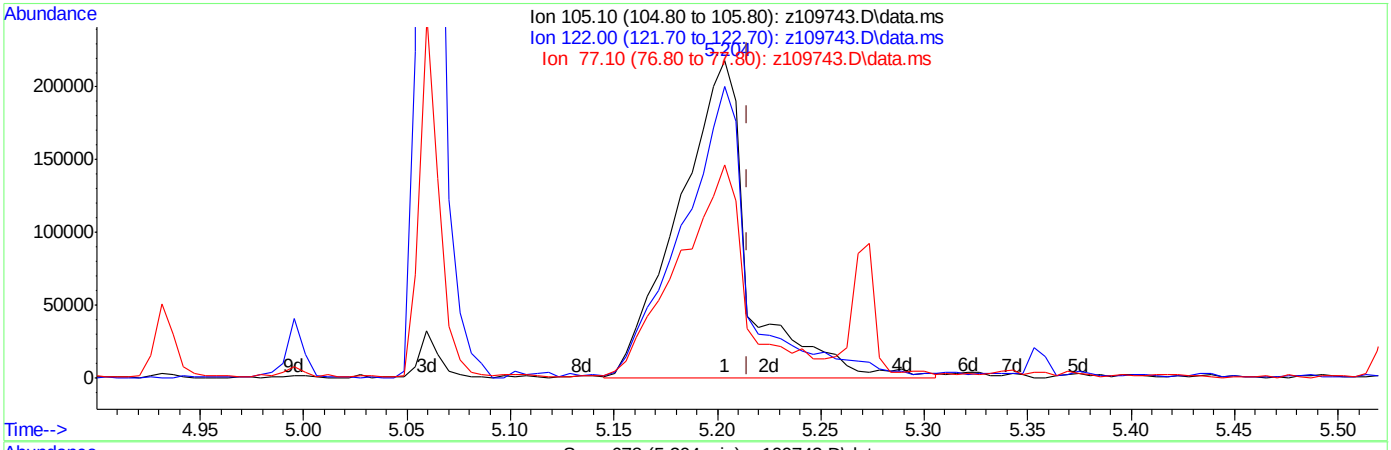
response 447525

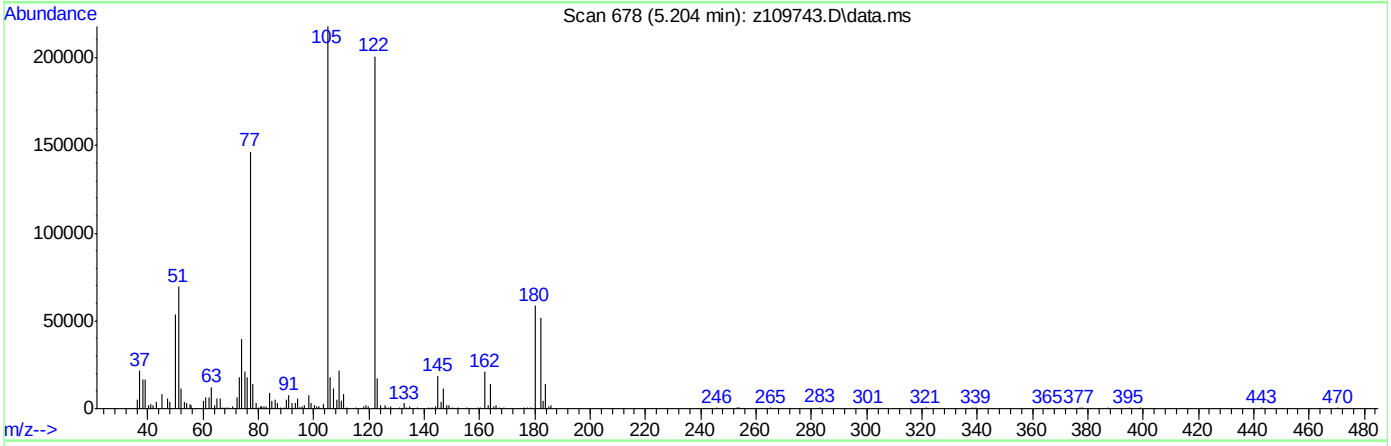
Ion	Exp%	Act%
105.10	100	100
122.00	94.00	92.29
77.10	70.50	67.19
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:02:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration





TIC: z109743.D\data.ms

(31) Benzoic Acid

5.204min (-0.011) 84.40ppm m

response 518620

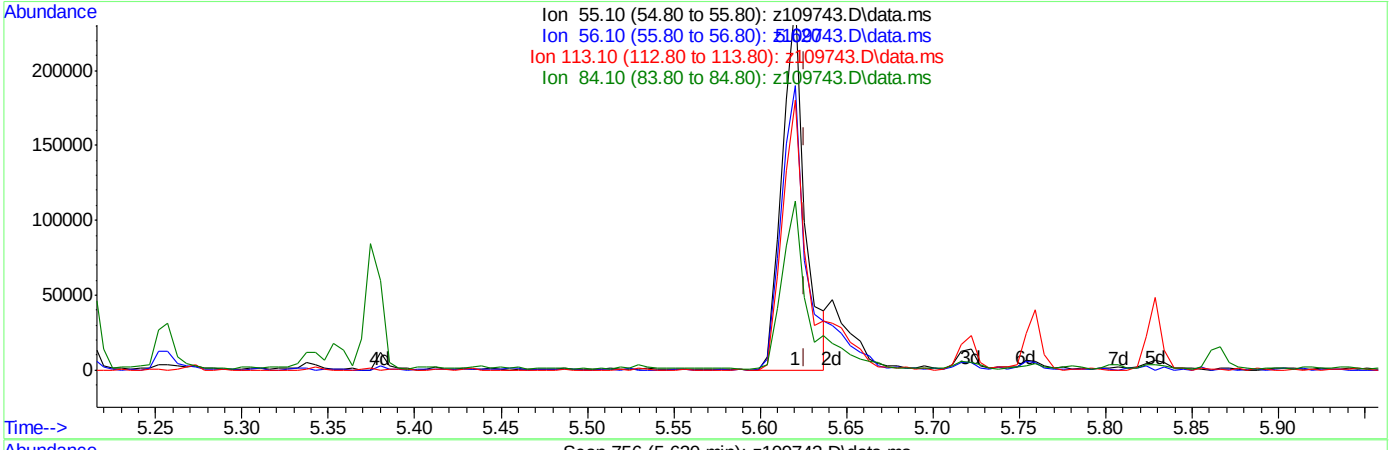
Ion	Exp%	Act%
105.10	100	100
122.00	94.00	92.10
77.10	70.50	67.25
0.00	0.00	0.00

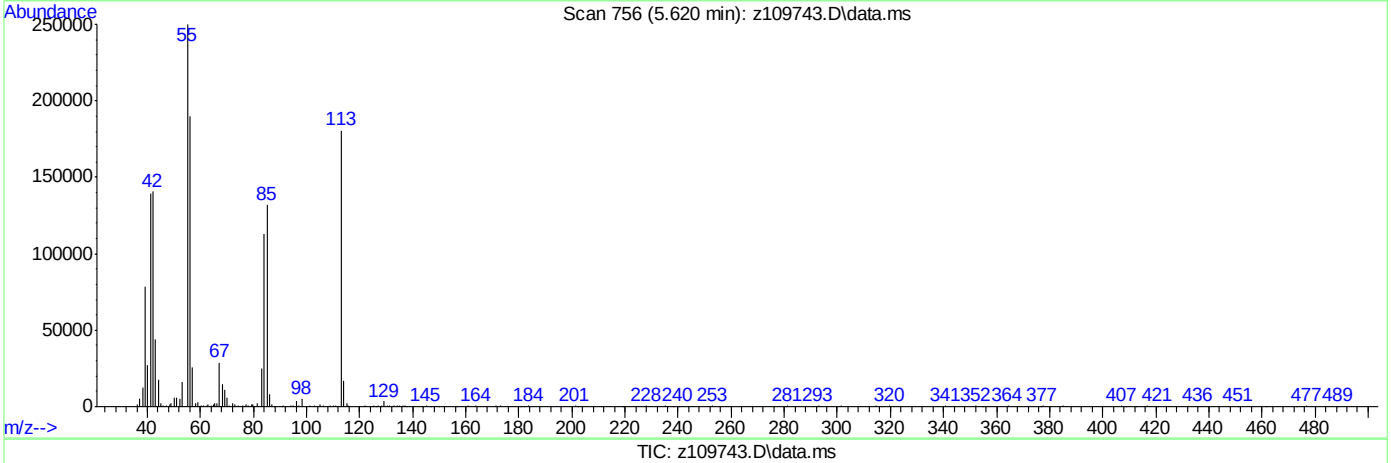
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:02:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration





TIC: z109743.D\data.ms

(41) Caprolactam (t)

5.620min (-0.006) 59.55ppm

response 226878

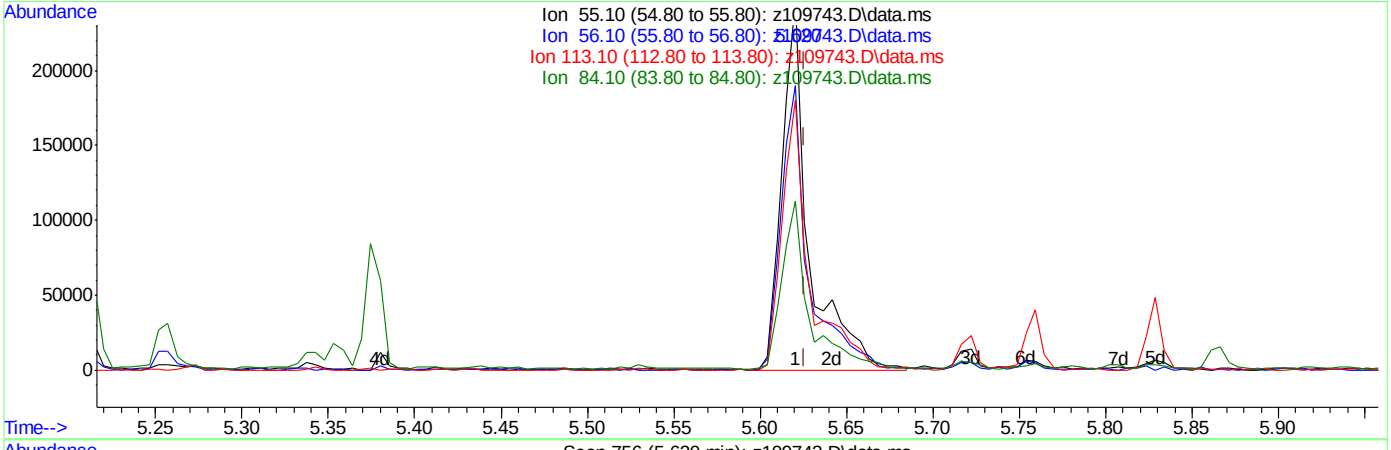
Ion	Exp%	Act%
55.10	100	100
56.10	73.50	75.29
113.10	68.60	71.30
84.10	44.10	43.64

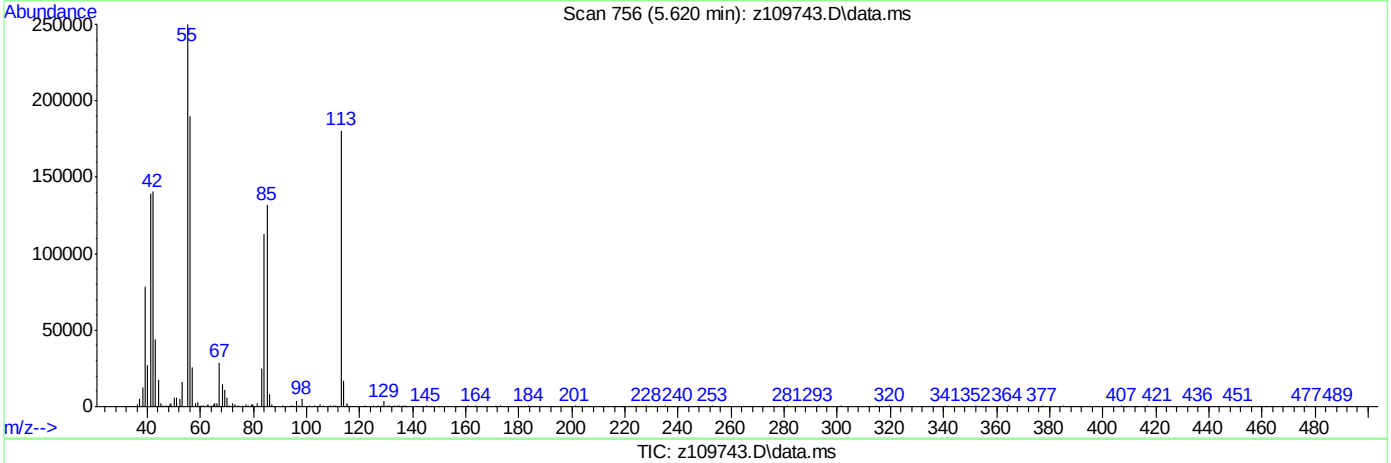
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109743.D
Acq On : 13 Apr 2016 10:38 pm
Operator : sarad
Sample : ic5485-80
Misc : op92825,ez5485
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 09:02:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:02:02 2016
Response via : Initial Calibration





TIC: z109743.D\data.ms

(41) Caprolactam (t)

5.620min (-0.006) 71.33ppm m

response 271772

Ion	Exp%	Act%
55.10	100	100
56.10	73.50	76.04
113.10	68.60	72.23
84.10	44.10	45.04

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109744.D
Acq On : 13 Apr 2016 11:09 pm
Operator : sarad
Sample : ic5485-25
Misc : op92825,ez5485
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 09:06:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:04:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	280948	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1064510	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	592883	40.00	ppm	0.00
69) Phenanthrene-d10	8.222	188	949333	40.00	ppm	0.00
83) Chrysene-d12	13.217	240	863958	40.00	ppm	0.00
92) Perylene-d12	16.204	264	858833	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	280948	40.00	ppm	0.00
104) Phenanthrene-d10a	8.222	188	949333	40.00	ppm	0.00
108) Chrysene-d12a	13.217	240	863958	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	592883	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1064510	40.00	ppm	0.00
114) Chrysene-d12b	13.217	240	863958	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.409	112	228527	23.35	ppm	0.00
Spiked Amount 50.000			Recovery	=	46.70%	
8) Phenol-d5	4.157	99	273897	24.19	ppm	0.00
Spiked Amount 50.000			Recovery	=	48.38%	
25) Nitrobenzene-d5	4.755	82	206136	23.36	ppm	0.00
Spiked Amount 50.000			Recovery	=	46.72%	
51) 2-Fluorobiphenyl	6.021	172	464848	24.64	ppm	0.00
Spiked Amount 50.000			Recovery	=	49.28%	
73) 2,4,6-Tribromophenol	7.351	330	68260	22.41	ppm	0.00
Spiked Amount 50.000			Recovery	=	44.82%	
86) Terphenyl-d14	11.059	244	423291	22.73	ppm	-0.01
Spiked Amount 50.000			Recovery	=	45.46%	
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.795	88	95996	22.87	ppm	93
3) Pyridine	2.175	79	180041	22.01	ppm	94
4) N-Nitrosodimethylamine	2.132	74	140193	25.86	ppm	92
6) Indene	4.520	116	423623	23.26	ppm	99
7) Cumene	3.719	105	546041	23.97	ppm	99
9) Phenol	4.162	94	277095	23.92	ppm	95
10) Aniline	4.119	93	329210	24.72	ppm	97
11) bis(2-Chloroethyl)ether	4.151	93	176483	22.02	ppm	97
12) 2-Chlorophenol	4.205	128	239621	21.91	ppm	95
13) Decane	4.194	43	231381	22.95	ppm	98
14) 1,3-Dichlorobenzene	4.285	146	275900	23.75	ppm	98
15) 1,4-Dichlorobenzene	4.344	146	261103	23.94	ppm	99
16) Benzyl alcohol	4.472	108	120344	23.90	ppm	89
17) 1,2-Dichlorobenzene	4.456	146	248316	22.72	ppm	95
18) Acetophenone	4.638	105	294033	23.70	ppm	93
19) 2-Methylphenol	4.584	108	201757	22.06	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.536	121	61040	21.31	ppm	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109744.D
Acq On : 13 Apr 2016 11:09 pm
Operator : sarad
Sample : ic5485-25
Misc : op92825,ez5485
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 09:06:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:04:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.696	108	218129	23.27	ppm	94
22) n-Nitroso-di-n-propyla...	4.638	70	152235	23.35	ppm	88
23) Hexachloroethane	4.696	201	79170	25.81	ppm	89
26) Nitrobenzene	4.766	77	209537	23.53	ppm	91
27) Quinoline	5.519	129	483781	23.45	ppm	98
28) Isophorone	4.926	82	366401	24.09	ppm	98
29) 2-Nitrophenol	4.995	139	134030	24.46	ppm	89
30) 2,4-Dimethylphenol	5.054	107	209074	24.46	ppm	97
31) Benzoic Acid	5.172	105	155360	23.66	ppm	89
32) bis(2-Chloroethoxy)met...	5.092	93	219992	22.96	ppm	99
33) 2,4-Dichlorophenol	5.188	162	185495	25.26	ppm	96
34) 2,6-Dichlorophenol	5.337	162	180699	25.00	ppm	98
35) 1,3,5-Trichlorobenzene	4.979	180	203664	25.15	ppm	95
36) 1,2,4-Trichlorobenzene	5.209	180	185260	23.91	ppm	96
37) 1,2,3-Trichlorobenzene	5.375	180	183818	24.59	ppm	90
38) Naphthalene	5.268	128	702811	23.40	ppm	99
39) 4-Chloroaniline	5.337	127	274166	23.24	ppm	93
40) 2,3-Dichloroaniline	5.984	161	224718	23.47	ppm	92
41) Caprolactam	5.594	55	89515	23.02	ppm	95
42) Hexachlorobutadiene	5.353	225	88600	26.22	ppm	99
43) 4-Chloro-3-methylphenol	5.711	107	197389	24.91	ppm	83
44) 2-Methylnaphthalene	5.754	141	403413	25.57	ppm	93
45) 1-Methylnaphthalene	5.829	141	422755	24.10	ppm	92
46) Dimethylnaphthalene	6.208	156	406350	23.89	ppm	97
48) Hexachlorocyclopentadiene	5.866	237	208790	56.51	ppm	96
49) 2,4,6-Trichlorophenol	5.984	196	120102	25.45	ppm	91
50) 2,4,5-Trichlorophenol	6.021	196	131136	24.58	ppm	88
52) 2-Chloronaphthalene	6.107	162	393753	23.02	ppm	98
53) Biphenyl	6.091	154	554076	23.33	ppm	98
54) 2-Nitroaniline	6.224	65	114355	25.39	ppm	95
55) Dimethylphthalate	6.342	163	461250	24.50	ppm	99
56) Acenaphthylene	6.438	152	714822	24.42	ppm	99
57) 2,6-Dinitrotoluene	6.395	165	100285	24.80	ppm	80
58) 3-Nitroaniline	6.566	138	124583	24.89	ppm	98
59) Acenaphthene	6.582	153	423635	24.05	ppm	98
60) 2,4-Dinitrophenol	6.641	184	103331	50.67	ppm	97
61) 4-Nitrophenol	6.796	109	52613	22.31	ppm	95
62) Dibenzofuran	6.742	168	583053	23.83	ppm	98
63) 2,4-Dinitrotoluene	6.753	165	134141	25.04	ppm	97
64) 2,3,4,6-Tetrachlorophenol	6.887	232	104650	24.51	ppm	98
65) Diethylphthalate	6.972	149	448588	22.68	ppm	99
66) Fluorene	7.074	166	475126	23.83	ppm	92
67) 4-Chlorophenyl-phenyle...	7.074	204	203013	24.48	ppm	95
68) 4-Nitroaniline	7.175	138	131233	27.31	ppm	94
70) 4,6-Dinitro-2-methylph...	7.159	198	68896	23.90	ppm	96
71) n-Nitrosodiphenylamine	7.218	169	328414	23.79	ppm	96
72) 1,2-Diphenylhydrazine	7.245	77	396607	24.09	ppm	99
74) 4-Bromophenyl-phenylether	7.629	248	118368	23.74	ppm	94
75) Hexachlorobenzene	7.704	284	128352	22.82	ppm	95
76) Pentachlorophenol	8.009	266	146716	49.47	ppm	95

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109744.D
Acq On : 13 Apr 2016 11:09 pm
Operator : sarad
Sample : ic5485-25
Misc : op92825,ez5485
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 09:06:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:04:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	8.254	178	635376	23.09 ppm	95
78) Anthracene	8.324	178	670345	23.84 ppm	100
79) Carbazole	8.628	167	648697	24.24 ppm	97
80) Di-n-butylphthalate	9.216	149	793411	24.06 ppm	100
81) Fluoranthene	10.236	202	668499	22.72 ppm	97
82) Octadecane	8.073	57	278655	23.56 ppm	98
84) Pyrene	10.653	202	684539	23.25 ppm	97
85) Butyl stearate	12.395	56	193847	24.68 ppm	95
87) Butylbenzylphthalate	12.191	149	341075	24.35 ppm	89
88) Benzo[a]anthracene	13.185	228	602447	23.23 ppm	97
89) 3,3'-Dichlorobenzidine	13.292	252	227032	25.21 ppm	98
90) Chrysene	13.265	228	585842	23.15 ppm	97
91) bis(2-Ethylhexyl)phtha...	13.532	149	475075	24.18 ppm	99
93) Di-n-octylphthalate	14.932	149	849184	26.01 ppm	99
94) Benzo[b]fluoranthene	15.456	252	634827	22.87 ppm	97
95) Benzo[k]fluoranthene	15.509	252	590358	24.52 ppm	98
96) Benzo[a]pyrene	16.075	252	597927	24.52 ppm	98
97) Indeno[1,2,3-cd]pyrene	18.111	276	578561	23.89 ppm	95
98) Dibenz(a,h)acridine	17.753	279	550356	23.28 ppm	99
99) Dibenz[a,h]anthracene	18.164	278	608301	23.74 ppm	96
100) 7,12-Dimethylbenz(a)an...	15.466	256	287021	22.32 ppm	96
101) Benzo[g,h,i]perylene	18.538	276	612804	22.99 ppm	99

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

7.6.118

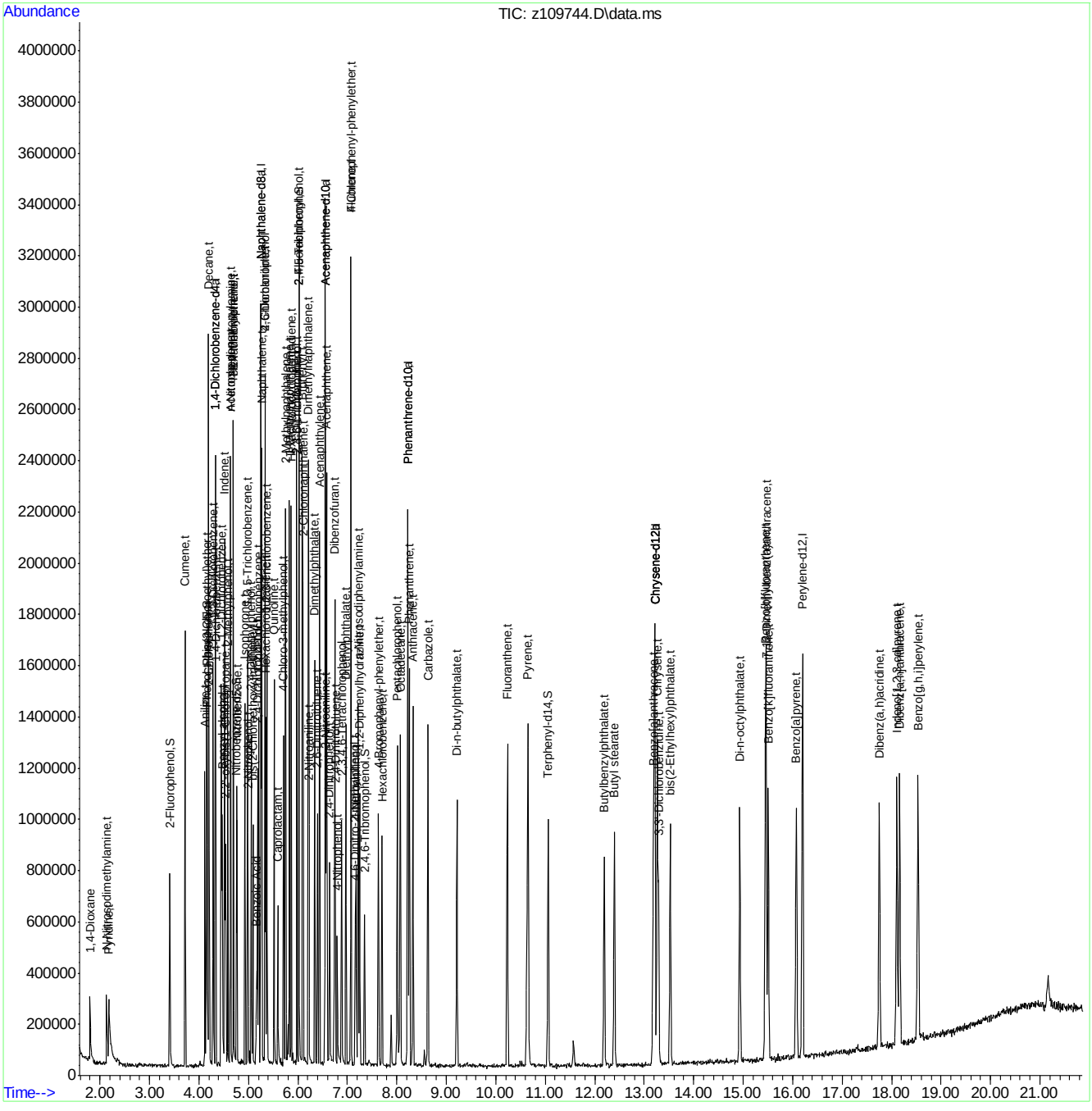
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109744.D
Acq On : 13 Apr 2016 11:09 pm
Operator : sarad
Sample : ic5485-25
Misc : op92825,ez5485
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 09:06:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:04:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109745.D
Acq On : 13 Apr 2016 11:41 pm
Operator : sarad
Sample : ic5485-10
Misc : op92825,ez5485
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 09:12:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:11:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	293705	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1115195	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	602060	40.00	ppm	0.00
69) Phenanthrene-d10	8.222	188	961212	40.00	ppm	0.00
83) Chrysene-d12	13.207	240	884555	40.00	ppm	-0.01
92) Perylene-d12	16.204	264	877332	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	293705	40.00	ppm	0.00
104) Phenanthrene-d10a	8.222	188	961212	40.00	ppm	0.00
108) Chrysene-d12a	13.207	240	884555	40.00	ppm	-0.01
110) Acenaphthene-d10a	6.555	164	602060	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1115195	40.00	ppm	0.00
114) Chrysene-d12b	13.207	240	884555	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.409	112	93922	9.30	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.60%	
8) Phenol-d5	4.157	99	114060	9.70	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.40%	
25) Nitrobenzene-d5	4.755	82	83435	9.15	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.30%	
51) 2-Fluorobiphenyl	6.021	172	189394	9.91	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.82%	
73) 2,4,6-Tribromophenol	7.351	330	28009	9.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.54%	
86) Terphenyl-d14	11.054	244	175695	9.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.76%	
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.801	88	44809	10.39	ppm #	78
3) Pyridine	2.207	79	62011	7.55	ppm	96
4) N-Nitrosodimethylamine	2.148	74	51336	9.00	ppm	78
6) Indene	4.520	116	176002	9.37	ppm	99
7) Cumene	3.719	105	225760	9.56	ppm	98
9) Phenol	4.167	94	111487	9.29	ppm	83
10) Aniline	4.119	93	137896	9.93	ppm	99
11) bis(2-Chloroethyl)ether	4.151	93	78838	9.64	ppm	90
12) 2-Chlorophenol	4.205	128	107560	9.65	ppm	97
13) Decane	4.194	43	95547	9.22	ppm	97
14) 1,3-Dichlorobenzene	4.285	146	113957	9.48	ppm	99
15) 1,4-Dichlorobenzene	4.344	146	110737	9.79	ppm	90
16) Benzyl alcohol	4.472	108	45793	8.78	ppm	98
17) 1,2-Dichlorobenzene	4.456	146	102814	9.17	ppm	94
18) Acetophenone	4.638	105	123497	9.62	ppm	98
19) 2-Methylphenol	4.584	108	88760	9.51	ppm	94
20) 2,2'-oxybis(1-Chloropr...	4.536	121	27072	9.31	ppm #	76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109745.D
Acq On : 13 Apr 2016 11:41 pm
Operator : sarad
Sample : ic5485-10
Misc : op92825,ez5485
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 09:12:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:11:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	4.696	108	93553	9.68	ppm		95
22) n-Nitroso-di-n-propyla...	4.638	70	61821	9.19	ppm		92
23) Hexachloroethane	4.696	201	33453	10.36	ppm		96
26) Nitrobenzene	4.766	77	84202	9.13	ppm		93
27) Quinoline	5.514	129	196687	9.22	ppm		98
28) Isophorone	4.926	82	148068	9.36	ppm		98
29) 2-Nitrophenol	4.996	139	52059	9.11	ppm		94
30) 2,4-Dimethylphenol	5.054	107	88278	9.90	ppm		94
31) Benzoic Acid	5.150	105	53056	7.82	ppm		97
32) bis(2-Chloroethoxy)met...	5.086	93	92463	9.37	ppm		99
33) 2,4-Dichlorophenol	5.188	162	79146	10.27	ppm		89
34) 2,6-Dichlorophenol	5.337	162	75224	9.93	ppm		96
35) 1,3,5-Trichlorobenzene	4.979	180	89623	10.55	ppm		95
36) 1,2,4-Trichlorobenzene	5.209	180	83302	10.35	ppm		93
37) 1,2,3-Trichlorobenzene	5.375	180	75509	9.67	ppm		85
38) Naphthalene	5.268	128	287267	9.25	ppm		98
39) 4-Chloroaniline	5.337	127	114653	9.41	ppm		95
40) 2,3-Dichloroaniline	5.979	161	92098	9.29	ppm		91
41) Caprolactam	5.583	55	37173	9.27	ppm		95
42) Hexachlorobutadiene	5.353	225	39183	10.96	ppm		97
43) 4-Chloro-3-methylphenol	5.711	107	76579	9.23	ppm	#	32
44) 2-Methylnaphthalene	5.754	141	171428	10.33	ppm		95
45) 1-Methylnaphthalene	5.824	141	175329	9.61	ppm		99
46) Dimethylnaphthalene	6.208	156	167293	9.47	ppm		96
48) Hexachlorocyclopentadiene	5.866	237	82798	21.51	ppm		97
49) 2,4,6-Trichlorophenol	5.979	196	52662	10.95	ppm		94
50) 2,4,5-Trichlorophenol	6.021	196	51898	9.61	ppm		91
52) 2-Chloronaphthalene	6.107	162	166925	9.76	ppm		97
53) Biphenyl	6.091	154	233260	9.80	ppm		98
54) 2-Nitroaniline	6.219	65	48402	10.55	ppm	#	68
55) Dimethylphthalate	6.342	163	185107	9.72	ppm		99
56) Acenaphthylene	6.438	152	294697	9.96	ppm		99
57) 2,6-Dinitrotoluene	6.395	165	43389	10.58	ppm		90
58) 3-Nitroaniline	6.566	138	50331	9.91	ppm		91
59) Acenaphthene	6.582	153	176954	9.97	ppm		97
60) 2,4-Dinitrophenol	6.641	184	31240	15.04	ppm		80
61) 4-Nitrophenol	6.796	109	23538	10.05	ppm	#	77
62) Dibenzofuran	6.737	168	241479	9.81	ppm		93
63) 2,4-Dinitrotoluene	6.753	165	56943	10.46	ppm		95
64) 2,3,4,6-Tetrachlorophenol	6.887	232	37998	8.80	ppm		85
65) Diethylphthalate	6.967	149	185356	9.40	ppm		96
66) Fluorene	7.074	166	205326	10.24	ppm		92
67) 4-Chlorophenyl-phenyle...	7.074	204	80965	9.65	ppm		92
68) 4-Nitroaniline	7.170	138	52497	10.56	ppm		97
70) 4,6-Dinitro-2-methylph...	7.159	198	26944	9.33	ppm		90
71) n-Nitrosodiphenylamine	7.218	169	142083	10.27	ppm		98
72) 1,2-Diphenylhydrazine	7.245	77	165524	10.00	ppm		95
74) 4-Bromophenyl-phenylether	7.629	248	45787	9.16	ppm		98
75) Hexachlorobenzene	7.699	284	53615	9.58	ppm		87
76) Pentachlorophenol	8.009	266	55326	18.46	ppm		91

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109745.D
Acq On : 13 Apr 2016 11:41 pm
Operator : sarad
Sample : ic5485-10
Misc : op92825,ez5485
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 09:12:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:11:50 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.249	178	265865	9.69	ppm	97
78)	Anthracene	8.324	178	280527	9.95	ppm	96
79)	Carbazole	8.623	167	257259	9.55	ppm	95
80)	Di-n-butylphthalate	9.211	149	325473	9.82	ppm	99
81)	Fluoranthene	10.231	202	269861	9.23	ppm	97
82)	Octadecane	8.067	57	115441	9.75	ppm	95
84)	Pyrene	10.648	202	284039	9.56	ppm	92
85)	Butyl stearate	12.395	56	74046	9.23	ppm	95
87)	Butylbenzylphthalate	12.192	149	133403	9.35	ppm	94
88)	Benzo[a]anthracene	13.180	228	237993	9.09	ppm	94
89)	3,3'-Dichlorobenzidine	13.287	252	85636	9.27	ppm	87
90)	Chrysene	13.255	228	234303	9.18	ppm	99
91)	bis(2-Ethylhexyl)phtha...	13.527	149	183442	9.18	ppm	97
93)	Di-n-octylphthalate	14.932	149	320172	9.52	ppm	97
94)	Benzo[b]fluoranthene	15.445	252	256650	9.21	ppm	99
95)	Benzo[k]fluoranthene	15.498	252	246331	10.05	ppm	98
96)	Benzo[a]pyrene	16.070	252	231324	9.32	ppm	92
97)	Indeno[1,2,3-cd]pyrene	18.105	276	234325	9.56	ppm	91
98)	Dibenz(a,h)acridine	17.747	279	218357	9.17	ppm	90
99)	Dibenz[a,h]anthracene	18.159	278	245089	9.46	ppm	92
100)	7,12-Dimethylbenz(a)an...	15.461	256	111687	8.69	ppm	93
101)	Benzo[g,h,i]perylene	18.527	276	241668	9.02	ppm	94

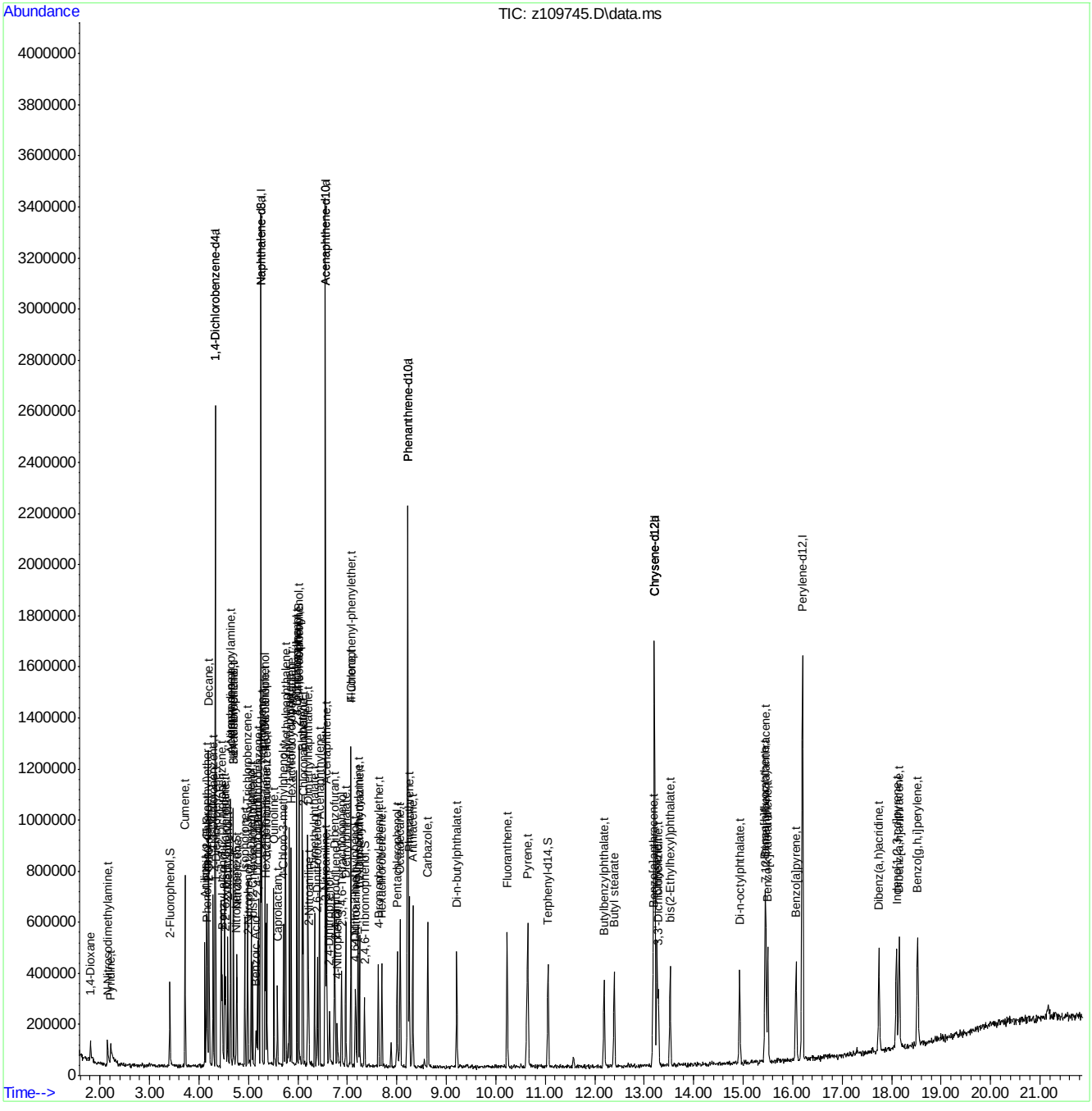
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109745.D
Acq On : 13 Apr 2016 11:41 pm
Operator : sarad
Sample : ic5485-10
Misc : op92825,ez5485
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 09:12:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:11:50 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 09:12:13 2016 RTE

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SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109746.D
Acq On : 14 Apr 2016 12:12 am
Operator : sarad
Sample : ic5485-5
Misc : op92825,ez5485
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 09:15:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:12:30 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	284017	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1116459	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	607895	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	975683	40.00	ppm	0.00
83) Chrysene-d12	13.206	240	874619	40.00	ppm	0.00
92) Perylene-d12	16.198	264	881979	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	284017	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	975683	40.00	ppm	0.00
108) Chrysene-d12a	13.206	240	874619	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	607895	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1116459	40.00	ppm	0.00
114) Chrysene-d12b	13.206	240	874619	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.409	112	54296	5.63	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.26%	
8) Phenol-d5	4.157	99	63351	5.60	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.20%	
25) Nitrobenzene-d5	4.755	82	47757	5.30	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.60%	
51) 2-Fluorobiphenyl	6.021	172	113231	5.88	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.76%	
73) 2,4,6-Tribromophenol	7.346	330	15162	5.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.02%	
86) Terphenyl-d14	11.059	244	97949	5.35	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.70%	
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.806	88	22247	5.30	ppm	79
3) Pyridine	2.239	79	17967	2.41	ppm	75
4) N-Nitrosodimethylamine	2.159	74	28640	5.28	ppm #	60
6) Indene	4.520	116	99499	5.54	ppm	93
7) Cumene	3.719	105	129222	5.70	ppm	98
9) Phenol	4.162	94	65725	5.73	ppm	86
10) Aniline	4.119	93	71141	5.30	ppm	91
11) bis(2-Chloroethyl)ether	4.151	93	46362	5.90	ppm	88
12) 2-Chlorophenol	4.205	128	59546	5.56	ppm	94
13) Decane	4.194	43	55356	5.60	ppm	96
14) 1,3-Dichlorobenzene	4.285	146	66904	5.81	ppm	96
15) 1,4-Dichlorobenzene	4.344	146	63795	5.85	ppm	96
16) Benzyl alcohol	4.472	108	22539	4.56	ppm #	79
17) 1,2-Dichlorobenzene	4.461	146	59069	5.52	ppm	92
18) Acetophenone	4.637	105	69088	5.60	ppm	97
19) 2-Methylphenol	4.584	108	52289	5.84	ppm	96
20) 2,2'-oxybis(1-Chloropr...	4.536	121	14987	5.39	ppm #	70

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109746.D
Acq On : 14 Apr 2016 12:12 am
Operator : sarad
Sample : ic5485-5
Misc : op92825,ez5485
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 09:15:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:12:30 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	4.696	108	54660	5.88	ppm		96
22) n-Nitroso-di-n-propyla...	4.637	70	37157	5.79	ppm		91
23) Hexachloroethane	4.696	201	19557	6.23	ppm		97
26) Nitrobenzene	4.766	77	49322	5.42	ppm		95
27) Quinoline	5.514	129	111484	5.29	ppm		96
28) Isophorone	4.926	82	86627	5.53	ppm		98
29) 2-Nitrophenol	4.995	139	29300	5.20	ppm		95
30) 2,4-Dimethylphenol	5.054	107	45403	5.10	ppm		92
31) Benzoic Acid	5.156	105	28219	4.34	ppm	#	65
32) bis(2-Chloroethoxy)met...	5.086	93	53350	5.46	ppm		96
33) 2,4-Dichlorophenol	5.188	162	42413	5.47	ppm		80
34) 2,6-Dichlorophenol	5.337	162	42574	5.62	ppm		87
35) 1,3,5-Trichlorobenzene	4.979	180	51317	5.98	ppm		90
36) 1,2,4-Trichlorobenzene	5.209	180	45130	5.57	ppm		94
37) 1,2,3-Trichlorobenzene	5.375	180	46698	6.01	ppm		89
38) Naphthalene	5.268	128	164883	5.37	ppm		97
39) 4-Chloroaniline	5.337	127	71708	5.94	ppm		94
40) 2,3-Dichloroaniline	5.978	161	53499	5.46	ppm		98
41) Caprolactam	5.578	55	20860	5.26	ppm		90
42) Hexachlorobutadiene	5.353	225	18446	5.07	ppm		90
43) 4-Chloro-3-methylphenol	5.711	107	45947	5.61	ppm	#	98
44) 2-Methylnaphthalene	5.754	141	99491	5.95	ppm		93
45) 1-Methylnaphthalene	5.823	141	101012	5.57	ppm		99
46) Dimethylnaphthalene	6.208	156	98399	5.61	ppm		94
48) Hexachlorocyclopentadiene	5.866	237	47205	11.99	ppm		97
49) 2,4,6-Trichlorophenol	5.978	196	28599	5.80	ppm		94
50) 2,4,5-Trichlorophenol	6.021	196	31017	5.73	ppm		97
52) 2-Chloronaphthalene	6.107	162	95605	5.56	ppm		98
53) Biphenyl	6.091	154	137244	5.73	ppm		98
54) 2-Nitroaniline	6.219	65	23014	4.92	ppm		88
55) Dimethylphthalate	6.342	163	108091	5.65	ppm		99
56) Acenaphthylene	6.438	152	173156	5.80	ppm		98
57) 2,6-Dinitrotoluene	6.395	165	23361	5.59	ppm		86
58) 3-Nitroaniline	6.566	138	26425	5.16	ppm	#	63
59) Acenaphthene	6.582	153	101294	5.65	ppm		94
60) 2,4-Dinitrophenol	6.641	184	14364	7.20	ppm		71
61) 4-Nitrophenol	6.801	109	12468	5.27	ppm		87
62) Dibenzofuran	6.737	168	140045	5.65	ppm		90
63) 2,4-Dinitrotoluene	6.753	165	26788	4.84	ppm		97
64) 2,3,4,6-Tetrachlorophenol	6.887	232	24451	5.72	ppm		81
65) Diethylphthalate	6.967	149	112027	5.68	ppm		96
66) Fluorene	7.074	166	118471	5.83	ppm		98
67) 4-Chlorophenyl-phenyle...	7.074	204	47232	5.61	ppm		86
68) 4-Nitroaniline	7.164	138	27334	5.40	ppm		90
70) 4,6-Dinitro-2-methylph...	7.159	198	12303	4.26	ppm		84
71) n-Nitrosodiphenylamine	7.212	169	77088	5.46	ppm		96
72) 1,2-Diphenylhydrazine	7.244	77	94137	5.60	ppm		96
74) 4-Bromophenyl-phenylether	7.629	248	28085	5.62	ppm		95
75) Hexachlorobenzene	7.699	284	31020	5.50	ppm		93
76) Pentachlorophenol	8.008	266	29034	9.67	ppm		92

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109746.D
Acq On : 14 Apr 2016 12:12 am
Operator : sarad
Sample : ic5485-5
Misc : op92825,ez5485
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 09:15:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:12:30 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.249	178	155211	5.60	ppm	99
78)	Anthracene	8.324	178	155570	5.44	ppm	93
79)	Carbazole	8.623	167	148717	5.48	ppm	92
80)	Di-n-butylphthalate	9.210	149	178991	5.34	ppm	97
81)	Fluoranthene	10.231	202	149544	5.10	ppm	99
82)	Octadecane	8.067	57	68158	5.70	ppm	95
84)	Pyrene	10.653	202	168604	5.78	ppm	99
85)	Butyl stearate	12.389	56	43458	5.55	ppm	90
87)	Butylbenzylphthalate	12.191	149	73068	5.24	ppm	84
88)	Benzo[a]anthracene	13.180	228	134944	5.29	ppm	95
89)	3,3'-Dichlorobenzidine	13.287	252	53888	5.97	ppm	77
90)	Chrysene	13.255	228	134395	5.40	ppm	98
91)	bis(2-Ethylhexyl)phtha...	13.527	149	108596	5.57	ppm	96
93)	Di-n-octylphthalate	14.927	149	175392	5.23	ppm	100
94)	Benzo[b]fluoranthene	15.445	252	151008	5.46	ppm	97
95)	Benzo[k]fluoranthene	15.498	252	141212	5.73	ppm	98
96)	Benzo[a]pyrene	16.070	252	132325	5.36	ppm	94
97)	Indeno[1,2,3-cd]pyrene	18.100	276	136824	5.59	ppm	93
98)	Dibenz(a,h)acridine	17.742	279	118670	5.03	ppm	89
99)	Dibenz[a,h]anthracene	18.153	278	144292	5.59	ppm	97
100)	7,12-Dimethylbenz(a)an...	15.456	256	68000	5.38	ppm	94
101)	Benzo[g,h,i]perylene	18.527	276	144367	5.45	ppm	94

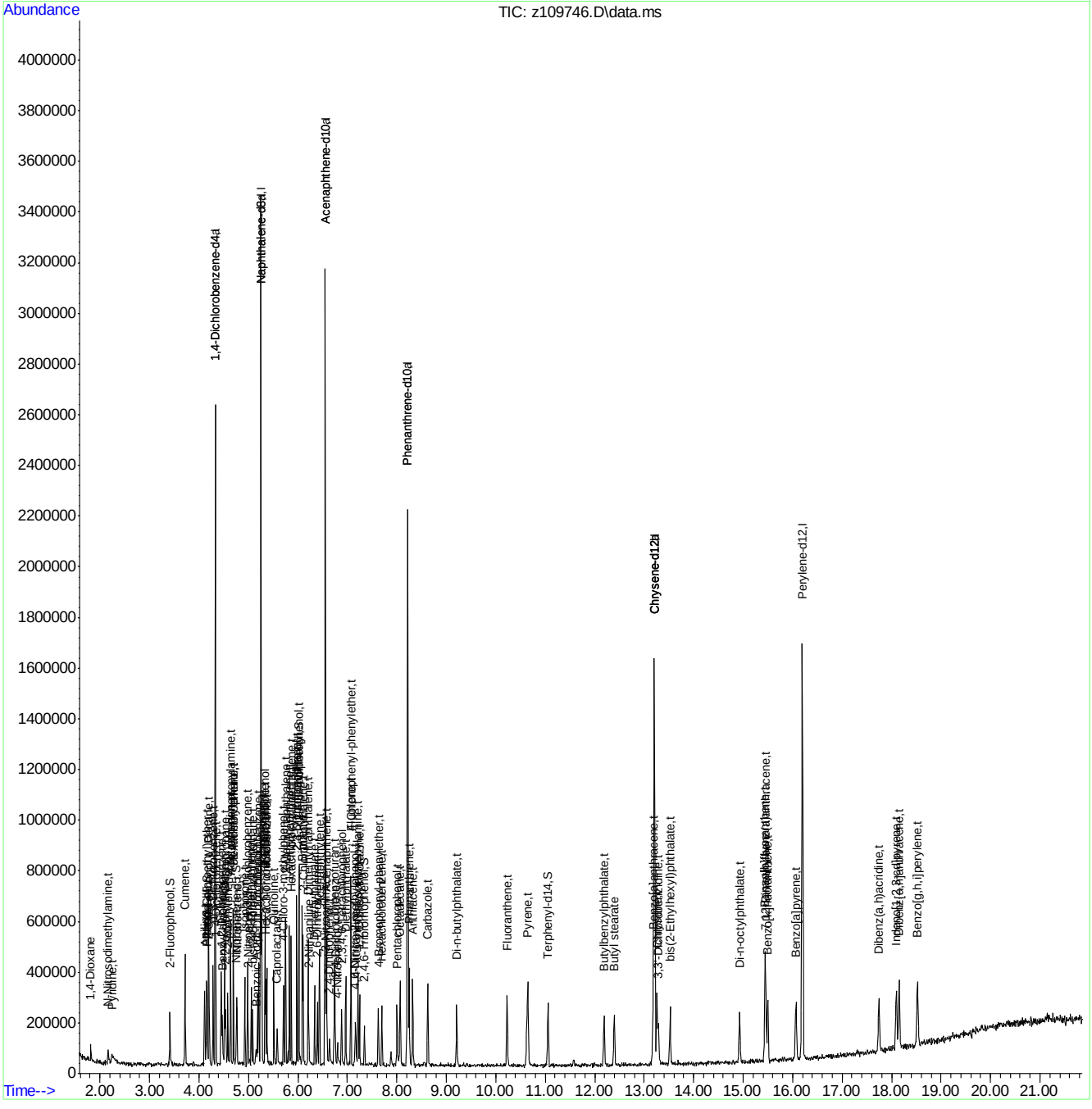
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109746.D
Acq On : 14 Apr 2016 12:12 am
Operator : sarad
Sample : ic5485-5
Misc : op92825,ez5485
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 09:15:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:12:30 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 09:15:14 2016 RTE

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SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109747.D
Acq On : 14 Apr 2016 12:44 am
Operator : sarad
Sample : ic5485-1
Misc : op92825,ez5485
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 14 08:44:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:43:41 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	297751	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1125663	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	606870	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	963905	40.00	ppm	0.00
83) Chrysene-d12	13.206	240	875954	40.00	ppm	-0.01
92) Perylene-d12	16.198	264	873471	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.328	152	297751	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	963905	40.00	ppm	0.00
108) Chrysene-d12a	13.206	240	875954	40.00	ppm	-0.01
110) Acenaphthene-d10a	6.555	164	606870	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1125663	40.00	ppm	0.00
114) Chrysene-d12b	13.206	240	875954	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.414	112	10312	0.94	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.88%	
8) Phenol-d5	4.157	99	12742	1.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.02%	
25) Nitrobenzene-d5	4.755	82	10558	1.06	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.12%	
51) 2-Fluorobiphenyl	6.021	172	22896	1.10	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.20%	
73) 2,4,6-Tribromophenol	7.346	330	3813	1.24	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.48%	
86) Terphenyl-d14	11.054	244	19910	0.95	ppm	-0.01
Spiked Amount 50.000			Recovery	=	1.90%	
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.827	88	4004	0.72	ppm	# 65
4) N-Nitrosodimethylamine	2.191	74	4714	0.61	ppm	# 52
6) Indene	4.520	116	21359	0.98	ppm	100
7) Cumene	3.719	105	26419	1.04	ppm	98
9) Phenol	4.167	94	13297	0.99	ppm	91
10) Aniline	4.125	93	14916	0.93	ppm	95
11) bis(2-Chloroethyl)ether	4.157	93	9531	1.04	ppm	82
12) 2-Chlorophenol	4.210	128	13577	1.02	ppm	83
13) Decane	4.194	43	13480	1.15	ppm	83
14) 1,3-Dichlorobenzene	4.285	146	13195	0.94	ppm	# 62
15) 1,4-Dichlorobenzene	4.338	146	13072	1.12	ppm	86
16) Benzyl alcohol	4.477	108	5415	1.02	ppm	# 66
17) 1,2-Dichlorobenzene	4.461	146	13506	1.05	ppm	95
18) Acetophenone	4.643	105	12986	0.86	ppm	86
19) 2-Methylphenol	4.584	108	10640	1.06	ppm	71
20) 2,2'-oxybis(1-Chloropr...	4.541	121	3216	0.86	ppm	# 74
21) 3&4-Methylphenol	4.696	108	11147	1.03	ppm	95

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109747.D
Acq On : 14 Apr 2016 12:44 am
Operator : sarad
Sample : ic5485-1
Misc : op92825,ez5485
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 14 08:44:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:43:41 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	4.638	70	7843	0.98	ppm		84
23) Hexachloroethane	4.696	201	3327	0.94	ppm		97
26) Nitrobenzene	4.766	77	10741	0.99	ppm		99
27) Quinoline	5.519	129	24206	1.04	ppm		94
28) Isophorone	4.926	82	16753	0.98	ppm		89
29) 2-Nitrophenol	4.995	139	6325	1.03	ppm		92
30) 2,4-Dimethylphenol	5.060	107	9134	0.93	ppm		85
32) bis(2-Chloroethoxy)met...	5.086	93	12237	1.18	ppm		90
33) 2,4-Dichlorophenol	5.193	162	7721	0.96	ppm		86
34) 2,6-Dichlorophenol	5.337	162	8030	1.01	ppm		64
35) 1,3,5-Trichlorobenzene	4.979	180	8732	0.92	ppm	#	63
36) 1,2,4-Trichlorobenzene	5.209	180	8994	0.99	ppm		80
37) 1,2,3-Trichlorobenzene	5.375	180	9070	1.07	ppm		96
38) Naphthalene	5.268	128	37207	1.10	ppm		75
39) 4-Chloroaniline	5.337	127	15213	1.09	ppm		89
40) 2,3-Dichloroaniline	5.984	161	11685	1.04	ppm		84
41) Caprolactam	5.594	55	3972	0.84	ppm	#	62
42) Hexachlorobutadiene	5.353	225	3211	0.78	ppm	#	57
43) 4-Chloro-3-methylphenol	5.711	107	8846	1.03	ppm		84
44) 2-Methylnaphthalene	5.754	141	17834	1.00	ppm	#	56
45) 1-Methylnaphthalene	5.823	141	23616	1.27	ppm		85
46) Dimethylnaphthalene	6.208	156	19372	0.99	ppm		80
48) Hexachlorocyclopentadiene	5.866	237	6815	1.81	ppm		99
49) 2,4,6-Trichlorophenol	5.984	196	4953	0.95	ppm		93
50) 2,4,5-Trichlorophenol	6.027	196	5917	0.92	ppm		93
52) 2-Chloronaphthalene	6.107	162	20330	0.99	ppm		87
53) Biphenyl	6.091	154	28688	1.07	ppm		96
54) 2-Nitroaniline	6.224	65	4071	0.73	ppm		94
55) Dimethylphthalate	6.342	163	20502	0.96	ppm		76
56) Acenaphthylene	6.433	152	33365	1.04	ppm		84
57) 2,6-Dinitrotoluene	6.395	165	4690	1.24	ppm		76
58) 3-Nitroaniline	6.571	138	5464	1.01	ppm		67
59) Acenaphthene	6.582	153	20219	1.02	ppm		92
61) 4-Nitrophenol	6.812	109	2657	0.99	ppm	#	73
62) Dibenzofuran	6.737	168	28678	1.05	ppm		94
63) 2,4-Dinitrotoluene	6.753	165	4721	0.71	ppm		66
64) 2,3,4,6-Tetrachlorophenol	6.887	232	4883	1.03	ppm		82
65) Diethylphthalate	6.967	149	24202	1.09	ppm		91
66) Fluorene	7.074	166	23953	1.06	ppm		87
67) 4-Chlorophenyl-phenyle...	7.074	204	9161	0.94	ppm		76
68) 4-Nitroaniline	7.170	138	4534	0.89	ppm		88
71) n-Nitrosodiphenylamine	7.212	169	13719	0.81	ppm		83
72) 1,2-Diphenylhydrazine	7.245	77	18604	1.02	ppm		75
74) 4-Bromophenyl-phenylether	7.629	248	5793	1.07	ppm	#	72
75) Hexachlorobenzene	7.699	284	7078	1.23	ppm		67
76) Pentachlorophenol	8.014	266	5692	2.11	ppm		88
77) Phenanthrene	8.249	178	31609	1.07	ppm		97
78) Anthracene	8.318	178	30520	0.96	ppm		99
79) Carbazole	8.623	167	27901	0.92	ppm		72
80) Di-n-butylphthalate	9.210	149	33667	0.91	ppm		95

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109747.D
Acq On : 14 Apr 2016 12:44 am
Operator : sarad
Sample : ic5485-1
Misc : op92825,ez5485
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 14 08:44:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:43:41 2016
Response via : Initial Calibration

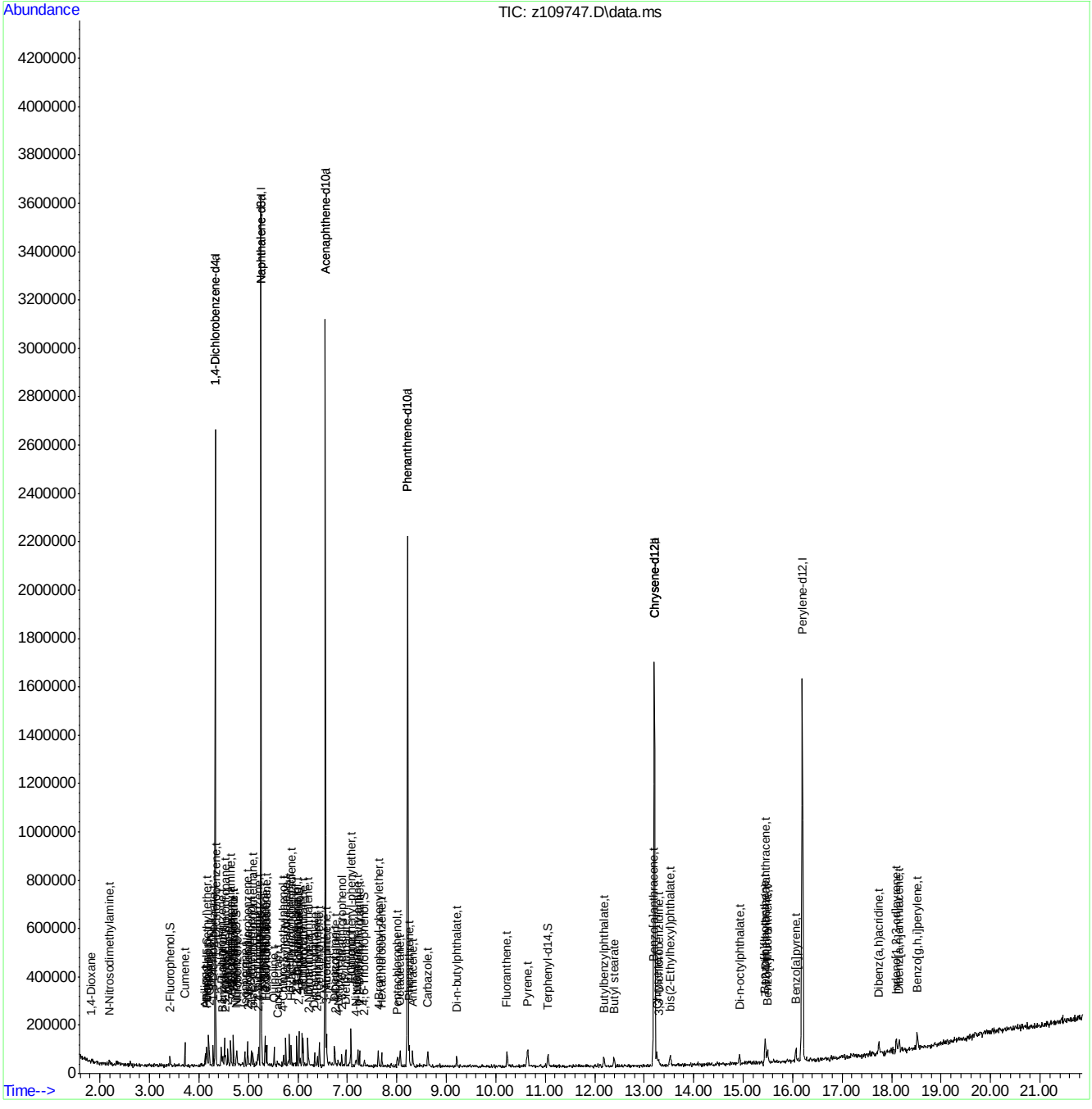
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
81)	Fluoranthene	10.226	202	36103	1.17	ppm	98
82)	Octadecane	8.067	57	12845	0.92	ppm	90
84)	Pyrene	10.653	202	31822	0.94	ppm	88
85)	Butyl stearate	12.394	56	6899	0.78	ppm	78
87)	Butylbenzylphthalate	12.181	149	13751	0.93	ppm	99
88)	Benzo[a]anthracene	13.180	228	28116	1.00	ppm	74
89)	3,3'-Dichlorobenzidine	13.292	252	9141	0.92	ppm	88
90)	Chrysene	13.255	228	27478	0.92	ppm	84
91)	bis(2-Ethylhexyl)phtha...	13.527	149	18855	0.89	ppm	91
93)	Di-n-octylphthalate	14.927	149	30031	0.86	ppm	85
94)	Benzo[b]fluoranthene	15.445	252	32996	1.13	ppm	71
95)	Benzo[k]fluoranthene	15.498	252	26609	0.98	ppm	67
96)	Benzo[a]pyrene	16.070	252	27746	1.06	ppm	69
97)	Indeno[1,2,3-cd]pyrene	18.095	276	27336	1.04	ppm	65
98)	Dibenz(a,h)acridine	17.747	279	27886	1.06	ppm	88
99)	Dibenz[a,h]anthracene	18.159	278	27334	0.95	ppm	95
100)	7,12-Dimethylbenz(a)an...	15.450	256	15853	1.16	ppm	83
101)	Benzo[g,h,i]perylene	18.527	276	32946	1.13	ppm	74

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109747.D
Acq On : 14 Apr 2016 12:44 am
Operator : sarad
Sample : ic5485-1
Misc : op92825,ez5485
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 14 08:44:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 08:43:41 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 08:44:46 2016 RTE Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109748.D
Acq On : 14 Apr 2016 1:15 am
Operator : sarad
Sample : icc5485-50
Misc : op92825,ez5485
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 09:21:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:16:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	259405	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1036556	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	583842	40.00	ppm	0.00
69) Phenanthrene-d10	8.222	188	914506	40.00	ppm	0.00
83) Chrysene-d12	13.212	240	832316	40.00	ppm	0.00
92) Perylene-d12	16.198	264	833372	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	259405	40.00	ppm	0.00
104) Phenanthrene-d10a	8.222	188	914506	40.00	ppm	0.00
108) Chrysene-d12a	13.212	240	832316	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	583842	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1036556	40.00	ppm	0.00
114) Chrysene-d12b	13.212	240	832316	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.404	112	442858	49.36	ppm	0.00
Spiked Amount 50.000			Recovery	=	98.72%	
8) Phenol-d5	4.157	99	519365	49.41	ppm	0.00
Spiked Amount 50.000			Recovery	=	98.82%	
25) Nitrobenzene-d5	4.755	82	394934	46.84	ppm	0.00
Spiked Amount 50.000			Recovery	=	93.68%	
51) 2-Fluorobiphenyl	6.021	172	847432	44.68	ppm	0.00
Spiked Amount 50.000			Recovery	=	89.36%	
73) 2,4,6-Tribromophenol	7.351	330	130600	46.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	92.00%	
86) Terphenyl-d14	11.064	244	831872	47.24	ppm	0.00
Spiked Amount 50.000			Recovery	=	94.48%	
105) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.790	88	186362	48.19	ppm	98
3) Pyridine	2.159	79	291347	47.74	ppm	80
4) N-Nitrosodimethylamine	2.121	74	269489	53.95	ppm	85
6) Indene	4.520	116	763287	45.81	ppm	90
7) Cumene	3.713	105	1020676	48.33	ppm	97
9) Phenol	4.162	94	518347	48.46	ppm	65
10) Aniline	4.119	93	577881	46.76	ppm	92
11) bis(2-Chloroethyl)ether	4.151	93	340911	46.29	ppm	96
12) 2-Chlorophenol	4.205	128	449814	45.23	ppm	97
13) Decane	4.194	43	405555	44.13	ppm	97
14) 1,3-Dichlorobenzene	4.285	146	507118	47.10	ppm	98
15) 1,4-Dichlorobenzene	4.344	146	487715	47.84	ppm	91
16) Benzyl alcohol	4.472	108	238488	53.50	ppm #	80
17) 1,2-Dichlorobenzene	4.456	146	459596	46.35	ppm	97
18) Acetophenone	4.638	105	562912	49.12	ppm	100
19) 2-Methylphenol	4.584	108	400551	47.83	ppm	92
20) 2,2'-oxybis(1-Chloropr...	4.536	121	122301	47.66	ppm #	81

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109748.D
Acq On : 14 Apr 2016 1:15 am
Operator : sarad
Sample : icc5485-50
Misc : op92825,ez5485
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 09:21:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:16:01 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21)	3&4-Methylphenol	4.696	108	429004	49.29	ppm		93
22)	n-Nitroso-di-n-propyla...	4.643	70	268460	44.79	ppm		92
23)	Hexachloroethane	4.696	201	142933	48.15	ppm		99
26)	Nitrobenzene	4.766	77	380772	44.55	ppm		99
27)	Quinoline	5.519	129	938814	47.56	ppm		95
28)	Isophorone	4.926	82	704071	47.69	ppm		96
29)	2-Nitrophenol	4.995	139	253181	48.10	ppm		94
30)	2,4-Dimethylphenol	5.060	107	392849	47.35	ppm		89
31)	Benzoic Acid	5.188	105	310550	52.63	ppm	#	59
32)	bis(2-Chloroethoxy)met...	5.092	93	422405	45.92	ppm		97
33)	2,4-Dichlorophenol	5.188	162	350495	48.06	ppm		94
34)	2,6-Dichlorophenol	5.337	162	335973	46.95	ppm		88
35)	1,3,5-Trichlorobenzene	4.979	180	377990	46.15	ppm		82
36)	1,2,4-Trichlorobenzene	5.215	180	347973	45.51	ppm		95
37)	1,2,3-Trichlorobenzene	5.375	180	342697	46.16	ppm		95
38)	Naphthalene	5.268	128	1299196	45.09	ppm		98
39)	4-Chloroaniline	5.337	127	501550	43.56	ppm		93
40)	2,3-Dichloroaniline	5.984	161	417289	45.26	ppm		95
41)	Caprolactam	5.604	55	177933	47.97	ppm		89
42)	Hexachlorobutadiene	5.353	225	159458	47.14	ppm		93
43)	4-Chloro-3-methylphenol	5.717	107	368999	47.66	ppm		94
44)	2-Methylnaphthalene	5.759	141	758671	47.60	ppm		96
45)	1-Methylnaphthalene	5.829	141	791172	46.21	ppm		96
46)	Dimethylnaphthalene	6.208	156	760961	45.96	ppm		90
48)	Hexachlorocyclopentadiene	5.866	237	391861	100.79	ppm		95
49)	2,4,6-Trichlorophenol	5.984	196	232819	48.05	ppm		93
50)	2,4,5-Trichlorophenol	6.027	196	230381	43.38	ppm		92
52)	2-Chloronaphthalene	6.107	162	745049	44.40	ppm		96
53)	Biphenyl	6.091	154	1054336	44.91	ppm		100
54)	2-Nitroaniline	6.224	65	215988	48.21	ppm		85
55)	Dimethylphthalate	6.342	163	877405	46.87	ppm		100
56)	Acenaphthylene	6.438	152	1360087	46.37	ppm		98
57)	2,6-Dinitrotoluene	6.401	165	199769	48.94	ppm		98
58)	3-Nitroaniline	6.571	138	239044	48.39	ppm		75
59)	Acenaphthene	6.582	153	819091	46.73	ppm		96
60)	2,4-Dinitrophenol	6.641	184	219635	120.31	ppm		94
61)	4-Nitrophenol	6.796	109	104341	45.54	ppm		84
62)	Dibenzofuran	6.742	168	1121810	46.29	ppm		96
63)	2,4-Dinitrotoluene	6.753	165	265589	50.17	ppm		91
64)	2,3,4,6-Tetrachlorophenol	6.887	232	192156	45.87	ppm		88
65)	Diethylphthalate	6.972	149	871381	45.16	ppm		96
66)	Fluorene	7.074	166	909492	45.50	ppm		97
67)	4-Chlorophenyl-phenyle...	7.074	204	380047	46.19	ppm		90
68)	4-Nitroaniline	7.180	138	247482	50.30	ppm		95
70)	4,6-Dinitro-2-methylph...	7.164	198	159486	60.36	ppm		72
71)	n-Nitrosodiphenylamine	7.218	169	628575	46.91	ppm		96
72)	1,2-Diphenylhydrazine	7.250	77	752188	46.96	ppm		96
74)	4-Bromophenyl-phenylether	7.629	248	228349	47.87	ppm		89
75)	Hexachlorobenzene	7.704	284	251275	46.86	ppm		91
76)	Pentachlorophenol	8.008	266	298466	106.55	ppm		95

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109748.D
Acq On : 14 Apr 2016 1:15 am
Operator : sarad
Sample : icc5485-50
Misc : op92825,ez5485
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 09:21:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:16:01 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.254	178	1222719	46.29	ppm	96
78)	Anthracene	8.329	178	1284080	47.30	ppm	94
79)	Carbazole	8.628	167	1261391	48.93	ppm	93
80)	Di-n-butylphthalate	9.216	149	1548820	48.80	ppm	99
81)	Fluoranthene	10.236	202	1286782	46.71	ppm	96
82)	Octadecane	8.067	57	536072	46.87	ppm	93
84)	Pyrene	10.658	202	1293158	45.56	ppm	94
85)	Butyl stearate	12.400	56	386003	51.00	ppm	96
87)	Butylbenzylphthalate	12.197	149	678128	50.72	ppm	92
88)	Benzo[a]anthracene	13.190	228	1162286	47.52	ppm	99
89)	3,3'-Dichlorobenzidine	13.292	252	422804	47.92	ppm	81
90)	Chrysene	13.271	228	1107093	46.21	ppm	99
91)	bis(2-Ethylhexyl)phtha...	13.527	149	943027	50.03	ppm	91
93)	Di-n-octylphthalate	14.932	149	1684295	52.82	ppm	96
94)	Benzo[b]fluoranthene	15.456	252	1256978	47.48	ppm	97
95)	Benzo[k]fluoranthene	15.520	252	1124283	47.28	ppm	96
96)	Benzo[a]pyrene	16.086	252	1123567	47.71	ppm	97
97)	Indeno[1,2,3-cd]pyrene	18.121	276	1134152	48.24	ppm	94
98)	Dibenz(a,h)acridine	17.758	279	1051782	47.11	ppm	95
99)	Dibenz[a,h]anthracene	18.175	278	1174843	47.37	ppm	96
100)	7,12-Dimethylbenz(a)an...	15.472	256	561714	46.52	ppm	91
101)	Benzo[g,h,i]perylene	18.549	276	1188606	46.88	ppm	96

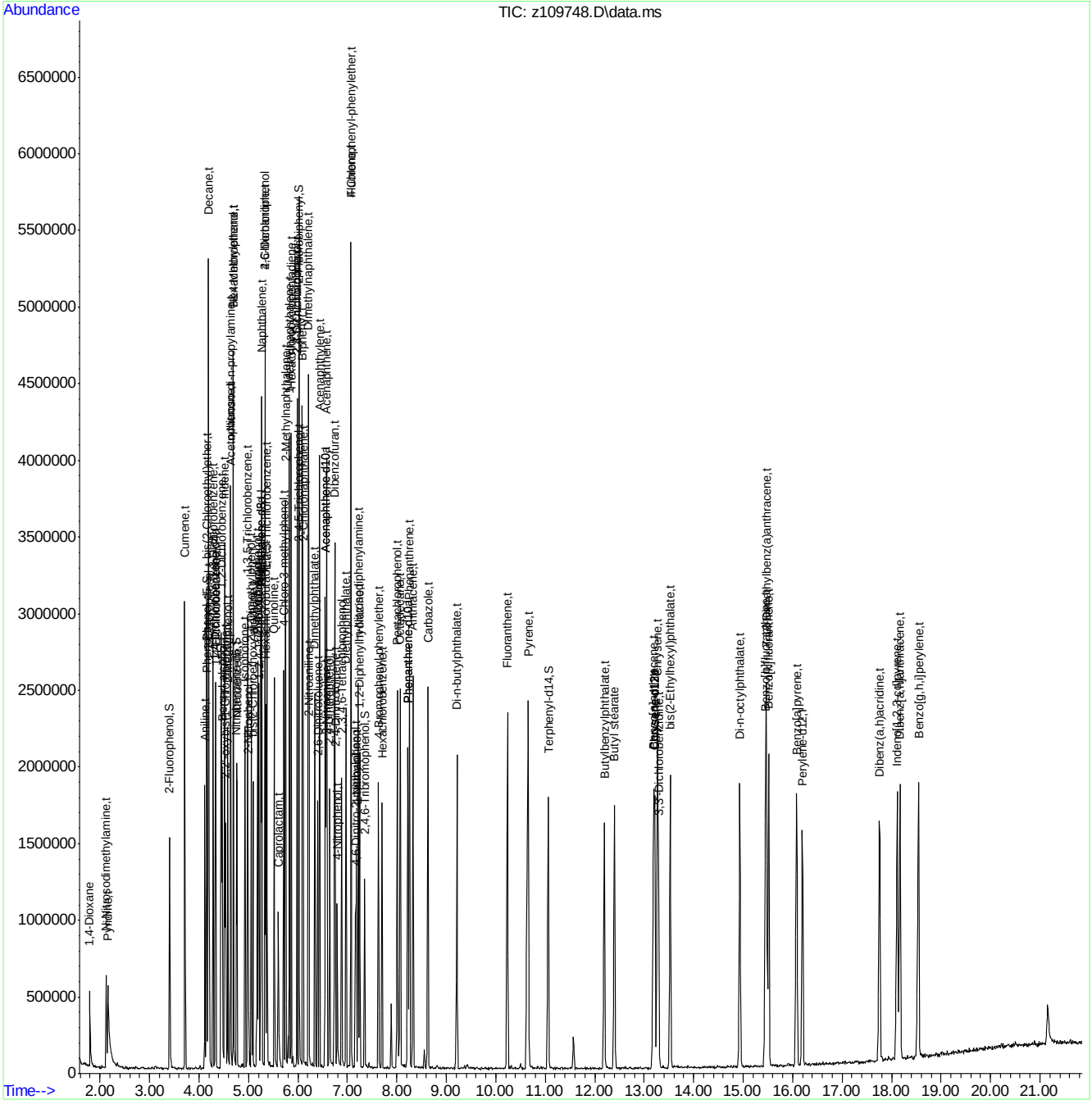
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109748.D
Acq On : 14 Apr 2016 1:15 am
Operator : sarad
Sample : icc5485-50
Misc : op92825,ez5485
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 09:21:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:16:01 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 09:25:43 2016 RTE Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109750.D
Acq On : 14 Apr 2016 1:54 am
Operator : sarad
Sample : ic5486-100
Misc : op92825,ez5486
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 09:58:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	292127	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1202462	40.00	ppm	0.00
47) Acenaphthene-d10	6.556	164	572164	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	966486	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	914631	40.00	ppm	-0.01
92) Perylene-d12	16.198	264	917348	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	292127	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	966486	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	914631	40.00	ppm	0.00
110) Acenaphthene-d10a	6.556	164	572164	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1202462	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	914631	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	10.130	57	717247	99.92	ppm	0.00
Spiked Amount 50.000			Recovery = 199.84%			
106) o-terphenyl	8.831	230	1116394	99.92	ppm	0.00
Spiked Amount 50.000			Recovery = 199.84%			
Target Compounds						Qvalue
103) Benzaldehyde	4.018	105	551747	100.28	ppm	100
107) Atrazine	7.896	215	217894	100.01	ppm	100
109) Benzidine	10.632	184	828919	100.76	ppm	100
111) 1,2,4,5-Tetrachloroben...	5.872	216	649070	100.00	ppm	100
113) Hydroquinone	5.642	110	930028	104.50	ppm	100

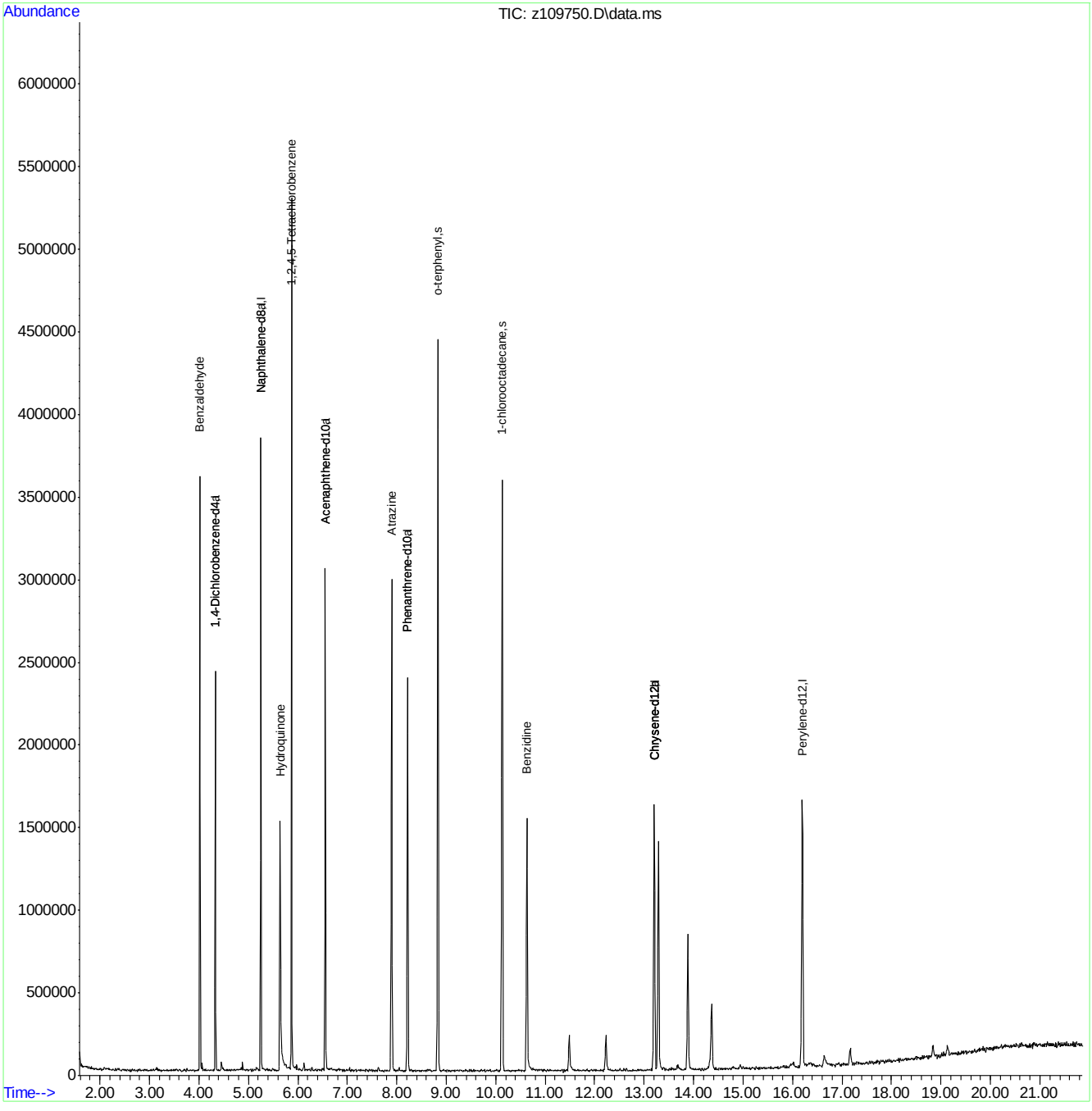
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109750.D
Acq On : 14 Apr 2016 1:54 am
Operator : sarad
Sample : ic5486-100
Misc : op92825,ez5486
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 09:58:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 09:58:27 2016 RTE

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109751.D
Acq On : 14 Apr 2016 2:25 am
Operator : sarad
Sample : ic5486-80
Misc : op92825,ez5486
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 09:59:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	301730	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1195479	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	574041	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	972804	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	915412	40.00	ppm	-0.01
92) Perylene-d12	16.198	264	929031	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	301730	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	972804	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	915412	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	574041	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1195479	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	915412	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	10.129	57	578872	80.12	ppm	0.00
Spiked Amount 50.000			Recovery = 160.24%			
106) o-terphenyl	8.831	230	927608	82.48	ppm	0.00
Spiked Amount 50.000			Recovery = 164.96%			
Target Compounds						Qvalue
103) Benzaldehyde	4.018	105	555248	97.70	ppm	96
107) Atrazine	7.896	215	171883	78.38	ppm	98
109) Benzidine	10.631	184	750698	91.18	ppm	96
111) 1,2,4,5-Tetrachloroben...	5.871	216	528921	81.22	ppm	97
113) Hydroquinone	5.636	110	686435	77.58	ppm	99

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

7.6.124

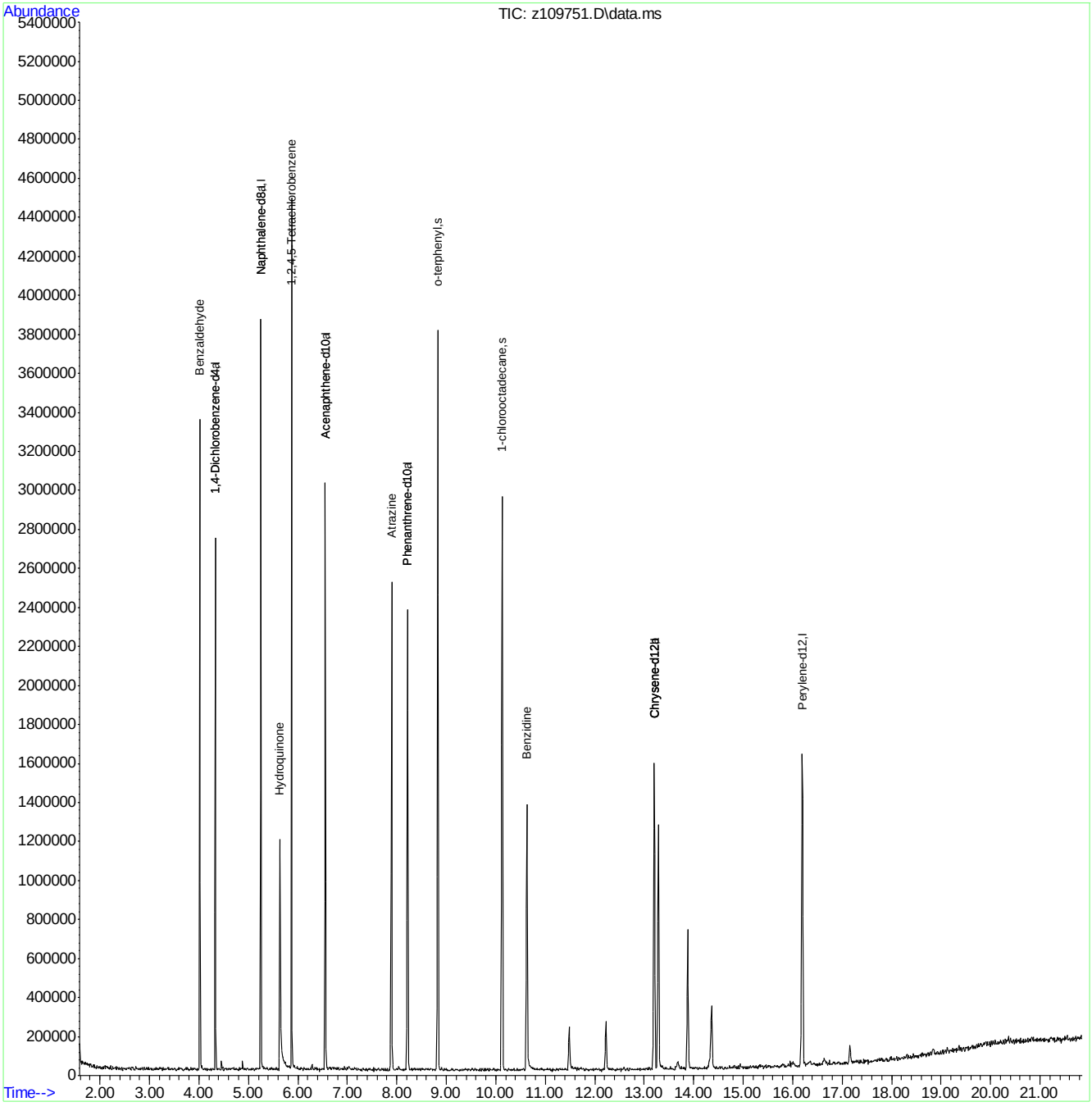
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109751.D
Acq On : 14 Apr 2016 2:25 am
Operator : sarad
Sample : ic5486-80
Misc : op92825,ez5486
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 09:59:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 09:59:41 2016 RTE

Page: 2

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109752.D
Acq On : 14 Apr 2016 2:56 am
Operator : sarad
Sample : ic5486-25
Misc : op92825,ez5486
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 10:02:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	300514	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1217462	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	584904	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1037494	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	976728	40.00	ppm	-0.01
92) Perylene-d12	16.198	264	1029686	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	300514	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1037494	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	976728	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	584904	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1217462	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	976728	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	10.124	57	200835	26.06	ppm	0.00
Spiked Amount 50.000			Recovery = 52.12%			
106) o-terphenyl	8.826	230	327305	27.29	ppm	0.00
Spiked Amount 50.000			Recovery = 54.58%			
Target Compounds						Qvalue
103) Benzaldehyde	4.018	105	200118	35.36	ppm	95
107) Atrazine	7.886	215	61261	26.19	ppm	97
109) Benzidine	10.626	184	346987	39.50	ppm	95
111) 1,2,4,5-Tetrachloroben...	5.872	216	187678	28.29	ppm	95
113) Hydroquinone	5.631	110	217914	24.18	ppm	97

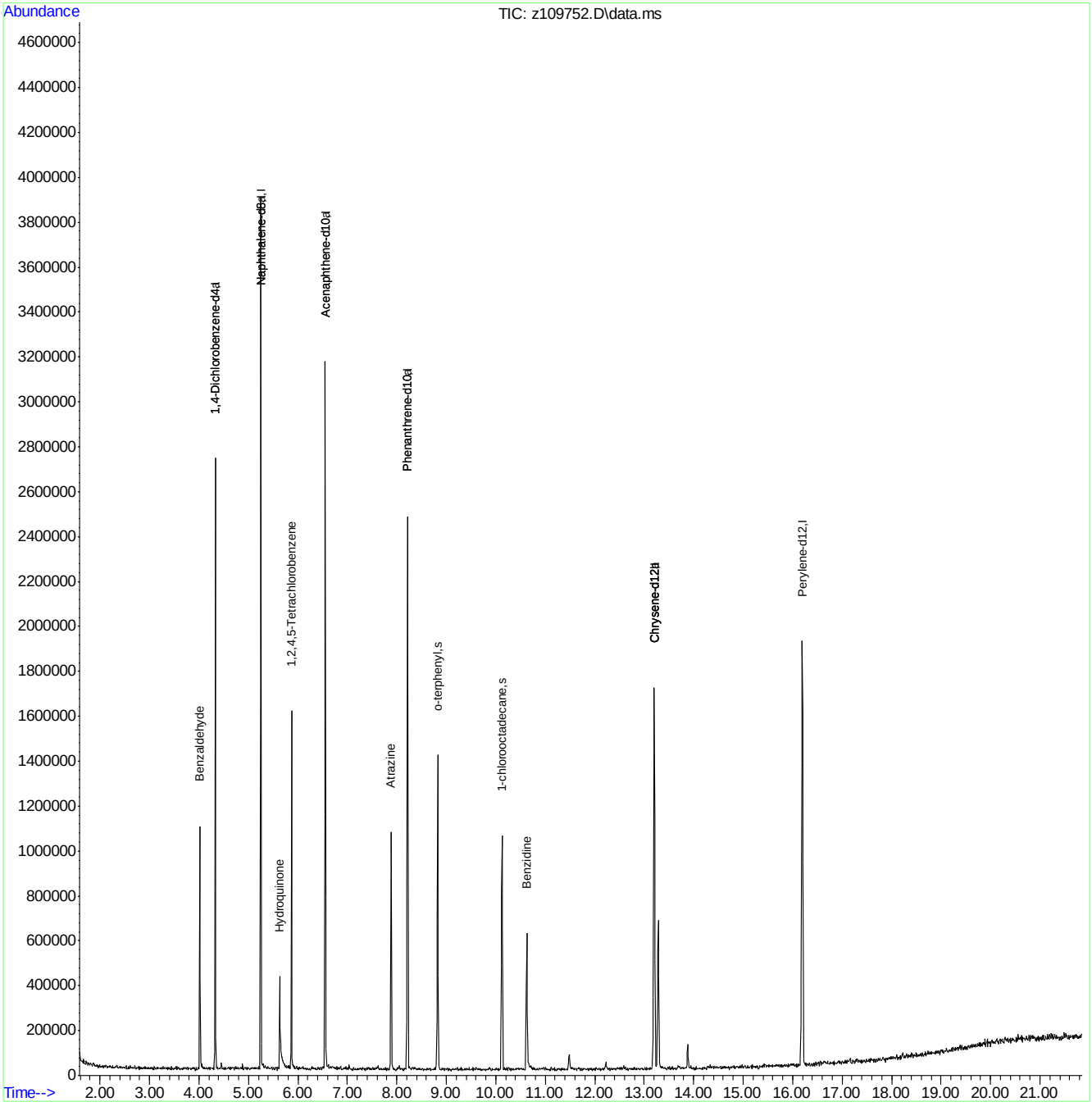
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109752.D
Acq On : 14 Apr 2016 2:56 am
Operator : sarad
Sample : ic5486-25
Misc : op92825,ez5486
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 10:02:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109753.D
Acq On : 14 Apr 2016 3:27 am
Operator : sarad
Sample : ic5486-10
Misc : op92825,ez5486
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 10:03:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	311373	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1244793	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	608850	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1079818	40.00	ppm	0.00
83) Chrysene-d12	13.206	240	1012103	40.00	ppm	0.00
92) Perylene-d12	16.198	264	1065156	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	311373	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1079818	40.00	ppm	0.00
108) Chrysene-d12a	13.206	240	1012103	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	608850	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1244793	40.00	ppm	0.00
114) Chrysene-d12b	13.206	240	1012103	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	10.124	57	81354	10.14	ppm	0.00
Spiked Amount 50.000			Recovery = 20.28%			
106) o-terphenyl	8.826	230	131231	10.51	ppm	0.00
Spiked Amount 50.000			Recovery = 21.02%			
Target Compounds						Qvalue
103) Benzaldehyde	4.018	105	84990	14.49	ppm	96
107) Atrazine	7.880	215	26090	10.72	ppm #	82
109) Benzidine	10.626	184	148724	16.34	ppm	99
111) 1,2,4,5-Tetrachloroben...	5.871	216	72365	10.48	ppm	98
113) Hydroquinone	5.636	110	63097	6.85	ppm	91

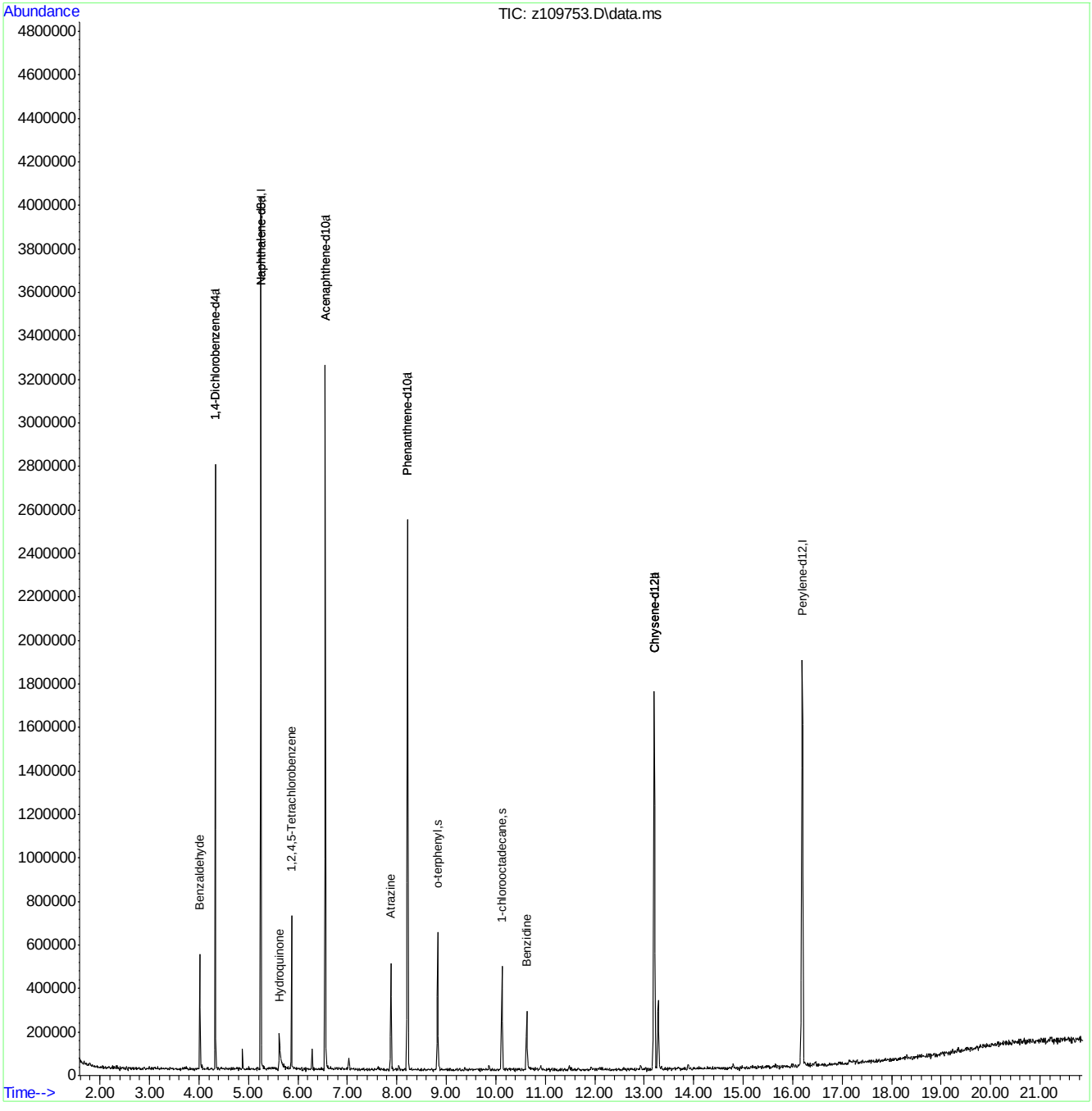
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109753.D
Acq On : 14 Apr 2016 3:27 am
Operator : sarad
Sample : ic5486-10
Misc : op92825,ez5486
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 10:03:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 10:03:16 2016 RTE Page: 2

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/14/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109754.D
Acq On : 14 Apr 2016 3:58 am
Operator : sarad
Sample : ic5486-5
Misc : op92825,ez5486
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 10:11:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	309074	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1221504	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	593546	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1054647	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	1021533	40.00	ppm	-0.01
92) Perylene-d12	16.198	264	1036245	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	309074	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1054647	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	1021533	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	593546	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1221504	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	1021533	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	10.124	57	43727	5.58	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.16%	
106) o-terphenyl	8.826	230	77289	6.34	ppm	0.00
Spiked Amount 50.000			Recovery	=	12.68%	
Target Compounds						Qvalue
103) Benzaldehyde	4.018	105	44734	7.68	ppm	89
107) Atrazine	7.880	215	15201	6.39	ppm	92
109) Benzidine	10.626	184	86521	9.42	ppm	98
111) 1,2,4,5-Tetrachloroben...	5.872	216	42787	6.35	ppm	95
113) Hydroquinone	5.647	110	42812m	4.74	ppm	

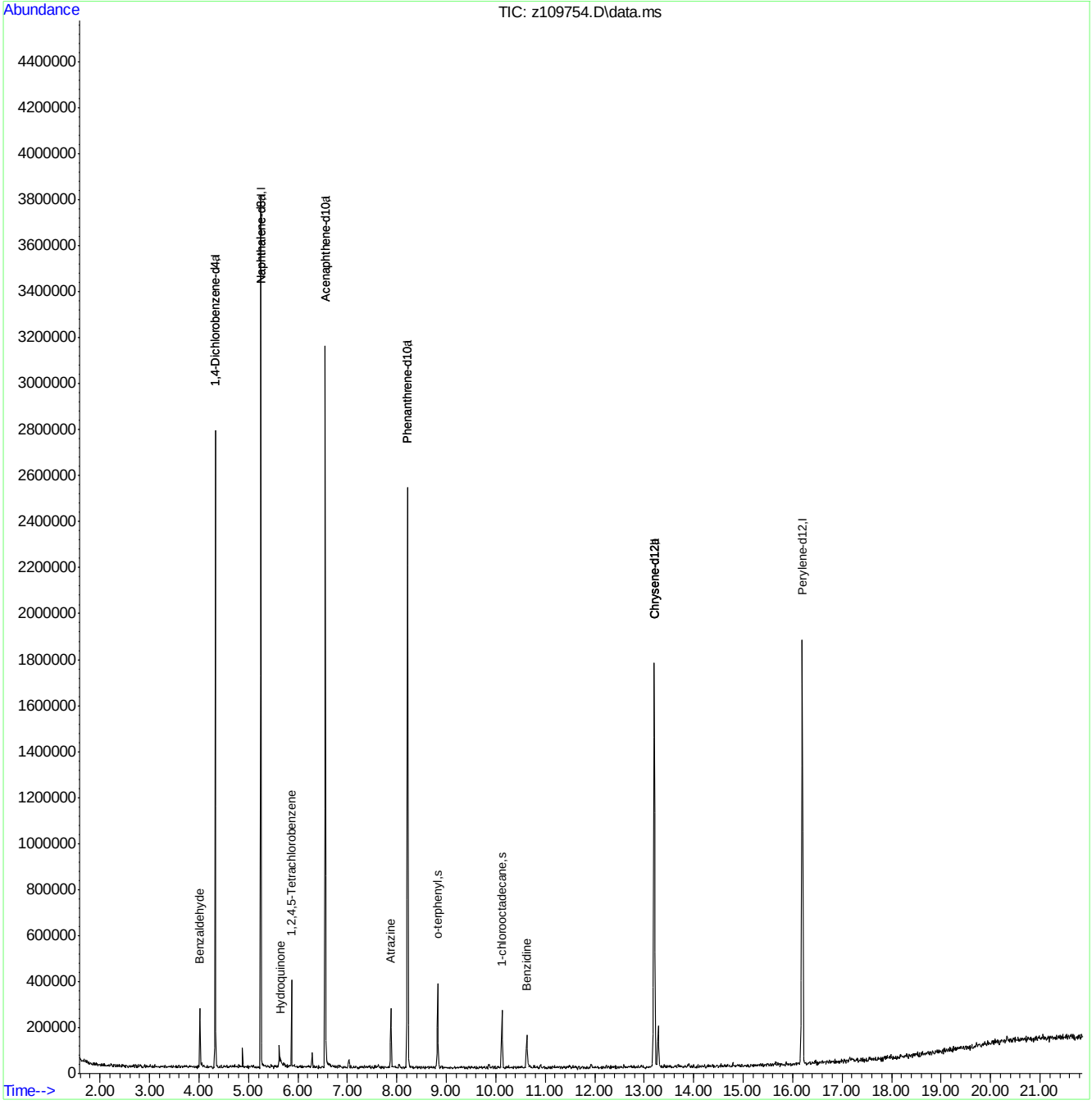
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.127
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109754.D
Acq On : 14 Apr 2016 3:58 am
Operator : sarad
Sample : ic5486-5
Misc : op92825,ez5486
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 10:11:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration



Manual Integration Approval Summary

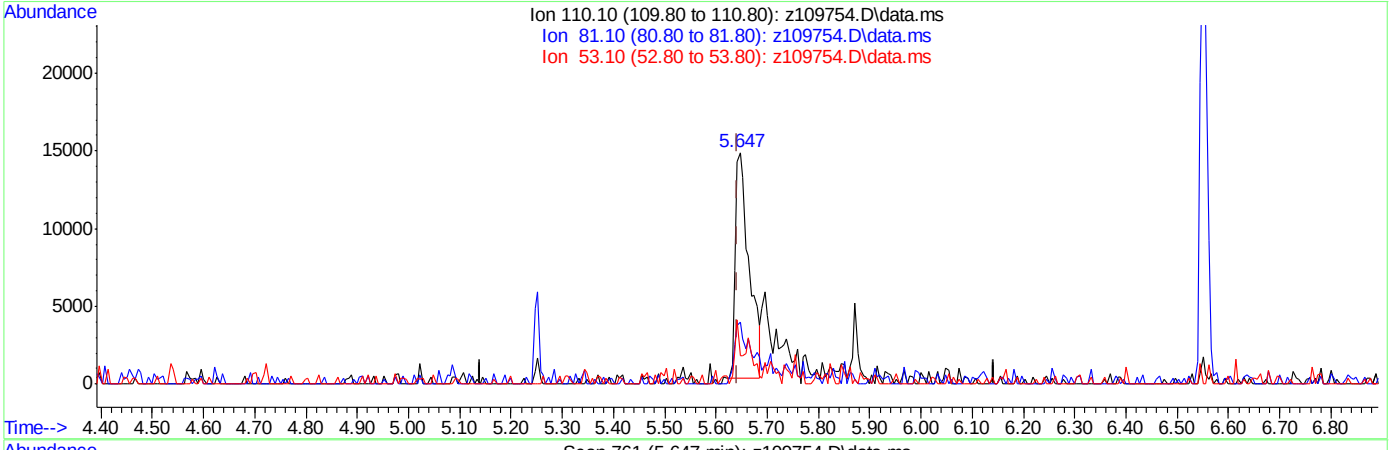
Sample Number:	EZ5486-IC5486	**Method:**	SW846 8270D
Lab FileID:	Z109754.D	**Analyst approved:**	04/14/16 12:00 Arielle Cocozza
Injection Time:	04/14/16 03:58	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

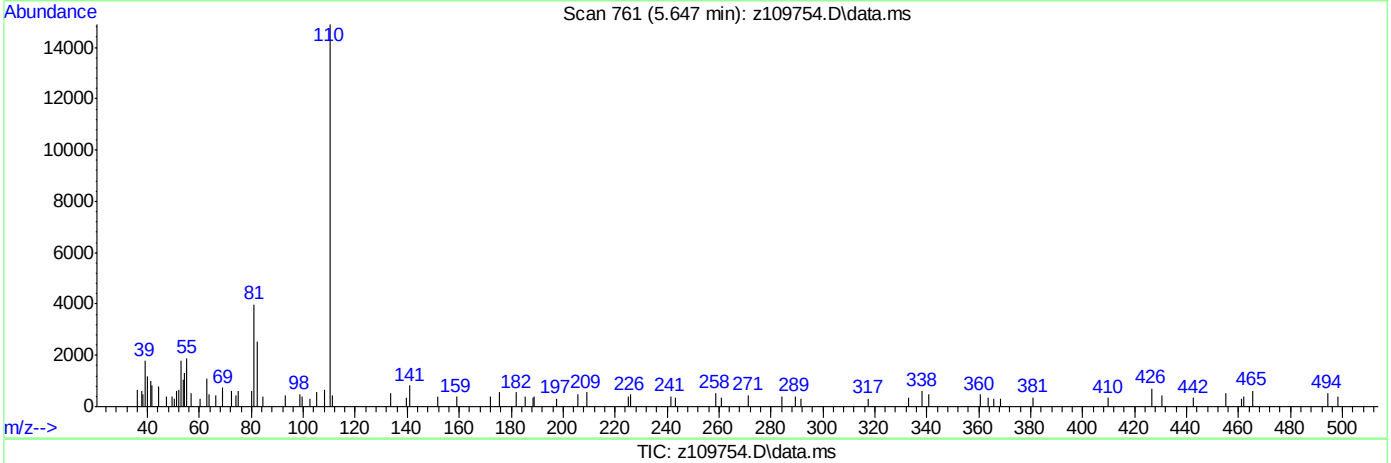
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hydroquinone	123-31-9		5.65	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109754.D
Acq On : 14 Apr 2016 3:58 am
Operator : sarad
Sample : ic5486-5
Misc : op92825,ez5486
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 10:10:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration





TIC: z109754.D\data.ms

(113) Hydroquinone

5.647min (+0.005) 2.98ppm

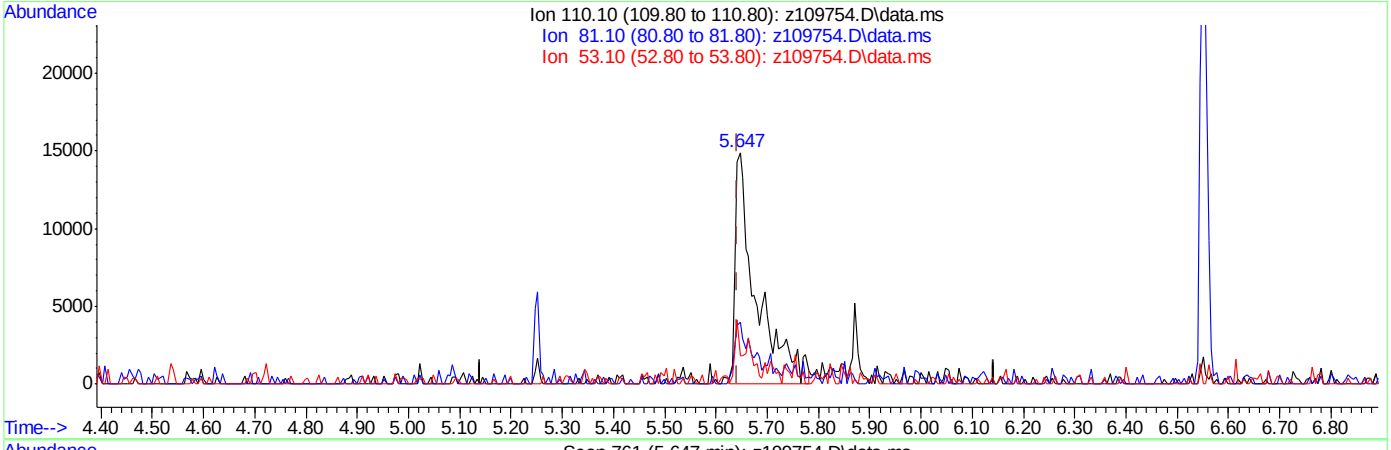
response 26917

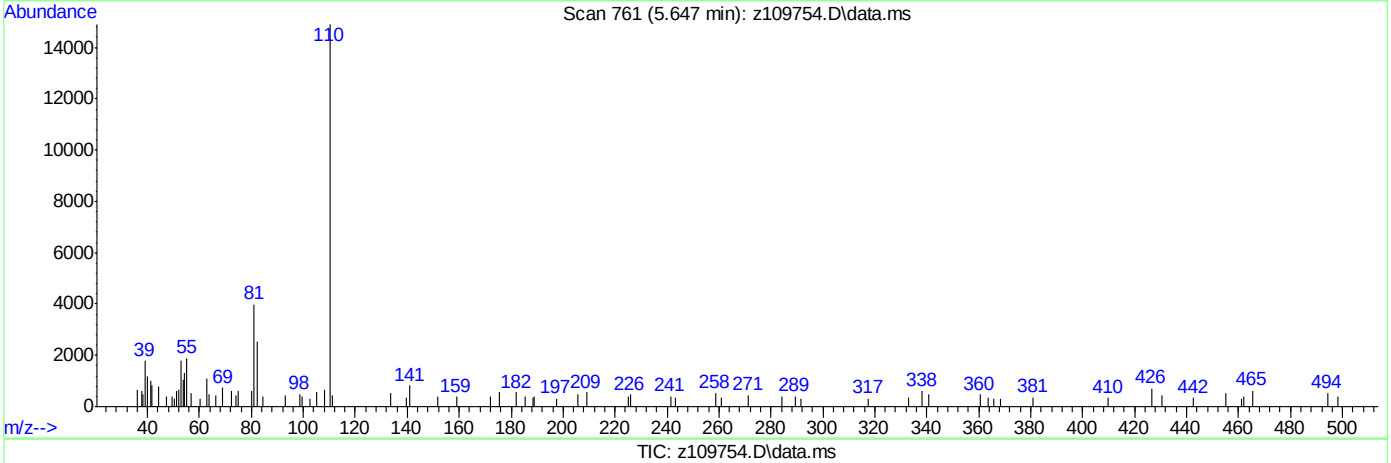
Ion	Exp%	Act%
110.10	100	100
81.10	25.30	22.81
53.10	19.60	20.09
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109754.D
Acq On : 14 Apr 2016 3:58 am
Operator : sarad
Sample : ic5486-5
Misc : op92825,ez5486
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 10:10:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration





TIC: z109754.D\data.ms

(113) Hydroquinone

5.647min (+0.005) 4.74ppm m

response 42812

Ion	Exp%	Act%
110.10	100	100
81.10	25.30	26.72
53.10	19.60	12.07
0.00	0.00	0.00

Z109754.D edits: Hydroquinone

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/14/16 15:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109755.D
Acq On : 14 Apr 2016 4:29 am
Operator : sarad
Sample : ic5486-2
Misc : op92825,ez5486
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 10:12:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	350607	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1362066	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	655569	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1183994	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	1116785	40.00	ppm	-0.01
92) Perylene-d12	16.198	264	1154884	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	350607	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1183994	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	1116785	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	655569	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1362066	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	1116785	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	10.119	57	19368	2.20	ppm	-0.01
Spiked Amount 50.000			Recovery	=	4.40%	
106) o-terphenyl	8.820	230	32826	2.40	ppm	-0.01
Spiked Amount 50.000			Recovery	=	4.80%	
Target Compounds						Qvalue
103) Benzaldehyde	4.023	105	18342	2.78	ppm	93
107) Atrazine	7.875	215	6144	2.30	ppm #	81
109) Benzidine	10.632	184	33598	3.34	ppm	92
111) 1,2,4,5-Tetrachloroben...	5.872	216	18137	2.44	ppm	93
113) Hydroquinone	5.663	110	11808m	1.17	ppm	

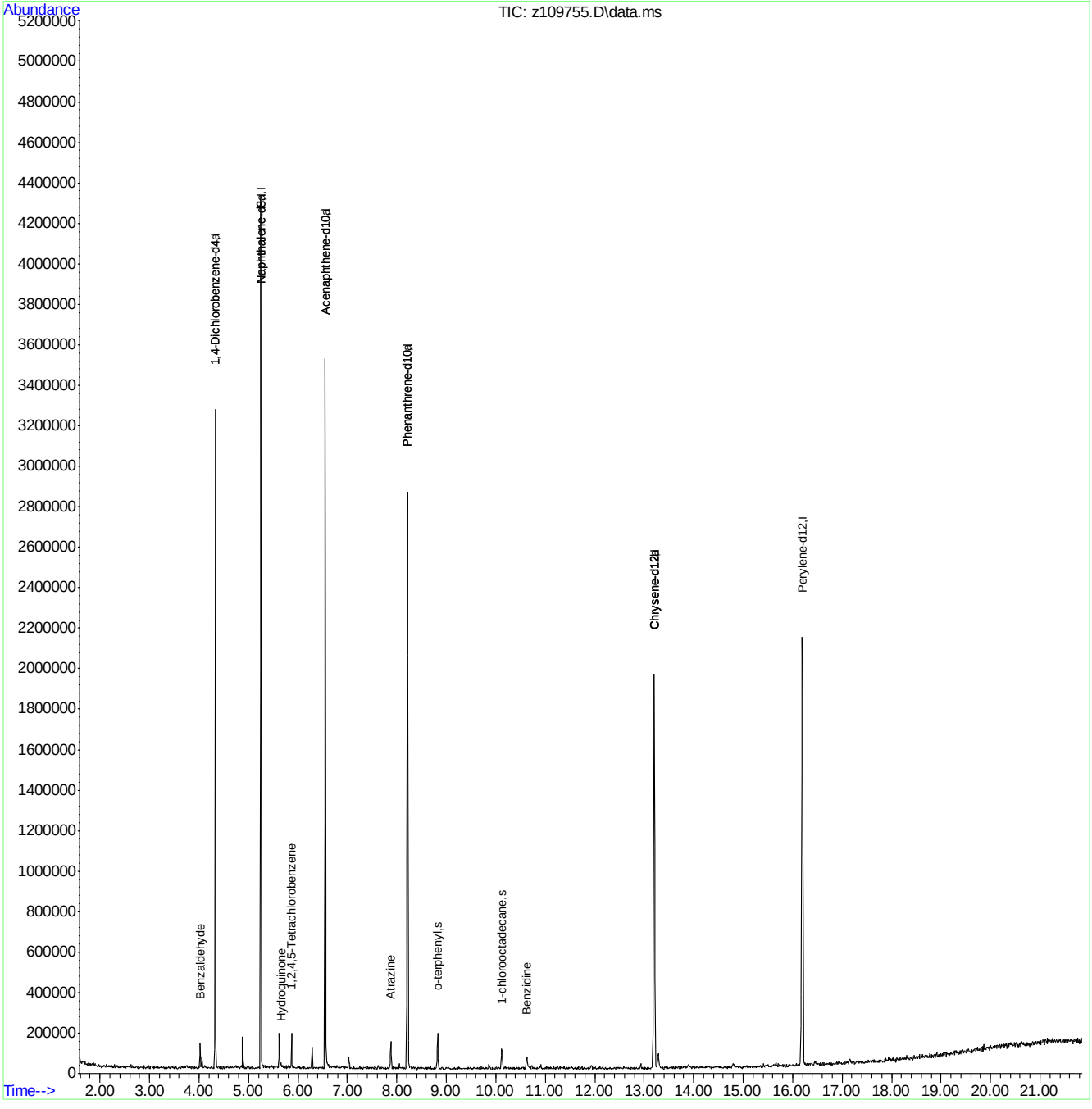
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.6.128
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109755.D
Acq On : 14 Apr 2016 4:29 am
Operator : sarad
Sample : ic5486-2
Misc : op92825,ez5486
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 10:12:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 10:12:11 2016 RTE

Manual Integration Approval Summary

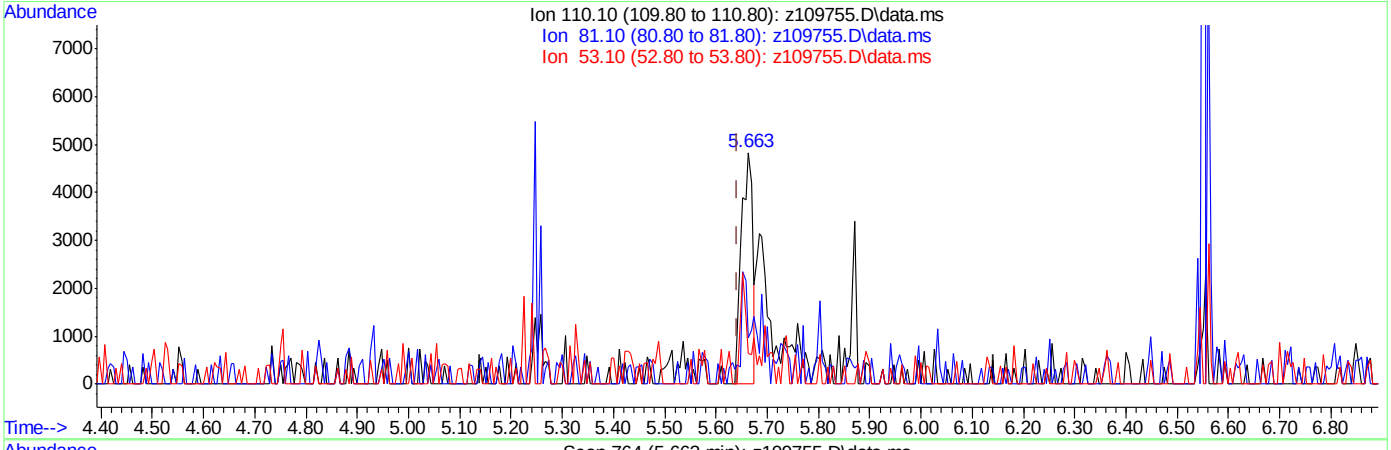
Sample Number:	EZ5486-IC5486	**Method:**	SW846 8270D
Lab FileID:	Z109755.D	**Analyst approved:**	04/14/16 12:00 Arielle Cocozza
Injection Time:	04/14/16 04:29	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

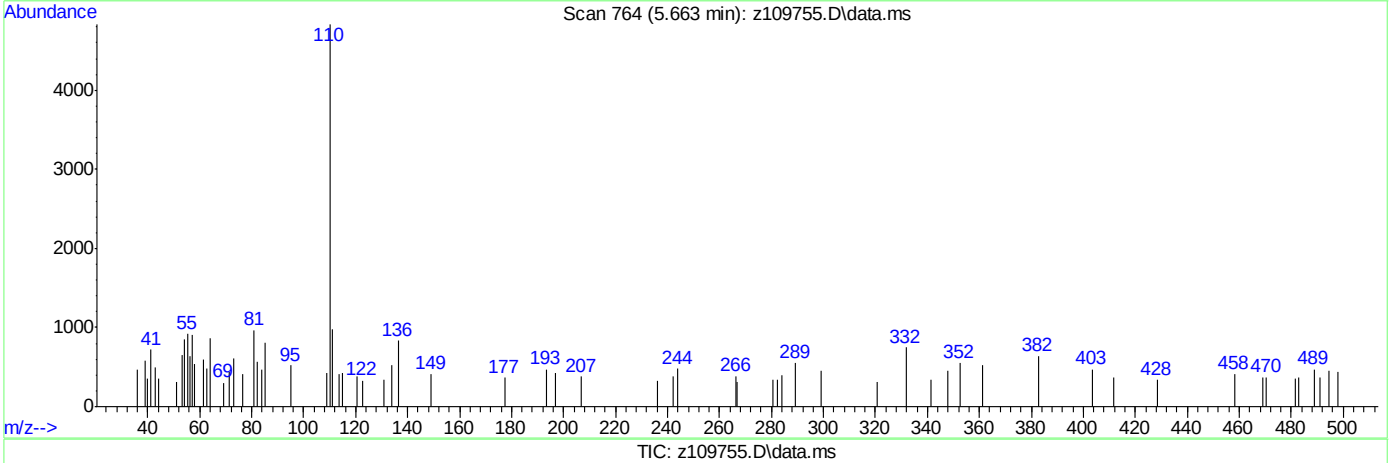
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hydroquinone	123-31-9		5.66	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109755.D
Acq On : 14 Apr 2016 4:29 am
Operator : sarad
Sample : ic5486-2
Misc : op92825,ez5486
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 10:11:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration





TIC: z109755.D\data.ms

(113) Hydroquinone

5.663min (+0.021) 0.72ppm

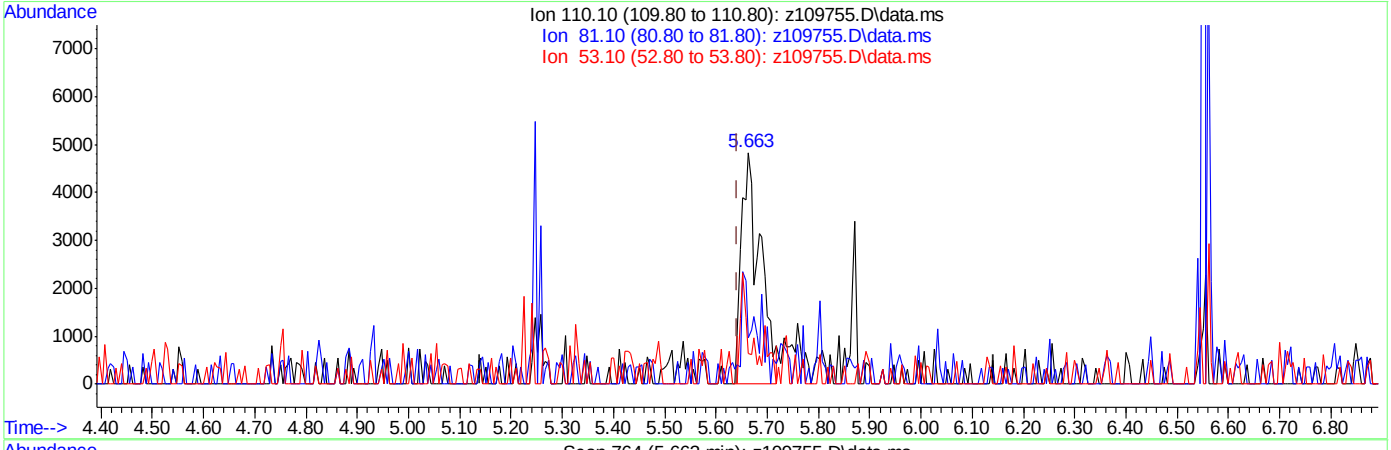
response 7265

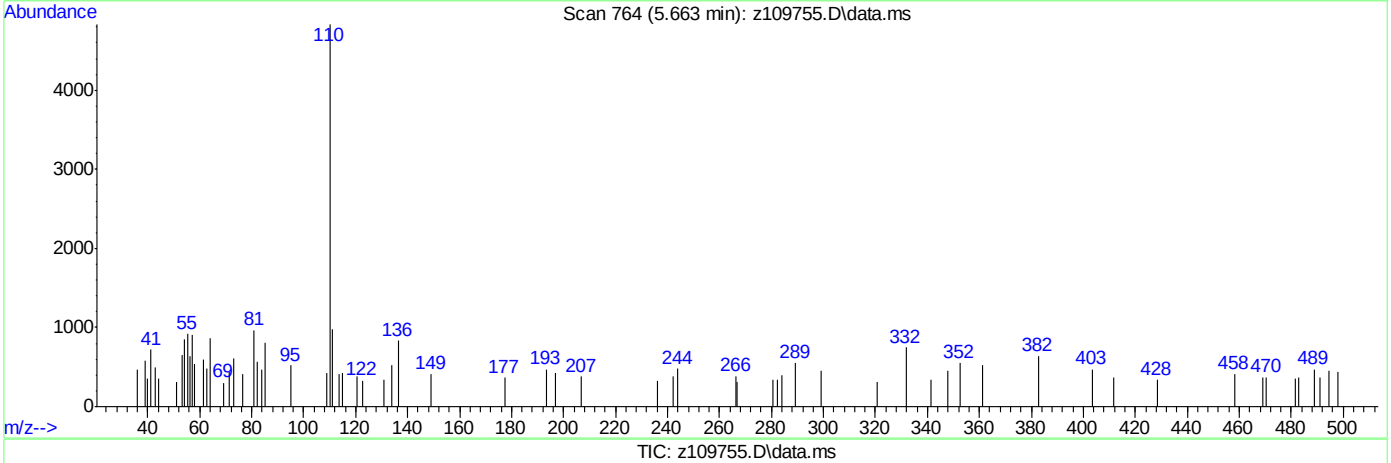
Ion	Exp%	Act%
110.10	100	100
81.10	25.30	2.73
53.10	19.60	4.48
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109755.D
Acq On : 14 Apr 2016 4:29 am
Operator : sarad
Sample : ic5486-2
Misc : op92825,ez5486
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 10:11:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:57:39 2016
Response via : Initial Calibration





TIC: z109755.D\data.ms

(113) Hydroquinone

5.663min (+0.021) 1.17ppm m

response 11808

Ion	Exp%	Act%
110.10	100	100
81.10	25.30	19.97
53.10	19.60	13.41
0.00	0.00	0.00

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109756.D
Acq On : 14 Apr 2016 5:00 am
Operator : sarad
Sample : ic5486-1
Misc : op92825,ez5486
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 14 10:12:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:08:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	323084	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1318642	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	653253	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1130873	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	1036244	40.00	ppm	-0.01
92) Perylene-d12	16.198	264	1089065	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	323084	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1130873	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	1036244	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	653253	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1318642	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	1036244	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	10.124	57	7765	0.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.92%	
106) o-terphenyl	8.820	230	17564	1.30	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.60%	
Target Compounds						Qvalue
103) Benzaldehyde	4.023	105	11073	1.32	ppm	# 76
107) Atrazine	7.880	215	3337	1.32	ppm	# 40
109) Benzidine	10.637	184	10996	0.76	ppm	89
111) 1,2,4,5-Tetrachloroben...	5.872	216	9368	1.16	ppm	# 69
113) Hydroquinone	5.663	110	9852	1.08	ppm	91

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

7.6.129

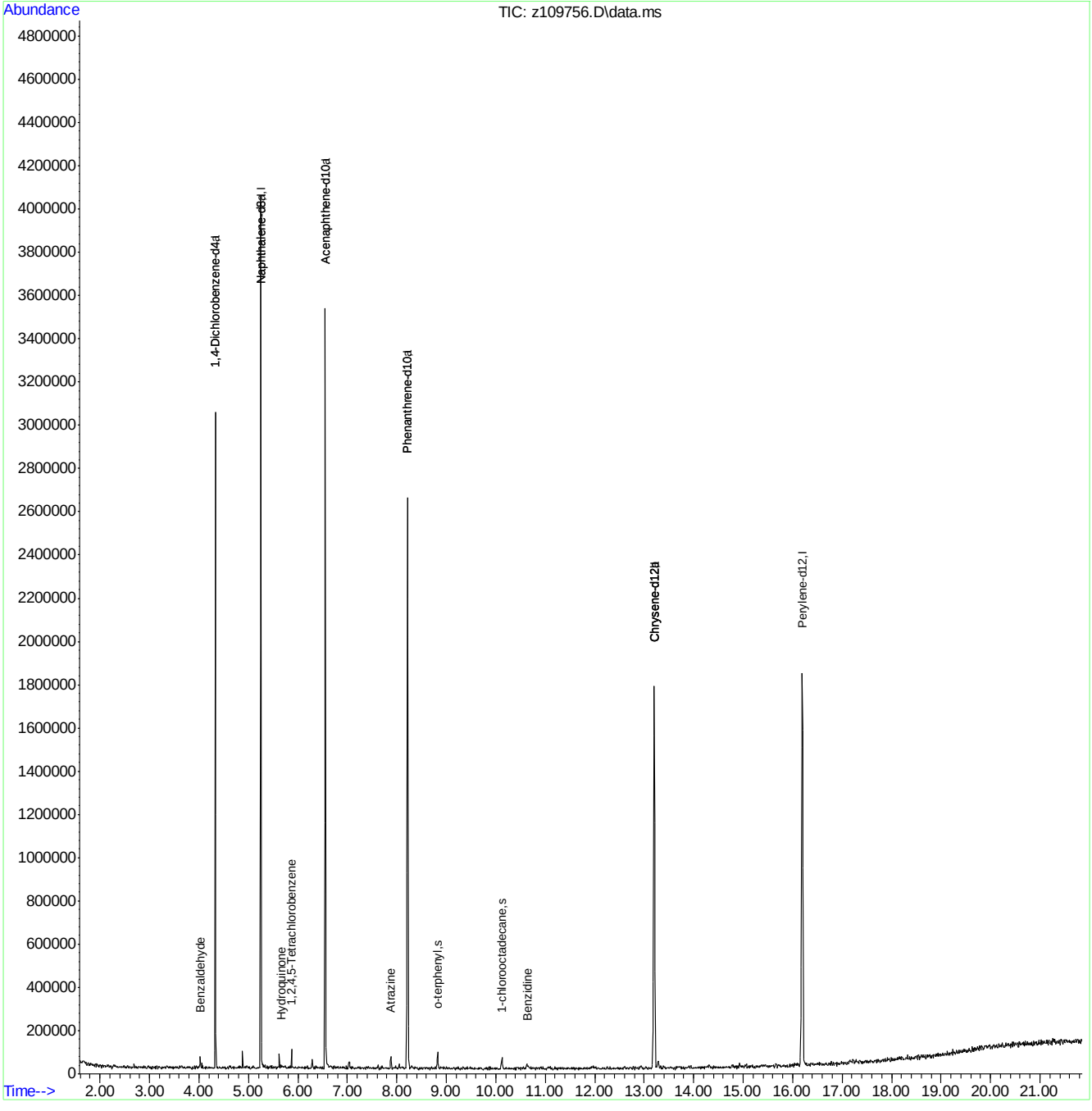
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5485\
Data File : z109756.D
Acq On : 14 Apr 2016 5:00 am
Operator : sarad
Sample : ic5486-1
Misc : op92825,ez5486
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 14 10:12:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:08:50 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109757.D
Acq On : 14 Apr 2016 5:32 am
Operator : sarad
Sample : icc5486-50
Misc : op92825,ez5486
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 14 12:01:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	294519	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1178696	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	561026	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1014892	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	945857	40.00	ppm	-0.02
92) Perylene-d12	16.198	264	991160	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	294519	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1014892	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	945857	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	561026	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1178696	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	945857	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	10.124	57	361617	47.04	ppm	0.00
Spiked Amount 50.000			Recovery = 94.08%			
106) o-terphenyl	8.826	230	605693	45.81	ppm	0.00
Spiked Amount 50.000			Recovery = 91.62%			
Target Compounds						Qvalue
103) Benzaldehyde	4.012	105	384251	49.42	ppm	96
107) Atrazine	7.891	215	113802	45.07	ppm #	69
109) Benzidine	10.626	184	669691	51.81	ppm	85
111) 1,2,4,5-Tetrachloroben...	5.872	216	347232	48.28	ppm	95
113) Hydroquinone	5.631	110	436289	56.01	ppm	88

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

7.6.130

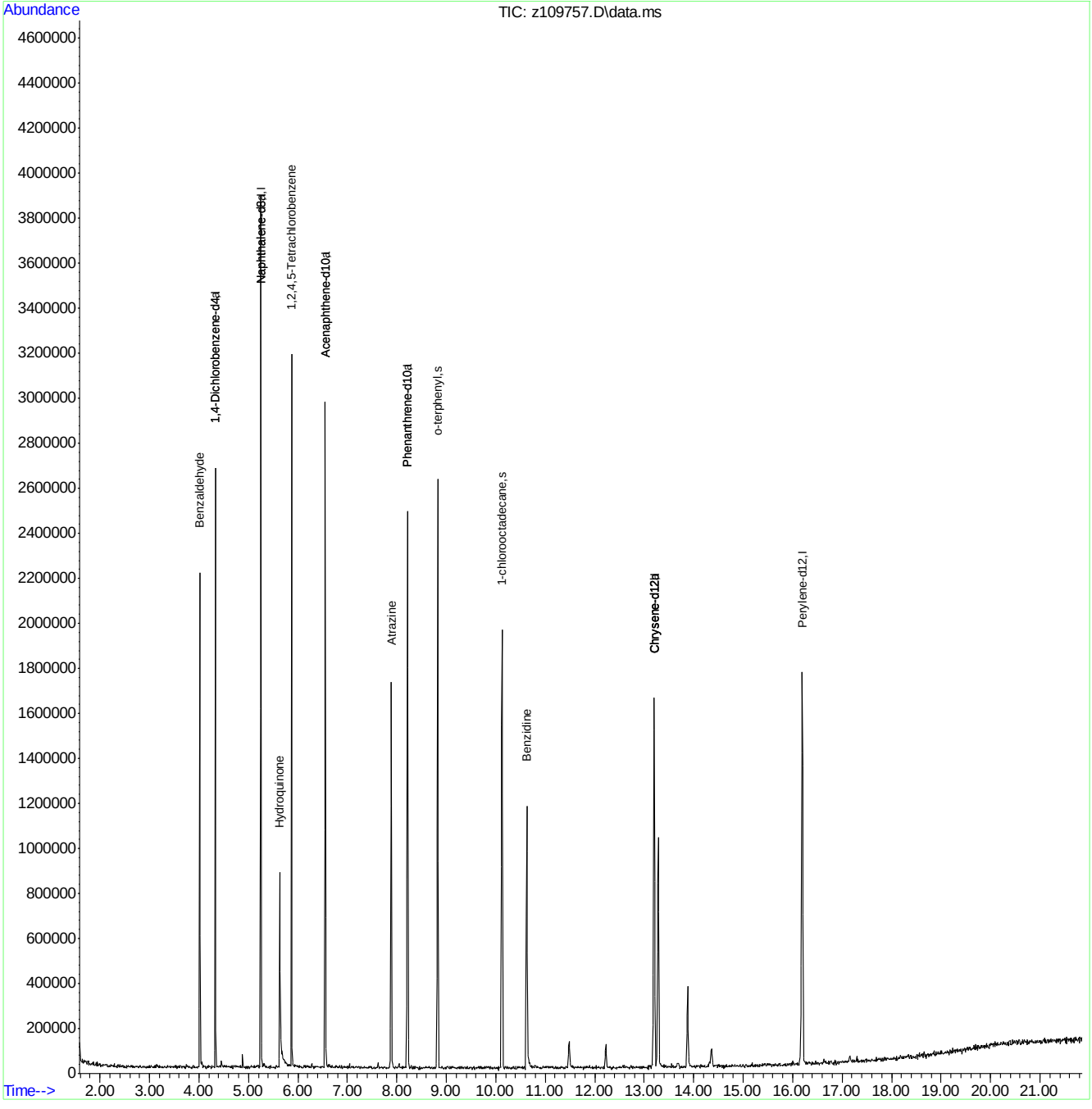
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109757.D
Acq On : 14 Apr 2016 5:32 am
Operator : sarad
Sample : icc5486-50
Misc : op92825,ez5486
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 14 12:01:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109758.D
Acq On : 14 Apr 2016 7:59 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 14 10:33:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:08:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	318657	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1212299	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	680138	40.00	ppm	0.00
69) Phenanthrene-d10	8.222	188	1069173	40.00	ppm	0.00
83) Chrysene-d12	13.207	240	918855	40.00	ppm	0.00
92) Perylene-d12	16.198	264	854540	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.328	152	318657	40.00	ppm	0.00
104) Phenanthrene-d10a	8.222	188	1069173	40.00	ppm	0.00
108) Chrysene-d12a	13.207	240	918855	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	680138	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1212299	40.00	ppm	0.00
114) Chrysene-d12b	13.207	240	918855	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
9) Phenol	4.162	94	656907	50.19	ppm	97
12) 2-Chlorophenol	4.205	128	584947	48.46	ppm	97
19) 2-Methylphenol	4.579	108	505129	49.37	ppm	96
21) 3&4-Methylphenol	4.691	108	529822	49.65	ppm	97
29) 2-Nitrophenol	4.996	139	313432	51.16	ppm	93
30) 2,4-Dimethylphenol	5.054	107	490881	50.93	ppm	99
31) Benzoic Acid	5.188	105	334056	48.05	ppm	93
33) 2,4-Dichlorophenol	5.183	162	437893	51.59	ppm	93
34) 2,6-Dichlorophenol	5.337	162	403738	48.61	ppm	98
43) 4-Chloro-3-methylphenol	5.706	107	457266	50.80	ppm	97
49) 2,4,6-Trichlorophenol	5.979	196	286438	51.00	ppm	98
50) 2,4,5-Trichlorophenol	6.016	196	270687	44.49	ppm	94
60) 2,4-Dinitrophenol	6.641	184	111881	46.15	ppm	90
61) 4-Nitrophenol	6.791	109	134422	50.93	ppm	97
64) 2,3,4,6-Tetrachlorophenol	6.887	232	222818	46.14	ppm	96
70) 4,6-Dinitro-2-methylph...	7.159	198	174688	54.92	ppm	97
76) Pentachlorophenol	8.009	266	175431	53.13	ppm	100

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109758.D
Acq On : 14 Apr 2016 7:59 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 14 10:33:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:08:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.131

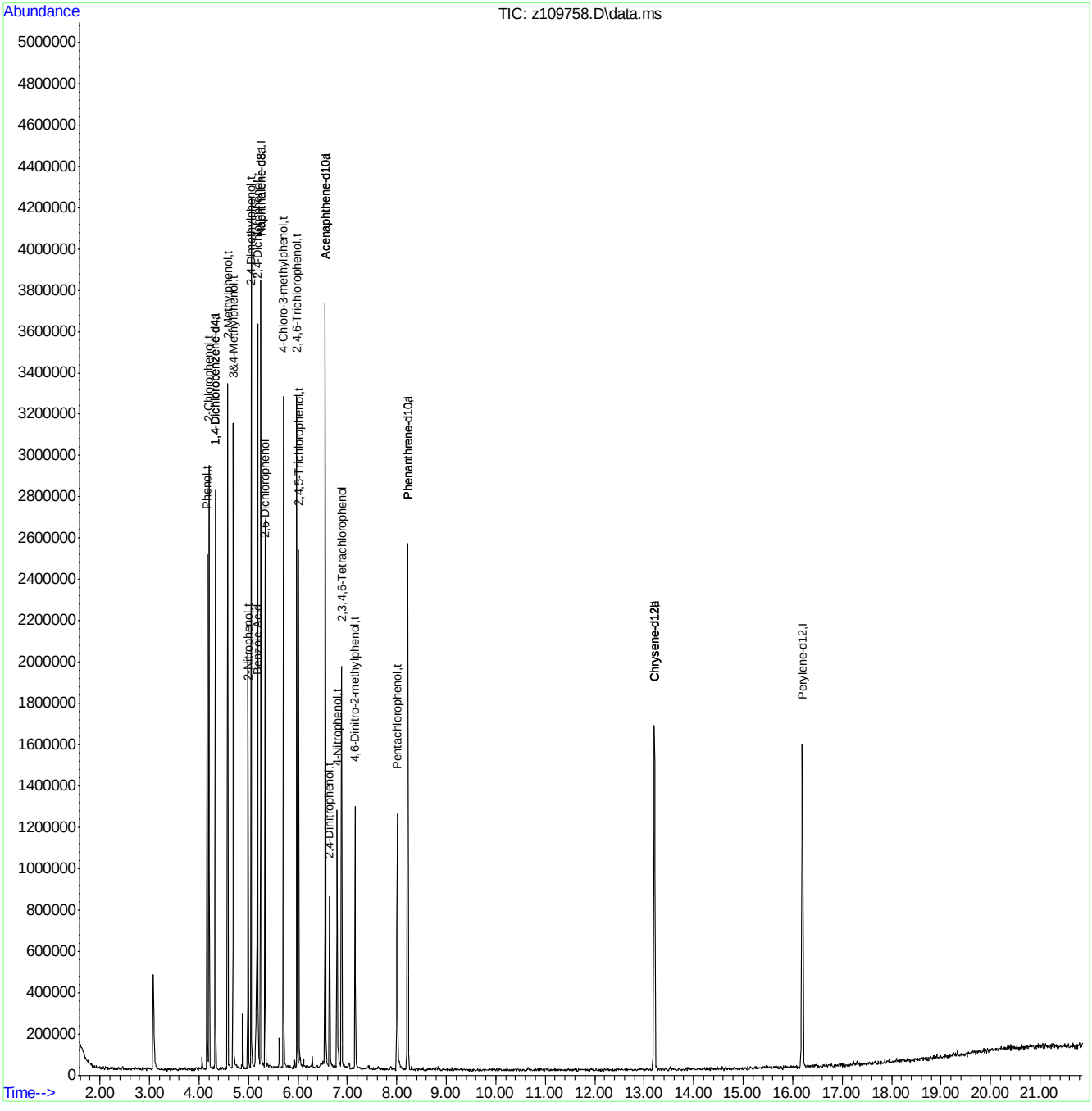
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109758.D
Acq On : 14 Apr 2016 7:59 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 14 10:33:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:08:50 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109759.D
Acq On : 14 Apr 2016 8:30 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 14 10:40:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	292844	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1189754	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	639312	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1022797	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	877838	40.00	ppm	-0.02
92) Perylene-d12	16.193	264	782708	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.328	152	292844	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1022797	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	877838	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	639312	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1189754	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	877838	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
3) Pyridine	2.287	79	486168	71.11	ppm	92
10) Aniline	4.120	93	668714	48.32	ppm	96
16) Benzyl alcohol	4.472	108	292330	57.59	ppm	97
39) 4-Chloroaniline	5.338	127	583975	44.91	ppm	94
44) 2-Methylnaphthalene	5.754	141	841794	46.29	ppm	92
54) 2-Nitroaniline	6.219	65	230099	47.11	ppm #	78
58) 3-Nitroaniline	6.566	138	259911	48.24	ppm	97
62) Dibenzofuran	6.737	168	1235859	47.01	ppm	97
68) 4-Nitroaniline	7.170	138	251673	46.68	ppm	98
79) Carbazole	8.629	167	1365980	47.50	ppm	96

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

7.6.132

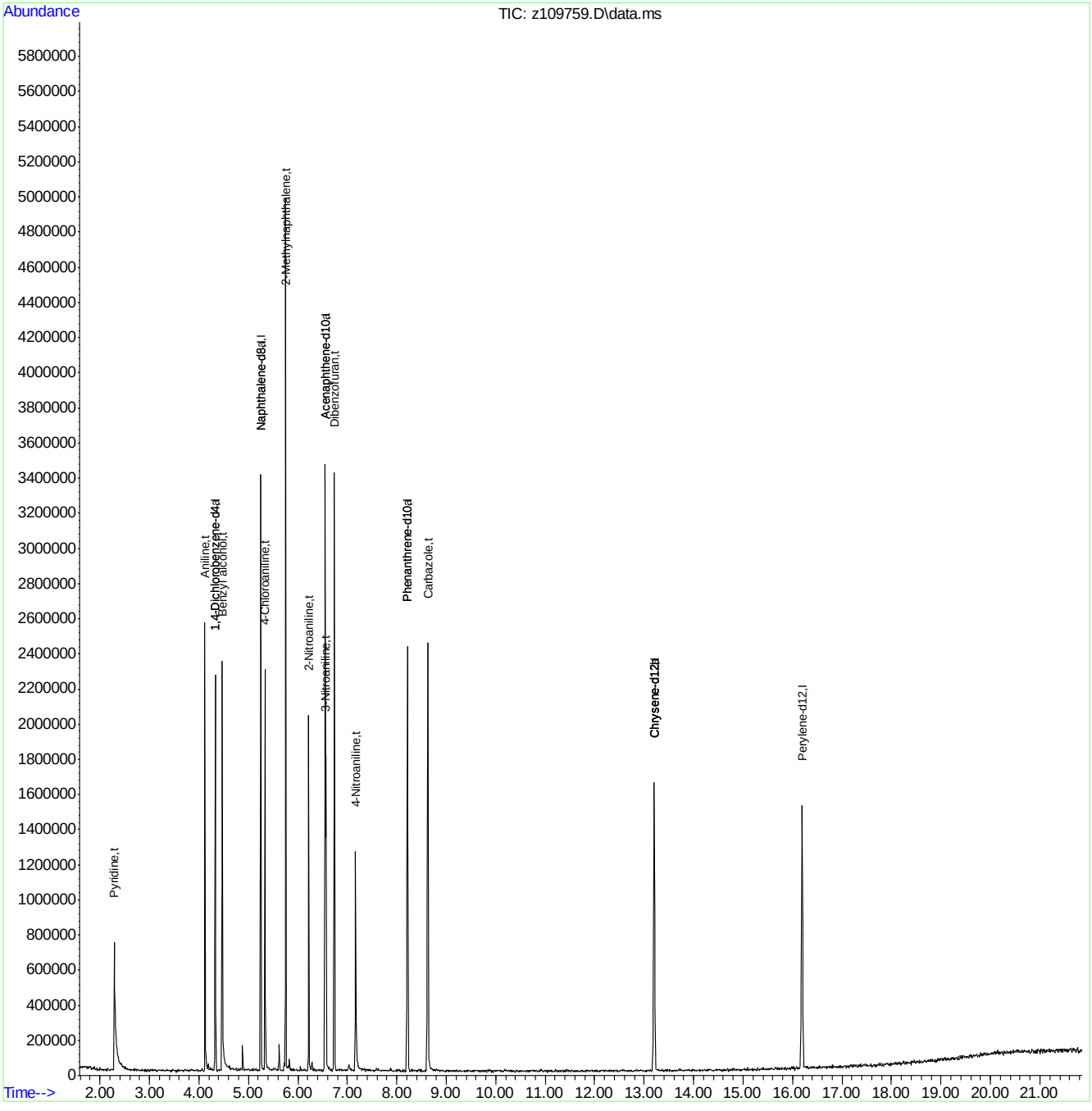
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109759.D
Acq On : 14 Apr 2016 8:30 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 14 10:40:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 10:41:03 2016 RTE

Page: 2

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109760.D
Acq On : 14 Apr 2016 9:01 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 14 10:43:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:11:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	348705	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1362242	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	729101	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1119541	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	976579	40.00	ppm	-0.02
92) Perylene-d12	16.193	264	878122	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.328	152	348705	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	1119541	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	976579	40.00	ppm	-0.02
110) Acenaphthene-d10a	6.550	164	729101	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1362242	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	976579	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.409	112	626577	52.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	104.54%	
8) Phenol-d5	4.151	99	726060	52.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	104.00%	
25) Nitrobenzene-d5	4.750	82	553000	49.62	ppm	0.00
Spiked Amount 50.000			Recovery	=	99.24%	
51) 2-Fluorobiphenyl	6.021	172	1235578	53.40	ppm	0.00
Spiked Amount 50.000			Recovery	=	106.80%	
73) 2,4,6-Tribromophenol	7.346	330	169410	48.16	ppm	0.00
Spiked Amount 50.000			Recovery	=	96.32%	
86) Terphenyl-d14	11.059	244	1104906	53.45	ppm	0.00
Spiked Amount 50.000			Recovery	=	106.90%	
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds Qvalue

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

7.6.133

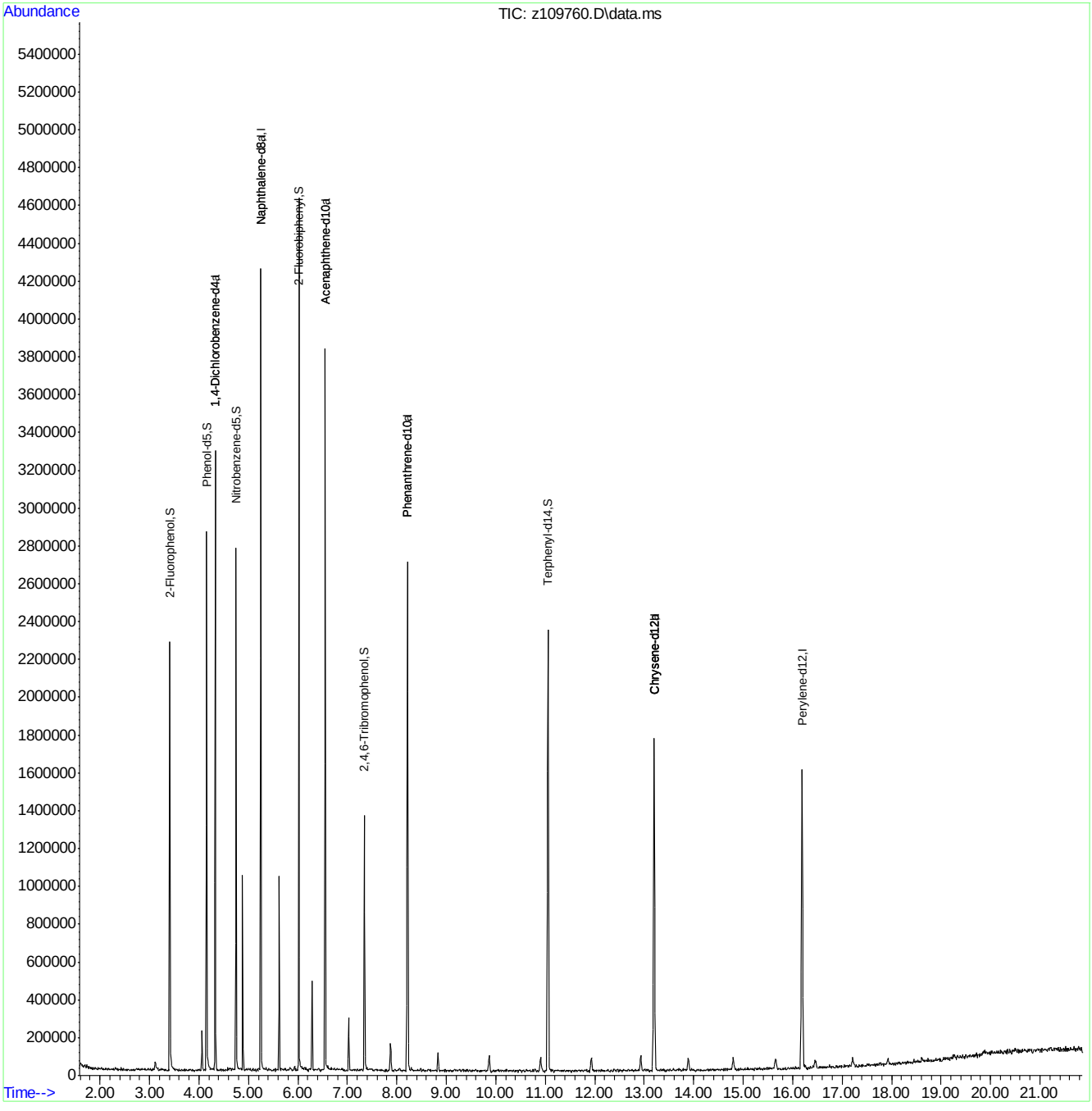
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109760.D
Acq On : 14 Apr 2016 9:01 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 14 10:43:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 09:11:08 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109761.D
Acq On : 14 Apr 2016 9:32 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 14 13:29:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	290194	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1105906	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	586675	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	930198	40.00	ppm	0.00
83) Chrysene-d12	13.206	240	757551	40.00	ppm	-0.01
92) Perylene-d12	16.193	264	704226	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.328	152	290194	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	930198	40.00	ppm	0.00
108) Chrysene-d12a	13.206	240	757551	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	586675	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1105906	40.00	ppm	0.00
114) Chrysene-d12b	13.206	240	757551	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.148	74	289584	51.32	ppm	98
11) bis(2-Chloroethyl)ether	4.146	93	446452	54.70	ppm	91
14) 1,3-Dichlorobenzene	4.285	146	596644	49.89	ppm	98
15) 1,4-Dichlorobenzene	4.344	146	579234	51.06	ppm	97
17) 1,2-Dichlorobenzene	4.456	146	562286	51.16	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.536	121	110997	38.89	ppm #	75
22) n-Nitroso-di-n-propyla...	4.637	70	330028	49.87	ppm	84
23) Hexachloroethane	4.696	201	169610	51.31	ppm	95
26) Nitrobenzene	4.766	77	457662	50.88	ppm	95
28) Isophorone	4.921	82	829132	52.94	ppm	98
32) bis(2-Chloroethoxy)met...	5.086	93	503342	51.82	ppm	95
36) 1,2,4-Trichlorobenzene	5.209	180	421762	52.29	ppm	95
38) Naphthalene	5.268	128	1499585	49.39	ppm	99
42) Hexachlorobutadiene	5.353	225	210477	58.74	ppm	96
48) Hexachlorocyclopentadiene	5.866	237	204290	52.24	ppm	97
52) 2-Chloronaphthalene	6.107	162	861266	51.81	ppm	99
55) Dimethylphthalate	6.342	163	964361	51.67	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109761.D
Acq On : 14 Apr 2016 9:32 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 14 13:29:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56)	Acenaphthylene	6.438	152	1393030	47.70	ppm	99
57)	2,6-Dinitrotoluene	6.395	165	210947	51.57	ppm	91
59)	Acenaphthene	6.582	153	919620	52.64	ppm	99
63)	2,4-Dinitrotoluene	6.753	165	270101	50.76	ppm	97
65)	Diethylphthalate	6.972	149	973361	50.81	ppm	99
66)	Fluorene	7.073	166	963971	48.54	ppm	95
67)	4-Chlorophenyl-phenyle...	7.073	204	410957	50.19	ppm	96
71)	n-Nitrosodiphenylamine	7.218	169	693275	51.26	ppm	93
72)	1,2-Diphenylhydrazine	7.244	77	813652	50.32	ppm	97
74)	4-Bromophenyl-phenylether	7.629	248	233946	48.47	ppm	91
75)	Hexachlorobenzene	7.699	284	264423	48.86	ppm	93
77)	Phenanthrene	8.249	178	1303444	48.97	ppm	97
78)	Anthracene	8.324	178	1314918	47.94	ppm	99
80)	Di-n-butylphthalate	9.210	149	1656784	51.47	ppm	100
81)	Fluoranthene	10.231	202	1361766	49.00	ppm	97
84)	Pyrene	10.653	202	1375846	53.86	ppm	94
87)	Butylbenzylphthalate	12.191	149	671280	55.06	ppm	90
88)	Benzo[a]anthracene	13.180	228	1140996	51.57	ppm	99
90)	Chrysene	13.260	228	1044259	48.35	ppm	96
91)	bis(2-Ethylhexyl)phtha...	13.527	149	930139	54.21	ppm	99
93)	Di-n-octylphthalate	14.927	149	1599914	58.96	ppm	98
94)	Benzo[b]fluoranthene	15.450	252	1108131	49.85	ppm	93
95)	Benzo[k]fluoranthene	15.504	252	1090917	54.67	ppm	98
96)	Benzo[a]pyrene	16.075	252	1030970	52.11	ppm	97
97)	Indeno[1,2,3-cd]pyrene	18.105	276	1029021	52.02	ppm	92
99)	Dibenz[a,h]anthracene	18.159	278	1041959	50.05	ppm	97
101)	Benzo[g,h,i]perylene	18.538	276	1035212	48.69	ppm	97

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

7.6.134

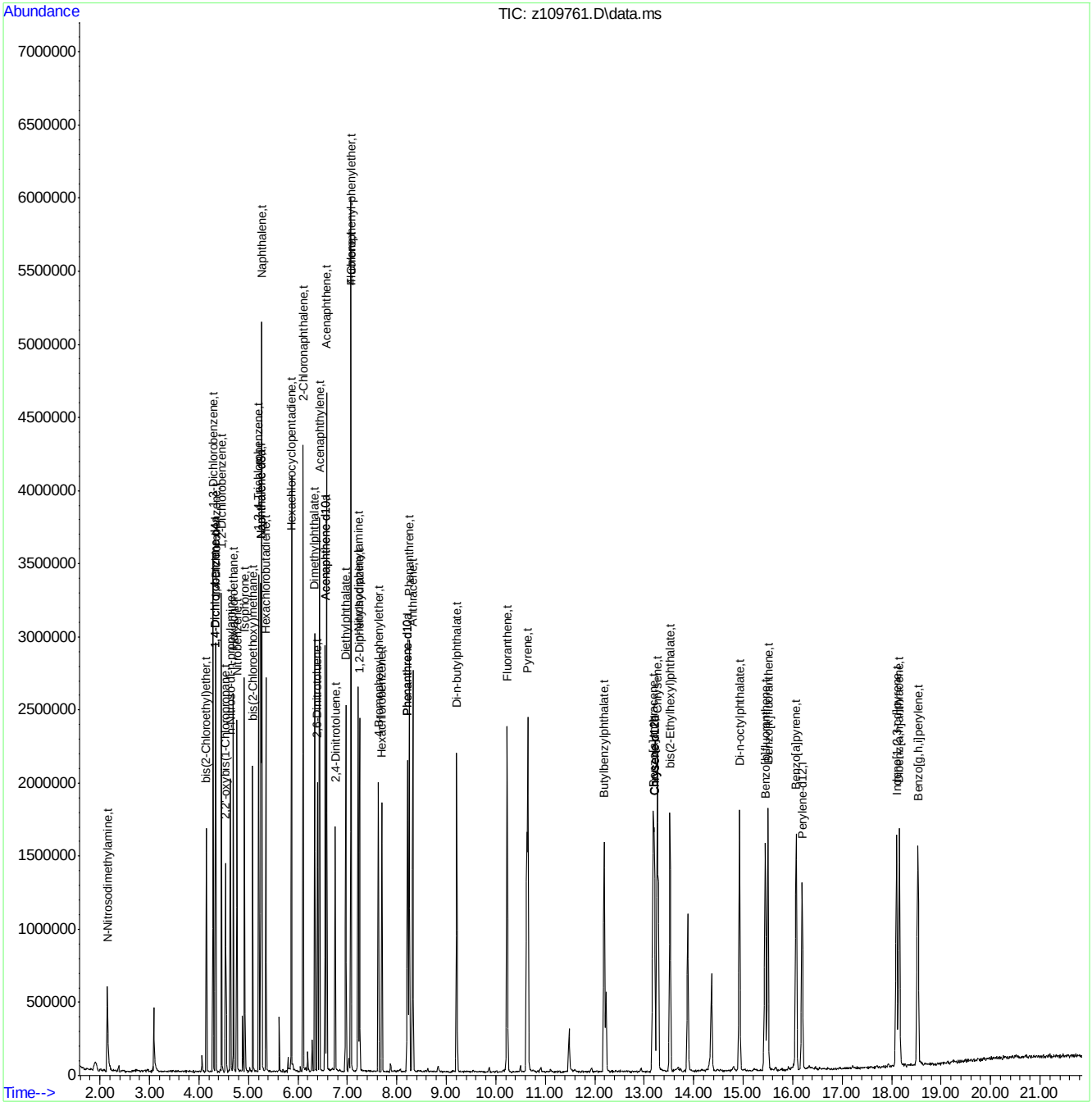
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109761.D
Acq On : 14 Apr 2016 9:32 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 14 13:29:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 13:29:15 2016 RTE Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109761a.D
Acq On : 14 Apr 2016 9:32 am
Operator : sarad
Sample : icv5486-50
Misc : op92825,ez5486
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 14 13:30:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	290194	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1105906	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	586675	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	930198	40.00	ppm	0.00
83) Chrysene-d12	13.206	240	757551	40.00	ppm	-0.01
92) Perylene-d12	16.193	264	704226	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.328	152	290194	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	930198	40.00	ppm	0.00
108) Chrysene-d12a	13.206	240	757551	40.00	ppm	0.00
110) Acenaphthene-d10a	6.555	164	586675	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1105906	40.00	ppm	0.00
114) Chrysene-d12b	13.206	240	757551	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
109) Benzidine	10.626	184	806234	77.87	ppm	87
111) 1,2,4,5-Tetrachloroben...	5.871	216	382532	50.86	ppm	94

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

7.6.135

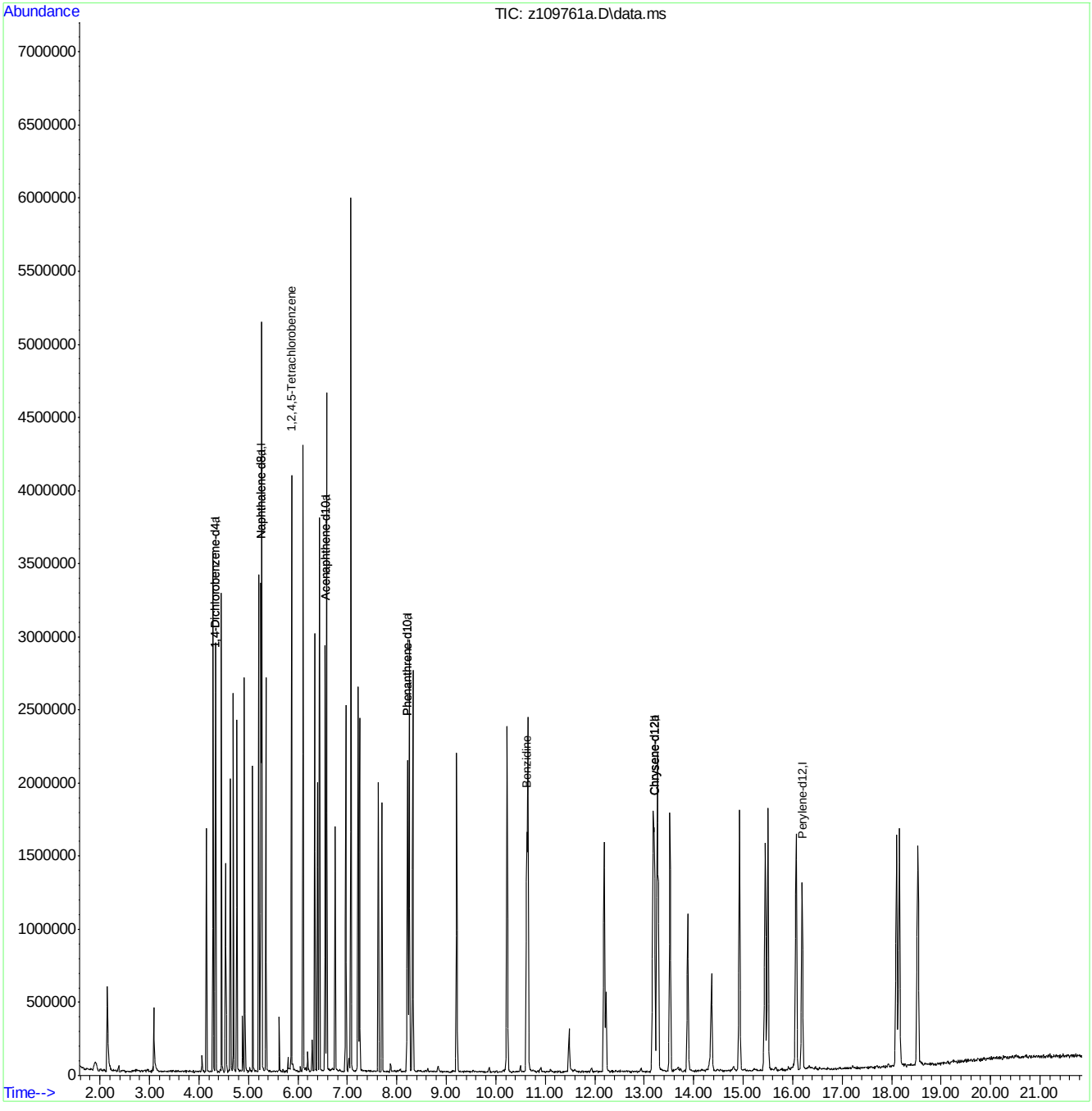
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109761a.D
Acq On : 14 Apr 2016 9:32 am
Operator : sarad
Sample : icv5486-50
Misc : op92825,ez5486
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 14 13:30:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 15:33:25 2016 RTE

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109762.D
Acq On : 14 Apr 2016 10:03 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 14 10:52:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.327	152	306061	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1176501	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	629319	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	964323	40.00	ppm	0.00
83) Chrysene-d12	13.196	240	834677	40.00	ppm	-0.02
92) Perylene-d12	16.193	264	773212	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.327	152	306061	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	964323	40.00	ppm	0.00
108) Chrysene-d12a	13.196	240	834677	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	629319	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1176501	40.00	ppm	0.00
114) Chrysene-d12b	13.196	240	834677	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.811	88	203465	44.80	ppm	94
6) Indene	4.520	116	929287	47.77	ppm	98
7) Cumene	3.719	105	1148717	46.29	ppm	99
13) Decane	4.194	43	493944	46.24	ppm	98
18) Acetophenone	4.637	105	628668	46.60	ppm	91
27) Quinoline	5.513	129	1034495	46.46	ppm	97
40) 2,3-Dichloroaniline	5.978	161	404434	39.11	ppm	92
41) Caprolactam	5.578	55	171068	40.84	ppm	87
45) 1-Methylnaphthalene	5.823	141	849509	44.14	ppm	98
46) Dimethylnaphthalene	6.208	156	861267	46.30	ppm	98
53) Biphenyl	6.090	154	1135689	45.46	ppm	100
82) Octadecane	8.067	57	579174	48.40	ppm	96
100) 7,12-Dimethylbenz(a)an...	15.455	256	493715	44.46	ppm	92
103) Benzaldehyde	4.018	105	407214	50.40	ppm	94
107) Atrazine	7.891	215	121727	50.73	ppm #	80

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109762.D
Acq On : 14 Apr 2016 10:03 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 14 10:52:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

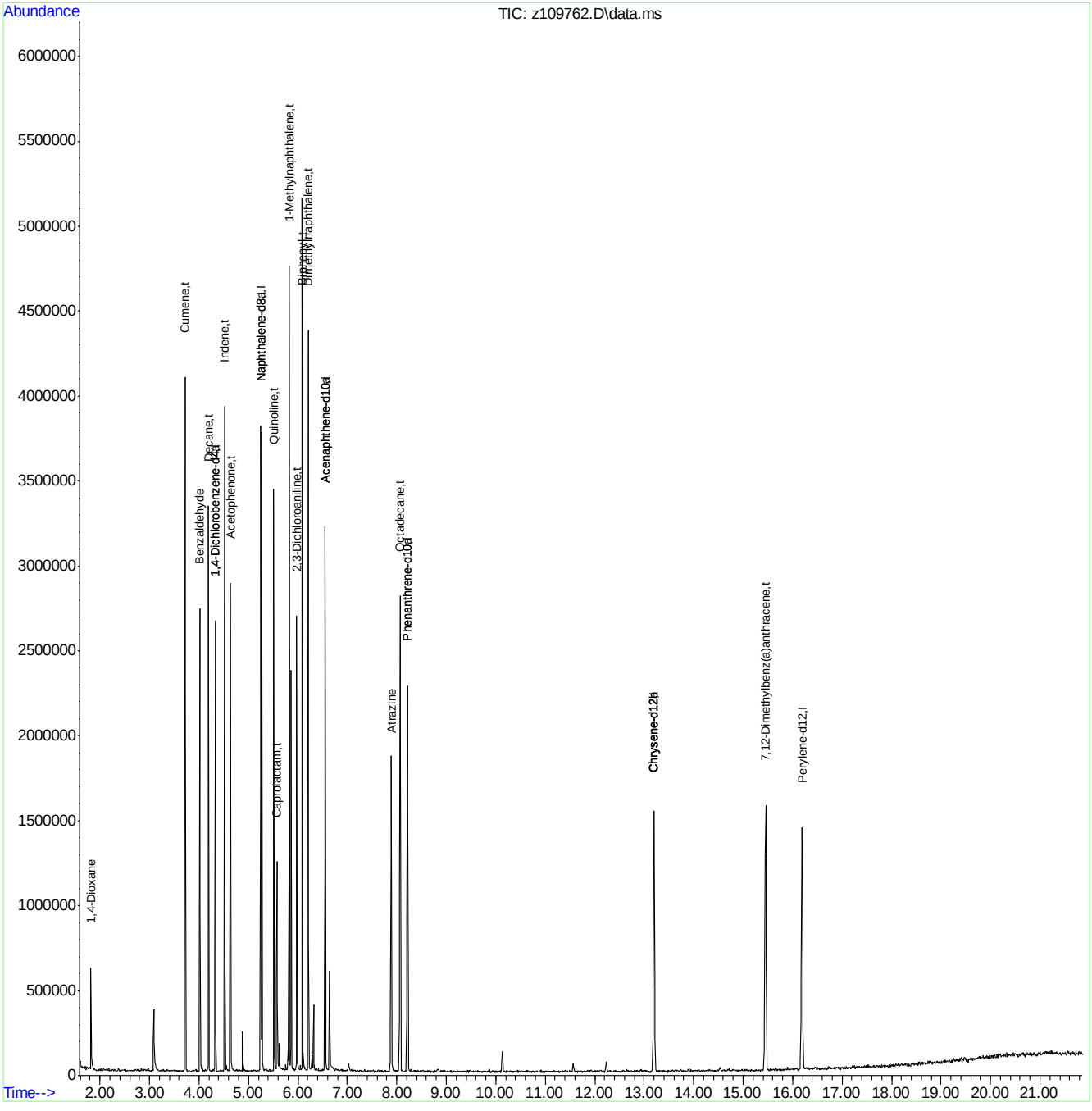
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109762.D
Acq On : 14 Apr 2016 10:03 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 14 10:52:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 10:52:32 2016 RTE

Page: 3

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109762a.D
Acq On : 14 Apr 2016 10:03 am
Operator : sarad
Sample : icv5486-50
Misc : op92825,ez5486
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 14 13:31:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.327	152	306061	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1176501	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	629319	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	964323	40.00	ppm	0.00
83) Chrysene-d12	13.196	240	834677	40.00	ppm	-0.02
92) Perylene-d12	16.193	264	773212	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.327	152	306061	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	964323	40.00	ppm	0.00
108) Chrysene-d12a	13.196	240	834677	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	629319	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1176501	40.00	ppm	0.00
114) Chrysene-d12b	13.196	240	834677	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
103) Benzaldehyde	4.018	105	407214	50.40	ppm	94
107) Atrazine	7.891	215	121727	50.73	ppm #	80

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

7.6.137

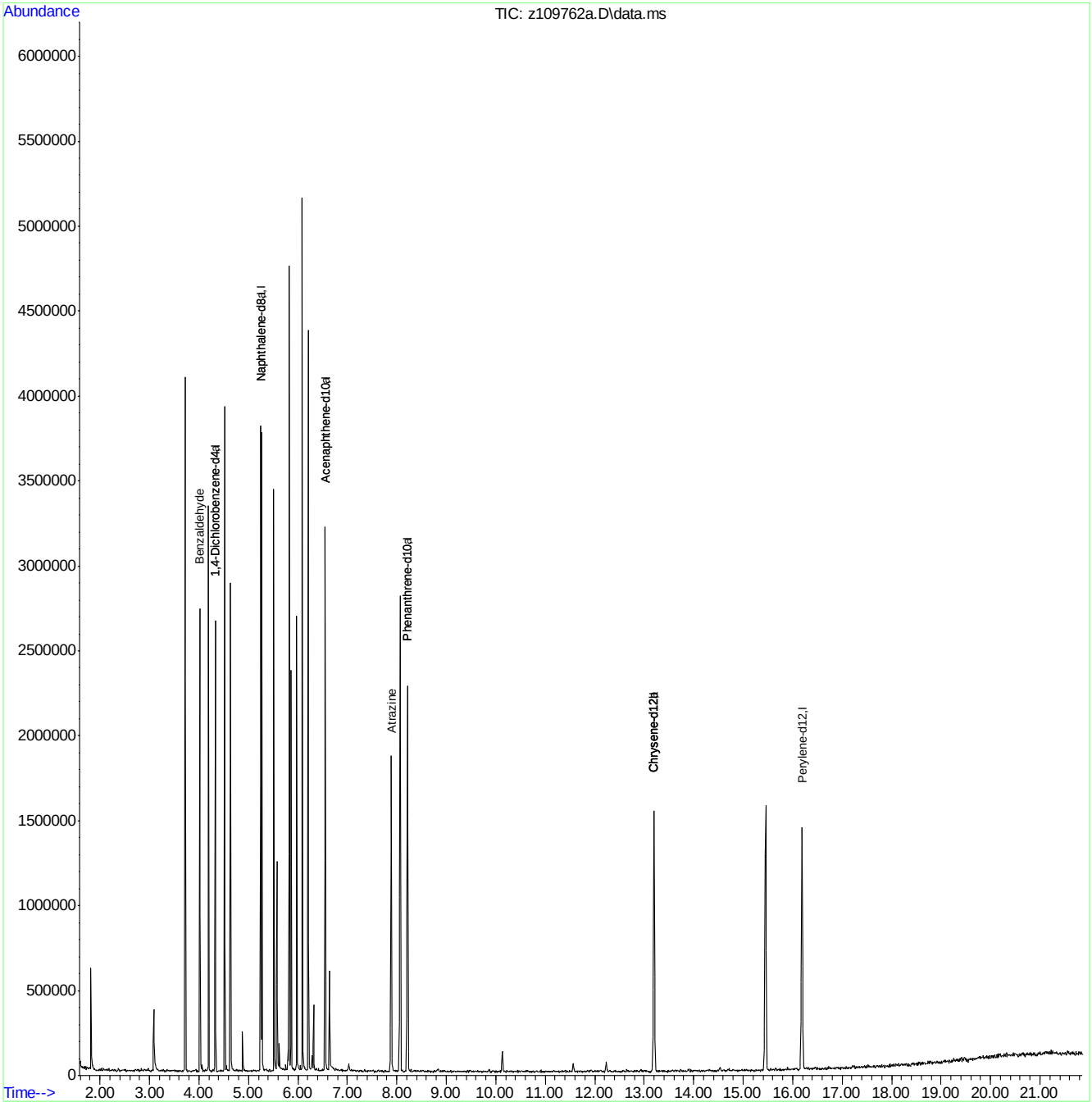
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109762a.D
Acq On : 14 Apr 2016 10:03 am
Operator : sarad
Sample : icv5486-50
Misc : op92825,ez5486
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 14 13:31:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 15:33:32 2016 RTE

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109763.D
Acq On : 14 Apr 2016 10:35 am
Operator : sarad
Sample : icv5486-50
Misc : op92825,ez5486
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 14 11:05:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	289489	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1093473	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	603385	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	932001	40.00	ppm	0.00
83) Chrysene-d12	13.201	240	826872	40.00	ppm	-0.02
92) Perylene-d12	16.193	264	828079	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.328	152	289489	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	932001	40.00	ppm	0.00
108) Chrysene-d12a	13.201	240	826872	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	603385	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1093473	40.00	ppm	0.00
114) Chrysene-d12b	13.201	240	826872	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
113) Hydroquinone	5.631	110	414062	57.30	ppm	89

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

7.6.138

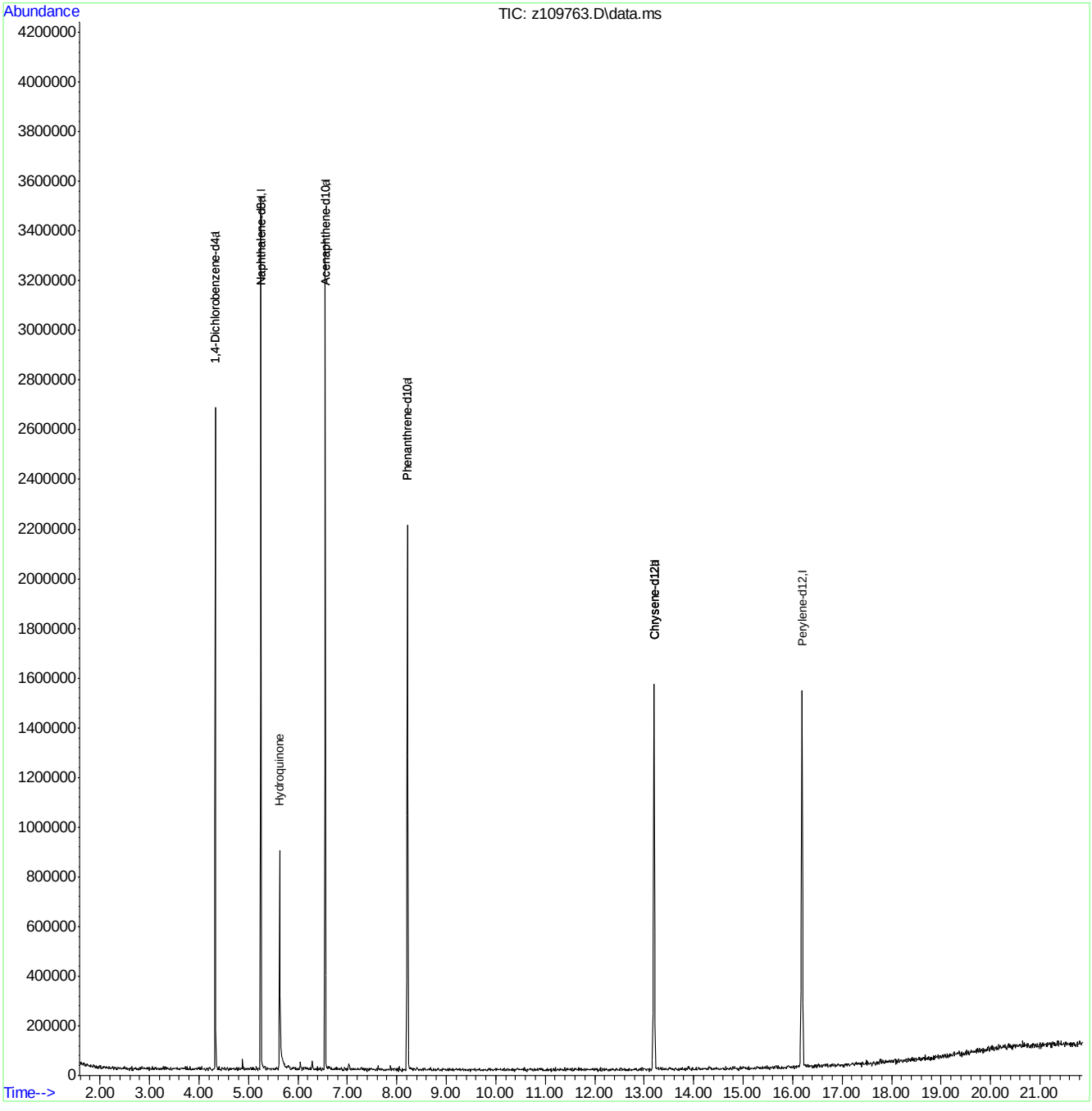
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109763.D
Acq On : 14 Apr 2016 10:35 am
Operator : sarad
Sample : icv5486-50
Misc : op92825,ez5486
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 14 11:05:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



MZ5485.M Thu Apr 14 11:05:17 2016 RTE

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SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109764.D
Acq On : 14 Apr 2016 11:06 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 14 13:08:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	278435	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1065389	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	582844	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	954062	40.00	ppm	0.00
83) Chrysene-d12	13.196	240	844027	40.00	ppm	-0.02
92) Perylene-d12	16.187	264	846117	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.328	152	278435	40.00	ppm	0.00
104) Phenanthrene-d10a	8.217	188	954062	40.00	ppm	0.00
108) Chrysene-d12a	13.196	240	844027	40.00	ppm	0.00
110) Acenaphthene-d10a	6.550	164	582844	40.00	ppm	0.00
112) Naphthalene-d8a	5.252	136	1065389	40.00	ppm	0.00
114) Chrysene-d12b	13.196	240	844027	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
106) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
89) 3,3'-Dichlorobenzidine	13.281	252	426883	47.96	ppm	98

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

7.6.139

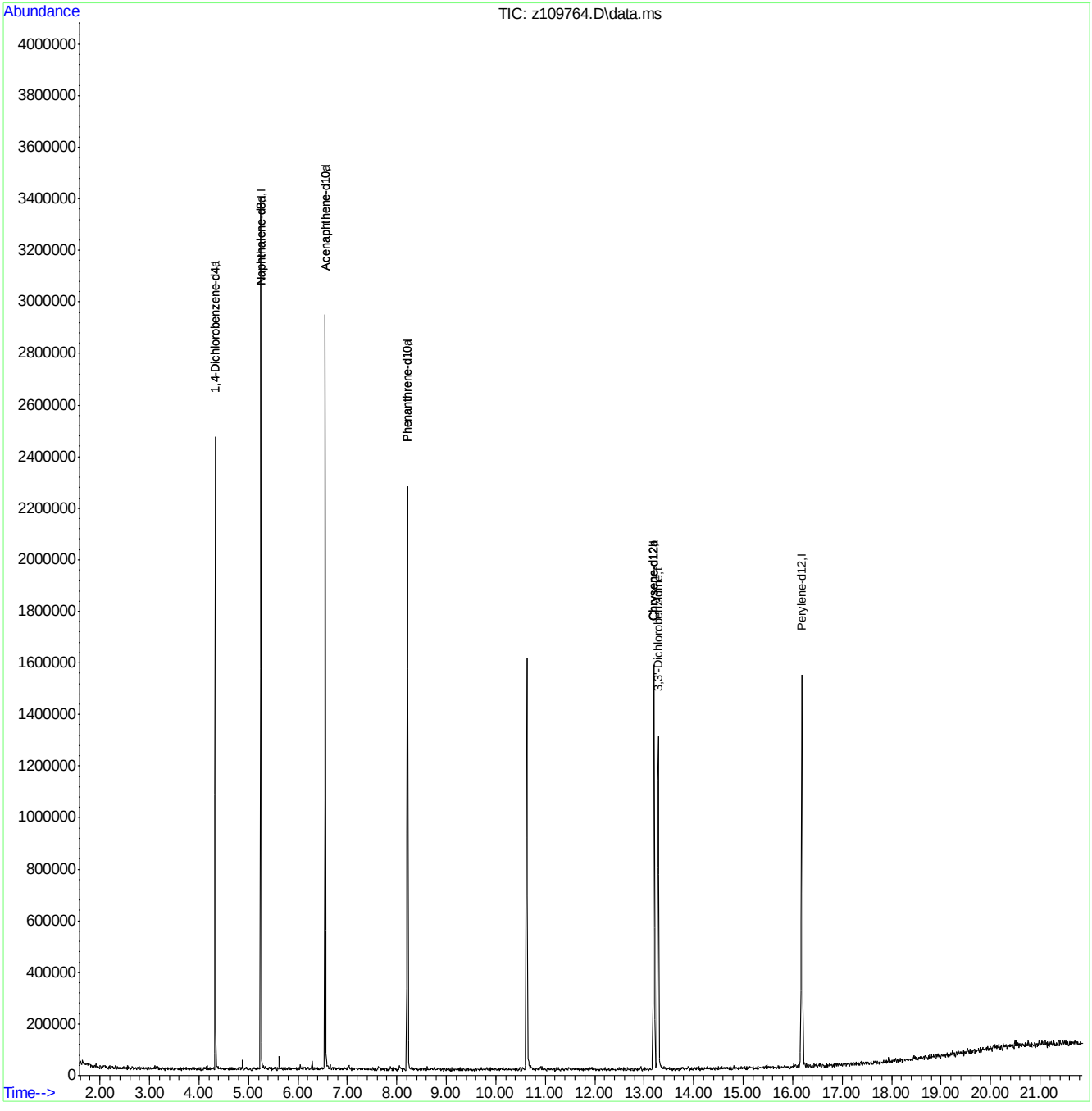
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5486\
Data File : z109764.D
Acq On : 14 Apr 2016 11:06 am
Operator : sarad
Sample : icv5485-50
Misc : op92825,ez5486
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 14 13:08:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu Apr 14 10:27:46 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/26/16 15:52

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110074.D
Acq On : 26 Apr 2016 12:24 pm
Operator : ariellec
Sample : cc5485-50
Misc : op93086,ez5500
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 26 14:36:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 14:35:23 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.189	152	293213	40.00	ppm	0.00
24) Naphthalene-d8	5.113	136	1072753	40.00	ppm	0.00
47) Acenaphthene-d10	6.384	164	689209	40.00	ppm	0.00
69) Phenanthrene-d10	7.976	188	1183335	40.00	ppm	0.00
83) Chrysene-d12	12.870	240	1239926	40.00	ppm	0.00
92) Perylene-d12	15.845	264	1106324	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.189	152	293213	40.00	ppm	0.00
104) Phenanthrene-d10a	7.976	188	1183335	40.00	ppm	0.00
106) Chrysene-d12a	12.870	240	1239926	40.00	ppm	0.00
108) Acenaphthene-d10a	6.384	164	689209	40.00	ppm	0.00
110) Naphthalene-d8a	5.113	136	1072753	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.264	112	450494	44.49	ppm	0.00
Spiked Amount 50.000			Recovery	=	88.98%	
8) Phenol-d5	4.028	99	556384	46.90	ppm	0.00
Spiked Amount 50.000			Recovery	=	93.80%	
25) Nitrobenzene-d5	4.616	82	479817	55.42	ppm	-0.01
Spiked Amount 50.000			Recovery	=	110.84%	
51) 2-Fluorobiphenyl	5.882	172	1056106	47.81	ppm	0.02
Spiked Amount 50.000			Recovery	=	95.62%	
73) 2,4,6-Tribromophenol	7.148	330	172040	47.30	ppm	0.02
Spiked Amount 50.000			Recovery	=	94.60%	
86) Terphenyl-d14	10.744	244	1284555	49.31	ppm	-0.01
Spiked Amount 50.000			Recovery	=	98.62%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.624	88	212622	48.86	ppm	91
3) Pyridine	1.982	79	402050	58.73	ppm	90
4) N-Nitrosodimethylamine	1.934	74	257337	45.13	ppm	96
6) Indene	4.376	116	807702	43.34	ppm	92
7) Cumene	3.569	105	1193145	50.19	ppm	97
9) Phenol	4.034	94	552624	45.89	ppm	80
10) Aniline	3.980	93	503077	36.31	ppm	93
11) bis(2-Chloroethyl)ether	4.012	93	425401	51.58	ppm	93
12) 2-Chlorophenol	4.066	128	467367	42.08	ppm	93
13) Decane	4.055	43	366415	35.80	ppm	91
14) 1,3-Dichlorobenzene	4.146	146	575583	47.64	ppm	97
15) 1,4-Dichlorobenzene	4.199	146	549077	47.91	ppm	97
16) Benzyl alcohol	4.338	108	266383	52.41	ppm #	75
17) 1,2-Dichlorobenzene	4.317	146	527456	47.50	ppm	97
18) Acetophenone	4.504	105	619962	47.97	ppm	91
19) 2-Methylphenol	4.456	108	421729	44.80	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.402	121	127987	44.38	ppm #	63
21) 3&4-Methylphenol	4.568	108	435236	44.32	ppm	95
22) n-Nitroso-di-n-propyla...	4.509	70	324033	48.46	ppm	91
23) Hexachloroethane	4.557	201	218923	65.55	ppm #	72
26) Nitrobenzene	4.632	77	483803	55.45	ppm	94
27) Quinoline	5.385	129	933771	45.99	ppm	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110074.D
Acq On : 26 Apr 2016 12:24 pm
Operator : ariellec
Sample : cc5485-50
Misc : op93086,ez5500
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 26 14:36:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 14:35:23 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28)	Isophorone	4.798	82	836978	55.10	ppm		93
29)	2-Nitrophenol	4.856	139	262559	48.43	ppm		75
30)	2,4-Dimethylphenol	4.926	107	445430	52.23	ppm		93
31)	Benzoic Acid	5.075	105	292870	47.60	ppm		91
32)	bis(2-Chloroethoxy)met...	4.958	93	457530	48.56	ppm		98
33)	2,4-Dichlorophenol	5.049	162	423648	56.40	ppm		93
34)	2,6-Dichlorophenol	5.204	162	420545	57.23	ppm		97
35)	1,3,5-Trichlorobenzene	4.840	180	502693	59.89	ppm		93
36)	1,2,4-Trichlorobenzene	5.070	180	473144	60.48	ppm		92
37)	1,2,3-Trichlorobenzene	5.236	180	453057	59.54	ppm		89
38)	Naphthalene	5.129	128	1353153	45.94	ppm		99
39)	4-Chloroaniline	5.204	127	475450	40.56	ppm		92
40)	2,3-Dichloroaniline	5.845	161	503246	53.37	ppm		94
41)	Caprolactam	5.492	55	171032	44.78	ppm		87
42)	Hexachlorobutadiene	5.214	225	283644	81.60	ppm		94
43)	4-Chloro-3-methylphenol	5.588	107	412294	51.76	ppm	#	42
44)	2-Methylnaphthalene	5.615	141	782280	47.71	ppm		97
45)	1-Methylnaphthalene	5.684	141	815968	46.49	ppm		97
46)	Dimethylnaphthalene	6.058	156	861879	50.81	ppm		98
48)	Hexachlorocyclopentadiene	5.727	237	663838	144.50	ppm		97
49)	2,4,6-Trichlorophenol	5.845	196	339718	59.68	ppm		96
50)	2,4,5-Trichlorophenol	5.887	196	344700m	55.91	ppm		
52)	2-Chloronaphthalene	5.962	162	885719	45.35	ppm		95
53)	Biphenyl	5.946	154	1143470	41.79	ppm		99
54)	2-Nitroaniline	6.080	65	247752	47.06	ppm		86
55)	Dimethylphthalate	6.192	163	1093426	49.87	ppm		98
56)	Acenaphthylene	6.272	152	1468910	42.81	ppm		99
57)	2,6-Dinitrotoluene	6.245	165	232125	48.30	ppm		93
58)	3-Nitroaniline	6.411	138	231950	39.94	ppm		94
59)	Acenaphthene	6.411	153	902903	44.00	ppm		99
60)	2,4-Dinitrophenol	6.480	184	249806	95.82	ppm		93
61)	4-Nitrophenol	6.635	109	137619	51.45	ppm	#	66
62)	Dibenzofuran	6.566	168	1330877	46.96	ppm		99
63)	2,4-Dinitrotoluene	6.587	165	313602	50.16	ppm		86
64)	2,3,4,6-Tetrachlorophenol	6.705	232	304055	62.13	ppm		90
65)	Diethylphthalate	6.796	149	1053037	46.79	ppm		96
66)	Fluorene	6.881	166	1064264	45.61	ppm		97
67)	4-Chlorophenyl-phenyle...	6.881	204	554794	57.67	ppm		89
68)	4-Nitroaniline	6.993	138	233937	40.25	ppm		74
70)	4,6-Dinitro-2-methylph...	6.972	198	203418	57.78	ppm		92
71)	n-Nitrosodiphenylamine	7.025	169	756625	43.97	ppm		96
72)	1,2-Diphenylhydrazine	7.047	77	950140	46.20	ppm		62
74)	4-Bromophenyl-phenylether	7.410	248	353814	57.63	ppm		86
75)	Hexachlorobenzene	7.479	284	363416	52.79	ppm		94
76)	Pentachlorophenol	7.779	266	464633	127.15	ppm		90
77)	Phenanthrene	8.008	178	1544033	45.60	ppm		99
78)	Anthracene	8.078	178	1605870	46.03	ppm		99
79)	Carbazole	8.377	167	1455985	43.77	ppm		98
80)	Di-n-butylphthalate	8.943	149	1853058	45.26	ppm		98
81)	Fluoranthene	9.932	202	1856289	52.50	ppm		89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110074.D
Acq On : 26 Apr 2016 12:24 pm
Operator : ariellec
Sample : cc5485-50
Misc : op93086,ez5500
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 26 14:36:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 14:35:23 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
82) Octadecane	7.832	57	517367	35.23 ppm	91
84) Pyrene	10.343	202	1910644	45.70 ppm	93
85) Butyl stearate	12.074	56	361109	31.95 ppm	80
87) Butylbenzylphthalate	11.871	149	812599	40.72 ppm	97
88) Benzo[a]anthracene	12.843	228	1783844	49.26 ppm	96
89) 3,3'-Dichlorobenzidine	12.961	252	590865	45.18 ppm	95
90) Chrysene	12.923	228	1692358	47.87 ppm	91
91) bis(2-Ethylhexyl)phtha...	13.196	149	1088549	38.76 ppm	97
93) Di-n-octylphthalate	14.595	149	1883078	44.17 ppm	98
94) Benzo[b]fluoranthene	15.114	252	1744233	49.95 ppm	90
95) Benzo[k]fluoranthene	15.167	252	1648118	52.57 ppm	89
96) Benzo[a]pyrene	15.728	252	1566028	50.38 ppm	90
97) Indeno[1,2,3-cd]pyrene	17.758	276	1542842	49.65 ppm	76
98) Dibenz(a,h)acridine	17.400	279	1420841	48.29 ppm	98
99) Dibenz[a,h]anthracene	17.811	278	1562572	47.77 ppm	87
100) 7,12-Dimethylbenz(a)an...	15.119	256	818490	51.51 ppm	96
101) Benzo[g,h,i]perylene	18.185	276	1602634	47.99 ppm	87

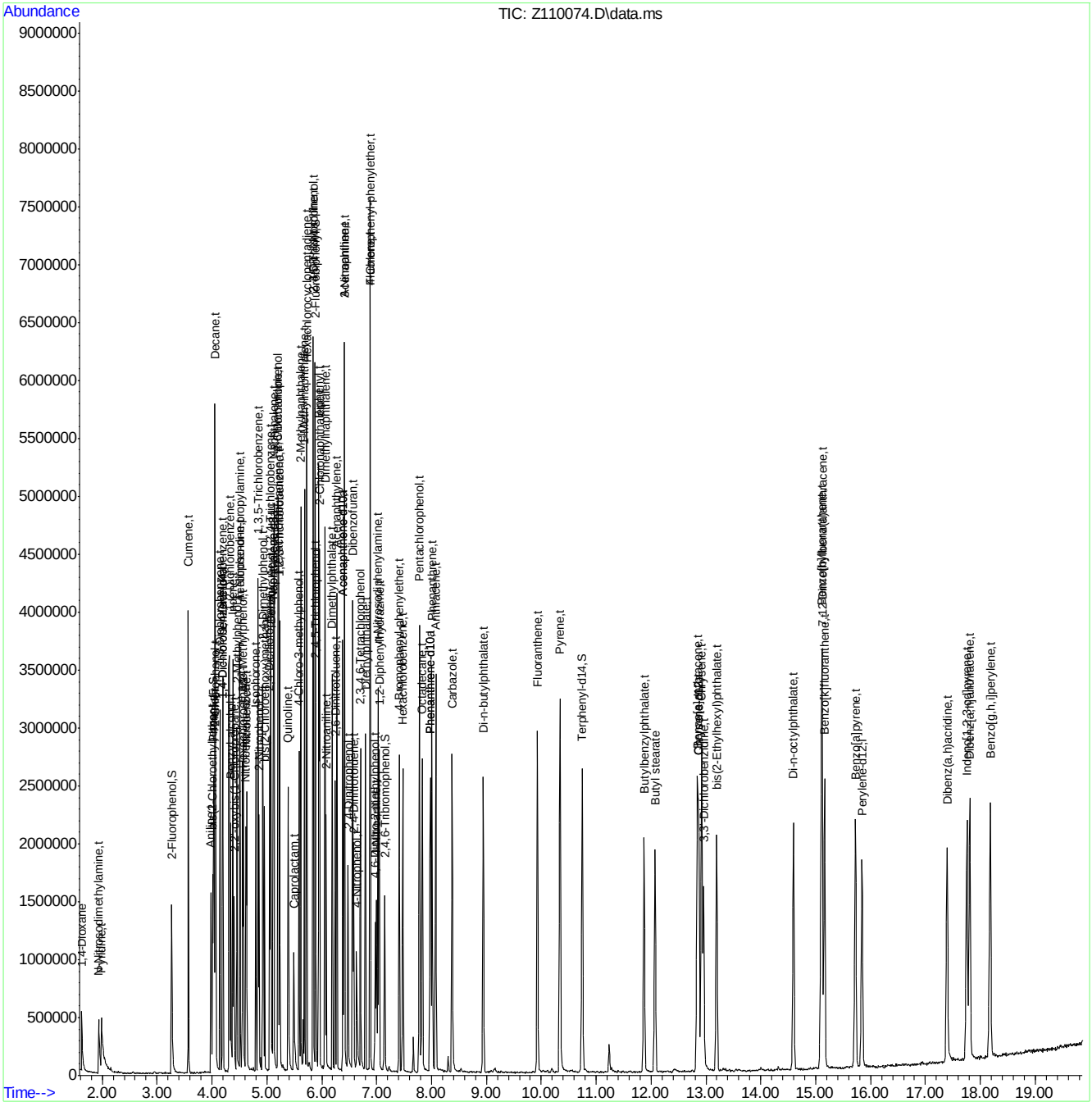
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110074.D
Acq On : 26 Apr 2016 12:24 pm
Operator : ariellec
Sample : cc5485-50
Misc : op93086,ez5500
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 26 14:36:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 14:35:23 2016
Response via : Initial Calibration



SGS ACCUTEST JC18649

Manual Integration Approval Summary

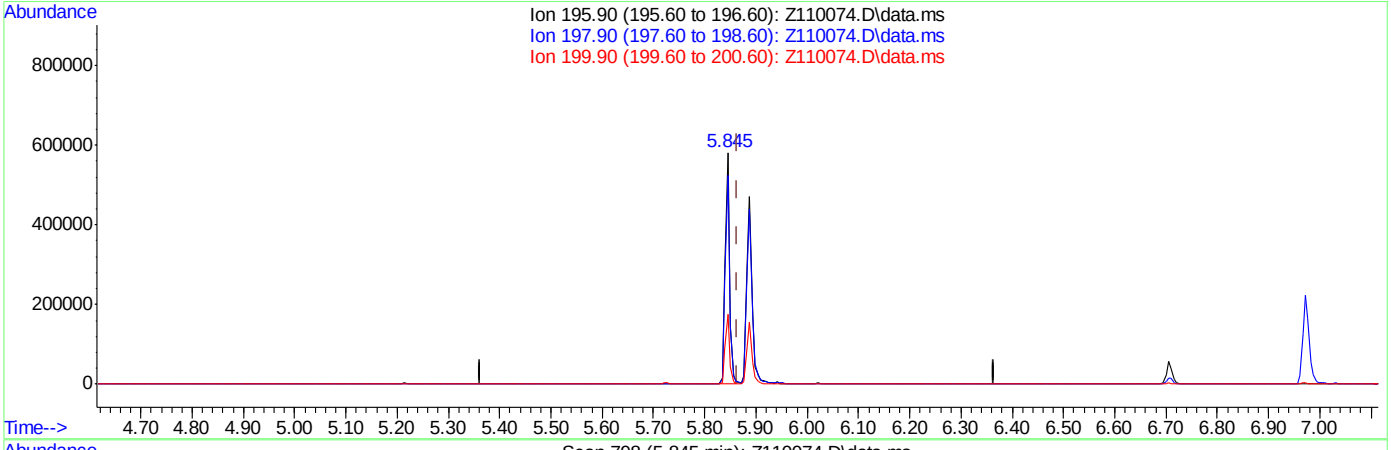
Sample Number:	EZ5500-CC5485	**Method:**	SW846 8270D
Lab FileID:	Z110074.D	**Analyst approved:**	04/26/16 14:42 Arielle Cocozza
Injection Time:	04/26/16 12:24	**Supervisor approved:**	04/26/16 15:52 Nina Pandya

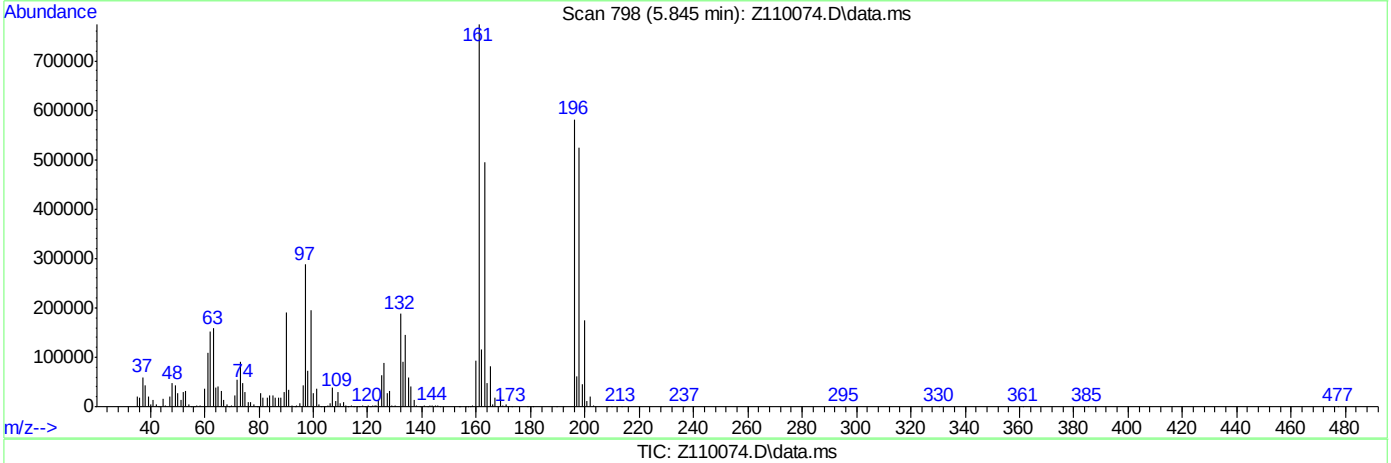
Parameter	CAS	Sig#	R.T. (min.)	Reason
2,4,5-Trichlorophenol	95-95-4		5.89	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110074.D
Acq On : 26 Apr 2016 12:24 pm
Operator : ariellec
Sample : cc5485-50
Misc : op93086,ez5500
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 26 14:35:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 14:35:23 2016
Response via : Initial Calibration





(50) 2,4,5-Trichlorophenol (t)

5.845min (-0.019) 55.10ppm

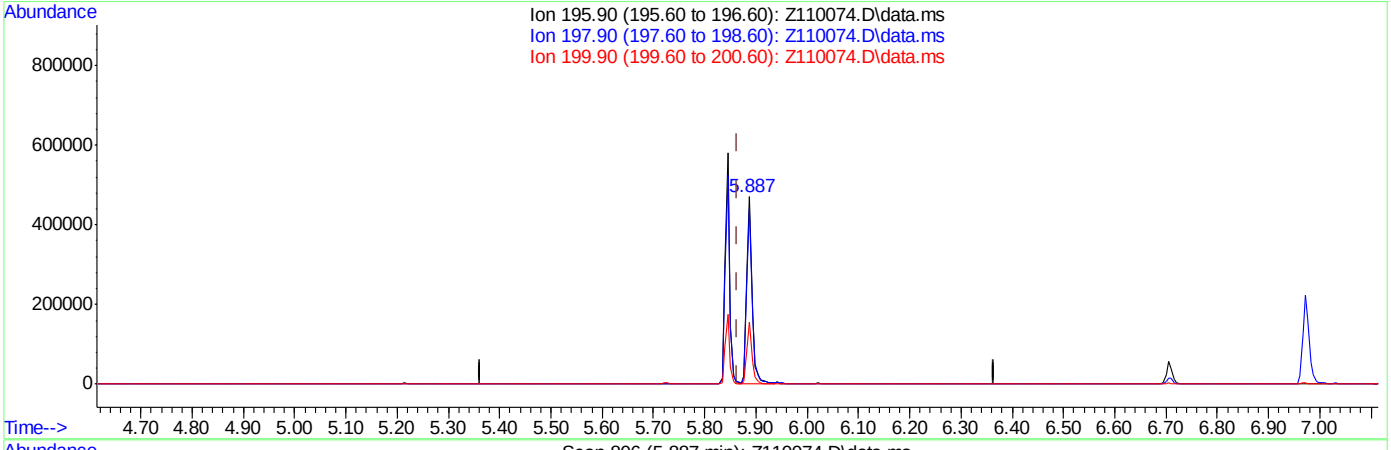
response 339718

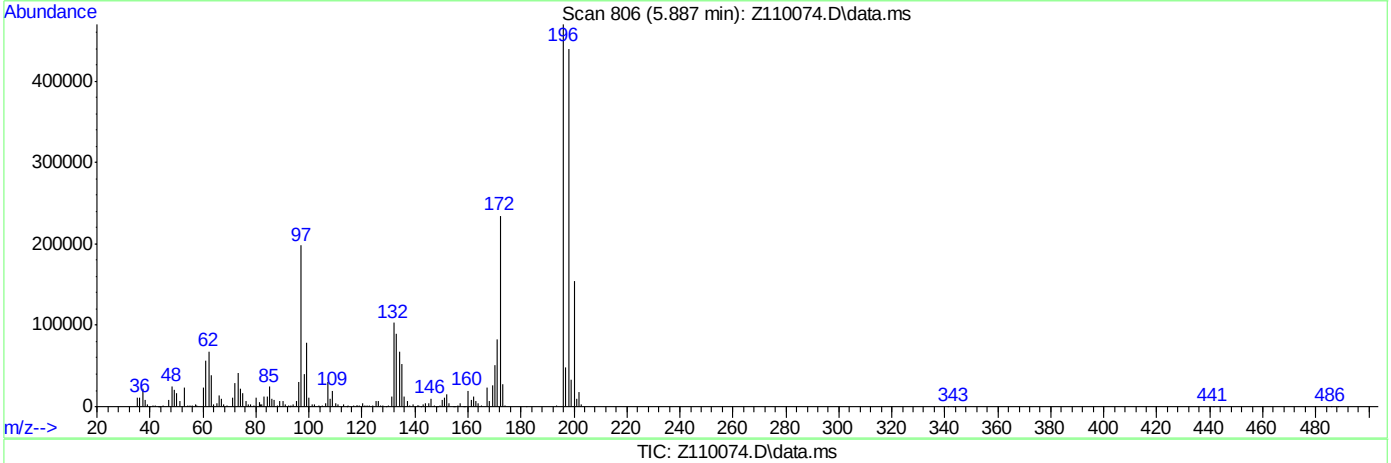
Ion	Exp%	Act%
195.90	100	100
197.90	87.20	90.34
199.90	27.60	30.16
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110074.D
Acq On : 26 Apr 2016 12:24 pm
Operator : ariellec
Sample : cc5485-50
Misc : op93086,ez5500
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 26 14:35:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 14:35:23 2016
Response via : Initial Calibration





(50) 2,4,5-Trichlorophenol (t)

5.887min (+0.023) 55.91ppm m

response 344700

Ion	Exp%	Act%
195.90	100	100
197.90	87.20	93.57
199.90	27.60	32.92
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110075A.D
Acq On : 26 Apr 2016 1:45 pm
Operator : ariellec
Sample : cc5486-50
Misc : op93086,ez5500
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 26 14:36:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 09:30:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.189	152	285492	40.00	ppm	-0.02
24) Naphthalene-d8	5.113	136	1064559	40.00	ppm	-0.02
47) Acenaphthene-d10	6.384	164	678176	40.00	ppm	-0.02
69) Phenanthrene-d10	7.976	188	1164604	40.00	ppm	-0.17
83) Chrysene-d12	12.865	240	1250670	40.00	ppm	-0.04
92) Perylene-d12	15.840	264	1078418	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4a	4.189	152	285492	40.00	ppm	-0.02
104) Phenanthrene-d10a	7.976	188	1164604	40.00	ppm	-0.03
106) Chrysene-d12a	12.865	240	1250670	40.00	ppm	-0.04
108) Acenaphthene-d10a	6.384	164	678176	40.00	ppm	-0.02
110) Naphthalene-d8a	5.113	136	1064559	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	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
103) Benzaldehyde	3.879	105	337071	44.72	ppm	94
105) Atrazine	7.677	215	161229	55.64	ppm #	72
107) Benzidine	10.332	184	425187	24.88	ppm	98
109) 1,2,4,5-Tetrachloroben...	5.733	216	483909	55.66	ppm	92
111) Hydroquinone	5.514	110	384943	54.72	ppm	94

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

7.6.141

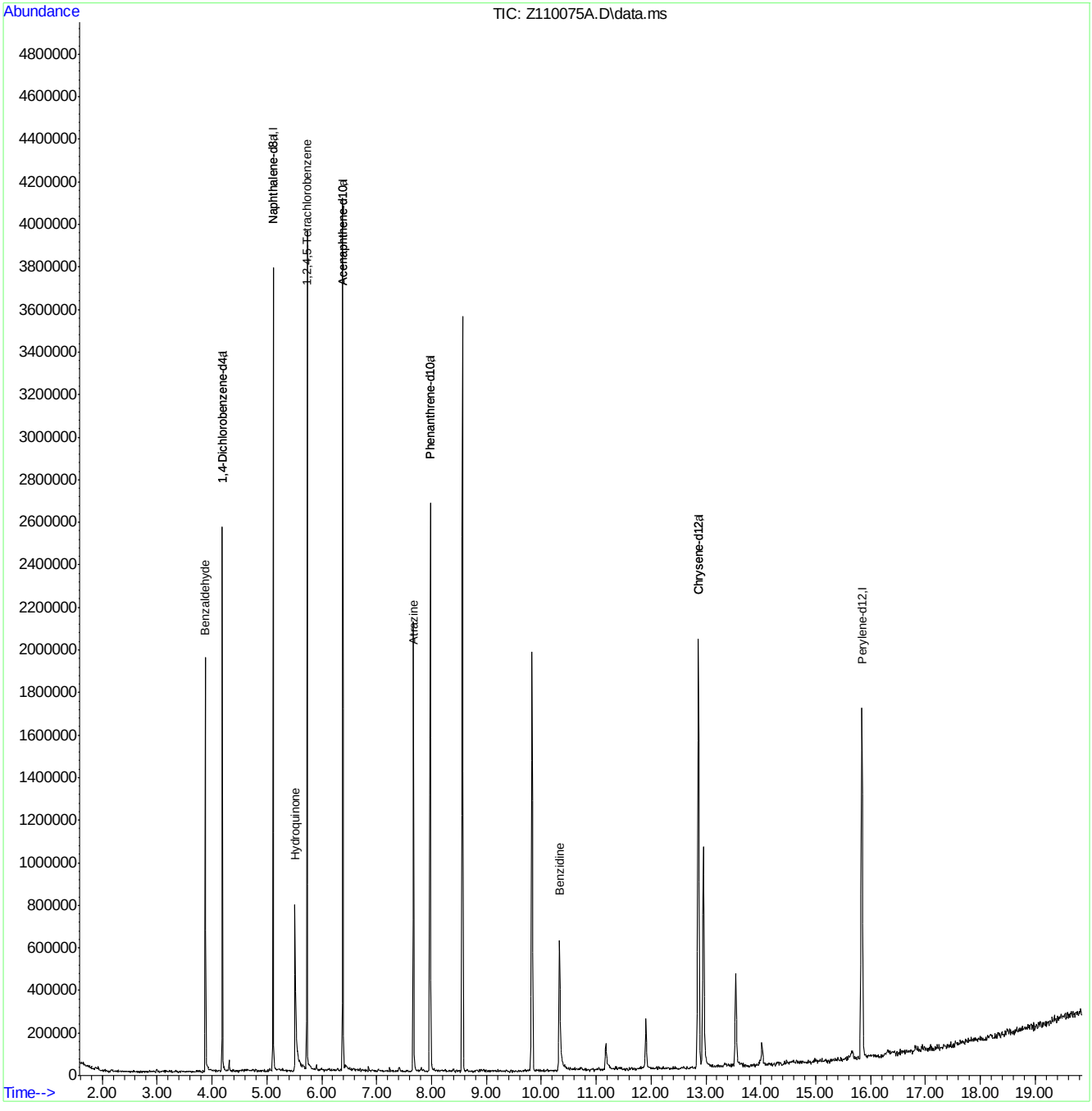
7

SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5500\
Data File : Z110075A.D
Acq On : 26 Apr 2016 1:45 pm
Operator : ariellec
Sample : cc5486-50
Misc : op93086,ez5500
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 26 14:36:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Tue Apr 26 09:30:21 2016
Response via : Initial Calibration



MZ5485.M Tue Apr 26 14:36:59 2016 RTE

Page: 2

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E2M3649

Print Analyst Name: Ashley N.

Analyst Signature: [illegible]

Date: 4-15-2016

Columns: Rxi5ms30mx.25mmx.25µm

Method 8270D/625

Initial Cal. Method M2M3649

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV15827-108	dftpp	50ppm
CM5732	Internal Standard	4000ppm
162417	dcm (DSW)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 4/15/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M83064	dftpp			W	1					NG	S1T reinjected
	83065	dftpp				1					OK	8:54AM
	83066	ic 3649-2		BNA		2					OK	SV15827-106H
	83067	ic 3649-1				3					OK	-106I
	83068	-100				4					OK	-106A
	83069	-80				5					OK	-106B
	83070	-75				6					OK	-106D
	83071	-10				7					OK	-106E
	83072	-5				8					OK	-106G
	83073	icc 3649-50				9					OK	-106C 12:19pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07

Rev. Date: 1/19/16

SGS ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E2M3651

Print Analyst Name: Ashley N.

Date: 4-15-16

Analyst Signature: AN

Columns: Rxi5sil ms 30m x 25mm x 25µm

Method: 8270D / 1625

Initial Cal. Method: M2M3649

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151809-108	dfTPP	50 ppm
CM5732	Internal Std	4000 ppm
102417	dam (Fisher)	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMM

Date: 4/15/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	2M83090	dfTPP			W	1					OK	3:07 pm
	83091	ic 3651-100		TCL42		2					OK	SV151827-73A
	83092	-80				3					OK	-73B
	83093	icc 3651 ~~-25~~ 50	(a) AN 4/15/16			4					OK	-73D
	83094	ic 3651 -10				5					OK	-73E
	83095	-5				6					OK	-73G
	83096	-2				7					OK	-73H
	83097	-1				8					OK	-73I
	83098	IC 3651-25 ~~ICC 3651 -50~~	(a) AN 4/15/16			9					OK	-73C
	83099	ICV 3649-50		Acids		10					OK	SV151827-114
	83100	-50		Anilines		11					OK	-115
	83101	-50		Abn Sum		12					OK	CP 1617125 5
	83102	-50		BN1		13					OK	MO 33 DCB SV151827-113
	83103	-50		BN2		14					OK	-95
	83104	ICV 3651-50		HQ		15					OK	-98C
	83105	ICV 3649-50		Benzidine 3rd		16					OK	3:3 DCB only! -38F 9:39 pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07

Rev. Date: 1/19/16

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7.7.2

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E2M3657

Print Analyst Name: Ashley N.

Analyst Signature: [signature]

Date: 4-21-2016

Columns: Rxi 5ms 30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method M2M3649

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 151829-108	dfTPP	50ppm
151877-61 L	BNA	25ppm
-74 D	TCL42	↓
CM5732	Internal Std	400ppm
159148	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4/25/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	2M83242	dfTPP			W	1					OK	9:05AM
	83243	CC 3649-25		BNA	W	2					OK	61T
	83244	CC 3657-25		TCL42	W	3					OK	Atrazine ↑ HDA
	83245	JC18649-4	932361	ABS2050C	W	4			3.56 ↓		not using	rx
	83246	OP93236MB1		ABS2750	W	5			/	\	OK	
R	83247	JC18649-1		ABS2 + 2NNAD ↑ NNAD		6	200		/	X	OK	
R	83248	-2		↓		7	200		/	X	OK	
R	83249	-5		↓		8	2		/	\	OK	
	83250	OP93249-MB1	932491	ABS270	S	9		+	/	\	OK	
	83251	JC18555-2		ABTCL42		10		+	/	\	OK	
	83252	-1		↓		11		+	/	\	OK	
	83253	-3		↓		12		+	/	\	OK	
	83254	JC18570-1		ABPPL		13		+	/	\	OK	
	83255	JC18518-1		↓		14		+	/	\	OK	
	83256	JC18519-13		↓		15		+	4.5 ↓	2 ↑	OK	RR 1:5 for matrix ✗ VF=5ML
	83257	JC18570 -1		↓		16		+	/	\	OK	
	83258	-3		↓		17		+	/	\	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E2M3657

Print Analyst Name: Ashley N.

Date: 4-21-2016

Analyst Signature: [signature]

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.
	see page #	123

Columns: Rtx5silms30mx25mmx25µm

Method 8270D/1625

Initial Cal. Method M2M3649

Injection Volume: 1µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4/25/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
R	2M83259	JC18246-6	93189-1	ABTCCTD@	S	18	2		/	\	OK	
R	832600	-5		↓		19		+	AN ↓	\	OK	6:19 pm
R	832601	JC18589-13	93249-1	ABPPL@		20	5		/	-	ok	ran before 2M832559 VF=5mL

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

7.7.3

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E2M3668

Print Analyst Name: Ashley N.

Date: 4-28-2016

Analyst Signature: AN

Columns: Rxi-5Sil MS 30m x 25mm x .25µm

Method 8270D/625

Initial Cal. Method M2M3649

Injection Volume: 1µL

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.
SV151827-91	dftpp	50ppm
-107	BNA	
-74C	TCL42	↓
CM5332	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: [signature] Date: 4-25-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	2M83429	dftpp			W	1					NG	127% PCP↑ reinstall
	83430	dftpp				1					↓	127% PCP↑ retune split.
	83431	dftpp				1					NG	68% PCP↑ retune flow
	83432	dftpp				1					↓	PCP↑ retune flow
	83433	dftpp				1					NG	51↓ reinject
	83434	dftpp			W	1					NG	PCP↑ retune flow
	83435	dftpp				1					NG	PCP↑ reinstall
	83436	dftpp			W	1					OK	10:46AM
	83437	CC3649-SD		BNA		2					OK	#2↓41↑61↑
	83438	CC3651-SD		TCL42		3					OK	atrazine↑
	83439	lpna vol 1ppm				4					OK	SV151827-102F
	83440	OP93364-BS1				5			✓	✓	OK	double spiked w/ISTD
	83441	-MB1				6			✓	✓	OK	double spiked w/ISTD
R	83442	JC19014-1A	93419	ABTCLP+PAH	W	7			✓	✓	OK	ran after 2M83446
R	83443	JC18952-22	93387-3	ABTCLP		8			✓	✓	OK	↓
R	83444	OP93419-MB1		↓		9			✓	✓	OK	ran before 2M83342
R	83445	-LB6				10			✓	✓	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E2M3668

Print Analyst Name: Ashley N.

Analyst Signature: AN

Date: 4-28-16

Columns: Rxi5Sil MS 30m x 0.25mm x 0.25µm

Method 8270D/625

Initial Cal. Method M2M3649

Injection Volume: 1µL

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.
	see page # 154	

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: 4-29-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
R	2M83446	OP93419-BS1	93419-1	ABTQP	W	11			✓	✓	OK	ran before 2M83342
	83447	-LS6				12			✓	✓	OK	
	83448	-MSD				13			✓	✓	OK	
	83449	JC18437-12A				14			✓	✓	OK	
	83450	JC18699-3	93364-1	ABSL+2mnap mnap	S	15		+	✓	✓	OK	
	83451	JC18673-1		ABCOXOH		16		+	✓	✓	OK	
	83452	JC18693-5		ABCOXOH		17		+	✓	✓	OK	
	83453	-6				18		+	✓	✓	OK	
	83454	-7				19		+	✓	✓	OK	
	83455	-8				20		+	✓	✓	OK	
	83456	-9				21		+	✓	✓	OK	
	83457	-10				22		+	✓	✓	OK	
	83458	-11				23		+	✓	✓	OK	
	83459	-1				24		+	✓	✓	OK	RR1:4
	83460	-2				25			✓	✓	RR	C/O 9:05PM

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: E2P2547

Print Analyst Name: Robert LaPosta

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.
SMI1124608	8270	50ppm
SMI1827-107A	BNA	50ppm
	4/14 #2	
CMS7132	DCA 1570	400ppm
167148	DAN (F500)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMG

Date: 4/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	2P5836	DFZBP				1					OK	3:12pm
	5836	~~IC2547-50~~		BNA	W	2					NA	SMI1827-107A + DCA
	5836	IC2547-50		BNA	W	2					OK	SMI1827-106C
	5836	IC2547-5				3					OK	-106D
	5836	IC2547-80	AMG 4/20/16			4					OK	-106B
	5836	-10				5					OK	-106E
	5836	-100				6					OK	-106A
	5837	-5				7					OK	-106G
	5837	-2				8					OK	-106H
	5837	-1				9					OK	-106I 7:21pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC18649

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 .25um

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 4/21 am AMO 4/20/16
	58389	aniline-test		extractions test		1					OK	SV151827130 passing

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 E2P2549

Print Analyst Name: Robert LaPosta

Date: 4/20/16

Analyst Signature: [signature]

Columns: ~~RX-5ms~~ ZB-MS+ 30mX0.25mX0.25um

Method 8270D/625

Initial Cal. Method M2P2547

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SMIX 9 OK OF 100		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
	2P58390	~~IC~~ 70				1					OK	9:38am
	58391	IOW25470		ACID		2					OK	SVM127-129 passes
	58392	50		ANALINES		3					OK	-130 passes
												10:6am

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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7.2.7

7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E2P2552

Print Analyst Name: Robert LaPosta

Date: 4/21/16

Analyst Signature: [signature]

Columns: ZB-5MS+30m x0.25mm x0.25

Method: 8270D/625

Initial Cal. Method: [illegible]

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
[illegible]	[illegible]	50ppm
[illegible]	BNA	50ppm
[illegible]	TCLHC	50ppm
[illegible]	[illegible]	400ppm
[illegible]	[illegible]	

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: 4-21-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	2855498	DFTPP				1					not used	68% peak tailing.
	58431	DFTPP				1						68% rung.
	58440	DFTPP				1						68% recall.
	58441	DFTPP				1					ok	9:59am
	58442	CC2547-50		BNA	W	2					ok	#22,896
	58443	CC2548-50		TCLHC	W	3					ok	HAP 5 ppb
	58444	BNA-Std-1ppm		BNA	W	4					ok	5015127-120 (1ppm)
	58445	0803249-MB	03249	ABD2275	S	5					not run	sequence stopped.
	58446	0803271-MB	03271	ABD220	S	10			✓	✓	ok	
	58447	-BS1				7			✓	✓	ok	
	58448	-BSD				8			✓	✓	ok	
	58449	CC2549-4		ABS[illegible]		9			✓	✓	ok	4:48pm

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 JC18649

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.
SVI51827-08	DFTPP	50ppm
SVI51827-03	SIM Internal	40ppm
159148	Dimethylsulfone	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 4-22-2016

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3m60750	Condition			W	100					Condition	
	60755	↓			W	100					↓	
	60760	Condition			W	99						
	60761	DFTPP ~~ICC2855-1.0~~ 4/14/16		4/14/16 BRASIM	W	1					ok	deg↑ reinstead
	60762	DFTPP			W	1					Ok	1:31pm
	60763A	ICC2855-1.0			W	2					ok	SVI51827-104C
	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

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ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3M2856

Date: 4/22/16

Analyst Signature: JK

Columns: Rxi-5Sil MS 30m x .25mm x 0.25um

Method 8270D/625

Initial Cal. Method M3M2855sim

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SVS1824-05	DFTPP	50ppm
SVS827-04	SIM std.	10ppm
-03	SIM internal	400ppm
162418	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 4-28-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3M60775	DFTPP			W	1					OK	9:08AM
	60776	CC2855-10		BNasim	W	2					OK	
	60777	OP93234-MB	93234-1	BS270	W	3	4/22/16		/	/	OK	
	60778	-bs12				4			/	/	OK	
	60779	-bs12				5			/	/	OK	
	60780	JC1777-1-3T		SPPCAL		6			/	/	OK	
	60781	JC1777-5T				7			/	/	OK	
	60782	-8T				8			/	/	OK	
	60783	OP93089-MB	93089-1	ABS270	W	9			✓	✓	OK	
R	60784	JC18254-1		1,4dioxane		10			✓	✓	OK	
R	60785	-2				11			✓	✓	OK	
	60786	OP93128-MB	93128-1	ABS270		12			✓	✓	OK	
R	60787	JC18373-2		1,4dioxane		13			✓	✓	OK	Allsyn in
R	60788	-3				14			✓	✓	OK	
	60789	OP93271-MB	93271-1	ABS270		15			✓	✓	OK	
	60790	-bs12				16			✓	✓	OK	
	60791	JC18447-1		1,4dioxane		17			✓	✓	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Form: OR015-05
Rev. Date: 1/16/2006

SGS ACCUTEST JC18649

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3M2856

Date: E3M 4/22/16

Analyst Signature: JK

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See pg 173	

Columns: Rxi-5sil MS 30m x .25mm x .25um

Method 8270D/625

Initial Cal. Method M3M2855sim

Injection Volume: 1 ul

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: dm

Date: 4-28-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3M60792	JC18447-2	93271-1	1,4dioX	W	18			✓	✓	OK	
	60793	-3				19			41 ↓		RR	injection failure
	60794	JC18450-10		ABSimMS T1,4dioX		20			✓	✓	OK	
	60795	-11				21			✓	✓	OK	
	60796	JC18433-2		1,4dioX		22					RR	bad injection
	60797	-3				23					Not run	see changed
	60798	JC18414-4	93289-1	BSimMS T1,4dioX		24			✓	✓	OK	8:39pm
	60799	OP93271-MS		ABS270		25					Not rad ↓	outside 12 h clock ↓
	60800	-MSD				26						

TX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

ample volume/weight used and final volumes refer to extraction log.

ll strikeouts must be initialed, dated and reason code applied as follows:
= reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

rm: OR015-05
v. Date: 1/16/2006

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7.7.10

7

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3M2863

Date: 4/26/16

Analyst Signature: [illegible]

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151829108	DFTPP	50ppm
SV161935-9B	SimStd	0.5ppm
-7	SimInternal	40ppm
160248	DCM-(Fisher)	—

Columns: ZB5MS+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: AMO

Date: 4/27/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3M60897	DFTPP				1					OK	9:52pm
	60898	CC2855-0.5				2					OK	18:12
	60899	OP93364-MB1	93364	B8270		3			/	/	OK	
	60900	-BS12				4			/	/	OK	
	60901	-MS				5			/	/	OK	
	60902	-MSD				6			/	/	OK	
	60903	JC18649-3		MAP+14D10X		7			/	/	OK	2:45AM

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

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All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3M2864

Print Analyst Name: Linsey K

Analyst Signature: [signature]

Date: 4/27/16

Columns: ZB-5MS 30m x .25mm x .25um

Method 8270D/625

Initial Cal. Method M3M2855sim

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SMS182408	DFTPP	50ppm
SVM835-9	SIM Std.	100ppm
-7	SIM Internal	40ppm
162418	DCM-extracted	—

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	L+	IS	SU	Status (Data)	Comments
	3M160924	DFTPP			W	1					ok	9:07AM
	160905	CC2855-10		BNasim	W	2					ok	
	160906	OP93382-MB	93382-1	AB8270		3			✓	✓	OK	
	160907A	-bs12				4			✓	✓	OK	Bad injection, ran as an "A" file. ran 4hr 3mar18
	160908	JC18853-1		ABSIMNS +1/4div		5			✓	✓	OK	
	160909	JC18862-1		ABSIMNO +1/4div		6			✓	✓	OK	
	160910	JC18862-2		↓		7			✓	✓	OK	
	160911	-3		↓		8			✓	✓	OK	
	160912	JC18938-1		BSIMNS +1/4div		9			✓	✓	OK	
	160913	JC189031		SIMPolt		10			✓	✓	OK	
	160914	-2				11			✓	✓	OK	NNBA/8270
	160915	-3				12			✓	✓	OK	
	160916	-4				13			✓	✓	OK	
	160917	OP93382-MS		AB8270		14			✓	✓	OK	
	160918	-MSD				15			✓	✓	OK	
	160919	OP93398-MS	93398-1	B8270		16			✓	✓	OK	
	160920	-bs12				17			✓	✓	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.12

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3M2864

Print Analyst Name: Linsey K

Analyst Signature: LK

Date: 4/27/16

Columns: ZB 5ms @ 30mx.25mmx.25um

Method 8270D/625

Initial Cal. Method M3M2855im

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Surrogate	

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	L+	IS	SU	Status (Data)	Comments
	3M60921	CP93398-bs012	93398-1	BS270	W	18			/	/	OK	
	60922	ICP1023-3		naph1,4dioxane		19			34		RK	RK for internals
	60923	CP93271-MS	93271-1	ABS270		20			/	/	OK	
	60924	-MSD				21			/	/	OK	8:30pm

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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7.7.12

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4M2881

Print Analyst Name: Linsey K.

Analyst Signature: LK

Date: 4/14/16

Columns: RtX-5Sil MS 30m x 0.25mm x 0.25um

Method 8270D/625

Initial Cal. Method M4M2881SIM

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SVS1829-168	LFMP	50 ppm
SVS1827-103	SIM internal	400 ppm
162342	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMB Date: 4/14/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4M64719	DFPP			W	1					NG	PCP↑ rerun
	64720	DFPP			W	1					OK	9:05AM
	64721	CC2881-05		BNASIM	W	2					not using	
	64722	4DDX test				2					not using	test split changed. flow and oven temp
	64723A	IC2881-5		BNASIM	W	2					OK	SVS1827-104D vorran as "A" file no bottle
	64724	IC2881-1.0				3					OK	SVS1827-104C
	64725	IC2881-0.2				4					OK	-104E
	64726	IC2881-0.1				5					OK	-104F
	64727	IC2881-0.05				6					OK	-104G
	64728	IC2881-0.02				7					OK	-104H
	64729	IC2881-0.01				8					OK	-104I
	64730	IC2881-5.0				9					OK	-104A
	64731	IC2881-2.5				10					OK	-104B
	64732	IC2881-1.0		Acids		11					OK	SVS1827-27
	64733	IC2881-1.0		BN1		12					OK	OP157624-73
	64734	IC2881-1.0		BN2		13					OK	SVS1829-85

AMB

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.13

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4m2889

Print Analyst Name: Linsey K

Analyst Signature: LK

Date: 4/21/16

Columns: RX-5MS SIMS 30m x 0.25mm x 0.25um

Method 8270D/625

Initial Cal. Method M4m2881Sim

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SUS1624-108	DFTPP	50ppm
SUS1627-104	SIMSTD.	0.5ppm
-103	SIM Internal	40ppm
154148	(2 Methylphenol)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AM

Date: 4-22-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4m04874	DFTPP			W	1					NG	4421 reinject
	04875	DFTPP			W	1					↓	4421 reinject
	04876	DFTPP			W	1					NG	9:00AM
	04877	CC2881-05		BNsim	W	2					↓	bias ↑
	04878	DFTPP			W	1					OK	10:09AM
	04879	CC2881-0.5		BNsim	W	2					OK	
	04880	OP93230mb1	93230-1	B8270	W	3			/	/	OK	
	04881	-bs12				4			/	/	OK	
	04882	JC18049-1		naphthalene		5			/	/	OK	
	04883	-2				6			/	/	OK	
	04884	-5				7			/	/	OK	
	04885	OP93230ms		B8270		8			/	/	OK	
	04886	msd				9			/	/	OK	2:02pm

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 JC18649

SGS ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E4M2890

Print Analyst Name: Lindsay K.

Date: 4/21/16

Analyst Signature: LK

Columns: Rxi-5Sil MS 30m x 0.25mm x 0.25um

Method: 8270D/625

Initial Cal. Method: M4M2888Sim

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SMS1824-108	DFTPP	50ppm
SMS1827-104	Sim std	10ppm
-103	Sim Internal	40ppm
154148	Dem (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 4-27-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4M64887	DFTPP			W	1					ok	2:58
	64888	CC2881-1.0		BNAsim	W	2					ok	13,14,18,20,21M
	64889	8893271-MB1	93271-1	ABS270	W	3			✓	✓	ok	
	64890	-DS1				4			✓	✓	ok	
	64891	JC10494-1x		MAP+1+Acid		5			✓	✓	ok	
	64892	OP93234-MB1	93234-1	BS270		6			✓	/	ok	
	64893	-LBS2				7			/	/	ok	
	64894	-bs12				8			/	↑	ok	rr for sum
	64895	-bs12d12				9			/	↑	ok	rr for sum
	64896	JC17771-2T		SPLPAH		10			/	/	ok	
	64897	-3T				11			/		rr	cert
	64898	-5T				12			/	↑	ok	rr for sum.
	64899	-8T				13			/		rr	cert
	64900	JC10254-1	93289-1	1,4 dioxane		14			/	↑	ok	run by 8270 ~~rr for sum~~ 4/27/16
	64901	-2				15			/	↑	ok	run by 8270!
	64902	JC10254-1		1,4 dioxane		16			/	↑	ok	rr for sum
	64903	-2				17			/	↑	ok	rr for sum

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 JC18649

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4M2890

Print Analyst Name: Linsey K

Analyst Signature: [illegible]

Date: 4/21/16

Columns: Rtx-5Sil MS 30m x 25mm x 25 um

Method 8270D/625

Initial Cal. Method M4M2881sim

Injection Volume: 1 ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See pg 127	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 4-22-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4M0494	JC18228-3	93089-1	82D.	W	18			/		Notising	82D only.
R	0495	JC18373-1	93228-1	1,4dioxane	W	19			/	M	OK	
R	0496	-2				20			/		Notising	Nr under passing ce.
R	0497	-3				21			/			
	0498	JC18475-5		ABSMSL		22	5		/	/	OK	4=10ml
R	0499	OP93089-MB	93089-1	AB8270		23			/	/	OK	2:21AM

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 JC18649

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 SB PCPT 105 SB 4/11/16
	27318	SB 4/11/16 DFTPP				1					OK	10:17am
	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	SV151827-60J 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

7.7.16

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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

7.7.17

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SGS ACCUTEST JC18649

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E5P1400

Print Analyst Name: Julius M. Johnson

Analyst Signature: JMJ

Date: 4/20/16

Columns: ZB-5ms + 30m × .25mm × .25µ

Method 8270D/625

Initial Cal. Method M5P1382

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151829/105	DFTPP	50 ppm
SV151827/61N	BNA	25 ppm
SV151827/74N	TCL42	25 ppm
CM-5732	Internal Std	4000 ppm
159148	DCM (Fisher)	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 4-21-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	5P27662	DFTPP				1					ok	8:53pm
	27663	CC1382-25				2					ok	#3,10,31↓ #13,20,82,87,100↑
	27664	CC1383-25				3					ok	Benzidine↓ COD↑
	27665	OP93236-MB1	93236	AB8270	W	4			/	/	ok	
	27666	-BS1	↓	↓	↓	5			/	/	ok	
	27667A	JC18649-1		ABSC + 2MNp MNp		6			/	/	ok	sequence changed, RR as A file
	27668	-2				7			/	/	ok	
	27669	-4		↓		8			3,4 5x	15	ok	Reanalyze for internal
	27670	-5		↓		9			/	/	ok	
	27671	OP93236-MS		AB8270		10			/	/	ok	
	27672	-MSD	↓	↓	↓	11			/	/	ok	
	27673	BNA spike SV161935-1 ~~SV151829~~				12			/		N/A	Reanalyze 8270 run after 5P27666
	27674	OP93233-MB1	93233	AB8270+	S	13		X	/	/	ok+	↓
	27675	-BS1				14			/	/	ok	↓
	27676	JC18555-~~6~~ 8		AB-TCL42 X		15		X	/	/	ok	
	27677	-11				16		X	/	/	ok	
	27678	-12				17		X	/	/	ok	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E5P1400

Print Analyst Name: Sara Davis

Date: 4/20/16

Analyst Signature: SED

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page 173	

Columns: ZB 5ms + 30m x .25mm x .25um

Method 8270 D/625

Initial Cal. Method ~~8270 D/625~~ M5P1382 SD 4/26

Injection Volume: 1ul

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4-21-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	5P27679	JC18555-10	93233	ABTCL42+	S	18		X	/	/	dc	
	27680	-13				19		X	/	/	dc	
	27681	-7				20		X	/	/	dc	
	27682	-9				21		X	/	/	dc	
	27683	-14				22		X	/	/	dc	RL1.5
	27684	-6				23		X	/	/	dc	
	27685	OP93233-MS		AB8270		24			/	/	dc	
	27686	-MSD				25			/	/	dc	
	27687	JC18455-9		PAH SL		26			/	/	dc	7.31 low RL1.10

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EZ5485

Print Analyst Name: Sara Davis

Analyst Signature: SED

Date: 4/13/2016

Standard Data

Lot #	Description	Conc.
SV151827-106A	BNA	100 ppm
-106B	↓	80
-106C		50
-106D		25
-106E		10
-106G	↓	5 ↓

Standard Data

Lot #	Description	Conc.
SV151819-108	DFTPP	50 ppm
SV151827-106H	BNA	2 ppm
-106I	↓	1 ↓
CM15732	Internal Std	4000 ppm
162342	DCM (Fisher)	—

Columns: Rx-5ms 30m x .25mm x .25um

Method 8270 D/625 85

Initial Cal. Method MZ5446 SD ② 4/13/16

Injection Volume: 1 ul

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMQ

Date: 4/19/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	Z109740	DFTPP			W	1					OK	9:20 pm
	109741	ic 5485-2		BNA	W	2					OK	
	109742	-100				3					OK	
	109743	-80				4					OK	
	109744	-25				5					OK	
	109745	-10				6					OK	
	109746	-5				7					OK	
	109747	-1				8					OK	
	109748	icc 5485-50				9					OK	11:54 am

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC18649

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EZ5486

Print Analyst Name: Sara Davis

Analyst Signature: SED

Date: 4/14/2016

Columns: Rxi-5sil ms 30mx.25mmx.25um

Method: 8270 D/625

Initial Cal. Method: MZ5485

Injection Volume: 1 ul

Standard Data

Lot #	Description	Conc.
SV151827-73A	TCL42	100
-73B		80
-73C		50
-73D		25
-73E		10
-73G		5

Standard Data

Lot #	Description	Conc.
SV151829-108	DFTPP	50 ppm
SV151827-73H	TCL42	2 ppm
-73I		1
CM-5732	Internal Std	4000 ppm
162342	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO Date: 4/14/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	Z109749	DFTPP				1					OK	129 um
	109750	TCL5486-100		TCL42		2					OK	
	109751	-80				3					OK	
	109752	-25				4					OK	
	109753	-10				5					OK	
	109754	-5				6					OK	
	109755	-2				7					OK	
	109756	-1				18					OK	
	109757	TCL5486-50				19					OK	
	109758	TCV5485-50		Acids		20					OK	SV151827-87
	109759	-50		Aniline		21					OK	-94
	109760	-50		ABN Surr		22					OK	OP151624 20
	109761	-50		BN1		23					OK	SV151827-113 33 dcsu
	109762	-50		BN2		24					OK	-95
	109763	TCV5486-50		HQ		25					OK	-98A
	109764	-50		Benzidine 3rd		26					OK	-38E 106 ftn

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EZ5500

Print Analyst Name: [illegible]

Analyst Signature: [illegible]

Date: 4/28/16

Columns: [illegible]

Method 8270D/625

Initial Cal. Method MZ5485

Injection Volume: 1 ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
152825108	DFTPP	50ppm
152427026	BNA	↓
74P	TCL 42	↓
LMF732	Int std	160ppm
162419	DCM (Fisher)	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMC

Date: 4/29/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	110061	DFTPP			W	1					NG	441↑ Bake/Reinject
	110062	DFTPP			W	1						PCP↑ reinstall
	110063	DFTPP			W	1						PCP↑ 471↑ 441↑ reinject
	110064	DFTPP			W	1						PCP 199↑ reinstall
	110065	Condition			W	100						leak in ms - tightened
	110066	DFTPP			W	1						441↑ bake/reinject
	110067	DFTPP			W	1						68 441↑ reinject PCP↑
	110068	DFTPP			W	1						441↑ return
	110069	DFTPP			W	1						127 197 441↑ target tune
	160070A	DFTPP			W	1						unfailed retune
	110071	DFTPP			W	1						275 442↑ return
	110072	DFTPP			W	1						275↑
	110073	DFTPP			W	1					OK	AC 4/29/16 12:03pm 245↑ DCM
	160074	CCS486-50			W	2					OK	586 826 850 PAH only! 10,13↓ 23,36,42,48,64,76
	160075A	CCS486-50			W	3					OK	Bottle ↓ AC 5/4/16 inf.
	110076	CCS336-MSI	95364	AB82704	S	4					OK	"
	110077	BSI				5					OK	OK for PAH reporting. 4CB↑ RR on diff inst for full list reporting

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 JC18649

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EZ5500

Print Analyst Name: Arielle Cocozza

Analyst Signature:

Date: 4/26/16

Columns: Rx Sil 30m 0.25mm x .25um

Method: 8270 D/625

Initial Cal. Method: M258 45 SD 4/26/16

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Seep 73	

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
	Z160078A	JC18799-18 (AC 4/26/16)	93364	PAH	S	6			✓	✓	OK	rerun as "A" file, ran before 1C9220 Midas
	160079	19				7			✓	✓	OK	
	160080	JC18799-19		PAH + AE		8			✓	✓	OK	RR 1:5
	160081	15				9			✓	✓	OK	
	160082	DCM				10					dcm	dcm dcm up
	(AC 4/26/16) 160083	DCM				10					↓	↓
	160084	OP93364-MS	93364	8270	S	11			✓	✓	OK	
	160085	-MSD			S	12			✓	✓	OK	
	160086	JC18799-16		PAH + AE + 2MNap	S	13			✓	✓	OK	RR ~~1:8~~ 1:10 SD 4/26/16
	160087	-17		↓	S	14			✓	✓	OK	RR 1:2 SD
	160088	-18			S	15			✓	✓	OK	RR 1:40 AC 4/27/16
	160089	-20			S	16			✓	✓	OK	
	160090	-21		↓	S	17			✓	✓	OK	9:14pm

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.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.21

7

ABN Aqueous Extraction Logbook

LOGBOOK ID: 6-1728

Date Started: 4/20/16 Time Started: 5:45pm

Date Finished: 4/20/16 Time Finished: 9:38pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):

Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM____

Continuous Liquid Liquid: SW846 3520C/CLP/other____

BATCH # MS 93236 RACK# Sarra

Extracted by: KS/ADL

Concentrated by: ADL, SD

Vialed by: ADL

Relinquished by:

Accepted by:

Supervisor Review: 4/20/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:

Manager/Supervisor/Team Lead Approval:

	Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) H2SO4	pH Adjust(mL) >11 NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
	MB1	ABN		DI H2O	1000	1	5	clr	1		
	BS1			DI H2O	1000	1	5	yellw	1		
	JC18649-1 MS		2	yellw	1000	1	5	yellw	1		
	1 MSD		2	yellw	1000	1	5	yellw	1		
	BS	125IM	1	DI H2O	~~405~~ 1000	1	5	lyellw	1		
	JC18649-2 MS		1	yellw	405	1	5	lyellw	1		
	1 MSD		1	yellw	405	1	5	lyellw	1		
1	JC18649-1	ABN	1	yellw	810	1	5	clr	1		
2	-2		2	yellw	810	1	5	clr	1		
3	-4		1	yellw	810	1	5	clr	1		
4	-5		2	yellw	800	1	5	clr	1		
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

10day TAT

Comments: okay to spk ms/msd rim ms/msd

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)					
Buchi Chiller					
Waterbath (70-80°C)	6,7	75, 75	-0.5, -0.4	75, 75	NA
Waterbath Chiller (GPM)	F2	6	—	—	1.5
NEVAP (32-38°C; LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	16 A12 74	50	1

WITNESS SIGN: GM SPIKE SIGN: ADL

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid			Acid: 1
Acid (for SIM)	15 B27 114	50	A(SIM): 0.1
Base #1	15 B27 113	50	1
Base #2	15 B27 102	50	1
Anilines	15 B27 136	50	1
BSIM	16 A12 66	1	1

WITNESS SIGN: GM SPIKE SIGN: ADL

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	159148	Fisher	6/60

REAGENT	LOT #	BRAND
NaOH	153303	Fisher
H2SO4	2601910	~~Fisher~~ Ricca
Sodium Sulfate	158459	Fisher
Glass Wool	02Q05-2	Cch
Filter Paper		
pH strips		

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

ABN Aqueous Extraction Logbook

LOGBOOK ID: 6-1728

Date Started: 4/20/16 Time Started: 5:45pm
Date Finished: 4/20/16 Time Finished: 9:38pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM
Continuous Liquid Liquid: SW846 3520C/CLP/other

BATCH # MS 93236	RACK# Sarra
Extracted by:	KS/ADL
Concentrated by:	ADL, SD
Vialed by:	ADL
Relinquished by:	
Accepted by:	
Supervisor Review:	4/20/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) ≤ H2SO4	pH Adjust(mL) ≥ NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
MB1	ABN		DI H2O	1000	1	5	clear	1		
BS1			DI H2O	1000	1	5	yellow	1		
JC18649-1 MS		2	yellow	1000	1	5	yellow	1		
1 MSD		2	yellow	1000	1	5	yellow	1		
BS	125IM	1	DI H2O	~~405~~ 1000	1	5	lt yellow	1		
JC18649-2 MS		1	yellow	405	1	5	lt yellow	1		
1 MSD		1	yellow	405	1	5	lt yellow	1		
1 JC18649-1	ABN	1	yellow	810	1	5	clear	1		
2 -2		2	yellow	810	1	5	clear	1		
3 -4		1	yellow	810	1	5	clear	1		
4 -5		2	yellow	800	1	5	clear	1		
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

10day TAT

Comments: okay to split ms/msd rim ms/msd

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	6,7	75, 75	-0.5, -0.5	75, 75	NA
Waterbath Chiller (GPM)	F2	6	—	—	1.5
NEVAP (32-38°C; LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	16 A12 74	50	1

WITNESS SIGN: GM SPIKE SIGN: ADC

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid			Acid: 1
Acid (for SIM)	15 B27 114	50	A(SIM): 0.1
Base #1	15 B27 113	50	1
Base #2	15 B27 102	50	1
Anilines	15 B27 136	50	1
BSIM	16 A12 66	1	1

WITNESS SIGN: GM SPIKE SIGN: ADC

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	159148	Fisher	6/60

REAGENT	LOT #	BRAND
NaOH	153303	Fisher
H2SO4	2601910	~~Fisher~~ Ricca
Sodium Sulfate	158459	Fisher
Glass Wool	02Q05-2	Cch
Filter Paper		
pH strips		

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

LOGBOOK ID: 6-1728

ABN Aqueous Extraction Logbook

Date Started: 4/21/2016 Time Started: 10 30 am
Date Finished: 4/21/2016 Time Finished: 1:20 pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM
Continuous Liquid Liquid: SW846 3520C/CLP/other

BATCH # MS 93271	RACK# A-8
Extracted by:	YB BOJ NL
Concentrated by:	MP, YB
Vialed by:	VP
Relinquished by:	
Accepted by:	
Supervisor Review:	N. Jae 4/21/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

	Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) ≤ H2SO4	pH Adjust(mL) ≥ 11 NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
	MB1	ABN		DI H2O	1000	1	4	Clear	1		
	BS1	ZSIM		DI H2O	1000	1	4	Yellow	1		
	JC18447-2 MS	A	6	clear	950	1	4	Yellow	1		
	MSD	A	2	clear	950	1	4	Yellow	1		
	~~BS~~										
	MS										
	MSD										
1	JC18251-4rx	ABN	2	clear	910	1	4	Clear	1		
2	JC18433-2		1	clear	1000	1	4	Clear	1		
3	-3		1	lt yellow	1000	1	4	Yellow	1		
4	-5		2	lt yellow	950	1	4	Yellow	1		
5	-6		1	yellow	950	1	4	Yellow	1		
6	-7		1	clear	1000	1	4	Clear	1		
7	JC18447-1		1	clear	1000	1	4	Clear	1		
8	-2		3	clear	900	1	4	Clear	1		
9	-3		2	clear	940	1	4	Clear	1		
10	JC18450-10		2	Brown	1000	1	4	Yellow	1		
11	-11		1	Brown	1000	1	4	Yellow	1		
12	JC18530-1		1	clear	1000	1	4	Clear	1		
13	JC18649-4rx	ABN	2	Yellow	910	1	4	Yellow	1		
14	BS1			DI H2O		1	4	yellow	1	Δ	
15	BSD			DI H2O		1	4	yellow	1	Δ	
16											
17											
18											
19											
20		Lot #		Conc (ppm)	Amt (ml)						
Comments: Δ	BN1	151827113		50	1						
	BN2	151827102		50	1						
	Aniline	151827130		50	1						
	Acid	151827114		50	1						

Spike by NG
witness VP

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	617	75.75	0.5,0.1	76.75	N/A
Waterbath Chiller (GPM)	F3	0	—	—	2
NEVAP (32-38°C; LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	16171274	50ppm	1mL

WITNESS SIGN: BOJ SPIKE SIGN: YB

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	151827114	50ppm	Acid: A(SIM): 0.1mL
Acid (for SIM)			
Base #1	151827113	~~50ppm~~	~~1mL~~ YB
Base #2	~~151827102~~	~~50ppm~~	~~1mL~~ YB
Anilines		~~50ppm~~	~~1mL~~ YB
BSIM	16171266	50ppm	1mL

WITNESS SIGN: BOJ SPIKE SIGN: YB

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	159148	Fisher	60mL x3

REAGENT	LOT #	BRAND
NaOH	153803	Fisher
H2SO4	2601910	Pica
Sodium Sulfate	158459	Fisher
Glass Wool	02205-2	Lab
Filter Paper		
pH strips	212713	Hydrion

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason: highsvr.

Spiking:

Weights/Volumes:

Required MS/MSD: JC18447-2.

Final Volume:

Other:

due today

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

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LOGBOOK ID: 6-1728

ABN Aqueous Extraction Logbook

Date Started: 4/21/2016 Time Started: 10 30 am
Date Finished: 4/21/2016 Time Finished: 1:20 pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM
Continuous Liquid Liquid: SW846 3520C/CLP/other

BATCH # MS 93271	RACK# A-8
Extracted by:	YB BOJ NL
Concentrated by:	MP, YB
Vialed by:	VP
Relinquished by:	
Accepted by:	
Supervisor Review:	N. Jae 4/21/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) ≤ H2SO4	pH Adjust(mL) ≥ NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
MB1	ABN		DI H2O	1000	1	4	Clear	1		
BS1	ZSIM		DI H2O	1000	1	4	Yellow	1		
JC18447-2 MS		6	Clear	950	1	4	Yellow	1		
MSD		2	Clear	950	1	4	Yellow	1		
~~BS~~										
MS										
MSD										
1 JC18251-4rx	ABN	2	Clear	910	1	4	Clear	1		
2 JC18433-2		1	clear	1000	1	4	Clear	1		
3 -3		1	lt yellow	1000	1	4	Yellow	1		
4 -5		2	lt yellow	950	1	4	Yellow	1		
5 -6		1	yellow	950	1	4	Yellow	1		
6 -7		1	Clear	1000	1	4	Clear	1		
7 JC18447-1		1	clear	1000	1	4	Clear	1		
8 -2		3	clear	900	1	4	Clear	1		
9 -3		2	clear	940	1	4	Clear	1		
10 JC18450-10		2	Brown	1000	1	4	Yellow	1		
11 -11		1	Brown	1000	1	4	Yellow	1		
12 JC18530-1		1	clear	1000	1	4	Clear	1		
13 JC18649-4rx	ABN	2	Yellow	910	1	4	Yellow	1		
14 BS1			DI H2O		1	4	Yellow	1	Δ	
15 BSD			DI H2O		1	4	Yellow	1	Δ	
16										
17										
18										
19										
20	Lot #		Conc (ppm)	Amt (ml)						
Comments: Δ BN1	151827113		50	1						
BN2	151827102		50	1						
Aniline	151827130		50	1						
Acid	151827114		50	1						

Spike by NG
witness VP

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	617	75.75	0.5,0.1	76.75	N/A
Waterbath Chiller (GPM)	F3	0	—	—	2
NEVAP (32-38°C; LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	16171274	50ppm	1mL

WITNESS SIGN: BOJ SPIKE SIGN: YB

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	151827114	50ppm	Acid: A(SIM): 0.1mL
Acid (for SIM)			
Base #1	~~151827113~~	~~50ppm~~	~~1mL~~ YB
Base #2	~~151827102~~	~~50ppm~~	~~1mL~~ YB
Anilines		~~50ppm~~	~~1mL~~ YB
BSIM	16171266	50ppm	1mL

WITNESS SIGN: BOJ SPIKE SIGN: YB

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	159148	Fisher	60mL x3

REAGENT	LOT #	BRAND
NaOH	153803	Fisher
H2SO4	2601910	Pica
Sodium Sulfate	158459	Fisher
Glass Wool	02205-2	Lab
Filter Paper		
pH strips	212713	Hydrion

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason: high sur.

Spiking:

Weights/Volumes:

Required MS/MSD: JC18447-2.

Final Volume:

Other:

due today

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

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LOGBOOK ID:

ABN Extraction Log - Solids

Date started: 4/26/16 Time started: 8am
Date finished: 4/26/16 Time finished: 5:10pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 √ Sonication SW3550C ____
Waste Dil. SW3580A ____ Soxhlet SW3540C ____

BATCH # MS 93364 RACK# AMO B-17

Weighed/Extracted by:	MS FN
Concentrated by:	FN MS
Vialed by:	FN
Relinquished by:	
Accepted by:	
Supervisor Review:	4/26/16

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	10,9	75.5, 75.1	0.6, 1.3	76, 76	NA/NA
Waterbath Chiller (GPM)	M2, M3	7.5	—	—	2.0, 2.1
NEVAP (32-38°C, LPM)	2	35.1	1.0	36	10
Balance	BA7	N/A	N/A	N/A	N/A

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Wet Wt. (g) Oil (g) Liq (mL)	Decant Y	Decant N	Sonicator ID	Microwave ID	Final Extract Color	Final Extract Vol(mL)	GPC Cleanup	Comments
MB1	ABN		sand	30.0			4		clear	1		
BS1			sand	30.0			4		Yellow	1		
JC18791-18 MS		1	Soil	31.4		/	4		Brown	1		
MSD		1	Soil	30.3		/	4		Brown	1		
BS 12 SIM			sand	30.0			4		Yellow	1		
JC18649-3 MS		1	Soil	30.7		/	4		Yellow	1		
MSD		1	Soil	31.7		/	4		Yellow	1		
1 JC18799-15	ABN	1	muck	31.7		/	4		Brown	1		
2 -16		1	muck	32.5		/	4		Brown	1		
3 -17		1	muck	30.3		/	4		Brown	1		
4 -18		1	mud/gravel	32.8		/	4		Brown	1		
5 -19		1	Soil	31.8		/	4		Brown	1		
6 -20		1	Waterygravel	30.6		/	4		Brown	1		
7 -21		1	Clay	32.6		/	4		Brown	1		
8 JC18791-18		1	Soil	30.6		/	4		Brown	1		
9 -19		1	Soil	32.5		/	4		Brown	1		
10 JC18649-3		1	Soil	31.7		/	4		Yellow	1		
11 JC18673-1		1	Soil	32.2		/	4		Yellow	1		
12 JC18693-1		1	Sand	30.5		/	4		Brown	1		
13 -2		1	Wet Sand	31.3		/	4		Brown	1		
14 -5		1	Soil	30.3		/	4		yellow	1		
15 -6		1	Soil	30.4		/	4		yellow	1		
16 -7		1	Wet Sand	31.2		/	4		Brown	1		
17 -8		1	Sand	31.6		/	4		Yellow	1		
18 -9		1	Sand	32.6		/	4		Yellow	1		
19 -10		1	Sand	31.2		/	4		Yellow	1		
20 -11		1	Sand	31.6		/	4		yellow	1		

1dTAT

Comments:

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN OP	1617274	50	1

WITNESS SIGN: SPIKE SIGN: FN

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SV	1518271 29	50	Acid: 1
Acid (for SIM) SV	1518271 29	50	A(SIM): 0.1 ml
Base #1 SV	1619351	50	1
Base #2 SV	1518271 34	50	1
Aniline SV	1518271 30	50	1
BSIM OP	1617126 6	1	1

WITNESS SIGN: SPIKE SIGN: FN

SOLVENT	LOT #	BRAND	AMT (mL)
1:1 METH CHLOR/ ACETONE	159148 / 158571	Fisher / Fisher	30ml
METH CHLOR			

REAGENT	LOT #	BRAND
HYDROMATRIX	6294128	Agilent
SODIUM SULFATE	158459	Fisher
FILTER PAPER	962629 4	Fisher

MATRIX	LOT #	BRAND
SAND	SGL150805 07A	Fisher

Special Processing Instructions

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

SGS ACCUTEST INC.
Form: OP019A-06
Rev Date: 11/20/15

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LOGBOOK ID:

ABN Extraction Log - Solids

Date started: 4/26/16 Time started: 8am
Date finished: 4/26/16 Time finished: 5:10pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 √ Sonication SW3550C ____
Waste Dil. SW3580A ____ Soxhlet SW3540C ____

BATCH # MS 93364 RACK# AMO B-17

Weighed/Extracted by:	MS FN
Concentrated by:	FN MS
Vialed by:	FN
Relinquished by:	[illegible]
Accepted by:	
Supervisor Review:	[signature] 4/26/16

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	10,9	75.5/75.1	0.6/1.3	76,76	NA/NA
Waterbath Chiller (GPM)	M2, M3	7.5	—	—	2.0/2.1
NEVAP (32-38°C, LPM)	2	35.1	1.0	36	10
Balance	BA7	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN OP	1617274	50	1

WITNESS SIGN: [illegible] SPIKE SIGN: FN

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SV	151827129	50	Acid: 1
Acid (for SIM) SV	151827129	50	A(SIM): 0.1ml
Base #1 SV	1619351	50	1
Base #2 SV	151827134	50	1
Aniline SV	151827130	50	1
BSIM OP	1617266	1	1

WITNESS SIGN: [illegible] SPIKE SIGN: FN

SOLVENT	LOT #	BRAND	AMT (mL)
1:1 METH CHLOR/ ACETONE	159148 / 158571	Fisher / Fisher	30ml
METH CHLOR			

REAGENT	LOT #	BRAND
HYDROMATRIX	6294128	Agilent
SODIUM SULFATE	158459	Fisher
FILTER PAPER	962629	Fisher

MATRIX	LOT #	BRAND
SAND	SGL150805074	Fisher

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

	Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Wet Wt. (g) Oil (g) Liq (mL)	Decant Y	Decant N	Sonicator ID	Microwave ID	Final Extract Color	Final Extract Vol(mL)	GPC Cleanup	Comments
	MB1	ABN		sand	30.0				4	clear	1		
	BS1			sand	30.0				4	Yellow	1		
	JC18791-18 MS		1	Soil	31.4		/		4	Brown	1		
	MSD		1	Soil	30.3		/		4	Brown	1		
	BS 12 SIM			sand	30.0				4	Yellow	1		
	JC18649-3 MS		1	Soil	30.7		/		4	Yellow	1		
	MSD		1	Soil	31.7		/		4	Yellow	1		
1	JC18799-15	ABN	1	muck	31.7		/		4	Brown	1		
2	-16		1	muck	32.5		/		4	Brown	1		
3	-17		1	muck	30.3		/		4	Brown	1		
4	-18		1	mud/gravel	32.8		/		4	Brown	1		
5	-19		1	Soil	31.8		/		4	Brown	1		
6	-20		1	Water/gravel	30.6		/		4	Brown	1		
7	-21		1	Clay	32.6		/		4	Brown	1		
8	JC18791-18		1	Soil	30.6		/		4	Brown	1		
9	-19		1	Soil	32.5		/		4	Brown	1		
10	JC18649-3		1	Soil	31.7		/		4	Yellow	1		
11	JC18673-1		1	Soil	32.2		/		4	Yellow	1		
12	JC18693-1		1	Sand	30.5		/		4	Brown	1		
13	-2		1	Wet Sand	31.3		/		4	Brown	1		
14	-5		1	Soil	30.3		/		4	yellow	1		
15	-6		1	Soil	30.4		/		4	yellow	1		
16	-7		1	Wet Sand	31.2		/		4	Brown	1		
17	-8		1	Sand	31.6		/		4	Yellow	1		
18	-9		1	Sand	32.6		/		4	Yellow	1		
19	-10		1	Sand	31.2		/		4	Yellow	1		
20	-11		1	Sand	31.6		/		4	yellow	1		

1dTAT

Comments:

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

SGS ACCUTEST INC.
Form: OP019A-06
Rev Date: 11/20/15

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[redacted]

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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93237-MB1	1G122354.D	1	04/21/16	BP	04/20/16	OP93237	G1G3968

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC18649-1, JC18649-2, JC18649-4, JC18649-5

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

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	89%	26-132%
877-09-8	Tetrachloro-m-xylene	93%	26-132%
2051-24-3	Decachlorobiphenyl	94%	10-118%
2051-24-3	Decachlorobiphenyl	63%	10-118%

Method Blank Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93322-MB1	6G34376.D	1	04/25/16	BP	04/23/16	OP93322	G6G995

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC18649-3

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.67	0.59	ug/kg	
319-84-6	alpha-BHC	ND	0.67	0.44	ug/kg	
319-85-7	beta-BHC	ND	0.67	0.41	ug/kg	
319-86-8	delta-BHC	ND	0.67	0.26	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.67	0.30	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.67	0.36	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.67	0.51	ug/kg	
60-57-1	Dieldrin	ND	0.67	0.52	ug/kg	
72-54-8	4,4'-DDD	ND	0.67	0.25	ug/kg	
72-55-9	4,4'-DDE	ND	0.67	0.22	ug/kg	
50-29-3	4,4'-DDT	ND	0.67	0.25	ug/kg	
72-20-8	Endrin	ND	0.67	0.24	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.67	0.38	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.67	0.50	ug/kg	
959-98-8	Endosulfan-I	ND	0.67	0.22	ug/kg	
33213-65-9	Endosulfan-II	ND	0.67	0.63	ug/kg	
76-44-8	Heptachlor	ND	0.67	0.55	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.67	0.28	ug/kg	
72-43-5	Methoxychlor	ND	1.3	0.37	ug/kg	
53494-70-5	Endrin ketone	ND	0.67	0.35	ug/kg	
8001-35-2	Toxaphene	ND	17	12	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	92%	24-136%
877-09-8	Tetrachloro-m-xylene	93%	24-136%
2051-24-3	Decachlorobiphenyl	95%	10-153%
2051-24-3	Decachlorobiphenyl	90%	10-153%

Blank Spike Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93237-BS1	1G122355.D	1	04/21/16	BP	04/20/16	OP93237	G1G3968

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC18649-1, JC18649-2, JC18649-4, JC18649-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
309-00-2	Aldrin	0.167	0.17	102	38-138
319-84-6	alpha-BHC	0.167	0.16	96	51-144
319-85-7	beta-BHC	0.167	0.17	102	55-137
319-86-8	delta-BHC	0.167	0.18	108	33-148
58-89-9	gamma-BHC (Lindane)	0.167	0.17	102	53-142
5103-71-9	alpha-Chlordane	0.167	0.18	108	52-137
5103-74-2	gamma-Chlordane	0.167	0.18	108	52-140
60-57-1	Dieldrin	0.167	0.17	102	54-144
72-54-8	4,4'-DDD	0.167	0.17	102	46-151
72-55-9	4,4'-DDE	0.167	0.17	102	51-142
50-29-3	4,4'-DDT	0.167	0.17	102	53-158
72-20-8	Endrin	0.167	0.19	114	53-149
1031-07-8	Endosulfan sulfate	0.167	0.17	102	49-148
7421-93-4	Endrin aldehyde	0.167	0.16	96	45-137
53494-70-5	Endrin ketone	0.167	0.17	102	48-142
959-98-8	Endosulfan-I	0.167	0.18	108	54-139
33213-65-9	Endosulfan-II	0.167	0.17	102	54-142
76-44-8	Heptachlor	0.167	0.18	108	45-137
1024-57-3	Heptachlor epoxide	0.167	0.18	108	54-140
72-43-5	Methoxychlor	0.167	0.17	102	51-157

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	97%	26-132%
877-09-8	Tetrachloro-m-xylene	100%	26-132%
2051-24-3	Decachlorobiphenyl	114%	10-118%
2051-24-3	Decachlorobiphenyl	76%	10-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93322-BS1	6G34377.D	1	04/25/16	BP	04/23/16	OP93322	G6G995

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC18649-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
309-00-2	Aldrin	16.7	14.2	85	40-135
319-84-6	alpha-BHC	16.7	13.7	82	37-134
319-85-7	beta-BHC	16.7	13.8	83	37-131
319-86-8	delta-BHC	16.7	12.3	74	34-132
58-89-9	gamma-BHC (Lindane)	16.7	13.9	83	36-128
5103-71-9	alpha-Chlordane	16.7	13.9	83	40-131
5103-74-2	gamma-Chlordane	16.7	14.2	85	41-133
60-57-1	Dieldrin	16.7	12.0	72	33-133
72-54-8	4,4'-DDD	16.7	14.6	88	37-132
72-55-9	4,4'-DDE	16.7	14.8	89	39-133
50-29-3	4,4'-DDT	16.7	15.1	91	26-150
72-20-8	Endrin	16.7	14.4	86	41-134
1031-07-8	Endosulfan sulfate	16.7	13.9	83	38-138
7421-93-4	Endrin aldehyde	16.7	13.1	79	37-129
959-98-8	Endosulfan-I	16.7	13.2	79	39-130
33213-65-9	Endosulfan-II	16.7	14.0	84	40-134
76-44-8	Heptachlor	16.7	13.7	82	36-132
1024-57-3	Heptachlor epoxide	16.7	13.3	80	39-131
72-43-5	Methoxychlor	16.7	15.3	92	28-149
53494-70-5	Endrin ketone	16.7	13.4	80	31-138

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	93%	24-136%
877-09-8	Tetrachloro-m-xylene	92%	24-136%
2051-24-3	Decachlorobiphenyl	103%	10-153%
2051-24-3	Decachlorobiphenyl	90%	10-153%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93237-MS	1G122364.D	1	04/21/16	BP	04/20/16	OP93237	G1G3968
OP93237-MSD	1G122365.D	1	04/21/16	BP	04/20/16	OP93237	G1G3968
JC18649-1	1G122360.D	1	04/21/16	BP	04/20/16	OP93237	G1G3968

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC18649-1, JC18649-2, JC18649-4, JC18649-5

CAS No.	Compound	JC18649-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND		0.333	0.30	90	0.333	0.28	84	7	37-159/40
319-84-6	alpha-BHC	ND		0.333	0.34	102	0.333	0.32	96	6	37-164/37
319-85-7	beta-BHC	ND		0.333	0.34	102	0.333	0.32	96	6	46-151/36
319-86-8	delta-BHC	ND		0.333	0.37	111	0.333	0.35	105	6	32-168/36
58-89-9	gamma-BHC (Lindane)	ND		0.333	0.36	108	0.333	0.34	102	6	44-160/37
5103-71-9	alpha-Chlordane	ND		0.333	1.0	300* [a]	0.333	1.0	300* [a]	0	38-160/35
5103-74-2	gamma-Chlordane	ND		0.333	0.35	105	0.333	0.35	105	0	39-157/37
60-57-1	Dieldrin	ND		0.333	0.39	117	0.333	0.37	111	5	42-161/36
72-54-8	4,4'-DDD	ND		0.333	0.34	102	0.333	0.33	99	3	40-161/36
72-55-9	4,4'-DDE	ND		0.333	0.29	87	0.333	0.28	84	4	34-158/36
50-29-3	4,4'-DDT	ND		0.333	0.30	90	0.333	0.29	87	3	41-173/33
72-20-8	Endrin	ND		0.333	0.40	120	0.333	0.40	120	0	44-166/35
1031-07-8	Endosulfan sulfate	ND		0.333	0.44	132	0.333	0.43	129	2	46-161/36
7421-93-4	Endrin aldehyde	ND		0.333	0.42	126	0.333	0.39	117	7	34-149/36
53494-70-5	Endrin ketone	ND		0.333	0.43	129	0.333	0.41	123	5	44-157/36
959-98-8	Endosulfan-I	ND		0.333	0.40	120	0.333	0.38	114	5	43-154/35
33213-65-9	Endosulfan-II	ND		0.333	0.40	120	0.333	0.38	114	5	40-162/35
76-44-8	Heptachlor	ND		0.333	0.35	105	0.333	0.33	99	6	33-153/37
1024-57-3	Heptachlor epoxide	ND		0.333	0.39	117	0.333	0.37	111	5	45-154/37
72-43-5	Methoxychlor	ND		0.333	0.38	114	0.333	0.34	102	11	48-169/32
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JC18649-1	Limits
877-09-8	Tetrachloro-m-xylene	85%	87%	92%	26-132%
877-09-8	Tetrachloro-m-xylene	85%	87%	96%	26-132%
2051-24-3	Decachlorobiphenyl	76%	78%	73%	10-118%
2051-24-3	Decachlorobiphenyl	52%	54%	53%	10-118%

(a) Outside the QC limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93322-MS	6G34381.D	1	04/25/16	BP	04/23/16	OP93322	G6G995
OP93322-MSD	6G34382.D	1	04/25/16	BP	04/23/16	OP93322	G6G995
JC18834-10	6G34387.D	1	04/25/16	BP	04/23/16	OP93322	G6G995

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC18649-3

CAS No.	Compound	JC18834-10 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND		17.8	17.9	100	18.2	14.3	79	22	19-147/48
319-84-6	alpha-BHC	ND		17.8	17.5	98	18.2	14.2	78	21	13-155/50
319-85-7	beta-BHC	ND		17.8	18.3	103	18.2	15.0	83	20	10-145/53
319-86-8	delta-BHC	ND		17.8	16.5	93	18.2	13.5	74	20	11-148/51
58-89-9	gamma-BHC (Lindane)	ND		17.8	18.0	101	18.2	14.5	80	22	16-143/47
5103-71-9	alpha-Chlordane	ND		17.8	18.3	103	18.2	15.1	83	19	15-151/50
5103-74-2	gamma-Chlordane	ND		17.8	17.9	100	18.2	14.7	81	20	13-151/50
60-57-1	Dieldrin	ND		17.8	17.7	99	18.2	15.2	84	15	10-157/54
72-54-8	4,4'-DDD	ND		17.8	19.2	108	18.2	15.7	86	20	10-157/52
72-55-9	4,4'-DDE	ND		17.8	19.0	107	18.2	15.6	86	20	10-155/49
50-29-3	4,4'-DDT	ND		17.8	19.3	108	18.2	16.2	89	17	10-187/49
72-20-8	Endrin	ND		17.8	19.7	110	18.2	16.2	89	19	14-154/53
1031-07-8	Endosulfan sulfate	ND		17.8	18.3	103	18.2	15.2	84	19	16-140/55
7421-93-4	Endrin aldehyde	ND		17.8	18.9	106	18.2	14.8	81	24	10-156/51
959-98-8	Endosulfan-I	ND		17.8	17.0	95	18.2	13.9	76	20	12-142/47
33213-65-9	Endosulfan-II	ND		17.8	18.6	104	18.2	15.2	84	20	10-150/52
76-44-8	Heptachlor	ND		17.8	18.3	103	18.2	14.6	80	22	10-159/49
1024-57-3	Heptachlor epoxide	ND		17.8	17.1	96	18.2	13.8	76	21	16-150/51
72-43-5	Methoxychlor	ND		17.8	19.5	109	18.2	15.7	86	22	10-166/52
53494-70-5	Endrin ketone	ND		17.8	18.9	106	18.2	15.7	86	18	10-171/52
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JC18834-10	Limits
877-09-8	Tetrachloro-m-xylene	108%	86%	106%	24-136%
877-09-8	Tetrachloro-m-xylene	108%	86%	107%	24-136%
2051-24-3	Decachlorobiphenyl	110%	90%	106%	10-153%
2051-24-3	Decachlorobiphenyl	105%	87%	102%	10-153%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3968-CC3951	**Injection Date:**	04/21/16
Lab File ID:	1G122349.D	**Injection Time:**	09:14
Instrument ID:	GC1G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	810114100	1.54	57957982	1.17
Upper Limit [a]	1620228200	2.04	115915964	1.67
Lower Limit [b]	405057050	1.04	28978991	0.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP93104-MB3	808950955	1.54	60397936	1.18
OP93104-BS3	875567941	1.54	64287604	1.17
OP93104-LB22	879979583	1.54	63965092	1.17
OP93237-MB1	835543080	1.54	61658351	1.17
OP93237-BS1	817242228	1.54	59858389	1.17
OP93201-BSD	785355569	1.54	58475978	1.17
ZZZZZZ	815227519	1.54	60744810	1.17
ZZZZZZ	805761735	1.54	61043802	1.17
ZZZZZZ	897353776	1.54	66529183	1.17
JC18649-1	801057115	1.54	59431714	1.17
JC18649-2	830958303	1.53	60482160	1.16
JC18649-4	855202238	1.54	62247089	1.17
JC18649-5	830981605	1.54	65723749	1.17
OP93237-MS	839229044	1.54	59430266	1.17
OP93237-MSD	830398635	1.54	58994487	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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G995-CC987	**Injection Date:**	04/25/16
Lab File ID:	6G34372.D	**Injection Time:**	10:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	49841087	1.57	135941310	1.30
Upper Limit [a]	99682174	2.07	271882620	1.80
Lower Limit [b]	24920544	1.07	67970655	0.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP93282-MB1	49207046	1.58	136785777	1.30
OP93282-BS1	50999986	1.58	142750268	1.30
OP93282-BSD	50038298	1.57	140465768	1.30
OP93322-MB1	49873992	1.58	139310432	1.30
OP93322-BS1	46225976	1.57	129203119	1.30
ZZZZZZ	50386582	1.58	142130692	1.30
ZZZZZZ	51422677	1.58	145405777	1.31
OP93322-MS	45777358	1.57	127347688	1.30
OP93322-MSD	48400218	1.57	135899923	1.30
ZZZZZZ	47332816	1.58	138424508	1.31
ZZZZZZ	49784280	1.57	143527117	1.30
ZZZZZZ	48560653	1.57	139795507	1.30
ZZZZZZ	47265566	1.58	133147796	1.30
JC18834-10	47972478	1.58	135556754	1.30
ZZZZZZ	48285016	1.57	135500283	1.30
ZZZZZZ	49203901	1.57	137492022	1.30
ZZZZZZ	48852790	1.57	143362512	1.30
ZZZZZZ	50466369	1.58	143609108	1.30
ZZZZZZ	45525722	1.57	130258481	1.30

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

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

Semivolatile Internal Standard Area Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G995-CC987	**Injection Date:**	04/25/16
Lab File ID:	6G34403.D	**Injection Time:**	20:00
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	52770040	1.58	151964312	1.30
Upper Limit [a]	105540080	2.08	303928624	1.80
Lower Limit [b]	26385020	1.08	75982156	0.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
ZZZZZZ	46379132	1.58	128004864	1.30
ZZZZZZ	49671030	1.57	140882074	1.30
ZZZZZZ	49273828	1.58	140642097	1.30
JC18649-3	47001932	1.58	135006056	1.30
ZZZZZZ	48103677	1.57	135868180	1.30
ZZZZZZ	50100426	1.57	142797480	1.30
ZZZZZZ	49736381	1.57	140393422	1.30
ZZZZZZ	48509469	1.58	138993104	1.30
ZZZZZZ	48533344	1.57	140208094	1.30
ZZZZZZ	46108008	1.58	133391580	1.30

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

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

DDT/Endrin Breakdown Check

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G1G3951-DDT
Lab File ID: 1G121638.D
Instrument ID: GC1G
Injection Date: 04/01/16
Injection Time: 10:37

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	2081667	26843936
4,4'-DDE	1293527	17237832
4,4'-DDT	138550612	1157819905
DDT Breakdown [a]	2.4 %	3.7 %
Endrin aldehyde	1241326	14533971
Endrin ketone	3577865	33672314
Endrin	70219660	687490125
Endrin Breakdown [b]	6.4 %	6.6 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G1G3951-IC3951	1G121640.D	04/01/16	11:12	00:35	Initial cal 1
G1G3951-IC3951	1G121641.D	04/01/16	11:30	00:53	Initial cal 2
G1G3951-IC3951	1G121642.D	04/01/16	11:48	01:11	Initial cal 5
G1G3951-IC3951	1G121643.D	04/01/16	12:05	01:28	Initial cal 10
G1G3951-ICC3951	1G121644.D	04/01/16	12:23	01:46	Initial cal 25
G1G3951-IC3951	1G121645.D	04/01/16	12:41	02:04	Initial cal 50
G1G3951-IC3951	1G121646.D	04/01/16	12:58	02:21	Initial cal 75
G1G3951-IC3951	1G121647.D	04/01/16	13:16	02:40	Initial cal 100
G1G3951-IC3951	1G121648.D	04/01/16	13:34	02:57	Initial cal 500
G1G3951-IC3951	1G121649.D	04/01/16	13:51	03:15	Initial cal 500
G1G3951-ICV3951	1G121650.D	04/01/16	14:09	03:33	Initial cal verification 25
G1G3951-ICV3951	1G121651.D	04/01/16	14:27	03:50	Initial cal verification 25
G1G3951-ICV3951	1G121652.D	04/01/16	14:44	04:08	Initial cal verification 500
G1G3951-ICV3951	1G121653.D	04/01/16	15:02	04:26	Initial cal verification 500

DDT/Endrin Breakdown Check

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G1G3968-DDT
Lab File ID: 1G122348.D
Instrument ID: GC1G
Injection Date: 04/21/16
Injection Time: 08:57

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	2909890	37063884
4,4'-DDE	732715	9111929
4,4'-DDT	188374277	1372814989
DDT Breakdown [a]	1.9 %	3.3 %
Endrin aldehyde	2042524	15220036
Endrin ketone	5023268	44476203
Endrin	96590309	858339336
Endrin Breakdown [b]	6.8 %	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
G1G3968-CC3951	1G122349.D	04/21/16	09:14	00:17	Continuing cal 50
OP93104-MB3	1G122351.D	04/21/16	10:00	01:03	Method Blank
OP93104-BS3	1G122352.D	04/21/16	10:17	01:20	Blank Spike
OP93104-LB22	1G122353.D	04/21/16	10:34	01:37	Leachate Blank
OP93237-MB1	1G122354.D	04/21/16	10:52	01:55	Method Blank
OP93237-BS1	1G122355.D	04/21/16	11:10	02:13	Blank Spike
OP93201-BSD	1G122356.D	04/21/16	11:27	02:30	Blank Spike Duplicate
ZZZZZZ	1G122357.D	04/21/16	11:44	02:47	(unrelated sample)
ZZZZZZ	1G122358.D	04/21/16	12:02	03:05	(unrelated sample)
ZZZZZZ	1G122359.D	04/21/16	12:20	03:23	(unrelated sample)
JC18649-1	1G122360.D	04/21/16	12:37	03:40	RA14-GWD
JC18649-2	1G122361.D	04/21/16	12:54	03:57	RA14D-GWD
JC18649-4	1G122362.D	04/21/16	13:12	04:15	RA13-GWS
JC18649-5	1G122363.D	04/21/16	13:30	04:33	RA13-GWD
OP93237-MS	1G122364.D	04/21/16	13:47	04:50	Matrix Spike
OP93237-MSD	1G122365.D	04/21/16	14:04	05:08	Matrix Spike Duplicate

DDT/Endrin Breakdown Check

Job Number: JC18649
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 JC18649)
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: JC18649
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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G6G995-DDT
Lab File ID: 6G34371A.D
Instrument ID: GC6G
Injection Date: 04/25/16
Injection Time: 09:50

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	1948326	996545
4,4'-DDE	1232422	542611
4,4'-DDT	222158660	66427045
DDT Breakdown [a]	1.4 %	2.3 %
Endrin aldehyde	852181	432241
Endrin ketone	4679405	1647017
Endrin	112470677	36720545
Endrin Breakdown [b]	4.7 %	5.4 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G6G995-CC987	6G34372.D	04/25/16	10:07	00:17	Continuing cal 25
OP93282-MB1	6G34374.D	04/25/16	10:39	00:49	Method Blank
OP93282-BS1	6G34375.D	04/25/16	10:56	01:06	Blank Spike
OP93282-BSD	6G34378.D	04/25/16	11:12	01:22	Blank Spike Duplicate
OP93322-MB1	6G34376.D	04/25/16	11:29	01:39	Method Blank
OP93322-BS1	6G34377.D	04/25/16	11:45	01:55	Blank Spike
ZZZZZZ	6G34379.D	04/25/16	12:02	02:12	(unrelated sample)
ZZZZZZ	6G34380.D	04/25/16	12:18	02:28	(unrelated sample)
OP93322-MS	6G34381.D	04/25/16	12:34	02:44	Matrix Spike
OP93322-MSD	6G34382.D	04/25/16	12:51	03:01	Matrix Spike Duplicate
ZZZZZZ	6G34383.D	04/25/16	13:07	03:17	(unrelated sample)
ZZZZZZ	6G34384.D	04/25/16	13:24	03:34	(unrelated sample)
ZZZZZZ	6G34385.D	04/25/16	13:40	03:50	(unrelated sample)
ZZZZZZ	6G34386.D	04/25/16	13:56	04:06	(unrelated sample)
JC18834-10	6G34387.D	04/25/16	14:13	04:23	(used for QC only; not part of job JC18649)
ZZZZZZ	6G34388.D	04/25/16	14:29	04:39	(unrelated sample)
ZZZZZZ	6G34389.D	04/25/16	14:46	04:56	(unrelated sample)
ZZZZZZ	6G34390.D	04/25/16	15:02	05:12	(unrelated sample)
ZZZZZZ	6G34391.D	04/25/16	15:18	05:28	(unrelated sample)
ZZZZZZ	6G34392.D	04/25/16	15:35	05:45	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G6G995-DDT
Lab File ID: 6G34393.D
Instrument ID: GC6G
Injection Date: 04/25/16
Injection Time: 17:16

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	2755069	2647372
4,4'-DDE	888704	396032
4,4'-DDT	269742992	73100962
DDT Breakdown [a]	1.3 %	4 %
Endrin aldehyde	1155619	472844
Endrin ketone	6312819	3220307
Endrin	141140520	43026549
Endrin Breakdown [b]	5 %	7.9 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G6G995-CC987	6G34394.D	04/25/16	17:32	00:16	Continuing cal 50
OP93251-MB1	6G34396.D	04/25/16	18:05	00:49	Method Blank
OP93251-BS1	6G34397.D	04/25/16	18:21	01:05	Blank Spike
ZZZZZZ	6G34398.D	04/25/16	18:38	01:22	(unrelated sample)
ZZZZZZ	6G34399.D	04/25/16	18:54	01:38	(unrelated sample)
JC18617-3	6G34400.D	04/25/16	19:10	01:54	(used for QC only; not part of job JC18649)
OP93251-MS	6G34401.D	04/25/16	19:27	02:11	Matrix Spike
OP93251-MSD	6G34402.D	04/25/16	19:43	02:27	Matrix Spike Duplicate
G6G995-CC987	6G34403.D	04/25/16	20:00	02:44	Continuing cal 25
ZZZZZZ	6G34405.D	04/25/16	20:32	03:16	(unrelated sample)
ZZZZZZ	6G34406.D	04/25/16	20:49	03:33	(unrelated sample)
ZZZZZZ	6G34407.D	04/25/16	21:05	03:49	(unrelated sample)
JC18649-3	6G34408.D	04/25/16	21:22	04:06	RA13(5-6)
ZZZZZZ	6G34409.D	04/25/16	21:38	04:22	(unrelated sample)
ZZZZZZ	6G34410.D	04/25/16	21:55	04:39	(unrelated sample)
ZZZZZZ	6G34411.D	04/25/16	22:11	04:55	(unrelated sample)
ZZZZZZ	6G34412.D	04/25/16	22:27	05:11	(unrelated sample)
ZZZZZZ	6G34413.D	04/25/16	22:44	05:28	(unrelated sample)
ZZZZZZ	6G34414.D	04/25/16	23:00	05:44	(unrelated sample)

GC Identification Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3968-CC3951	**Injection Date:**	04/21/16
Lab File ID:	1G122349.D	**Injection Time:**	09:14
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP93237-BS1	**Injection Date:**	04/21/16
Lab File ID:	1G122355.D	**Injection Time:**	11:10
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.30	3.30	0.18		ug/l	5.7
Aldrin	2 [a]	4.50	4.50	0.17		ug/l	
alpha-BHC	1 [a]	2.22	2.22	0.16		ug/l	6.1
alpha-BHC	2	3.05	3.05	0.17		ug/l	
beta-BHC	1 [a]	2.59	2.59	0.17		ug/l	5.7
beta-BHC	2	3.56	3.56	0.18		ug/l	
delta-BHC	1 [a]	2.77	2.77	0.18		ug/l	0.0
delta-BHC	2	3.96	3.96	0.18		ug/l	
gamma-BHC (Lindane)	1	2.51	2.51	0.17		ug/l	0.0
gamma-BHC (Lindane)	2 [a]	3.47	3.47	0.17		ug/l	
alpha-Chlordane	1	4.32	4.31	0.19		ug/l	5.4
alpha-Chlordane	2 [a]	5.83	5.83	0.18		ug/l	
gamma-Chlordane	1	4.15	4.15	0.19		ug/l	5.4
gamma-Chlordane	2 [a]	5.61	5.61	0.18		ug/l	
Dieldrin	1	4.80	4.80	0.19		ug/l	11.1
Dieldrin	2 [a]	6.36	6.36	0.17		ug/l	
4,4'-DDD	1	5.25	5.25	0.18		ug/l	5.7
4,4'-DDD	2 [a]	7.05	7.05	0.17		ug/l	
4,4'-DDE	1	4.43	4.43	0.19		ug/l	11.1
4,4'-DDE	2 [a]	6.10	6.10	0.17		ug/l	
4,4'-DDT	1	5.66	5.65	0.20		ug/l	16.2
4,4'-DDT	2 [a]	7.58	7.58	0.17		ug/l	
Endrin	1	5.12	5.11	0.20		ug/l	5.1
Endrin	2 [a]	6.86	6.86	0.19		ug/l	
Endosulfan sulfate	1	6.74	6.73	0.20		ug/l	16.2
Endosulfan sulfate	2 [a]	8.26	8.26	0.17		ug/l	
Endrin aldehyde	1	6.06	6.06	0.20		ug/l	22.2
Endrin aldehyde	2 [a]	7.79	7.79	0.16		ug/l	
Endrin ketone	1	7.16	7.16	0.20		ug/l	16.2
Endrin ketone	2 [a]	9.22	9.22	0.17		ug/l	
Endosulfan-I	1	4.49	4.49	0.19		ug/l	5.4
Endosulfan-I	2 [a]	5.92	5.92	0.18		ug/l	
Endosulfan-II	1	5.43	5.43	0.19		ug/l	11.1
Endosulfan-II	2 [a]	7.22	7.22	0.17		ug/l	
Heptachlor	1	2.98	2.98	0.19		ug/l	5.4
Heptachlor	2 [a]	4.05	4.05	0.18		ug/l	
Heptachlor epoxide	1	4.00	3.99	0.19		ug/l	5.4
Heptachlor epoxide	2 [a]	5.32	5.32	0.18		ug/l	
Methoxychlor	1	6.44	6.44	0.19		ug/l	11.1
Methoxychlor	2 [a]	8.83	8.83	0.17		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G995-CC987	**Injection Date:**	04/25/16
Lab File ID:	6G34372.D	**Injection Time:**	10:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93322-BS1	**Injection Date:**	04/25/16
Lab File ID:	6G34377.D	**Injection Time:**	11:45
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.69	3.69	14.6		ug/kg	2.8
Aldrin	2 [a]	4.71	4.71	14.2		ug/kg	
alpha-BHC	1 [a]	2.49	2.49	13.7		ug/kg	0.7
alpha-BHC	2	3.18	3.18	13.8		ug/kg	
beta-BHC	1	2.89	2.89	14.3		ug/kg	3.6
beta-BHC	2 [a]	3.72	3.72	13.8		ug/kg	
delta-BHC	1	3.08	3.08	12.7		ug/kg	3.2
delta-BHC	2 [a]	4.14	4.14	12.3		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.81	2.81	13.9		ug/kg	0.0
gamma-BHC (Lindane)	2	3.63	3.63	13.9		ug/kg	
alpha-Chlordane	1	4.79	4.80	14.2		ug/kg	2.1
alpha-Chlordane	2 [a]	6.14	6.14	13.9		ug/kg	
gamma-Chlordane	1 [a]	4.61	4.61	14.2		ug/kg	5.5
gamma-Chlordane	2	5.90	5.90	15.0		ug/kg	
Dieldrin	1 [a]	5.32	5.32	12.0		ug/kg	21.6
Dieldrin	2	6.71	6.71	14.9		ug/kg	
4,4'-DDD	1 [a]	5.81	5.81	14.6		ug/kg	0.7
4,4'-DDD	2	7.47	7.47	14.7		ug/kg	
4,4'-DDE	1	4.92	4.93	15.2		ug/kg	2.7
4,4'-DDE	2 [a]	6.44	6.44	14.8		ug/kg	
4,4'-DDT	1	6.26	6.26	15.1		ug/kg	0.0
4,4'-DDT	2 [a]	8.05	8.06	15.1		ug/kg	
Endrin	1	5.66	5.66	17.3		ug/kg	18.3
Endrin	2 [a]	7.25	7.26	14.4		ug/kg	
Endosulfan sulfate	1	7.41	7.41	14.7		ug/kg	5.6
Endosulfan sulfate	2 [a]	8.78	8.78	13.9		ug/kg	
Endrin aldehyde	1 [a]	6.67	6.67	13.1		ug/kg	1.5
Endrin aldehyde	2	8.27	8.27	13.3		ug/kg	
Endosulfan-I	1 [a]	4.98	4.98	13.2		ug/kg	3.7
Endosulfan-I	2	6.24	6.24	13.7		ug/kg	
Endosulfan-II	1	6.00	6.00	15.0		ug/kg	6.9
Endosulfan-II	2 [a]	7.64	7.64	14.0		ug/kg	
Heptachlor	1	3.34	3.34	14.1		ug/kg	2.9
Heptachlor	2 [a]	4.24	4.24	13.7		ug/kg	
Heptachlor epoxide	1 [a]	4.44	4.44	13.3		ug/kg	3.0
Heptachlor epoxide	2	5.59	5.59	13.7		ug/kg	
Methoxychlor	1 [a]	7.12	7.13	15.3		ug/kg	1.3
Methoxychlor	2	9.43	9.43	15.5		ug/kg	
Endrin ketone	1	7.88	7.88	14.6		ug/kg	8.6
Endrin ketone	2 [a]	9.83	9.83	13.4		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3968-CC3951	**Injection Date:**	04/21/16
Lab File ID:	1G122349.D	**Injection Time:**	09:14
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP93237-MS	**Injection Date:**	04/21/16
Lab File ID:	1G122364.D	**Injection Time:**	13:47
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.30	3.30	0.30		ug/l	6.5
Aldrin	2	4.50	4.50	0.32		ug/l	
alpha-BHC	1 [a]	2.22	2.22	0.34		ug/l	0.0
alpha-BHC	2	3.04	3.05	0.34		ug/l	
beta-BHC	1 [a]	2.59	2.59	0.34		ug/l	2.9
beta-BHC	2	3.56	3.56	0.35		ug/l	
delta-BHC	1 [a]	2.77	2.77	0.37		ug/l	5.6
delta-BHC	2	3.96	3.96	0.35		ug/l	
gamma-BHC (Lindane)	1 [a]	2.51	2.51	0.36		ug/l	8.7
gamma-BHC (Lindane)	2	3.47	3.47	0.33		ug/l	
alpha-Chlordane	1 [a]	4.31	4.31	1.0		ug/l	100.8
alpha-Chlordane	2	5.83	5.83	0.33		ug/l	
gamma-Chlordane	1 [a]	4.15	4.15	0.35		ug/l	5.9
gamma-Chlordane	2	5.60	5.61	0.33		ug/l	
Dieldrin	1 [a]	4.80	4.80	0.39		ug/l	5.3
Dieldrin	2	6.36	6.36	0.37		ug/l	
4,4'-DDD	1 [a]	5.25	5.25	0.34		ug/l	6.1
4,4'-DDD	2	7.05	7.05	0.32		ug/l	
4,4'-DDE	1 [a]	4.43	4.43	0.29		ug/l	14.8
4,4'-DDE	2	6.10	6.10	0.25		ug/l	
4,4'-DDT	1 [a]	5.65	5.65	0.30		ug/l	10.5
4,4'-DDT	2	7.58	7.58	0.27		ug/l	
Endrin	1 [a]	5.12	5.11	0.40		ug/l	7.8
Endrin	2	6.86	6.86	0.37		ug/l	
Endosulfan sulfate	1 [a]	6.73	6.73	0.44		ug/l	17.3
Endosulfan sulfate	2	8.26	8.26	0.37		ug/l	
Endrin aldehyde	1 [a]	6.06	6.06	0.42		ug/l	21.1
Endrin aldehyde	2	7.79	7.79	0.34		ug/l	
Endrin ketone	1 [a]	7.16	7.16	0.43		ug/l	15.0
Endrin ketone	2	9.22	9.22	0.37		ug/l	
Endosulfan-I	1 [a]	4.49	4.49	0.40		ug/l	13.3
Endosulfan-I	2	5.92	5.92	0.35		ug/l	
Endosulfan-II	1 [a]	5.43	5.43	0.40		ug/l	10.5
Endosulfan-II	2	7.21	7.22	0.36		ug/l	
Heptachlor	1 [a]	2.98	2.98	0.35		ug/l	5.9
Heptachlor	2	4.05	4.05	0.33		ug/l	
Heptachlor epoxide	1 [a]	4.00	3.99	0.39		ug/l	68.9
Heptachlor epoxide	2	5.33	5.32	0.80		ug/l	
Methoxychlor	1 [a]	6.43	6.44	0.38		ug/l	14.1
Methoxychlor	2	8.83	8.83	0.33		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G995-CC987	**Injection Date:**	04/25/16
Lab File ID:	6G34372.D	**Injection Time:**	10:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93322-MS	**Injection Date:**	04/25/16
Lab File ID:	6G34381.D	**Injection Time:**	12:34
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.69	3.69	17.9		ug/kg	1.7
Aldrin	2	4.71	4.71	17.6		ug/kg	
alpha-BHC	1 [a]	2.49	2.49	17.5		ug/kg	0.0
alpha-BHC	2	3.18	3.18	17.5		ug/kg	
beta-BHC	1 [a]	2.89	2.89	18.3		ug/kg	3.9
beta-BHC	2	3.72	3.72	17.6		ug/kg	
delta-BHC	1 [a]	3.08	3.08	16.5		ug/kg	3.1
delta-BHC	2	4.14	4.14	16.0		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.81	2.81	18.0		ug/kg	1.1
gamma-BHC (Lindane)	2	3.63	3.63	17.8		ug/kg	
alpha-Chlordane	1 [a]	4.79	4.80	18.3		ug/kg	5.6
alpha-Chlordane	2	6.14	6.14	17.3		ug/kg	
gamma-Chlordane	1 [a]	4.61	4.61	17.9		ug/kg	2.3
gamma-Chlordane	2	5.90	5.90	17.5		ug/kg	
Dieldrin	1 [a]	5.32	5.32	17.7		ug/kg	0.0
Dieldrin	2	6.71	6.71	17.7		ug/kg	
4,4'-DDD	1 [a]	5.81	5.81	19.2		ug/kg	4.8
4,4'-DDD	2	7.47	7.47	18.3		ug/kg	
4,4'-DDE	1 [a]	4.92	4.93	19.0		ug/kg	5.4
4,4'-DDE	2	6.44	6.44	18.0		ug/kg	
4,4'-DDT	1 [a]	6.26	6.26	19.3		ug/kg	0.5
4,4'-DDT	2	8.05	8.06	19.2		ug/kg	
Endrin	1 [a]	5.66	5.66	19.7		ug/kg	8.5
Endrin	2	7.26	7.26	18.1		ug/kg	
Endosulfan sulfate	1 [a]	7.41	7.41	18.3		ug/kg	5.6
Endosulfan sulfate	2	8.78	8.78	17.3		ug/kg	
Endrin aldehyde	1 [a]	6.67	6.67	18.9		ug/kg	8.3
Endrin aldehyde	2	8.27	8.27	17.4		ug/kg	
Endosulfan-I	1 [a]	4.98	4.98	17.0		ug/kg	0.6
Endosulfan-I	2	6.24	6.24	17.1		ug/kg	
Endosulfan-II	1 [a]	6.00	6.00	18.6		ug/kg	6.7
Endosulfan-II	2	7.64	7.64	17.4		ug/kg	
Heptachlor	1 [a]	3.34	3.34	18.3		ug/kg	9.1
Heptachlor	2	4.24	4.24	16.7		ug/kg	
Heptachlor epoxide	1 [a]	4.44	4.44	17.1		ug/kg	1.7
Heptachlor epoxide	2	5.59	5.59	17.4		ug/kg	
Methoxychlor	1 [a]	7.12	7.13	19.5		ug/kg	0.5
Methoxychlor	2	9.43	9.43	19.6		ug/kg	
Endrin ketone	1 [a]	7.88	7.88	18.9		ug/kg	10.6
Endrin ketone	2	9.83	9.83	17.0		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3968-CC3951	**Injection Date:**	04/21/16
Lab File ID:	1G122349.D	**Injection Time:**	09:14
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP93237-MSD	**Injection Date:**	04/21/16
Lab File ID:	1G122365.D	**Injection Time:**	14:04
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.30	3.30	0.28		ug/l	10.2
Aldrin	2	4.50	4.50	0.31		ug/l	
alpha-BHC	1 [a]	2.22	2.22	0.32		ug/l	3.1
alpha-BHC	2	3.04	3.05	0.33		ug/l	
beta-BHC	1 [a]	2.59	2.59	0.32		ug/l	6.1
beta-BHC	2	3.56	3.56	0.34		ug/l	
delta-BHC	1 [a]	2.77	2.77	0.35		ug/l	2.9
delta-BHC	2	3.96	3.96	0.34		ug/l	
gamma-BHC (Lindane)	1 [a]	2.51	2.51	0.34		ug/l	6.1
gamma-BHC (Lindane)	2	3.47	3.47	0.32		ug/l	
alpha-Chlordane	1 [a]	4.31	4.31	1.0		ug/l	103.0
alpha-Chlordane	2	5.83	5.83	0.32		ug/l	
gamma-Chlordane	1 [a]	4.15	4.15	0.35		ug/l	12.1
gamma-Chlordane	2	5.60	5.61	0.31		ug/l	
Dieldrin	1 [a]	4.80	4.80	0.37		ug/l	2.7
Dieldrin	2	6.36	6.36	0.36		ug/l	
4,4'-DDD	1 [a]	5.25	5.25	0.33		ug/l	3.1
4,4'-DDD	2	7.05	7.05	0.32		ug/l	
4,4'-DDE	1 [a]	4.43	4.43	0.28		ug/l	15.4
4,4'-DDE	2	6.10	6.10	0.24		ug/l	
4,4'-DDT	1 [a]	5.65	5.65	0.29		ug/l	18.9
4,4'-DDT	2	7.58	7.58	0.24		ug/l	
Endrin	1 [a]	5.12	5.11	0.40		ug/l	7.8
Endrin	2	6.86	6.86	0.37		ug/l	
Endosulfan sulfate	1 [a]	6.73	6.73	0.43		ug/l	17.7
Endosulfan sulfate	2	8.26	8.26	0.36		ug/l	
Endrin aldehyde	1 [a]	6.06	6.06	0.39		ug/l	26.1
Endrin aldehyde	2	7.79	7.79	0.30		ug/l	
Endrin ketone	1 [a]	7.16	7.16	0.41		ug/l	13.0
Endrin ketone	2	9.22	9.22	0.36		ug/l	
Endosulfan-I	1 [a]	4.49	4.49	0.38		ug/l	8.2
Endosulfan-I	2	5.92	5.92	0.35		ug/l	
Endosulfan-II	1 [a]	5.43	5.43	0.38		ug/l	11.1
Endosulfan-II	2	7.21	7.22	0.34		ug/l	
Heptachlor	1 [a]	2.98	2.98	0.33		ug/l	3.1
Heptachlor	2	4.05	4.05	0.32		ug/l	
Heptachlor epoxide	1 [a]	4.00	3.99	0.37		ug/l	75.6
Heptachlor epoxide	2	5.34	5.32	0.82		ug/l	
Methoxychlor	1 [a]	6.43	6.44	0.34		ug/l	6.1
Methoxychlor	2	8.83	8.83	0.32		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G995-CC987	**Injection Date:**	04/25/16
Lab File ID:	6G34372.D	**Injection Time:**	10:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93322-MSD	**Injection Date:**	04/25/16
Lab File ID:	6G34382.D	**Injection Time:**	12:51
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.69	3.69	14.3		ug/kg	0.7
Aldrin	2	4.71	4.71	14.4		ug/kg	
alpha-BHC	1 [a]	2.49	2.49	14.2		ug/kg	0.0
alpha-BHC	2	3.18	3.18	14.2		ug/kg	
beta-BHC	1 [a]	2.89	2.89	15.0		ug/kg	2.0
beta-BHC	2	3.72	3.72	14.7		ug/kg	
delta-BHC	1 [a]	3.08	3.08	13.5		ug/kg	4.5
delta-BHC	2	4.14	4.14	12.9		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.81	2.81	14.5		ug/kg	0.0
gamma-BHC (Lindane)	2	3.63	3.63	14.5		ug/kg	
alpha-Chlordane	1 [a]	4.79	4.80	15.1		ug/kg	4.7
alpha-Chlordane	2	6.14	6.14	14.4		ug/kg	
gamma-Chlordane	1 [a]	4.61	4.61	14.7		ug/kg	1.4
gamma-Chlordane	2	5.90	5.90	14.5		ug/kg	
Dieldrin	1 [a]	5.32	5.32	15.2		ug/kg	5.4
Dieldrin	2	6.71	6.71	14.4		ug/kg	
4,4'-DDD	1 [a]	5.81	5.81	15.7		ug/kg	4.6
4,4'-DDD	2	7.47	7.47	15.0		ug/kg	
4,4'-DDE	1 [a]	4.92	4.93	15.6		ug/kg	4.6
4,4'-DDE	2	6.44	6.44	14.9		ug/kg	
4,4'-DDT	1 [a]	6.26	6.26	16.2		ug/kg	3.1
4,4'-DDT	2	8.06	8.06	15.7		ug/kg	
Endrin	1 [a]	5.66	5.66	16.2		ug/kg	8.4
Endrin	2	7.26	7.26	14.9		ug/kg	
Endosulfan sulfate	1 [a]	7.41	7.41	15.2		ug/kg	4.7
Endosulfan sulfate	2	8.78	8.78	14.5		ug/kg	
Endrin aldehyde	1 [a]	6.67	6.67	14.8		ug/kg	7.7
Endrin aldehyde	2	8.27	8.27	13.7		ug/kg	
Endosulfan-I	1 [a]	4.98	4.98	13.9		ug/kg	2.1
Endosulfan-I	2	6.24	6.24	14.2		ug/kg	
Endosulfan-II	1 [a]	6.00	6.00	15.2		ug/kg	4.7
Endosulfan-II	2	7.64	7.64	14.5		ug/kg	
Heptachlor	1 [a]	3.34	3.34	14.6		ug/kg	8.6
Heptachlor	2	4.24	4.24	13.4		ug/kg	
Heptachlor epoxide	1 [a]	4.44	4.44	13.8		ug/kg	4.3
Heptachlor epoxide	2	5.59	5.59	14.4		ug/kg	
Methoxychlor	1 [a]	7.13	7.13	15.7		ug/kg	1.9
Methoxychlor	2	9.43	9.43	16.0		ug/kg	
Endrin ketone	1 [a]	7.88	7.88	15.7		ug/kg	10.7
Endrin ketone	2	9.83	9.83	14.1		ug/kg	

(a) QC results reported from this column.

Semivolatile Surrogate Recovery Summary

Job Number: JC18649
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]
JC18649-1	1G122360.D	92	96	73	53
JC18649-2	1G122361.D	87	88	67	46
JC18649-4	1G122362.D	92	100	83	58
JC18649-5	1G122363.D	66	81	33	26
OP93237-BS1	1G122355.D	97	100	114	76
OP93237-MB1	1G122354.D	89	93	94	63
OP93237-MS	1G122364.D	85	85	76	52
OP93237-MSD	1G122365.D	87	87	78	54

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: JC18649
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]
JC18649-3	6G34408.D	94	94	86	85
OP93322-BS1	6G34377.D	93	92	103	90
OP93322-MB1	6G34376.D	92	93	95	90
OP93322-MS	6G34381.D	108	108	110	105
OP93322-MSD	6G34382.D	86	86	90	87

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	24-136%
S2 = Decachlorobiphenyl	10-153%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G995-CC987	**Injection Date:**	04/25/16
Lab File ID:	6G34403.D	**Injection Time:**	20:00
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.98	2.47	9.92	11.76

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	6G34405.D	04/25/16	20:32	1.98	2.47	9.92	11.75
ZZZZZZ	6G34406.D	04/25/16	20:49	1.98	2.47	9.92	11.76
ZZZZZZ	6G34407.D	04/25/16	21:05	1.98	2.47	9.92	11.76
JC18649-3	6G34408.D	04/25/16	21:22	1.98	2.47	9.92	11.76
ZZZZZZ	6G34409.D	04/25/16	21:38	1.98	2.47	9.92	11.75
ZZZZZZ	6G34410.D	04/25/16	21:55	1.98	2.47	9.92	11.75
ZZZZZZ	6G34411.D	04/25/16	22:11	1.98	2.47	9.92	11.75
ZZZZZZ	6G34412.D	04/25/16	22:27	1.98	2.47	9.92	11.75
ZZZZZZ	6G34413.D	04/25/16	22:44	1.98	2.47	9.91	11.75
ZZZZZZ	6G34414.D	04/25/16	23:00	1.98	2.47	9.92	11.76

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3968-CC3951	**Injection Date:**	04/21/16
Lab File ID:	1G122349.D	**Injection Time:**	09:14
Instrument ID:	GC1G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.75	2.38	8.93	10.87

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP93104-MB3	1G122351.D	04/21/16	10:00	1.76	2.38	8.95	10.87
OP93104-BS3	1G122352.D	04/21/16	10:17	1.75	2.38	8.94	10.87
OP93104-LB22	1G122353.D	04/21/16	10:34	1.75	2.38	8.93	10.87
OP93237-MB1	1G122354.D	04/21/16	10:52	1.75	2.38	8.93	10.87
OP93237-BS1	1G122355.D	04/21/16	11:10	1.75	2.38	8.94	10.87
OP93201-BSD	1G122356.D	04/21/16	11:27	1.75	2.38	8.94	10.87
ZZZZZZ	1G122357.D	04/21/16	11:44	1.75	2.38	8.94	10.87
ZZZZZZ	1G122358.D	04/21/16	12:02	1.75	2.38	8.94	10.87
ZZZZZZ	1G122359.D	04/21/16	12:20	1.75	2.38	8.94	10.87
JC18649-1	1G122360.D	04/21/16	12:37	1.75	2.38	8.94	10.87
JC18649-2	1G122361.D	04/21/16	12:54	1.75	2.38	8.93	10.87
JC18649-4	1G122362.D	04/21/16	13:12	1.75	2.38	8.93	10.87
JC18649-5	1G122363.D	04/21/16	13:30	1.75	2.38	8.94	10.87
OP93237-MS	1G122364.D	04/21/16	13:47	1.75	2.38	8.94	10.87
OP93237-MSD	1G122365.D	04/21/16	14:04	1.75	2.38	8.94	10.87

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G995-CC987	**Injection Date:**	04/25/16
Lab File ID:	6G34372.D	**Injection Time:**	10:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.98	2.47	9.92	11.76

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP93282-MB1	6G34374.D	04/25/16	10:39	1.98	2.47	9.92	11.76
OP93282-BS1	6G34375.D	04/25/16	10:56	1.98	2.47	9.92	11.76
OP93282-BSD	6G34378.D	04/25/16	11:12	1.98	2.47	9.92	11.76
OP93322-MB1	6G34376.D	04/25/16	11:29	1.98	2.47	9.91	11.76
OP93322-BS1	6G34377.D	04/25/16	11:45	1.98	2.47	9.92	11.76
ZZZZZZ	6G34379.D	04/25/16	12:02	1.98	2.47	9.91	11.76
ZZZZZZ	6G34380.D	04/25/16	12:18	1.98	2.47	9.91	11.76
OP93322-MS	6G34381.D	04/25/16	12:34	1.98	2.47	9.92	11.76
OP93322-MSD	6G34382.D	04/25/16	12:51	1.98	2.47	9.92	11.76
ZZZZZZ	6G34383.D	04/25/16	13:07	1.98	2.47	9.92	11.76
ZZZZZZ	6G34384.D	04/25/16	13:24	1.98	2.47	9.92	11.76
ZZZZZZ	6G34385.D	04/25/16	13:40	1.98	2.47	9.92	11.76
ZZZZZZ	6G34386.D	04/25/16	13:56	1.98	2.47	9.92	11.76
JC18834-10	6G34387.D	04/25/16	14:13	1.98	2.47	9.92	11.76
ZZZZZZ	6G34388.D	04/25/16	14:29	1.98	2.47	9.92	11.76
ZZZZZZ	6G34389.D	04/25/16	14:46	1.98	2.47	9.92	11.76
ZZZZZZ	6G34390.D	04/25/16	15:02	1.98	2.47	9.91	11.76
ZZZZZZ	6G34391.D	04/25/16	15:18	1.98	2.47	9.92	11.76
ZZZZZZ	6G34392.D	04/25/16	15:35	1.98	2.47	9.92	11.76

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3951-ICC3951
Lab FileID: 1G121644.D

Response Factor Report GC1G

Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration

Calibration Files
2 =1G121641.D 5 =1G121642.D 10 =1G121643.D 25 =1G121644.D
50 =1G121645.D 100 =1G121647.D 1 =1G121640.D 75 =1G121646.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen					ISTD					
2) Tetrachloro-	0.919	0.923	0.919	0.939	0.922	0.985	1.081	0.958	0.956	5.83
3) alpha-BHC	1.043	0.968	1.009	1.125	1.201	1.392	1.031	1.312	1.135	13.53
4) gamma-BHC	0.959	0.935	0.975	1.077	1.134	1.283	1.083	1.218	1.083	11.56
5) Heptachlor	1.094	1.071	1.090	1.163	1.190	1.316	1.125	1.259	1.163	7.48
6) beta-BHC	0.538	0.518	0.510	0.537	0.535	0.559	0.667	0.545	0.551	8.95
7) delta-BHC	0.835	0.827	0.859	0.965	1.025	1.172	0.841	1.105	0.954	14.15
8) Aldrin	1.056	0.957	0.991	1.071	1.113	1.244	1.047	1.189	1.083	8.86
9) Heptachlor E	1.047	1.013	1.031	1.080	1.089	1.182	1.043	1.141	1.078	5.38
10) gamma-Chlord	1.141	1.038	1.030	1.087	1.093	1.193	1.363	1.146	1.136	9.42
11) alpha-Chlord	1.115	1.039	1.014	1.080	1.090	1.183	1.103	1.139	1.095	4.89
12) Endosulfan I	1.027	0.964	0.976	1.030	1.045	1.135	1.062	1.092	1.042	5.42
13) 4,4'-DDE	0.929	0.920	0.925	0.993	1.028	1.143	0.978	1.090	1.001	8.20
14) Dieldrin	0.974	0.957	0.971	1.038	1.076	1.199	1.078	1.143	1.055	8.25
15) Endrin	0.993	0.880	0.903	0.953	0.972	1.083	1.073	1.035	0.986	7.56
16) 4,4'-DDD	0.799	0.741	0.759	0.803	0.842	0.942	0.872	0.893	0.831	8.29
17) Endosulfan I	1.014	0.932	0.952	0.996	1.005	1.084	0.976	1.048	1.001	4.94
18) 4,4'-DDT	0.737	0.691	0.723	0.797	0.834	0.950	0.707	0.898	0.792	12.00
19) Endrin Aldeh	0.851	0.803	0.820	0.836	0.836	0.883	0.862	0.895	0.848	3.65
20) Endosulfan S	0.893	0.859	0.876	0.905	0.907	0.963	0.936	0.938	0.910	3.79
21) Methoxychlor	0.506	0.498	0.503	0.530	0.526	0.557	0.609	0.538	0.534	6.81
22) Mirex	1.049	0.997	1.020	1.014	0.975	0.976	1.087	0.969	1.011	4.06
23) Endrin Keton	0.976	0.957	0.980	1.047	1.058	1.146	1.227	1.107	1.062	8.82
24) Decachlorobi	1.351	1.307	1.296	1.301	1.246	1.251	1.565	1.246	1.320	7.98
25) I 1-bromo-2-nitrobenzen					ISTD					
26) Toxaphene{A}					0.018				0.018	0.00
27) Toxaphene{B}					0.047				0.047	0.00
28) Toxaphene{C}					0.036				0.036	0.00
29) Toxaphene{D}					0.036				0.036	0.00
30) Toxaphene{E}					0.032				0.032	0.00
31) I 1-bromo-2-nitrobenzen					ISTD					
32) Chlordane {A					0.033				0.033	0.00
33) Chlordane {B					0.044				0.044	0.00
34) Chlordane {C					0.149				0.149	0.00
35) Chlordane {D					0.235				0.235	0.00
36) Chlordane {E					0.033				0.033	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen					ISTD					
2) Tetrachloro-	0.820	0.797	0.810	0.783	0.752	0.783	0.775	0.774	0.787	2.76
3) alpha-BHC	1.216	1.171	1.196	1.181	1.137	1.176	1.263	1.157	1.187	3.26
4) gamma-BHC	1.142	1.058	1.076	1.052	1.013	1.049	1.111	1.034	1.067	3.93

Initial Calibration Summary

Job Number: JC18649 **Sample:** G1G3951-ICC3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G121644.D
Project: BMSMC, Building 5 Area, PR

5)	Heptachlor	1.009	0.960	0.965	0.940	0.909	0.931	1.037	0.921	0.959	4.61
6)	beta-BHC	0.474	0.460	0.446	0.455	0.430	0.431	0.502	0.428	0.453	5.64
7)	delta-BHC	0.953	0.971	0.991	0.991	0.965	1.011	0.966	0.988	0.980	1.93
8)	Aldrin	0.986	0.949	0.975	0.953	0.902	0.916	1.079	0.909	0.959	6.00
9)	Heptachlor E	0.885	0.871	0.883	0.871	0.821	0.830	0.958	0.824	0.868	5.20
10)	gamma-Chlord	0.898	0.877	0.868	0.860	0.822	0.832	0.968	0.821	0.868	5.61
11)	alpha-Chlord	0.875	0.837	0.842	0.832	0.779	0.790	0.978	0.783	0.840	7.79
12)	Endosulfan I	0.856	0.852	0.829	0.826	0.773	0.775	0.877	0.771	0.820	5.13
13)	4,4'-DDE	0.895	0.845	0.864	0.858	0.811	0.823	1.003	0.817	0.864	7.25
14)	Dieldrin	0.992	0.911	0.910	0.895	0.848	0.861	1.070	0.856	0.918	8.37
15)	Endrin	0.816	0.811	0.802	0.799	0.752	0.770	0.857	0.763	0.796	4.27
16)	4,4'-DDD	0.736	0.756	0.732	0.734	0.698	0.702	0.814	0.695	0.734	5.33
17)	Endosulfan I	0.840	0.825	0.792	0.789	0.740	0.743	0.876	0.740	0.793	6.46
18)	4,4'-DDT	0.571	0.501	0.539	0.609	0.616	0.630	0.511	0.614	0.574	8.92
19)	Endrin Aldeh	0.617	0.645	0.624	0.624	0.597	0.588	0.636	0.587	0.615	3.53
20)	Endosulfan S	0.667	0.659	0.663	0.674	0.633	0.639	0.767	0.637	0.667	6.43
21)	Methoxychlor	0.302	0.277	0.295	0.313	0.309	0.316	0.312	0.313	0.305	4.33
22)	Mirex	0.556	0.512	0.504	0.520	0.494	0.489	0.527	0.480	0.510	4.77
23)	Endrin Keton	0.701	0.709	0.720	0.741	0.705	0.716	0.681	0.708	0.710	2.43
24)	Decachlorobi	0.521	0.518	0.514	0.513	0.481	0.482	0.630	0.481	0.517	9.38

25) I 1-bromo-2-nitrobenzen ----------ISTD----------

26)	Toxaphene{A}	0.022	0.022	0.00
27)	Toxaphene{B}	0.025	0.025	0.00
28)	Toxaphene{C}	0.048	0.048	0.00
29)	Toxaphene{D}	0.028	0.028	0.00
30)	Toxaphene{E}	0.022	0.022	0.00

31) I 1-bromo-2-nitrobenzen ----------ISTD----------

32)	Chlordane {A	0.029	0.029	0.00
33)	Chlordane {B	0.030	0.030	0.00
34)	Chlordane {C	0.101	0.101	0.00
35)	Chlordane {D	0.165	0.165	0.00
36)	Chlordane {E	0.031	0.031	0.00

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

1PST3951.M Fri Apr 01 16:53:35 2016 RPT1

8.9.1

8

Initial Calibration Verification

Job Number: JC18649 **Sample:** G1G3951-ICV3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G121650.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD2B.CH
Acq On    : 4-1-16 02:09:36 PM                        Operator: dharas
Sample    : icv3951-25                                Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	109	0.00	1.14- 1.20
2	SAB	Tetrachloro-m-xylene	0.956	0.816	14.6	95	0.00	1.72- 1.78
3	A	alpha-BHC	1.135	0.994	12.4	96	0.00	2.19- 2.25
4	MA	gamma-BHC	1.083	0.951	12.2	96	0.00	2.48- 2.54
5	MA	Heptachlor	1.163	1.024	12.0	96	0.00	2.95- 3.01
6	B	beta-BHC	0.551	0.482	12.5	98	0.00	2.56- 2.62
7	B	delta-BHC	0.954	0.888	6.9	100	0.00	2.74- 2.80
8	MB	Aldrin	1.083	0.942	13.0	96	0.00	3.27- 3.33
9	B	Heptachlor Epoxide	1.078	0.953	11.6	96	0.00	3.97- 4.03
10	B	gamma-Chlordane	1.136	0.967	14.9	97	0.00	4.13- 4.19
11	B	alpha-Chlordane	1.095	0.962	12.1	97	0.00	4.29- 4.35
12	A	Endosulfan I	1.042	0.891	14.5	94	0.00	4.47- 4.53
13	B	4,4'-DDE	1.001	0.882	11.9	97	0.00	4.41- 4.47
14	MA	Dieldrin	1.055	0.934	11.5	98	0.00	4.78- 4.84
15	MA	Endrin	0.986	0.860	12.8	98	0.00	5.09- 5.15
16	A	4,4'-DDD	0.831	0.711	14.4	96	0.00	5.22- 5.29
17	B	Endosulfan II	1.001	0.875	12.6	96	0.00	5.41- 5.47
18	MA	4,4'-DDT	0.792	0.692	12.6	94	0.00	5.63- 5.69
19	B	Endrin Aldehyde	0.848	0.784	7.5	102	0.00	6.04- 6.10
20	B	Endosulfan Sulfate	0.910	0.808	11.2	97	0.00	6.71- 6.77
21	A	Methoxychlor	0.534	0.473	11.4	97	0.00	6.41- 6.47
23	B	Endrin Ketone	1.062	0.938	11.7	98	0.00	7.14- 7.20
24	SA	Decachlorobiphenyl	1.320	1.226	7.1	103	0.00	8.91- 8.97

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.51- 1.57
2	SAB	Tetrachloro-m-xylene	0.787	0.711	9.7	98	0.00	2.35- 2.41
3	A	alpha-BHC	1.187	1.047	11.8	95	0.00	3.02- 3.08
4	MA	gamma-BHC	1.067	0.946	11.3	97	0.00	3.45- 3.51
5	MA	Heptachlor	0.959	0.853	11.1	98	0.00	4.02- 4.08
6	B	beta-BHC	0.453	0.402	11.3	95	0.00	3.54- 3.60
7	B	delta-BHC	0.980	0.938	4.3	102	0.00	3.93- 3.99
8	MB	Aldrin	0.959	0.864	9.9	97	0.00	4.47- 4.53
9	B	Heptachlor Epoxide	0.868	0.803	7.5	99	0.00	5.30- 5.36
10	B	gamma-Chlordane	0.868	0.809	6.8	101	0.00	5.58- 5.64
11	B	alpha-Chlordane	0.840	0.761	9.4	98	0.00	5.81- 5.87
12	A	Endosulfan I	0.820	0.737	10.1	96	0.00	5.90- 5.96
13	B	4,4'-DDE	0.864	0.790	8.6	99	0.00	6.07- 6.13
14	MA	Dieldrin	0.918	0.834	9.2	100	0.00	6.34- 6.40

Initial Calibration Verification

Job Number: JC18649 **Sample:** G1G3951-ICV3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G121650.D
Project: BMSMC, Building 5 Area, PR

15	MA	Endrin	0.796	0.746	6.3	101	0.00	6.84- 6.90
16	A	4,4'-DDD	0.734	0.687	6.4	101	0.00	7.03- 7.09
17	B	Endosulfan II	0.793	0.715	9.8	97	0.00	7.19- 7.25
18	MA	4,4'-DDT	0.574	0.579	-0.9	102	0.00	7.56- 7.62
19	B	Endrin Aldehyde	0.615	0.613	0.3	106	0.00	7.77- 7.83
20	B	Endosulfan Sulfate	0.667	0.618	7.3	99	0.00	8.24- 8.30
21	A	Methoxychlor	0.305	0.285	6.6	98	0.00	8.81- 8.87
23	B	Endrin Ketone	0.710	0.679	4.4	99	0.00	9.20- 9.26
24	SA	Decachlorobiphenyl	0.517	0.494	4.4	103	0.00	10.85-10.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G121644.D 1PST3951.M Fri Apr 01 17:06:49 2016 RPT1

8.9.2

8

Initial Calibration Verification

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3951-ICV3951
Lab FileID: 1G121651.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD2B.CH
Acq On    : 4-1-16 02:27:16 PM                        Operator: dharas
Sample    : icv3951-25                                Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.14- 1.20
22	Mirex	1.011	0.999	1.2	106	0.00	6.51- 6.57
***** Signal #2 *****							
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.51- 1.57
22	Mirex	0.510	0.516	-1.2	106	0.00	9.13- 9.19

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 1G121644.D 1PST3951.M       Fri Apr 01 17:06:50 2016   RPT1
```

8.9.3

8

Initial Calibration Verification

Job Number: JC18649 **Sample:** G1G3951-ICV3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G121652.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD2B.CH
Acq On    : 4-1-16 02:44:56 PM                       Operator: dharas
Sample    : icv3951-500                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
31 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.07- 1.27
32	Chlordane {A}	0.033	0.037	-12.1	120	0.00	2.80- 3.00
33	Chlordane {B}	0.044	0.044	0.0	104	0.00	3.35- 3.55
34	Chlordane {C}	0.149	0.141	5.4	99	0.00	4.06- 4.26
35	Chlordane {D}	0.235	0.228	3.0	102	0.00	4.21- 4.41
36	Chlordane {E}	0.033	0.032	3.0	104	0.00	5.24- 5.44

***** Signal #2 *****

31 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.44- 1.64
32	Chlordane {A}	0.029	0.033	-13.8	118	0.00	3.76- 3.96
33	Chlordane {B}	0.030	0.031	-3.3	106	0.00	4.60- 4.80
34	Chlordane {C}	0.101	0.101	0.0	103	0.00	5.51- 5.71
35	Chlordane {D}	0.165	0.168	-1.8	105	0.00	5.74- 5.94
36	Chlordane {E}	0.031	0.032	-3.2	106	0.00	7.20- 7.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G121645.D 1PST3951.M Fri Apr 01 17:07:16 2016 RPT1

Initial Calibration Verification

Job Number: JC18649 **Sample:** G1G3951-ICV3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G121653.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD2B.CH
Acq On    : 4-1-16 03:02:33 PM                       Operator: dharas
Sample    : icv3951-500                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.07- 1.27
26	L8	Toxaphene{A}	0.018	0.017	5.6	96	0.00	4.72- 4.92
27	L8	Toxaphene{B}	0.047	0.044	6.4	95	0.00	5.33- 5.53
28	L8	Toxaphene{C}	0.036	0.033	8.3	93	0.00	5.50- 5.70
29	L8	Toxaphene{D}	0.036	0.033	8.3	91	0.00	5.83- 6.03
30	L8	Toxaphene{E}	0.032	0.030	6.3	96	0.00	6.47- 6.67

***** Signal #2 *****

25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.44- 1.64
26	L8	Toxaphene{A}	0.022	0.021	4.5	99	0.00	6.23- 6.43
27	L8	Toxaphene{B}	0.025	0.024	4.0	96	0.00	7.09- 7.29
28	L8	Toxaphene{C}	0.048	0.046	4.2	96	0.00	7.26- 7.46
29	L8	Toxaphene{D}	0.028	0.027	3.6	96	0.00	7.70- 7.90
30	L8	Toxaphene{E}	0.022	0.019	13.6	90	0.00	8.60- 8.80

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 1G121645.D 1PST3951.M       Fri Apr 01 17:07:17 2016   RPT1
```

Continuing Calibration Summary

Job Number: JC18649 **Sample:** G1G3968-CC3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122349.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122349.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122349.D\ECD2B.CH
Acq On    : 4-21-16 09:14:32 AM                      Operator: brittanp
Sample    : cc3951-50                                Inst    : GC1G
Misc      : op93213,g1g3968,15.3,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	81	0.00	1.14- 1.20
2	SAB	Tetrachloro-m-xylene	0.956	0.973	-1.8	86	0.00	1.72- 1.78
3	A	alpha-BHC	1.135	1.336	-17.7	90	0.00	2.19- 2.25
4	MA	gamma-BHC	1.083	1.265	-16.8	91	0.00	2.48- 2.54
5	MA	Heptachlor	1.163	1.377	-18.4	94	0.00	2.95- 3.01
6	B	beta-BHC	0.551	0.574	-4.2	87	0.00	2.56- 2.62
7	B	delta-BHC	0.954	1.122	-17.6	89	0.00	2.74- 2.80
8	MB	Aldrin	1.083	1.288	-18.9	94	0.00	3.27- 3.33
9	B	Heptachlor Epoxide	1.078	1.261	-17.0	94	0.00	3.96- 4.02
10	B	gamma-Chlordane	1.136	1.301	-14.5	97	0.00	4.12- 4.18
11	B	alpha-Chlordane	1.095	1.285	-17.4	96	0.00	4.28- 4.34
12	A	Endosulfan I	1.042	1.265	-21.4#	98	0.00	4.46- 4.52
13	B	4,4'-DDE	1.001	1.183	-18.2	93	0.00	4.40- 4.46
14	MA	Dieldrin	1.055	1.262	-19.6	95	0.00	4.77- 4.83
15	MA	Endrin	0.986	1.129	-14.5	94	-0.01	5.08- 5.14
16	A	4,4'-DDD	0.831	0.953	-14.7	92	0.00	5.22- 5.29
17	B	Endosulfan II	1.001	1.163	-16.2	94	0.00	5.40- 5.46
18	MA	4,4'-DDT	0.792	0.951	-20.1#	93	0.00	5.62- 5.68
19	B	Endrin Aldehyde	0.848	0.996	-17.5	97	0.00	6.03- 6.09
20	B	Endosulfan Sulfate	0.910	1.115	-22.5#	100	0.00	6.70- 6.76
21	A	Methoxychlor	0.534	0.604	-13.1	93	0.00	6.41- 6.47
22		Mirex	1.011	1.150	-13.7	96	-0.01	6.50- 6.56
23	B	Endrin Ketone	1.062	1.308	-23.2#	100	-0.01	7.13- 7.19
24	SA	Decachlorobiphenyl	1.320	1.431	-8.4	93	-0.01	8.90- 8.96

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	87	0.00	1.51- 1.57
2	SAB	Tetrachloro-m-xylene	0.787	0.793	-0.8	91	0.00	2.35- 2.41
3	A	alpha-BHC	1.187	1.233	-3.9	94	0.00	3.02- 3.08
4	MA	gamma-BHC	1.067	1.091	-2.2	93	0.00	3.44- 3.50
5	MA	Heptachlor	0.959	0.969	-1.0	92	0.00	4.02- 4.08
6	B	beta-BHC	0.453	0.441	2.6	89	0.00	3.53- 3.59
7	B	delta-BHC	0.980	1.040	-6.1	93	0.00	3.93- 3.99
8	MB	Aldrin	0.959	0.968	-0.9	93	0.00	4.47- 4.53
9	B	Heptachlor Epoxide	0.868	0.864	0.5	91	0.00	5.29- 5.35
10	B	gamma-Chlordane	0.868	0.855	1.5	90	0.00	5.58- 5.64
11	B	alpha-Chlordane	0.840	0.814	3.1	90	0.00	5.80- 5.86
12	A	Endosulfan I	0.820	0.810	1.2	91	0.00	5.89- 5.95

Continuing Calibration Summary

Job Number: JC18649 **Sample:** G1G3968-CC3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122349.D
Project: BMSMC, Building 5 Area, PR

13	B	4,4'-DDE	0.864	0.829	4.1	89	0.00	6.07- 6.13
14	MA	Dieldrin	0.918	0.878	4.4	90	0.00	6.33- 6.39
15	MA	Endrin	0.796	0.755	5.2	87	-0.01	6.83- 6.89
16	A	4,4'-DDD	0.734	0.703	4.2	87	0.00	7.02- 7.08
17	B	Endosulfan II	0.793	0.732	7.7	86	0.00	7.19- 7.25
18	MA	4,4'-DDT	0.574	0.561	2.3	79	0.00	7.55- 7.61
19	B	Endrin Aldehyde	0.615	0.579	5.9	84	-0.01	7.76- 7.82
20	B	Endosulfan Sulfate	0.667	0.623	6.6	85	-0.01	8.23- 8.29
21	A	Methoxychlor	0.305	0.270	11.5	76	0.00	8.80- 8.86
22		Mirex	0.510	0.449	12.0	79	-0.01	9.12- 9.18
23	B	Endrin Ketone	0.710	0.677	4.6	83	-0.01	9.19- 9.25
24	SA	Decachlorobiphenyl	0.517	0.371	28.2#	67	-0.01	10.84-10.90

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G121645.D 1PST3951.M Thu Apr 21 11:50:53 2016 RPT1

8.9.6

8

Continuing Calibration Summary

Job Number: JC18649 **Sample:** G1G3968-CC3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122388.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122388.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122388.D\ECD2B.CH
Acq On    : 4-21-16 06:05:53 PM                      Operator: dharas
Sample    : cc3951-50                                Inst    : GC1G
Misc      : op93252,g1g3968,15.4,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	81	0.00	1.13- 1.19
2	SAB	Tetrachloro-m-xylene	0.956	0.997	-4.3	87	0.00	1.71- 1.77
3	A	alpha-BHC	1.135	1.347	-18.7	91	-0.01	2.18- 2.24
4	MA	gamma-BHC	1.083	1.273	-17.5	91	-0.01	2.47- 2.53
5	MA	Heptachlor	1.163	1.393	-19.8	95	-0.01	2.94- 3.00
6	B	beta-BHC	0.551	0.570	-3.4	86	0.00	2.55- 2.61
7	B	delta-BHC	0.954	1.071	-12.3	84	0.00	2.73- 2.79
8	MB	Aldrin	1.083	1.316	-21.5#	95	-0.01	3.26- 3.32
9	B	Heptachlor Epoxide	1.078	1.302	-20.8#	97	-0.01	3.96- 4.02
10	B	gamma-Chlordane	1.136	1.289	-13.5	95	-0.01	4.11- 4.17
11	B	alpha-Chlordane	1.095	1.300	-18.7	96	-0.01	4.28- 4.34
12	A	Endosulfan I	1.042	1.365	-31.0#	105	-0.01	4.45- 4.51
13	B	4,4'-DDE	1.001	1.085	-8.4	85	0.00	4.40- 4.46
14	MA	Dieldrin	1.055	1.291	-22.4#	97	-0.01	4.77- 4.83
15	MA	Endrin	0.986	1.189	-20.6#	99	-0.02	5.08- 5.14
16	A	4,4'-DDD	0.831	0.872	-4.9	84	0.00	5.23- 5.30
17	B	Endosulfan II	1.001	1.171	-17.0	94	-0.01	5.40- 5.46
18	MA	4,4'-DDT	0.792	0.891	-12.5	86	0.00	5.63- 5.69
19	B	Endrin Aldehyde	0.848	0.983	-15.9	95	-0.01	6.02- 6.08
20	B	Endosulfan Sulfate	0.910	1.124	-23.5#	100	-0.01	6.70- 6.76
21	A	Methoxychlor	0.534	0.533	0.2	82	0.00	6.42- 6.48
22		Mirex	1.011	1.245	-23.1#	103	-0.02	6.50- 6.56
23	B	Endrin Ketone	1.062	1.244	-17.1	95	-0.01	7.13- 7.19
24	SA	Decachlorobiphenyl	1.320	1.681	-27.3#	109	-0.01	8.90- 8.96
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	77	0.00	1.06- 1.26
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	80	0.00	1.06- 1.26
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

Continuing Calibration Summary

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3968-CC3951
Lab FileID: 1G122388.D

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	86	0.00	1.50- 1.56
2	SAB	Tetrachloro-m-xylene	0.787	0.814	-3.4	93	0.00	2.34- 2.40
3	A	alpha-BHC	1.187	1.263	-6.4	96	0.00	3.01- 3.07
4	MA	gamma-BHC	1.067	1.123	-5.2	96	0.00	3.44- 3.50
5	MA	Heptachlor	0.959	1.016	-5.9	96	-0.01	4.01- 4.07
6	B	beta-BHC	0.453	0.480	-6.0	96	0.00	3.53- 3.59
7	B	delta-BHC	0.980	1.058	-8.0	95	0.00	3.92- 3.98
8	MB	Aldrin	0.959	1.004	-4.7	96	-0.01	4.46- 4.52
9	B	Heptachlor Epoxide	0.868	0.908	-4.6	95	-0.01	5.29- 5.35
10	B	gamma-Chlordane	0.868	0.885	-2.0	93	-0.01	5.57- 5.63
11	B	alpha-Chlordane	0.840	0.851	-1.3	94	-0.01	5.80- 5.86
12	A	Endosulfan I	0.820	0.845	-3.0	94	-0.01	5.89- 5.95
13	B	4,4'-DDE	0.864	0.886	-2.5	94	0.00	6.07- 6.13
14	MA	Dieldrin	0.918	0.922	-0.4	94	-0.01	6.32- 6.38
15	MA	Endrin	0.796	0.829	-4.1	95	-0.01	6.83- 6.89
16	A	4,4'-DDD	0.734	0.762	-3.8	94	0.00	7.02- 7.08
17	B	Endosulfan II	0.793	0.816	-2.9	95	-0.01	7.18- 7.24
18	MA	4,4'-DDT	0.574	0.583	-1.6	82	0.00	7.55- 7.61
19	B	Endrin Aldehyde	0.615	0.631	-2.6	91	-0.01	7.76- 7.82
20	B	Endosulfan Sulfate	0.667	0.705	-5.7	96	-0.01	8.23- 8.29
21	A	Methoxychlor	0.305	0.286	6.2	80	0.00	8.81- 8.87
22		Mirex	0.510	0.534	-4.7	93	-0.02	9.11- 9.17
23	B	Endrin Ketone	0.710	0.734	-3.4	90	-0.01	9.19- 9.25
24	SA	Decachlorobiphenyl	0.517	0.553	-7.0	99	-0.01	10.84-10.90
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	83	0.00	1.43- 1.63
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	85	0.00	1.43- 1.63
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G121645.D 1PST3951.M Fri Apr 22 10:36:14 2016 RPT1

8.9.7

8

Initial Calibration Summary

Job Number: JC18649 **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: JC18649 **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

8.9.8

8

Initial Calibration Verification

Job Number: JC18649 **Sample:** G6G987-ICV987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34140.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\987\6g34140.D\ECD1A.CH     Vial: 13
Signal #2 : C:\msdchem\1\DATA\987\6g34140.D\ECD2B.CH
Acq On    : 14 Apr 2016   6:33 pm                    Operator: dharas
Sample    : icv987-25                                Inst    : HP G1530A
Misc      : op92908,g6g987,6.8,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Apr 18 11:27:24 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.28- 1.34
2	SAB	Tetrachloro-m-xylene	0.916	0.874	4.6	98	0.00	1.96- 2.02
3	A	alpha-BHC	1.181	1.114	5.7	94	0.00	2.47- 2.53
4	MA	gamma-BHC	1.100	1.046	4.9	95	0.00	2.79- 2.85
5	MA	Heptachlor	1.104	1.038	6.0	96	0.00	3.31- 3.37
6	B	beta-BHC	0.540	0.507	6.1	95	0.00	2.87- 2.93
7	B	delta-BHC	1.025	1.045	-2.0	101	0.00	3.06- 3.12
8	MB	Aldrin	1.020	0.950	6.9	95	0.00	3.66- 3.73
9	B	Heptachlor Epoxide	0.955	0.899	5.9	96	0.00	4.41- 4.47
10	B	gamma-Chlordane	0.961	0.924	3.9	98	0.00	4.59- 4.65
11	B	alpha-Chlordane	0.954	0.904	5.2	97	0.00	4.77- 4.83
12	A	Endosulfan I	0.941	0.877	6.8	95	0.00	4.95- 5.01
13	B	4,4'-DDE	0.790	0.718	9.1	93	0.00	4.90- 4.96
14	MA	Dieldrin	0.931	0.881	5.4	97	0.00	5.30- 5.36
15	MA	Endrin	0.844	0.820	2.8	99	-0.01	5.64- 5.70
16	A	4,4'-DDD	0.668	0.637	4.6	100	-0.01	5.79- 5.85
17	B	Endosulfan II	0.833	0.789	5.3	99	0.00	5.98- 6.04
18	MA	4,4'-DDT	0.727	0.694	4.5	98	-0.01	6.24- 6.30
19	B	Endrin Aldehyde	0.679	0.694	-2.2	105	-0.01	6.65- 6.71
20	B	Endosulfan Sulfate	0.732	0.724	1.1	102	-0.01	7.39- 7.45
21	A	Methoxychlor	0.436	0.413	5.3	95	-0.01	7.11- 7.17
22		Mirex		----------NA----------				
23	B	Endrin Ketone	0.870	0.850	2.3	99	-0.01	7.87- 7.93
24	SAB	Decachlorobiphenyl	0.797	0.781	2.0	100	-0.01	9.89- 9.95
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.28- 1.34
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.28- 1.34
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

Initial Calibration Verification

Job Number: JC18649 **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

8.9.9 8

Initial Calibration Verification

Job Number: JC18649 **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 *****

8.9.10

8

Initial Calibration Verification

Job Number: JC18649 **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

8.9.10

8

Initial Calibration Verification

Job Number: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G6G987-ICV987
Lab FileID: 6G34142.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\987\6g34142.D\ECD1A.CH     Vial: 15
Signal #2 : C:\msdchem\1\DATA\987\6g34142.D\ECD2B.CH
Acq On    : 14 Apr 2016   7:06 pm                    Operator: dharas
Sample    : icv987-500                               Inst    : HP G1530A
Misc      : op92908,g6g987,6.8,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Apr 18 11:27:24 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.28- 1.34
2	SAB	Tetrachloro-m-xylene	0.916	0.850	7.2	92	0.00	1.96- 2.02
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex		----------NA----------				
23	B	Endrin Ketone		----------NA----------				
24	SAB	Decachlorobiphenyl	0.797	0.776	2.6	99	-0.01	9.90- 9.96
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	96	0.00	1.28- 1.34
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.28- 1.34
32		Chlordane {A}	0.031	0.036	-16.1	114	0.00	3.15- 3.35
33		Chlordane {B}	0.041	0.040	2.4	97	0.00	3.75- 3.95
34		Chlordane {C}	0.131	0.129	1.5	96	0.00	4.52- 4.72
35		Chlordane {D}	0.206	0.209	-1.5	100	0.00	4.69- 4.89
36		Chlordane {E}	0.032	0.030	6.3	91	0.00	5.82- 6.02

***** Signal #2 *****

Initial Calibration Verification

Job Number: JC18649 **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

8.9.11

8

Initial Calibration Verification

Job Number: JC18649 **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: JC18649 **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

8.9.12

8

Continuing Calibration Summary

Job Number: JC18649 **Sample:** G6G995-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34372.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\995\6g34372.D\ECD1A.CH     Vial: 2
Signal #2 : C:\msdchem\1\DATA\995\6g34372.D\ECD2B.CH
Acq On    : 25 Apr 2016  10:07 am                    Operator: brittanp
Sample    : cc987-25                                 Inst    : HP G1530A
Misc      : op93284,g6g995,15.2,,,10,10              Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 22 09:12:46 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	94	0.00	1.27- 1.33
2	SAB	Tetrachloro-m-xylene	0.916	0.918	-0.2	98	0.00	1.95- 2.01
3	A	alpha-BHC	1.181	1.224	-3.6	98	0.00	2.46- 2.52
4	MA	gamma-BHC	1.100	1.130	-2.7	98	0.00	2.78- 2.84
5	MA	Heptachlor	1.104	1.108	-0.4	97	0.00	3.31- 3.37
6	B	beta-BHC	0.540	0.539	0.2	96	0.00	2.86- 2.92
7	B	delta-BHC	1.025	1.037	-1.2	95	0.00	3.05- 3.11
8	MB	Aldrin	1.020	1.024	-0.4	97	0.00	3.66- 3.73
9	B	Heptachlor Epoxide	0.955	0.956	-0.1	97	0.00	4.41- 4.47
10	B	gamma-Chlordane	0.961	0.930	3.2	93	0.00	4.58- 4.64
11	B	alpha-Chlordane	0.954	0.930	2.5	94	0.00	4.77- 4.83
12	A	Endosulfan I	0.941	0.908	3.5	94	0.00	4.95- 5.01
13	B	4,4'-DDE	0.790	0.793	-0.4	98	0.00	4.90- 4.96
14	MA	Dieldrin	0.931	0.923	0.9	96	0.00	5.29- 5.35
15	MA	Endrin	0.844	0.850	-0.7	97	0.00	5.63- 5.69
16	A	4,4'-DDD	0.668	0.680	-1.8	101	0.00	5.78- 5.84
17	B	Endosulfan II	0.833	0.823	1.2	98	0.00	5.97- 6.03
18	MA	4,4'-DDT	0.727	0.721	0.8	96	0.00	6.23- 6.29
19	B	Endrin Aldehyde	0.679	0.669	1.5	96	0.00	6.64- 6.70
20	B	Endosulfan Sulfate	0.732	0.742	-1.4	99	0.00	7.38- 7.44
21	A	Methoxychlor	0.436	0.440	-0.9	96	0.00	7.10- 7.16
22		Mirex	0.746	0.732	1.9	94	0.00	7.23- 7.29
23	B	Endrin Ketone	0.870	0.850	2.3	94	0.00	7.85- 7.91
24	SAB	Decachlorobiphenyl	0.797	0.761	4.5	93	0.00	9.89- 9.95

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.54- 1.60
2	SAB	Tetrachloro-m-xylene	0.903	0.903	0.0	110	0.00	2.44- 2.50
3	A	alpha-BHC	1.177	1.187	-0.8	111	0.00	3.15- 3.21
4	MA	gamma-BHC	1.102	1.101	0.1	110	0.00	3.60- 3.66
5	MA	Heptachlor	1.114	1.037	6.9	105	0.00	4.21- 4.27
6	B	beta-BHC	0.537	0.519	3.4	108	0.00	3.69- 3.75
7	B	delta-BHC	1.027	1.019	0.8	109	0.00	4.11- 4.17
8	MB	Aldrin	1.036	0.992	4.2	107	0.00	4.68- 4.74
9	B	Heptachlor Epoxide	0.965	0.914	5.3	104	0.00	5.56- 5.62
10	B	gamma-Chlordane	0.944	0.889	5.8	105	0.00	5.87- 5.93
11	B	alpha-Chlordane	0.937	0.886	5.4	105	0.00	6.11- 6.17
12	A	Endosulfan I	0.911	0.857	5.9	106	0.00	6.21- 6.27

Continuing Calibration Summary

Job Number: JC18649 **Sample:** G6G995-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34372.D
Project: BMSMC, Building 5 Area, PR

13	B	4,4'-DDE	0.808	0.798	1.2	119	0.00	6.41- 6.47
14	MA	Dieldrin	0.930	0.870	6.5	106	0.00	6.68- 6.74
15	MA	Endrin	0.845	0.784	7.2	106	0.00	7.23- 7.29
16	A	4,4'-DDD	0.698	0.694	0.6	108	0.00	7.44- 7.50
17	B	Endosulfan II	0.827	0.792	4.2	109	0.00	7.61- 7.67
18	MA	4,4'-DDT	0.633	0.595	6.0	106	0.00	8.03- 8.09
19	B	Endrin Aldehyde	0.670	0.622	7.2	104	0.00	8.24- 8.30
20	B	Endosulfan Sulfate	0.727	0.671	7.7	105	0.00	8.75- 8.81
21	A	Methoxychlor	0.349	0.336	3.7	104	0.00	9.40- 9.46
22		Mirex	0.716	0.639	10.8	103	0.00	9.71- 9.77
23	B	Endrin Ketone	0.850	0.762	10.4	102	0.00	9.80- 9.86
24	SAB	Decachlorobiphenyl	0.679	0.616	9.3	97	0.00	11.73-11.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34134.D 6PST987.M Mon Apr 25 11:05:57 2016

8.9.13

8

Continuing Calibration Summary

Job Number: JC18649 **Sample:** G6G995-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34394.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\995\6g34394.D\ECD1A.CH     Vial: 4
Signal #2 : C:\msdchem\1\DATA\995\6g34394.D\ECD2B.CH
Acq On    : 25 Apr 2016   5:32 pm                    Operator: dharas
Sample    : cc987-50                                 Inst    : HP G1530A
Misc      : op93322,g6g995,15.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Apr 18 11:27:24 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.27- 1.33
2	SAB	Tetrachloro-m-xylene	0.916	0.899	1.9	98	0.00	1.95- 2.01
3	A	alpha-BHC	1.181	1.291	-9.3	98	0.00	2.46- 2.52
4	MA	gamma-BHC	1.100	1.175	-6.8	98	-0.01	2.78- 2.84
5	MA	Heptachlor	1.104	1.148	-4.0	99	-0.01	3.31- 3.37
6	B	beta-BHC	0.540	0.527	2.4	97	-0.01	2.86- 2.92
7	B	delta-BHC	1.025	1.116	-8.9	97	-0.01	3.05- 3.11
8	MB	Aldrin	1.020	1.078	-5.7	99	-0.01	3.65- 3.72
9	B	Heptachlor Epoxide	0.955	0.988	-3.5	99	-0.02	4.41- 4.47
10	B	gamma-Chlordane	0.961	0.992	-3.2	99	-0.01	4.58- 4.64
11	B	alpha-Chlordane	0.954	0.975	-2.2	99	-0.01	4.76- 4.82
12	A	Endosulfan I	0.941	0.963	-2.3	99	-0.02	4.95- 5.01
13	B	4,4'-DDE	0.790	0.847	-7.2	100	-0.02	4.89- 4.95
14	MA	Dieldrin	0.931	0.976	-4.8	100	-0.02	5.29- 5.35
15	MA	Endrin	0.844	0.893	-5.8	101	-0.02	5.63- 5.69
16	A	4,4'-DDD	0.668	0.724	-8.4	101	-0.02	5.78- 5.84
17	B	Endosulfan II	0.833	0.864	-3.7	99	-0.02	5.97- 6.03
18	MA	4,4'-DDT	0.727	0.761	-4.7	100	-0.02	6.23- 6.29
19	B	Endrin Aldehyde	0.679	0.694	-2.2	101	-0.02	6.64- 6.70
20	B	Endosulfan Sulfate	0.732	0.765	-4.5	103	-0.02	7.38- 7.44
21	A	Methoxychlor	0.436	0.445	-2.1	100	-0.03	7.09- 7.15
22		Mirex	0.746	0.730	2.1	99	-0.02	7.23- 7.29
23	B	Endrin Ketone	0.870	0.945	-8.6	103	-0.02	7.85- 7.91
24	SAB	Decachlorobiphenyl	0.797	0.765	4.0	98	-0.02	9.89- 9.95
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	96	0.00	1.27- 1.33
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.27- 1.33
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

Continuing Calibration Summary

Job Number: JC18649 **Sample:** G6G995-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34394.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.55- 1.61
2	SAB	Tetrachloro-m-xylene	0.903	0.863	4.4	103	0.00	2.44- 2.50
3	A	alpha-BHC	1.177	1.181	-0.3	102	-0.01	3.15- 3.21
4	MA	gamma-BHC	1.102	1.074	2.5	100	-0.01	3.60- 3.66
5	MA	Heptachlor	1.114	1.001	10.1	96	-0.02	4.21- 4.27
6	B	beta-BHC	0.537	0.493	8.2	97	-0.01	3.69- 3.75
7	B	delta-BHC	1.027	1.010	1.7	101	-0.01	4.11- 4.17
8	MB	Aldrin	1.036	0.958	7.5	99	-0.02	4.68- 4.74
9	B	Heptachlor Epoxide	0.965	0.880	8.8	98	-0.02	5.56- 5.62
10	B	gamma-Chlordane	0.944	0.864	8.5	99	-0.02	5.87- 5.93
11	B	alpha-Chlordane	0.937	0.863	7.9	100	-0.02	6.11- 6.17
12	A	Endosulfan I	0.911	0.834	8.5	100	-0.02	6.21- 6.27
13	B	4,4'-DDE	0.808	0.789	2.4	100	-0.02	6.41- 6.47
14	MA	Dieldrin	0.930	0.862	7.3	101	-0.02	6.68- 6.74
15	MA	Endrin	0.845	0.779	7.8	101	-0.02	7.23- 7.29
16	A	4,4'-DDD	0.698	0.705	-1.0	103	-0.03	7.44- 7.50
17	B	Endosulfan II	0.827	0.795	3.9	102	-0.02	7.61- 7.67
18	MA	4,4'-DDT	0.633	0.598	5.5	98	-0.03	8.02- 8.08
19	B	Endrin Aldehyde	0.670	0.637	4.9	102	-0.03	8.24- 8.30
20	B	Endosulfan Sulfate	0.727	0.687	5.5	104	-0.03	8.75- 8.81
21	A	Methoxychlor	0.349	0.333	4.6	98	-0.03	9.40- 9.46
22		Mirex	0.716	0.631	11.9	101	-0.03	9.71- 9.77
23	B	Endrin Ketone	0.850	0.828	2.6	106	-0.03	9.80- 9.86
24	SAB	Decachlorobiphenyl	0.679	0.633	6.8	98	-0.02	11.73-11.79
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.55- 1.61
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.48- 1.68
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34135.D 6PST987.M Tue Apr 26 12:06:47 2016

8.9.14

8

Continuing Calibration Summary

Job Number: JC18649 **Sample:** G6G995-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34403.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\995\6g34403.D\ECD1A.CH     Vial: 2
Signal #2 : C:\msdchem\1\DATA\995\6g34403.D\ECD2B.CH
Acq On    : 25 Apr 2016   8:00 pm                    Operator: dharas
Sample    : cc987-25                                 Inst    : HP G1530A
Misc      : op93251,g6g995,500,,,5,1                 Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Apr 18 11:27:24 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.27- 1.33
2	SAB	Tetrachloro-m-xylene	0.916	0.912	0.4	109	0.00	1.95- 2.01
3	A	alpha-BHC	1.181	1.234	-4.5	111	0.00	2.46- 2.52
4	MA	gamma-BHC	1.100	1.143	-3.9	110	-0.01	2.78- 2.84
5	MA	Heptachlor	1.104	1.138	-3.1	111	-0.01	3.31- 3.37
6	B	beta-BHC	0.540	0.537	0.6	107	0.00	2.86- 2.92
7	B	delta-BHC	1.025	1.069	-4.3	109	-0.01	3.05- 3.11
8	MB	Aldrin	1.020	1.063	-4.2	113	-0.01	3.66- 3.73
9	B	Heptachlor Epoxide	0.955	0.994	-4.1	112	-0.01	4.41- 4.47
10	B	gamma-Chlordane	0.961	1.001	-4.2	112	-0.01	4.58- 4.64
11	B	alpha-Chlordane	0.954	1.000	-4.8	113	-0.01	4.76- 4.82
12	A	Endosulfan I	0.941	0.988	-5.0	114	-0.01	4.95- 5.01
13	B	4,4'-DDE	0.790	0.805	-1.9	111	-0.01	4.89- 4.95
14	MA	Dieldrin	0.931	0.972	-4.4	113	-0.02	5.29- 5.35
15	MA	Endrin	0.844	0.875	-3.7	112	-0.02	5.63- 5.69
16	A	4,4'-DDD	0.668	0.673	-0.7	112	-0.02	5.78- 5.84
17	B	Endosulfan II	0.833	0.855	-2.6	113	-0.02	5.97- 6.03
18	MA	4,4'-DDT	0.727	0.728	-0.1	109	-0.02	6.23- 6.29
19	B	Endrin Aldehyde	0.679	0.712	-4.9	115	-0.02	6.64- 6.70
20	B	Endosulfan Sulfate	0.732	0.780	-6.6	117	-0.02	7.38- 7.44
21	A	Methoxychlor	0.436	0.447	-2.5	109	-0.02	7.10- 7.16
22		Mirex	0.746	0.787	-5.5	114	-0.02	7.23- 7.29
23	B	Endrin Ketone	0.870	0.975	-12.1	120	-0.02	7.86- 7.92
24	SAB	Decachlorobiphenyl	0.797	0.807	-1.3	110	-0.02	9.89- 9.95

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	1.55- 1.61
2	SAB	Tetrachloro-m-xylene	0.903	0.909	-0.7	117	0.00	2.44- 2.50
3	A	alpha-BHC	1.177	1.204	-2.3	119	-0.01	3.15- 3.21
4	MA	gamma-BHC	1.102	1.113	-1.0	118	-0.01	3.60- 3.66
5	MA	Heptachlor	1.114	1.072	3.8	115	-0.02	4.21- 4.27
6	B	beta-BHC	0.537	0.523	2.6	115	-0.01	3.69- 3.75
7	B	delta-BHC	1.027	1.044	-1.7	119	-0.01	4.11- 4.17
8	MB	Aldrin	1.036	1.034	0.2	118	-0.02	4.68- 4.74
9	B	Heptachlor Epoxide	0.965	0.969	-0.4	117	-0.02	5.56- 5.62
10	B	gamma-Chlordane	0.944	0.942	0.2	118	-0.02	5.87- 5.93
11	B	alpha-Chlordane	0.937	0.946	-1.0	119	-0.02	6.11- 6.17
12	A	Endosulfan I	0.911	0.915	-0.4	120	-0.02	6.21- 6.27

Continuing Calibration Summary

Job Number: JC18649 **Sample:** G6G995-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34403.D
Project: BMSMC, Building 5 Area, PR

13	B	4,4'-DDE	0.808	0.842	-4.2	133	-0.02	6.41-	6.47
14	MA	Dieldrin	0.930	0.923	0.8	119	-0.02	6.68-	6.74
15	MA	Endrin	0.845	0.812	3.9	116	-0.02	7.23-	7.29
16	A	4,4'-DDD	0.698	0.747	-7.0	123	-0.02	7.44-	7.50
17	B	Endosulfan II	0.827	0.857	-3.6	125	-0.02	7.61-	7.67
18	MA	4,4'-DDT	0.633	0.612	3.3	115	-0.02	8.03-	8.09
19	B	Endrin Aldehyde	0.670	0.690	-3.0	122	-0.03	8.24-	8.30
20	B	Endosulfan Sulfate	0.727	0.737	-1.4	122	-0.03	8.75-	8.81
21	A	Methoxychlor	0.349	0.342	2.0	112	-0.03	9.40-	9.46
22		Mirex	0.716	0.704	1.7	120	-0.03	9.71-	9.77
23	B	Endrin Ketone	0.850	0.885	-4.1	126	-0.03	9.80-	9.86
24	SAB	Decachlorobiphenyl	0.679	0.670	1.3	111	-0.02	11.73-	11.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34134.D 6PST987.M Tue Apr 26 12:07:03 2016

8.9.15

8

Continuing Calibration Summary

Job Number: JC18649 **Sample:** G6G996-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34416.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\996\6g34416.D\ECD1A.CH     Vial: 4
Signal #2 : C:\msdchem\1\DATA\996\6g34416.D\ECD2B.CH
Acq On    : 26 Apr 2016   7:53 am                    Operator: brittanp
Sample    : cc987-50                                 Inst    : HP G1530A
Misc      : op93322,g6g996,16.0,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Apr 18 11:27:24 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.02	1.30- 1.36
2	SAB	Tetrachloro-m-xylene	0.916	0.881	3.8	101	0.00	1.97- 2.03
3	A	alpha-BHC	1.181	1.256	-6.4	101	0.00	2.48- 2.54
4	MA	gamma-BHC	1.100	1.148	-4.4	102	0.00	2.79- 2.85
5	MA	Heptachlor	1.104	1.055	4.4	96	0.00	3.32- 3.38
6	B	beta-BHC	0.540	0.529	2.0	103	0.00	2.87- 2.93
7	B	delta-BHC	1.025	1.064	-3.8	98	0.00	3.06- 3.12
8	MB	Aldrin	1.020	0.997	2.3	98	0.00	3.66- 3.73
9	B	Heptachlor Epoxide	0.955	0.908	4.9	97	-0.01	4.41- 4.47
10	B	gamma-Chlordane	0.961	0.862	10.3	91	0.00	4.59- 4.65
11	B	alpha-Chlordane	0.954	0.877	8.1	94	0.00	4.77- 4.83
12	A	Endosulfan I	0.941	0.872	7.3	95	-0.01	4.95- 5.01
13	B	4,4'-DDE	0.790	0.781	1.1	98	-0.01	4.90- 4.96
14	MA	Dieldrin	0.931	0.900	3.3	97	-0.01	5.29- 5.35
15	MA	Endrin	0.844	0.840	0.5	100	-0.01	5.63- 5.69
16	A	4,4'-DDD	0.668	0.659	1.3	98	-0.02	5.78- 5.84
17	B	Endosulfan II	0.833	0.806	3.2	98	-0.01	5.98- 6.04
18	MA	4,4'-DDT	0.727	0.742	-2.1	103	-0.02	6.23- 6.29
19	B	Endrin Aldehyde	0.679	0.676	0.4	104	-0.02	6.65- 6.71
20	B	Endosulfan Sulfate	0.732	0.741	-1.2	105	-0.02	7.38- 7.44
21	A	Methoxychlor	0.436	0.433	0.7	103	-0.02	7.10- 7.16
22		Mirex	0.746	0.673	9.8	97	-0.02	7.23- 7.29
23	B	Endrin Ketone	0.870	0.914	-5.1	106	-0.02	7.86- 7.92
24	SAB	Decachlorobiphenyl	0.797	0.728	8.7	99	-0.02	9.89- 9.95

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.02	1.57- 1.63
2	SAB	Tetrachloro-m-xylene	0.903	0.849	6.0	106	0.00	2.46- 2.52
3	A	alpha-BHC	1.177	1.162	1.3	105	0.00	3.15- 3.21
4	MA	gamma-BHC	1.102	1.063	3.5	104	0.00	3.61- 3.67
5	MA	Heptachlor	1.114	0.986	11.5	98	0.00	4.21- 4.27
6	B	beta-BHC	0.537	0.497	7.4	102	0.00	3.70- 3.76
7	B	delta-BHC	1.027	1.030	-0.3	107	0.00	4.11- 4.17
8	MB	Aldrin	1.036	0.916	11.6	99	-0.01	4.69- 4.75
9	B	Heptachlor Epoxide	0.965	0.843	12.6	98	-0.02	5.57- 5.63
10	B	gamma-Chlordane	0.944	0.819	13.2	98	-0.02	5.87- 5.93
11	B	alpha-Chlordane	0.937	0.814	13.1	98	-0.02	6.12- 6.18
12	A	Endosulfan I	0.911	0.788	13.5	99	-0.02	6.21- 6.27

Continuing Calibration Summary

Job Number: JC18649 **Sample:** G6G996-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34416.D
Project: BMSMC, Building 5 Area, PR

13	B	4,4'-DDE	0.808	0.757	6.3	100	-0.02	6.41- 6.47
14	MA	Dieldrin	0.930	0.813	12.6	99	-0.02	6.68- 6.74
15	MA	Endrin	0.845	0.757	10.4	102	-0.02	7.23- 7.29
16	A	4,4'-DDD	0.698	0.657	5.9	100	-0.02	7.45- 7.51
17	B	Endosulfan II	0.827	0.753	8.9	101	-0.02	7.61- 7.67
18	MA	4,4'-DDT	0.633	0.623	1.6	107	-0.02	8.02- 8.08
19	B	Endrin Aldehyde	0.670	0.613	8.5	102	-0.03	8.24- 8.30
20	B	Endosulfan Sulfate	0.727	0.673	7.4	106	-0.03	8.75- 8.81
21	A	Methoxychlor	0.349	0.356	-2.0	109	-0.03	9.40- 9.46
22		Mirex	0.716	0.601	16.1	101	-0.03	9.71- 9.77
23	B	Endrin Ketone	0.850	0.818	3.8	109	-0.03	9.80- 9.86
24	SAB	Decachlorobiphenyl	0.679	0.613	9.7	99	-0.02	11.73-11.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34135.D 6PST987.M Tue Apr 26 13:20:47 2016

8.9.16

8

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122360.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122360.D\ECD2B.CH
Acq On    : 21 Apr 2016  12:37 pm                    Operator: brittanp
Sample    : jc18649-1                                Inst    : GC1G
Misc      : op93237,g1g3968,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21 12:53 2016  Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2-nitrob	1.17	1.54	59431714	801.1E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.17	1.54	59431714	801.1E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.17	1.54	59431714	801.1E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.75	2.38	41753150	482.3E6	36.750	38.258
Spiked Amount 40.000	Range 30 - 150		Recovery =		91.88%	95.64%
24) SA Decachlorobiphen	8.94	10.87	45716032	174.5E6	29.130	21.046
Spiked Amount 40.000			Recovery =		72.82%	52.62%
Target Compounds						

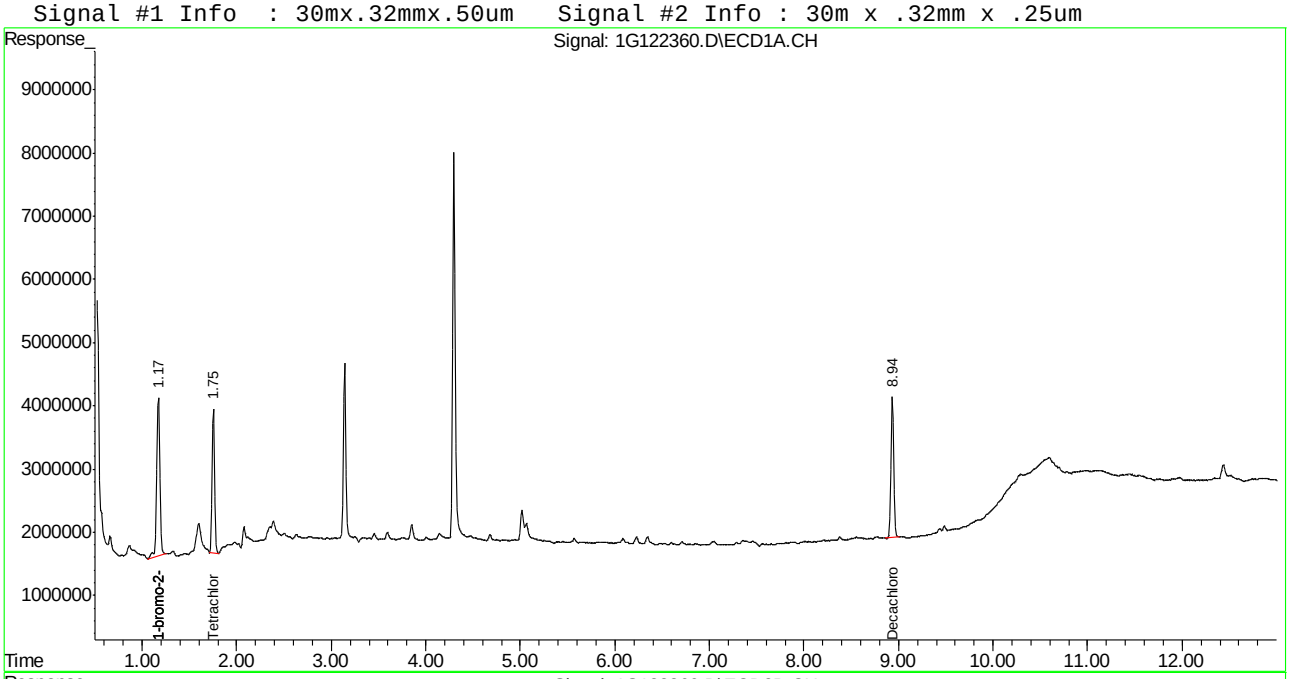
(f)=RT Delta > 1/2 Window (m)=manual int.

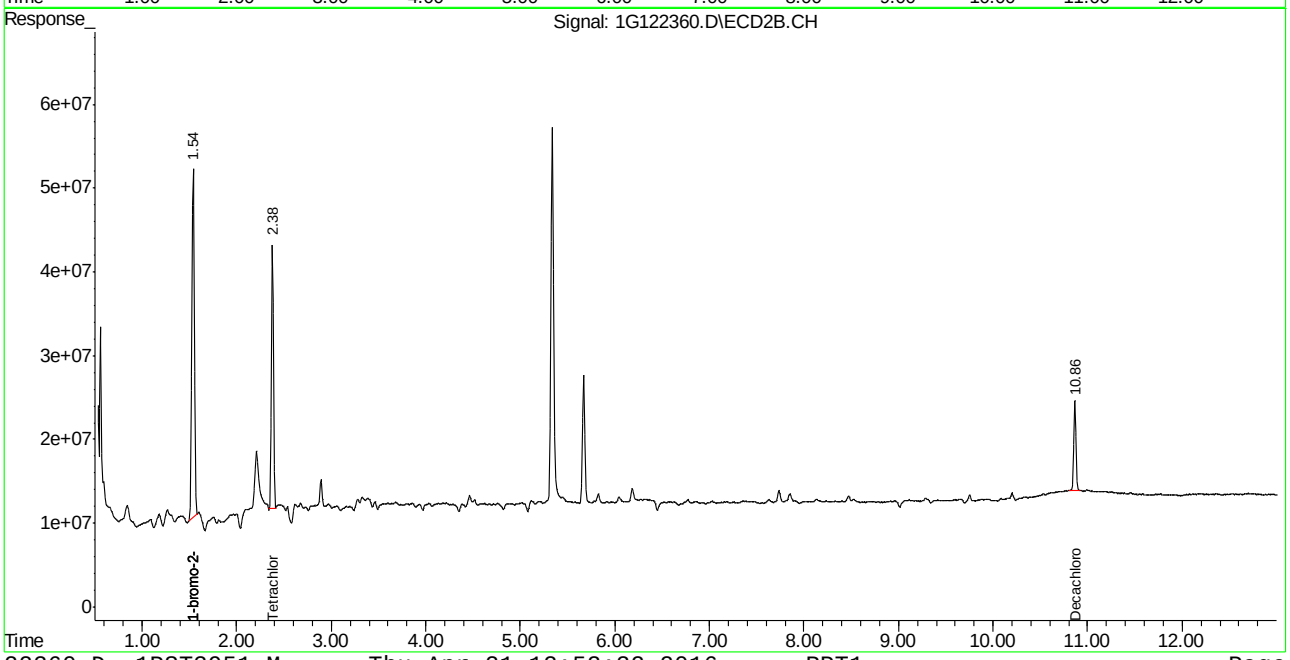
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122360.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122360.D\ECD2B.CH
Acq On : 21 Apr 2016 12:37 pm Operator: brittanp
Sample : jc18649-1 Inst : GC1G
Misc : op93237,g1g3968,300,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 12:53 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122361.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122361.D\ECD2B.CH
Acq On    : 21 Apr 2016  12:54 pm                    Operator: brittanp
Sample    : jc18649-2                                Inst    : GC1G
Misc      : op93237,g1g3968,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21 13:12 2016  Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2-nitrob	1.16	1.53	60482160	831.0E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.16	1.53	60482160	831.0E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.16	1.53	60482160	831.0E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.75	2.38	40178932	458.9E6	34.750	35.095
Spiked Amount 40.000	Range 30 - 150		Recovery =		86.88%	87.74%
24) SA Decachlorobiphen	8.93	10.87	42633090	157.7E6	26.694	18.331
Spiked Amount 40.000			Recovery =		66.73%	45.83%
Target Compounds						

(f)=RT Delta > 1/2 Window (m)=manual int.

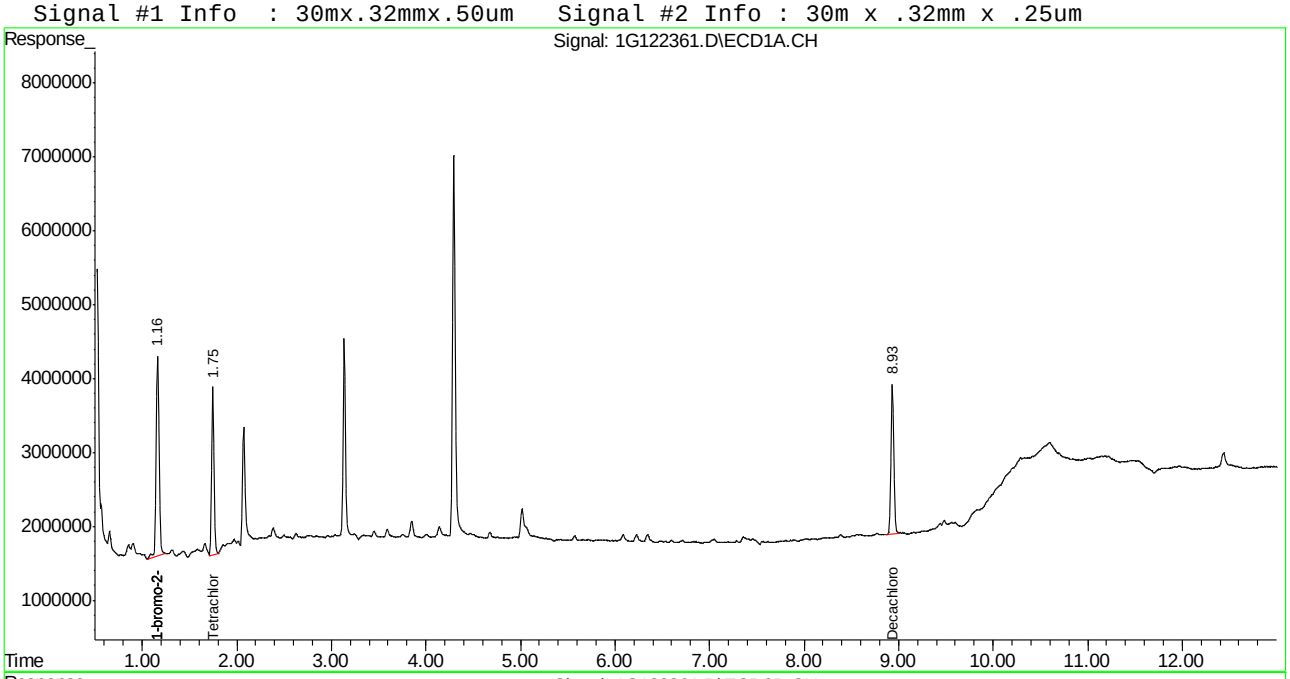
SGS ACCUTEST JC18649

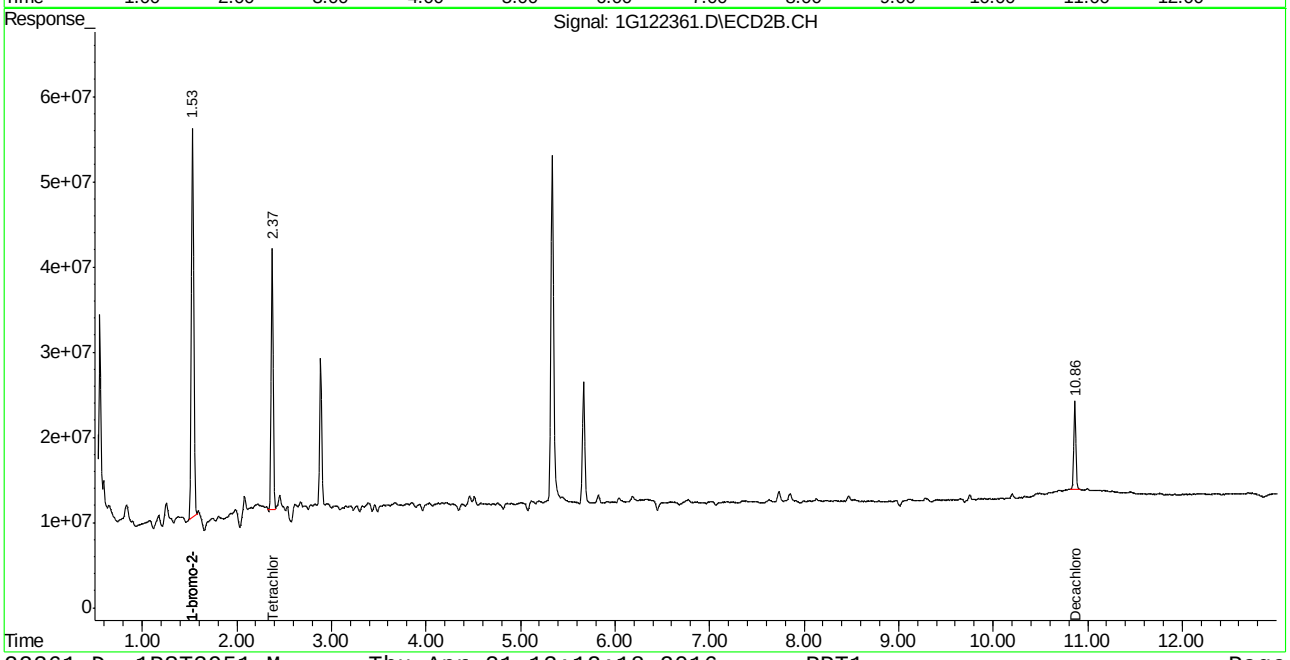
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122361.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122361.D\ECD2B.CH
Acq On : 21 Apr 2016 12:54 pm Operator: brittanp
Sample : jc18649-2 Inst : GC1G
Misc : op93237,g1g3968,300,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 13:12 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34408.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:22 pm
Operator : dharas
Sample : jc18649-3
Misc : op93322,g6g995,15.3,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 26 11:29:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.304	1.575	135.0E6	47001932	50.000	50.000
25) I	1-bromo-2...	1.304	1.575	135.0E6	47001932	50.000	50.000
31) I	1-bromo-2...	1.304	1.575	135.0E6	47001932	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.981	2.472	92788301	32002018	37.496	37.686
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 93.74%	94.22%
24)	SAB Decachlor...	9.917f	11.755f	73919754	21707556	34.353	33.999
	Spiked Amount	40.000			Recovery	= 85.88%	85.00%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

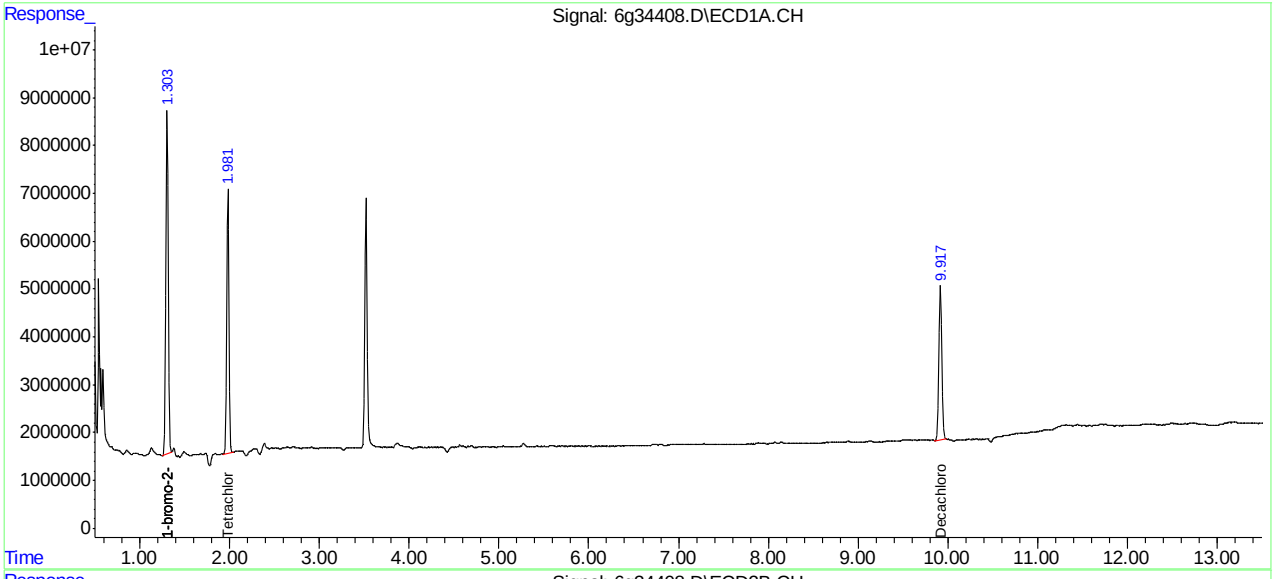
SGS ACCUTEST JC18649

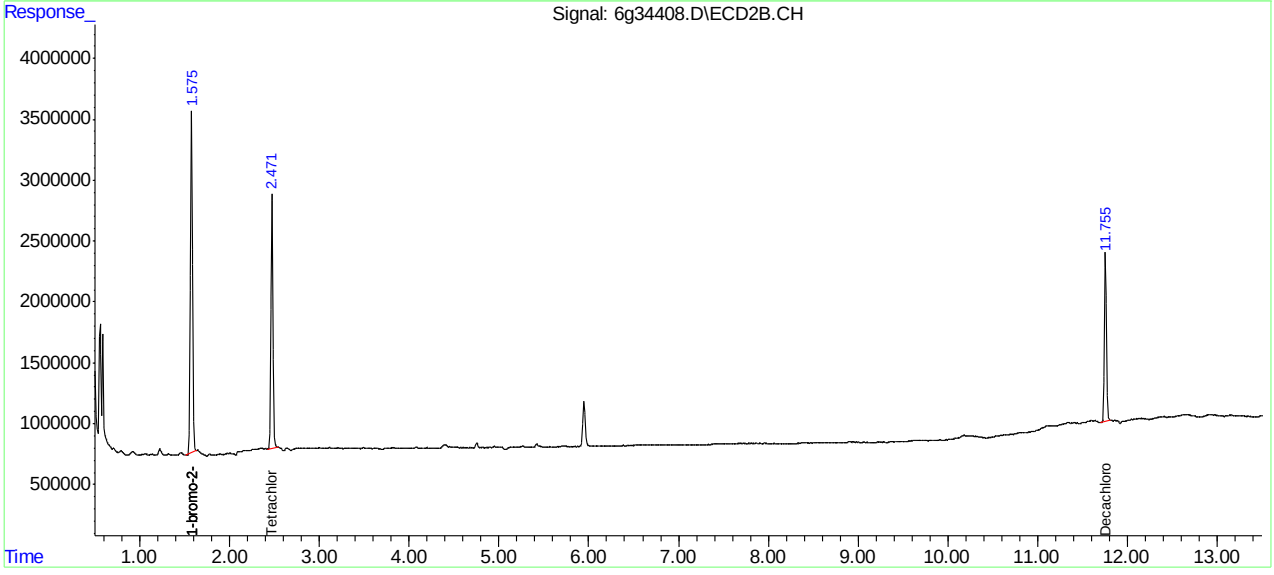
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34408.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:22 pm
Operator : dharas
Sample : jc18649-3
Misc : op93322,g6g995,15.3,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 26 11:29:01 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 04/21/16 15:10

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122362.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122362.D\ECD2B.CH
Acq On    : 4-21-16 01:12:28 PM                    Operator: brittanp
Sample    : jc18649-4                              Inst    : GC1G
Misc      : op93237,g1g3968,300,,,2,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21 14:44 2016  Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2-nitrob	1.17	1.54	62247089	855.2E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.17	1.54	62247089	855.2E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.17	1.54	62247089	855.2E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.75	2.38	43651877	540.1E6	36.683m	40.135m
Spiked Amount 40.000	Range 30 - 150		Recovery =		91.71%	100.34%
24) SA Decachlorobiphen	8.93	10.87	54416748	203.8E6	33.106	23.023
Spiked Amount 40.000			Recovery =		82.77%	57.56%
Target Compounds						

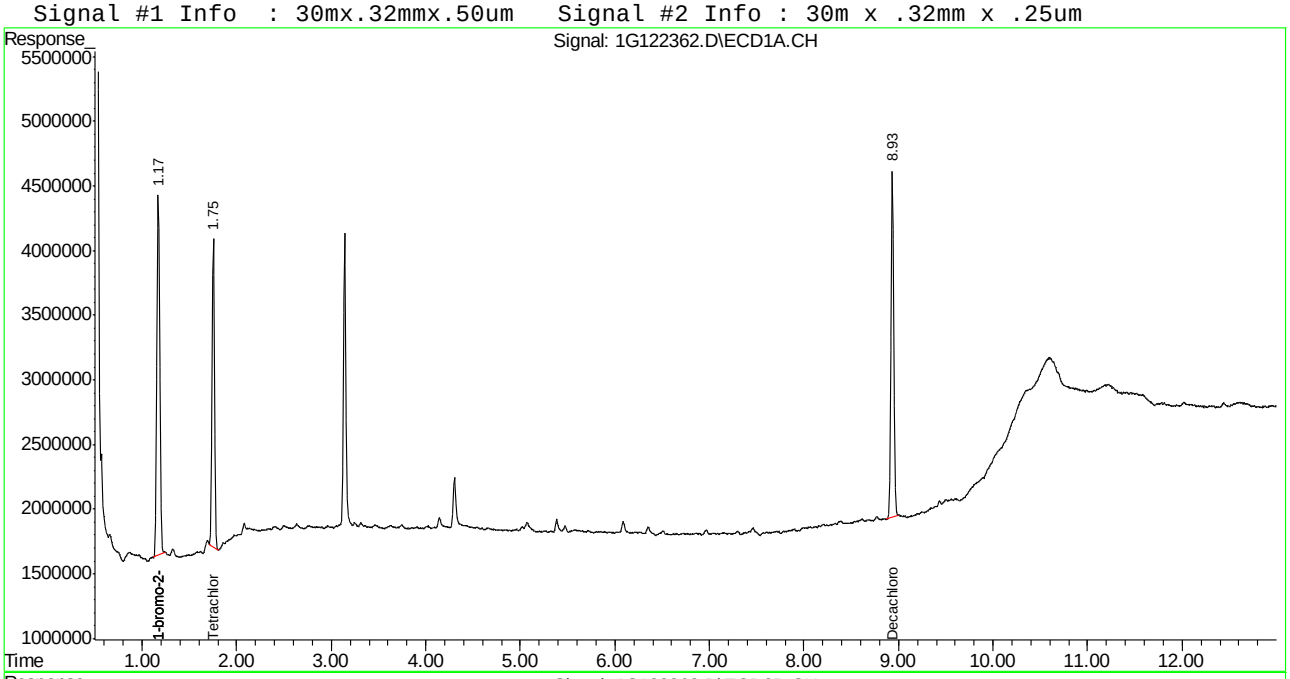
(f)=RT Delta > 1/2 Window (m)=manual int.

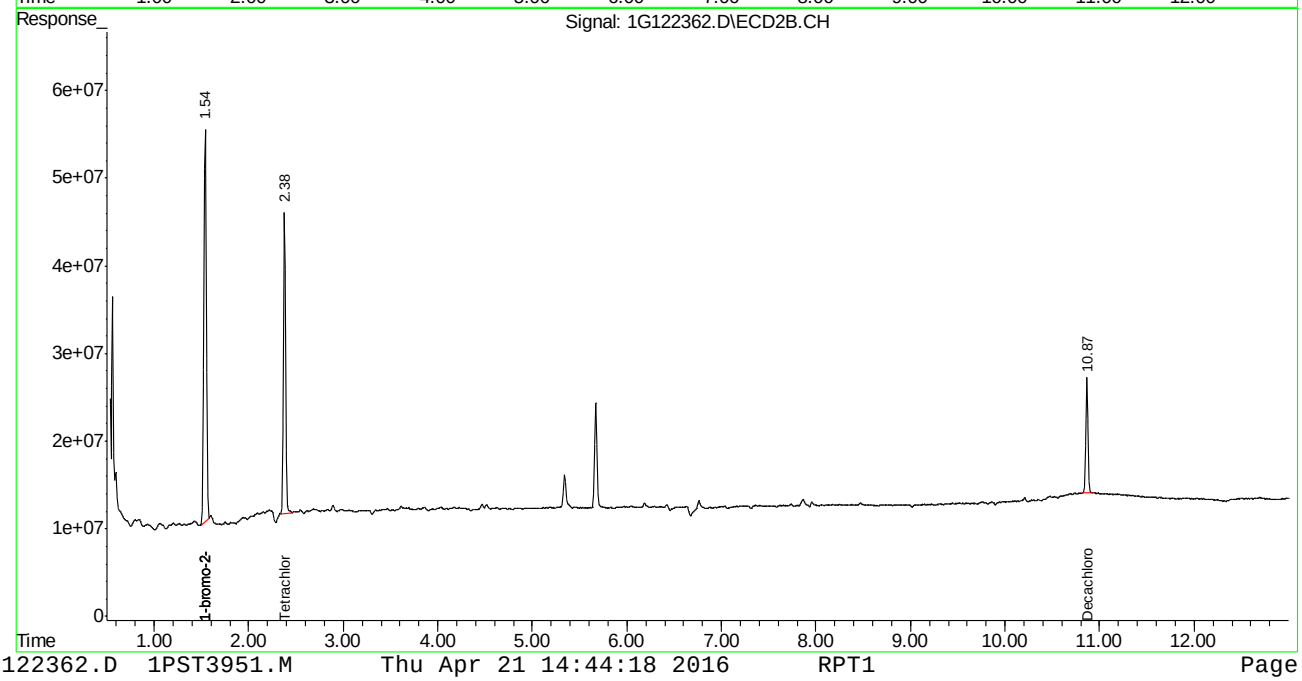
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122362.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122362.D\ECD2B.CH
Acq On : 4-21-16 01:12:28 PM Operator: brittanp
Sample : jc18649-4 Inst : GC1G
Misc : op93237,g1g3968,300,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 14:44 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

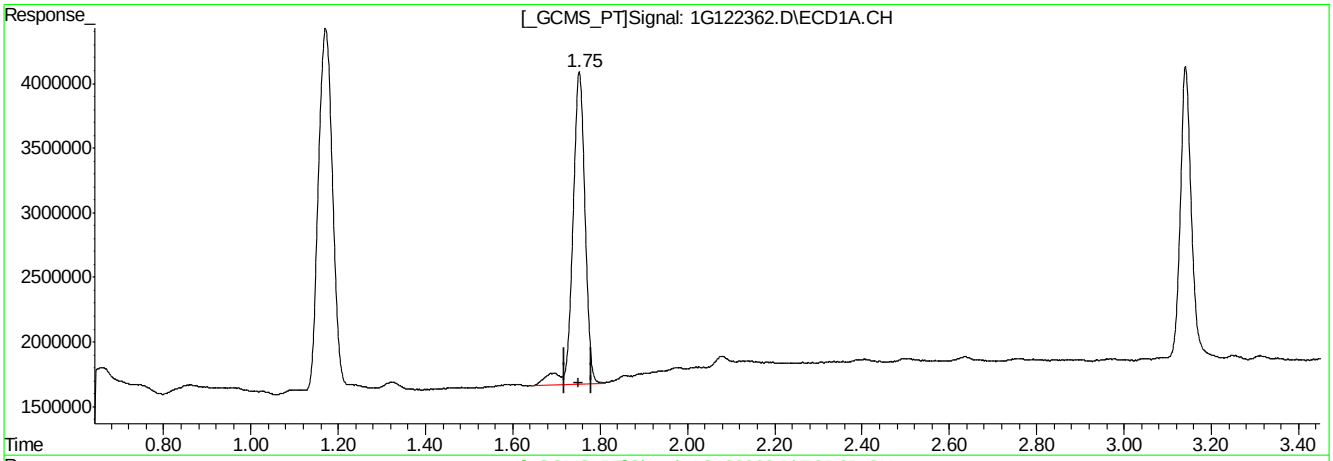
Sample Number:	JC18649-4	**Method:**	SW846 8081B
Lab FileID:	1G122362.D	**Analyst approved:**	04/21/16 14:48 Dhara Saparia
Injection Time:	04/21/16 13:12	**Supervisor approved:**	04/21/16 15:10 Gwendolyn Burns

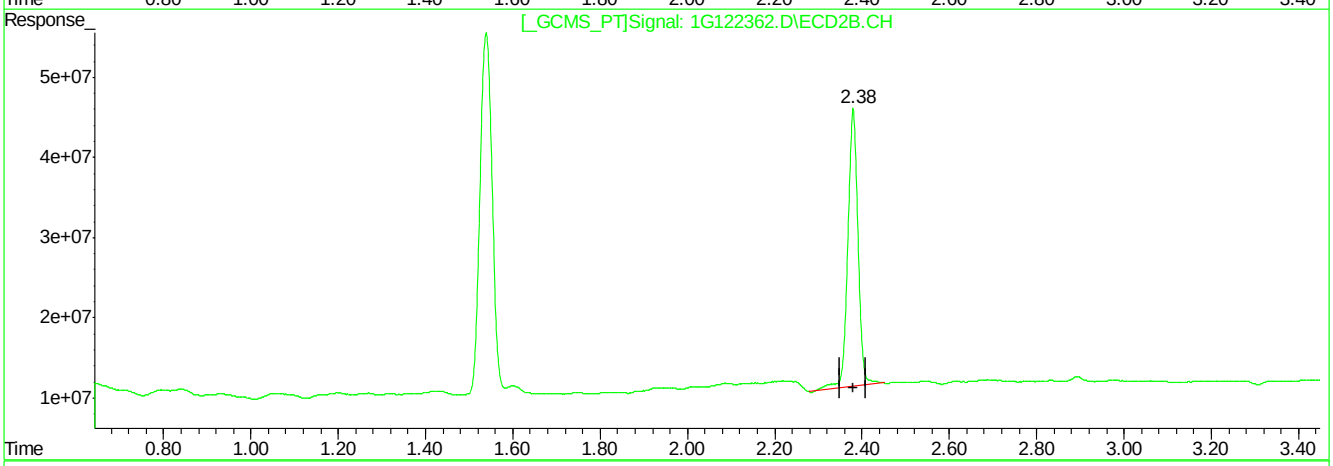
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.75	Poorly defined baseline
Tetrachloro-m-xylene	877-09-8	2	2.38	Poorly defined baseline

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122362.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122362.D\ECD2B.CH
Acq On    : 4-21-16 01:12:28 PM                      Operator: brittanp
Sample    : jc18649-4                                Inst    : GC1G
Misc      : op93237,g1g3968,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21 14:43 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 39.888PPB

response 47465950

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 42.151PPB

response 567252960

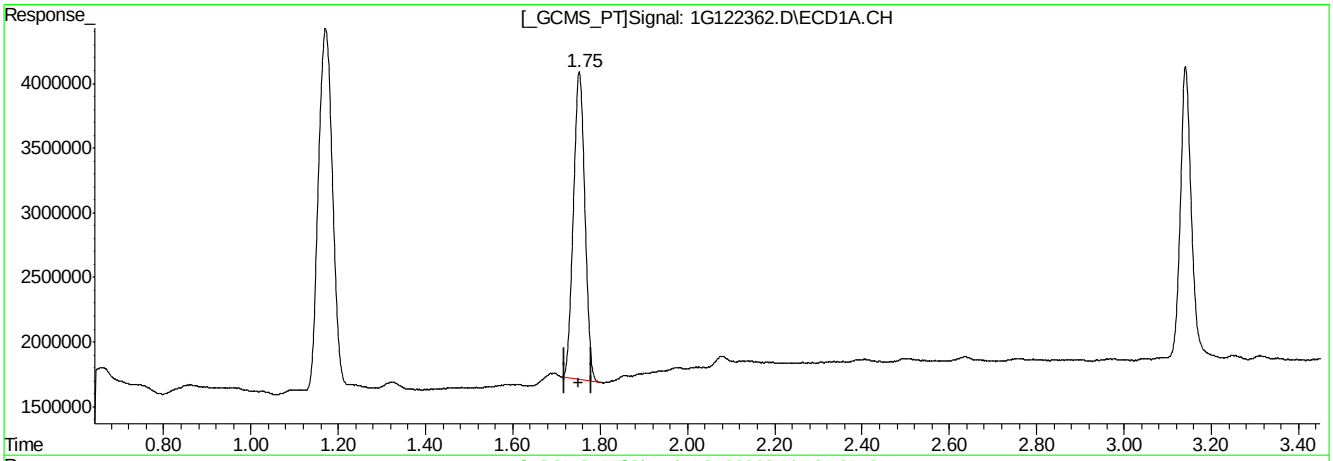
(+) = Expected Retention Time

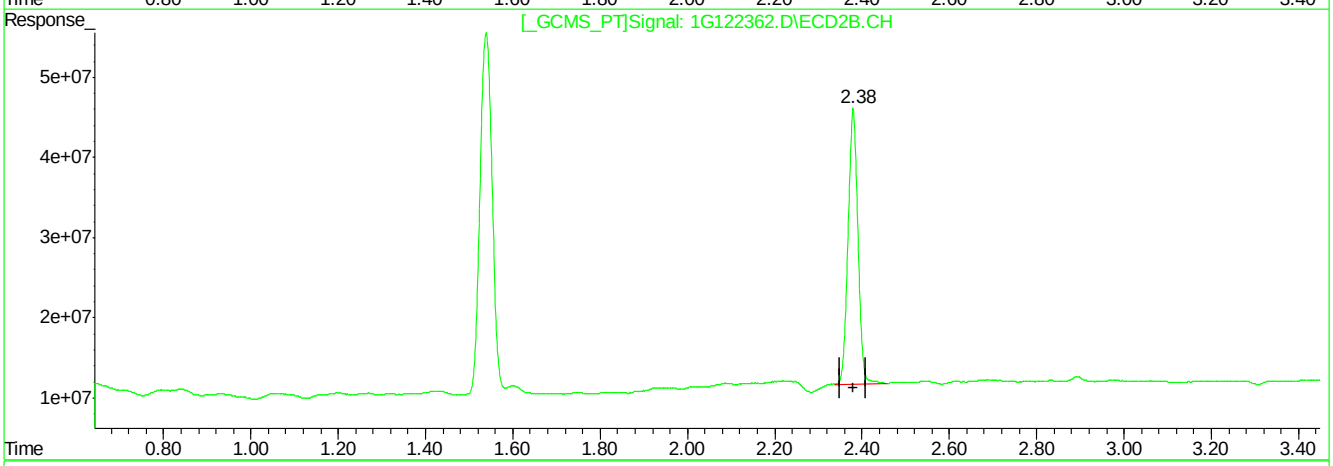
1G122362.D 1PST3951.M Thu Apr 21 14:43:25 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122362.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122362.D\ECD2B.CH
Acq On    : 4-21-16 01:12:28 PM                      Operator: brittanp
Sample    : jc18649-4                                Inst    : GC1G
Misc      : op93237,g1g3968,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21 14:43 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 36.683PPB m

response 43651877

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 40.135PPB m

response 540122950

(+) = Expected Retention Time

1G122362.D 1PST3951.M Thu Apr 21 14:43:37 2016 RPT1

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122363.D\ECD1A.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122363.D\ECD2B.CH
Acq On    : 4-21-16 01:30:03 PM                    Operator: brittanp
Sample    : jc18649-5                              Inst    : GC1G
Misc      : op93237,g1g3968,300,,,2,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21 14:46 2016  Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2-nitrob	1.17	1.54	65723749	831.0E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.17	1.54	65723749	831.0E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.17	1.54	65723749	831.0E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.75	2.38	33251924	421.4E6	26.465	32.222
Spiked Amount 40.000	Range 30 - 150		Recovery =		66.16%	80.55%
24) SA Decachlorobiphen	8.94	10.87	22969792	88422188	13.235	10.281
Spiked Amount 40.000			Recovery =		33.09%	25.70%
Target Compounds						

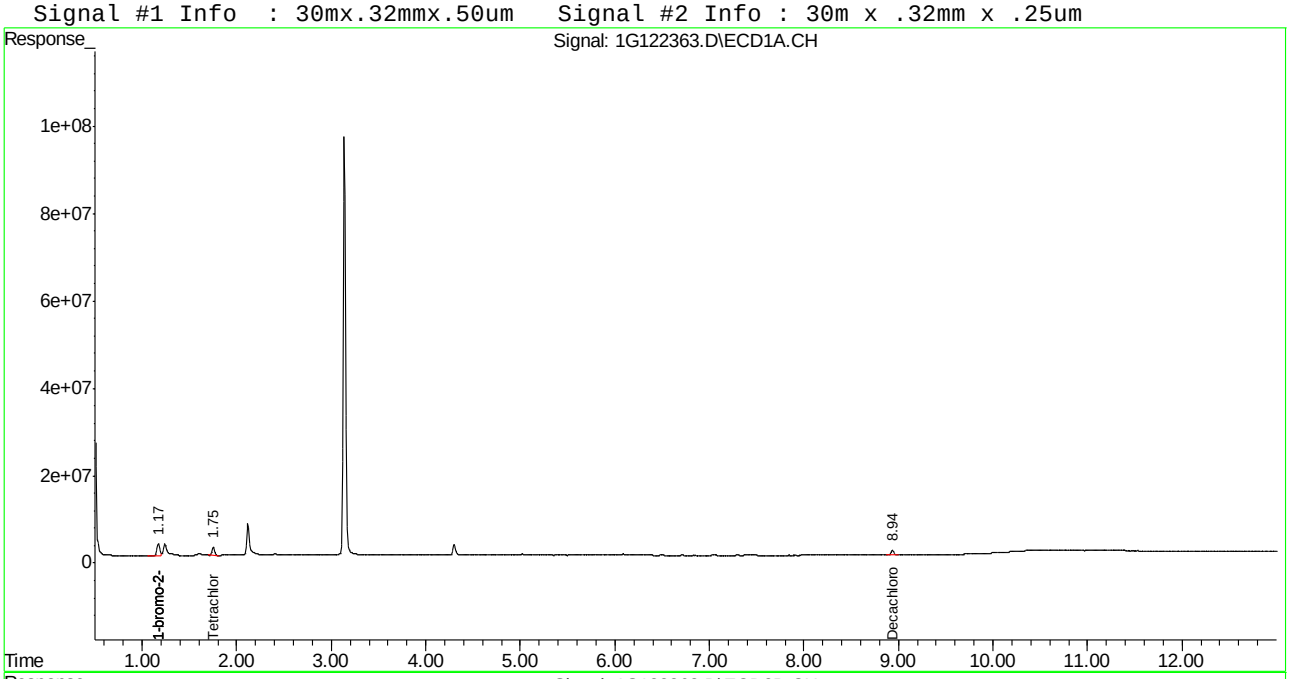
```
(f)=RT Delta > 1/2 Window                          (m)=manual int.
1G122363.D  1PST3951.M      Thu Apr 21 14:46:10 2016      RPT1
```

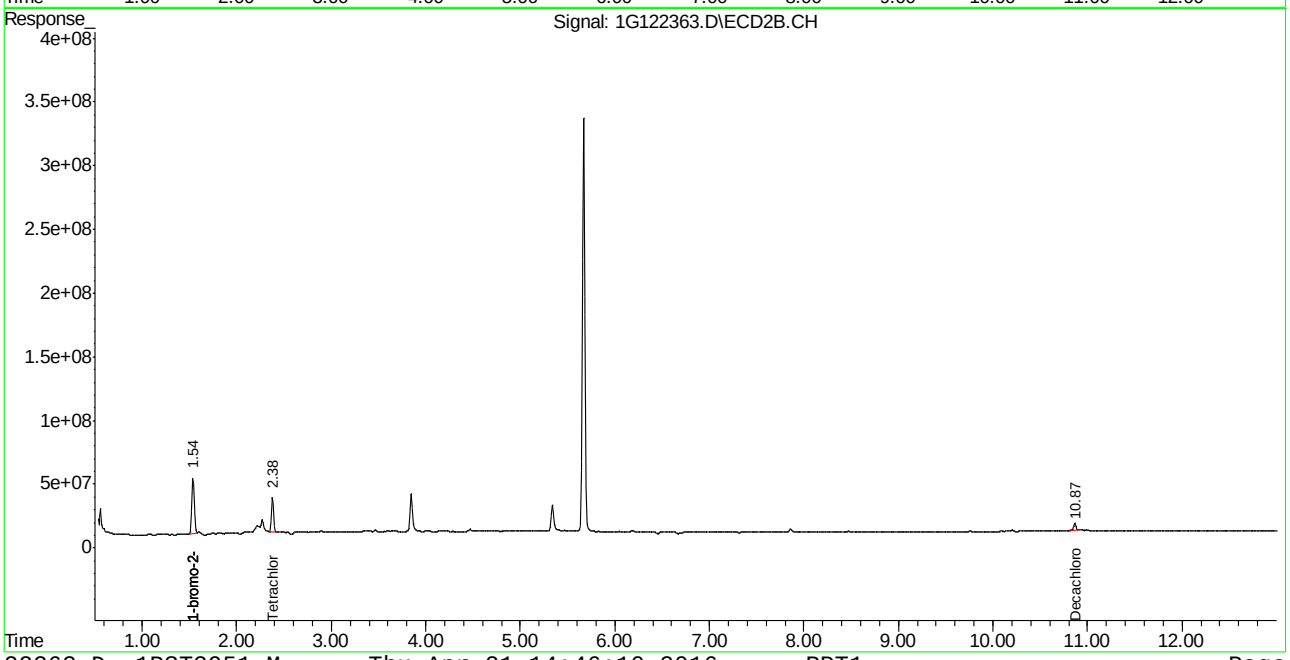
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122363.D\ECD1A.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122363.D\ECD2B.CH
Acq On : 4-21-16 01:30:03 PM Operator: brittanp
Sample : jc18649-5 Inst : GC1G
Misc : op93237,g1g3968,300,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 14:46 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122354.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122354.D\ECD2B.CH
Acq On    : 21 Apr 2016  10:52 am                    Operator: brittanp
Sample    : op93237-mb1                              Inst    : GC1G
Misc      : op93237,g1g3968,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21 11:55 2016  Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2-nitrob	1.17	1.54	61658351	835.5E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.17	1.54	61658351	835.5E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.17	1.54	61658351	835.5E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.75	2.38	42046396	488.5E6	35.671	37.155
Spiked Amount 40.000	Range 30 - 150		Recovery =		89.18%	92.89%
24) SA Decachlorobiphen	8.93	10.87	61257766	219.4E6	37.624	25.377
Spiked Amount 40.000			Recovery =		94.06%	63.44%
Target Compounds						

(f)=RT Delta > 1/2 Window (m)=manual int.

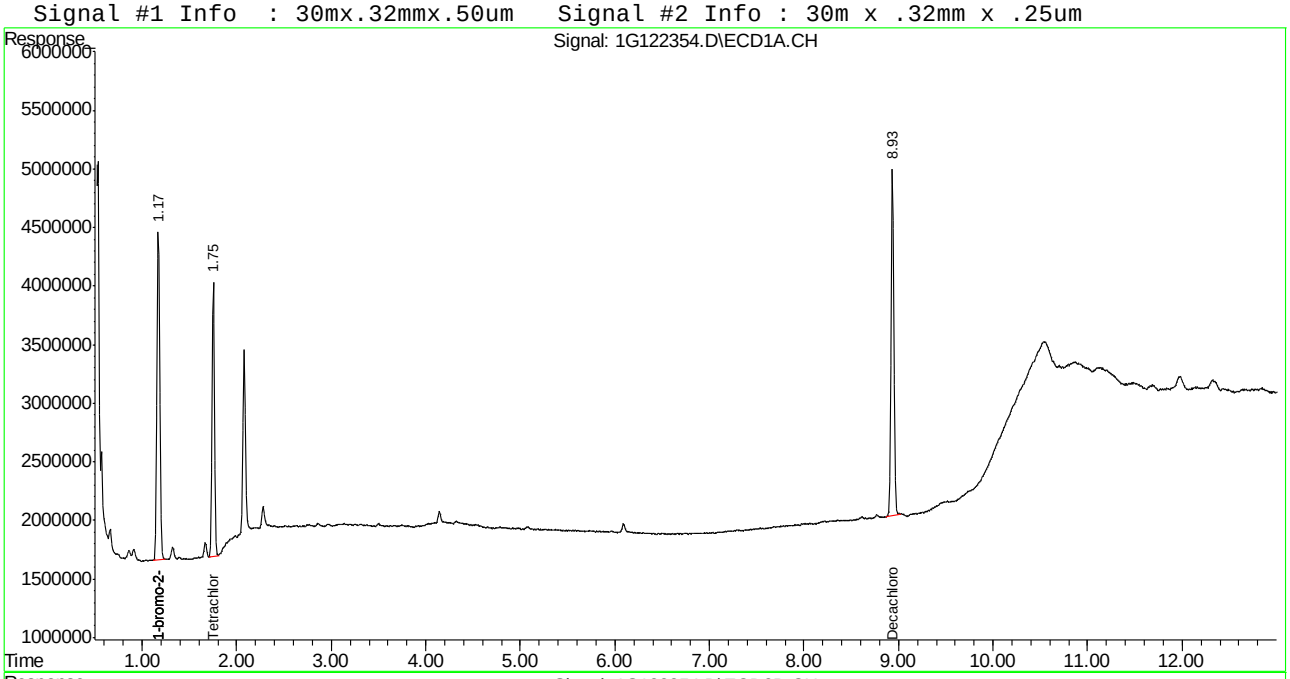
SGS ACCUTEST JC18649

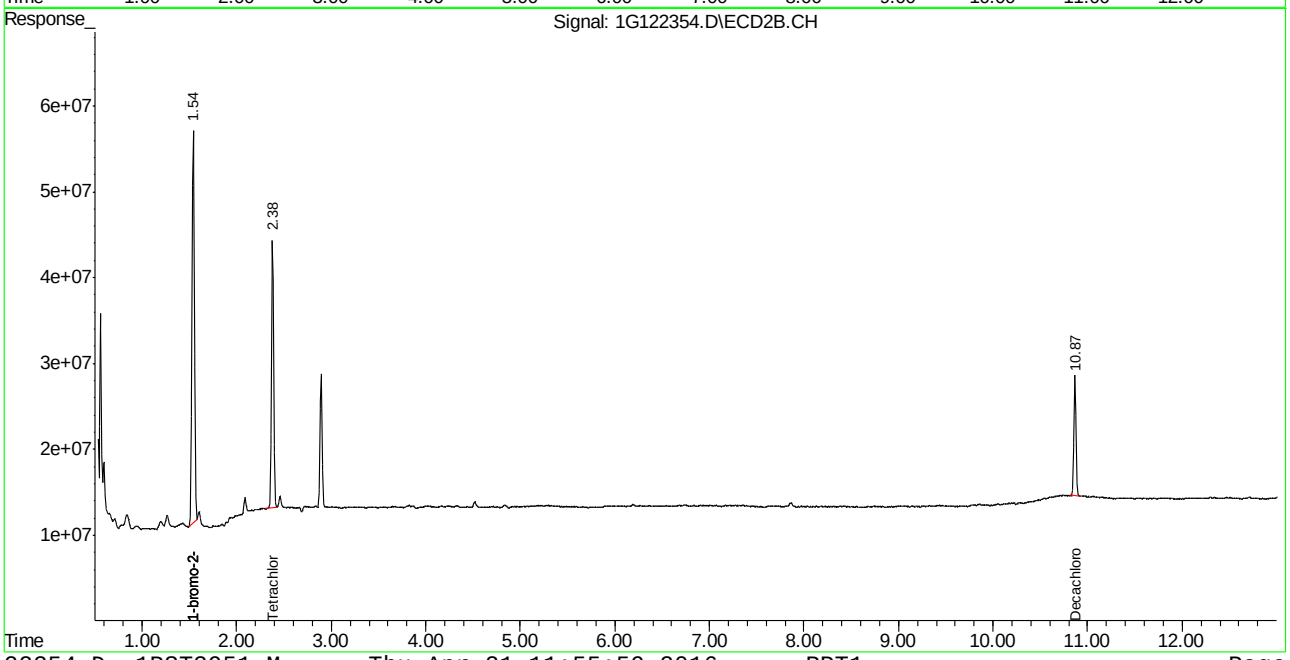
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122354.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122354.D\ECD2B.CH
Acq On : 21 Apr 2016 10:52 am Operator: brittanp
Sample : op93237-mb1 Inst : GC1G
Misc : op93237,g1g3968,300,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 11:55 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34376.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 11:29 am
Operator : brittanp
Sample : op93322-mb1
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 11:49:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.304	1.575	139.3E6	49873992	50.000	50.000
25) I	1-bromo-2...	1.304	1.575	139.3E6	49873992	50.000	50.000
31) I	1-bromo-2...	1.304	1.575	139.3E6	49873992	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.981	2.472	94456686	33364466	36.991	37.027
Spiked Amount		40.000	Range	30 - 150	Recovery	= 92.48%	92.57%
24) SAB	Decachlor...	9.914f	11.762	84329111	24381227	37.980	35.987
Spiked Amount		40.000			Recovery	= 94.95%	89.97%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

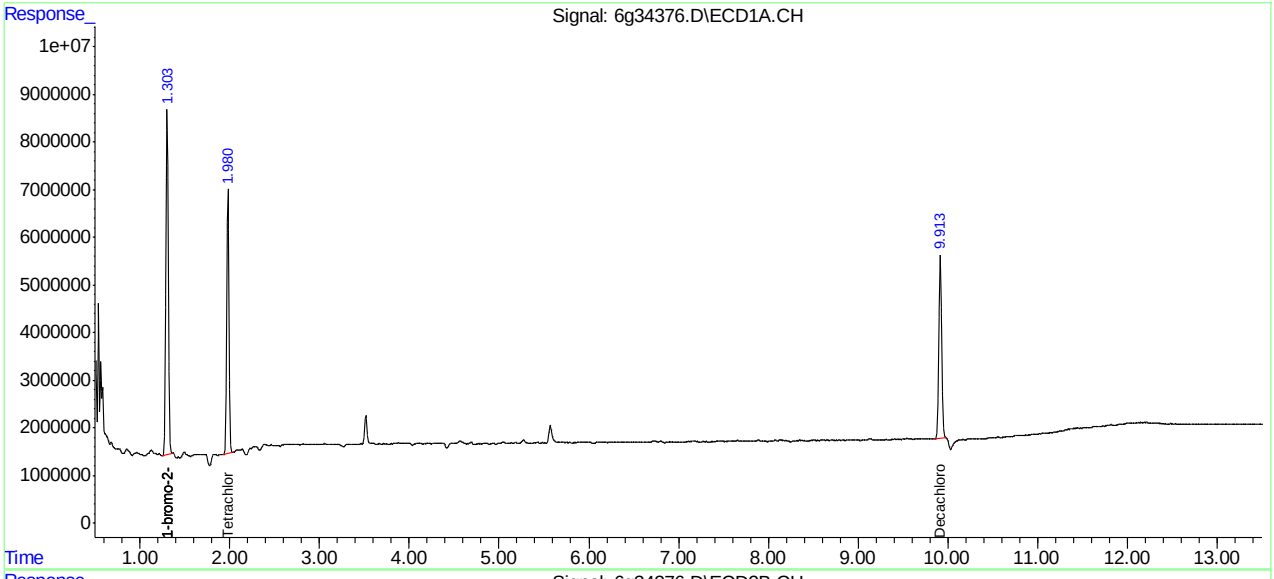
SGS ACCUTEST JC18649

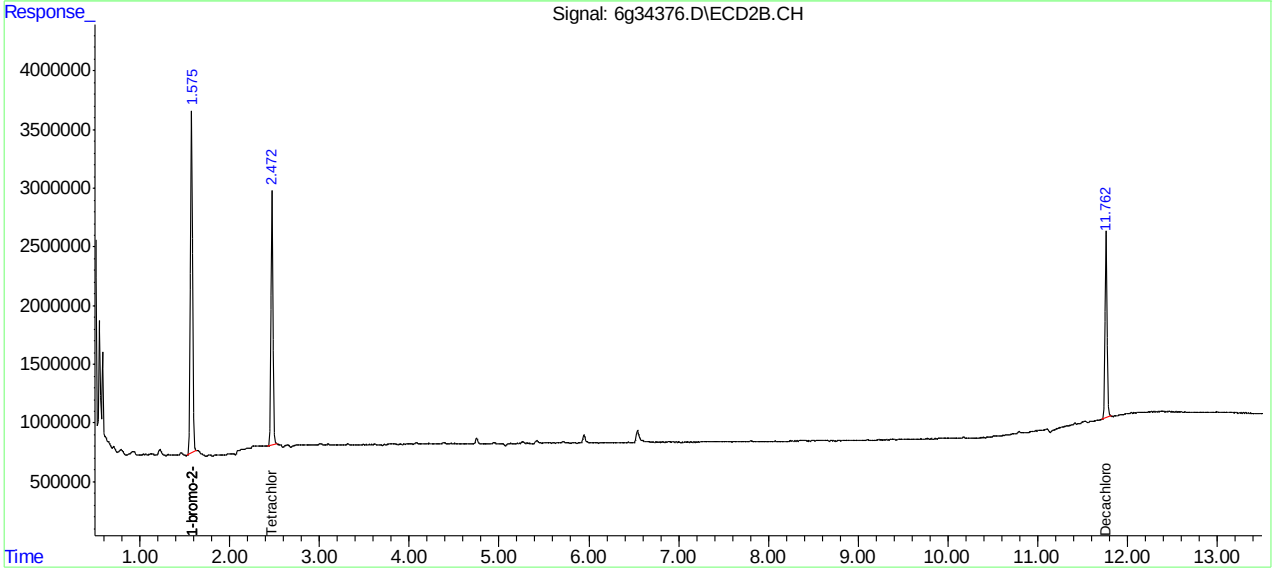
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34376.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 11:29 am
Operator : brittanp
Sample : op93322-mb1
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 11:49:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/21/16 13:33

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122355.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122355.D\ECD2B.CH
Acq On : 21 Apr 2016 11:10 am Operator: brittanp
Sample : op93237-bs1 Inst : GC1G
Misc : op93237,g1g3968,300,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 11:57 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	59858389	817.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	59858389	817.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	59858389	817.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	44256881	515.9E6	38.676	40.112
Spiked Amount	40.000	Range	30 - 150	Recovery	=	96.69%	100.28%
24) SA	Decachlorobiphen	8.94	10.87	72278882	258.4E6	45.728	30.553
Spiked Amount	40.000			Recovery	=	114.32%	76.38%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	33292333	499.8E6	24.502	25.756
4) MA	gamma-BHC	2.51	3.47	33995000	448.6E6	26.216	25.730m
5) MA	Heptachlor	2.98	4.05	38696369	415.5E6	27.783	26.508
6) B	beta-BHC	2.59	3.56	17097168	202.0E6	25.909	27.267
7) B	delta-BHC	2.77	3.96	30352745	427.0E6	26.585	26.672
8) MB	Aldrin	3.30	4.50	34669528	410.7E6	26.730	26.208
9) B	Heptachlor Epoxi	4.00	5.32	36197114	384.5E6	28.043	27.099
10) B	gamma-Chlordane	4.15	5.61	37762114	376.2E6	27.758	26.505
11) B	alpha-Chlordane	4.32	5.83	37126579	362.4E6	28.312	26.408
12) A	Endosulfan I	4.49	5.92	35506012	357.6E6	28.474	26.685
13) B	4,4'-DDE	4.43	6.10	34096348	362.5E6	28.459	25.660
14) MA	Dieldrin	4.80	6.36	35800880	392.7E6	28.358	26.177
15) MA	Endrin	5.12	6.86	35238457	362.6E6	29.839	27.861
16) A	4,4'-DDD	5.25	7.05	26385272	307.3E6	26.510	25.631
17) B	Endosulfan II	5.43	7.22	34074456	331.0E6	28.434	25.536
18) MA	4,4'-DDT	5.66	7.58	28507227	241.3E6	30.058	25.718
19) B	Endrin Aldehyde	6.06	7.79	30509345	236.5E6	30.046	23.540
20) B	Endosulfan Sulfa	6.74	8.26	32812507	282.4E6	30.131	25.882
21) A	Methoxychlor	6.44	8.83	18017893	126.3E6	28.210	25.369
23) B	Endrin Ketone	7.16	9.22	38288593	304.3E6	30.105	26.224

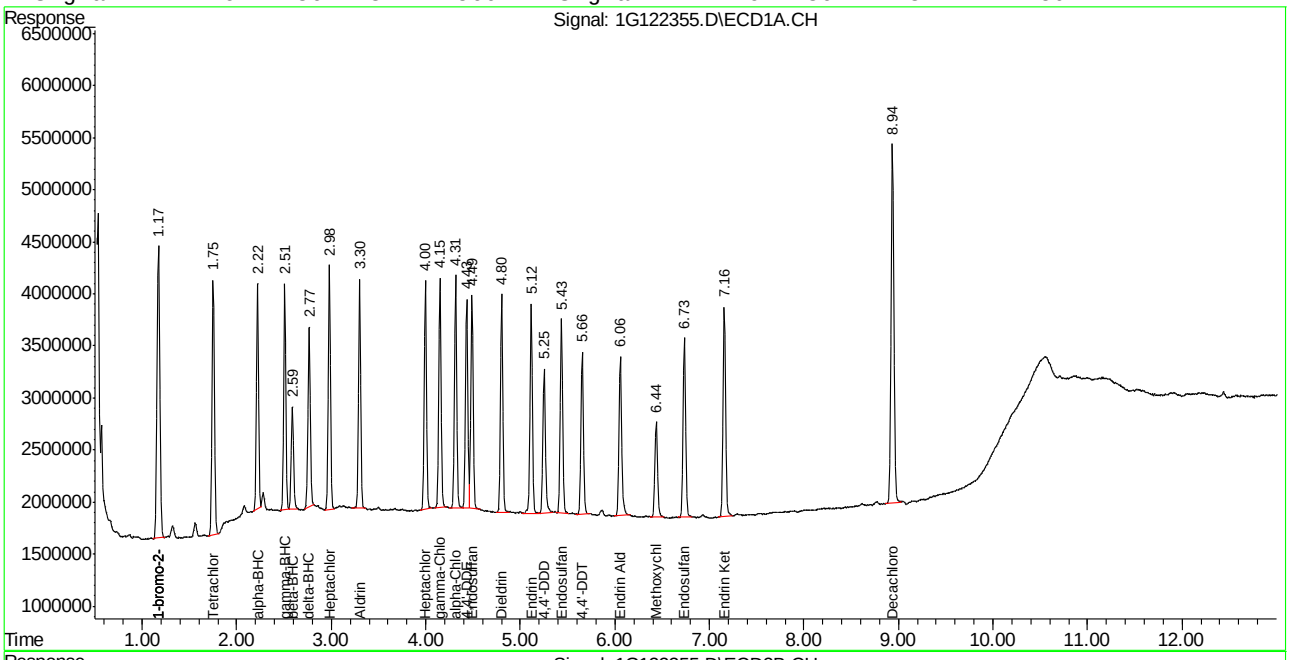
(f)=RT Delta > 1/2 Window (m)=manual int.

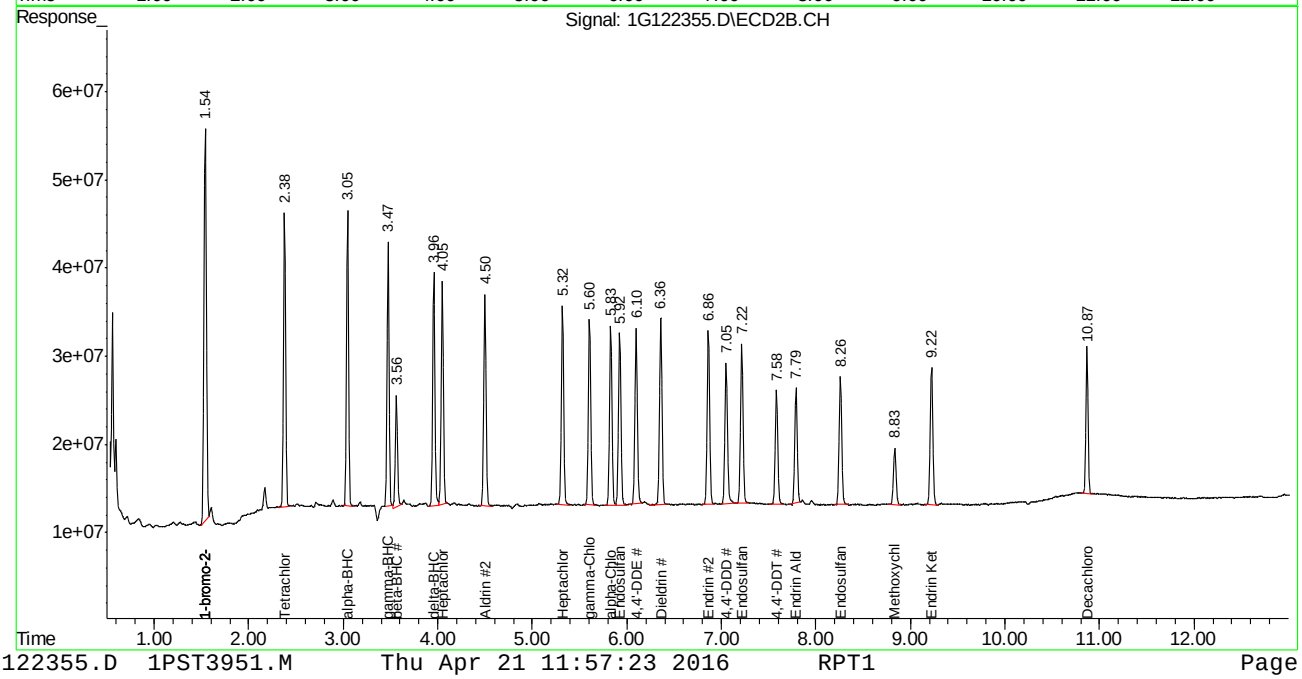
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122355.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122355.D\ECD2B.CH
Acq On : 21 Apr 2016 11:10 am Operator: brittanp
Sample : op93237-bs1 Inst : GC1G
Misc : op93237,g1g3968,300,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 11:57 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC18649

Manual Integration Approval Summary

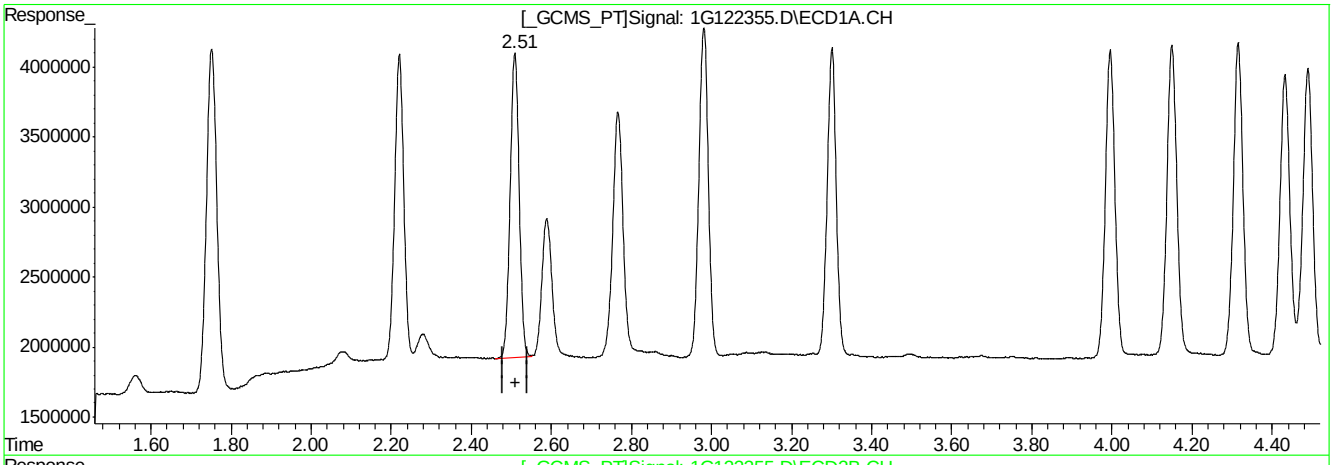
Sample Number:	OP93237-BS1	**Method:**	SW846 8081B
Lab FileID:	1G122355.D	**Analyst approved:**	04/21/16 12:01 Brittany Piercy
Injection Time:	04/21/16 11:10	**Supervisor approved:**	04/21/16 13:33 Gwendolyn Burns

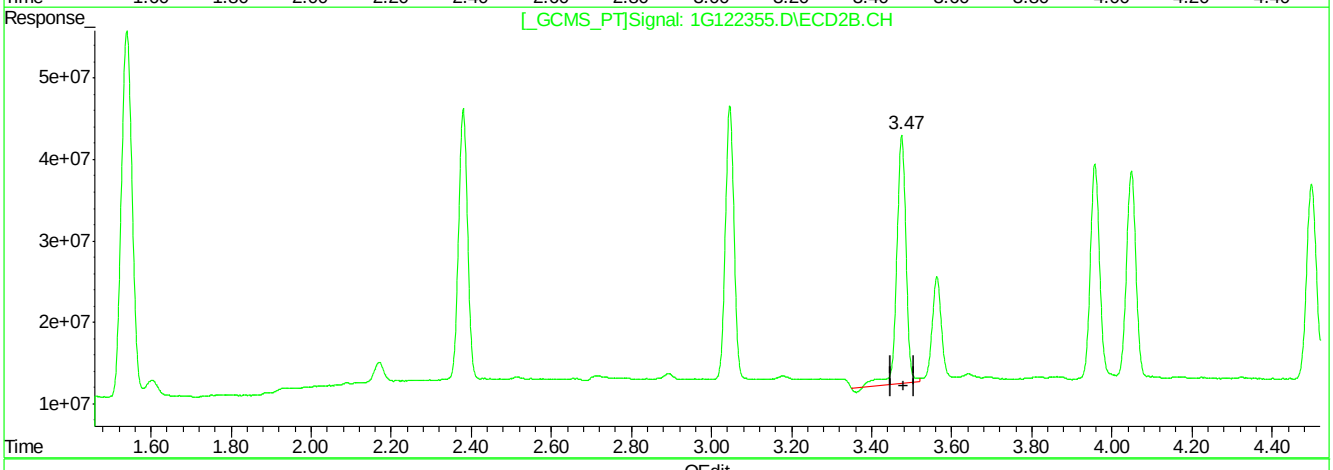
Parameter	CAS	Sig#	R.T. (min.)	Reason
gamma-BHC (Lindane)	58-89-9	2	3.47	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122355.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122355.D\ECD2B.CH
Acq On    : 21 Apr 2016  11:10 am                    Operator: brittanp
Sample    : op93237-bs1                              Inst    : GC1G
Misc      : op93237,g1g3968,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21 11:56 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(4) gamma-BHC (MA)

2.51min 26.216PPB

response 33995000

(4) gamma-BHC #2 (MA)

3.48min 28.203PPB

response 491764379

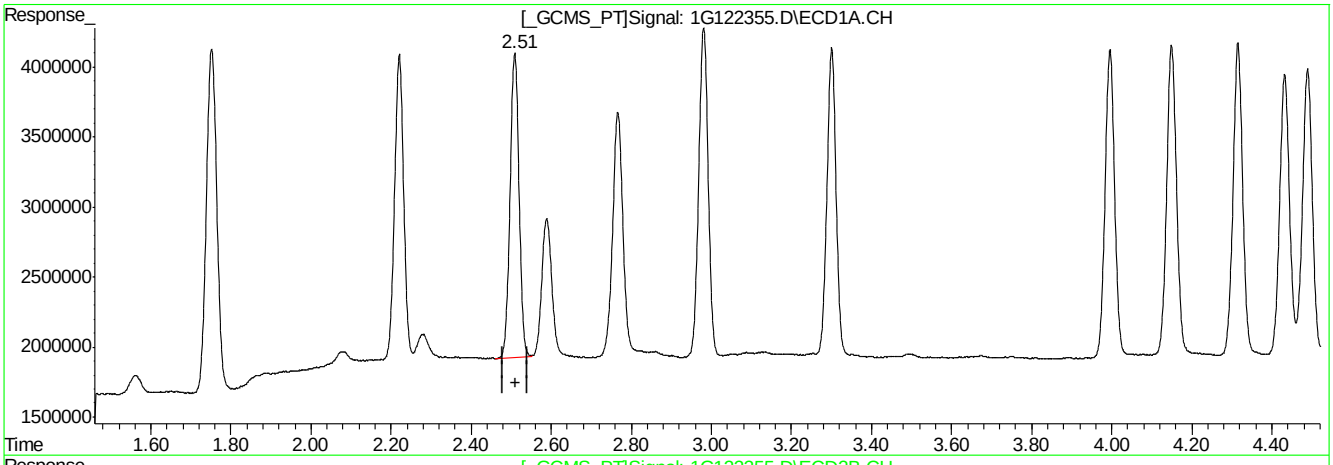
(+) = Expected Retention Time

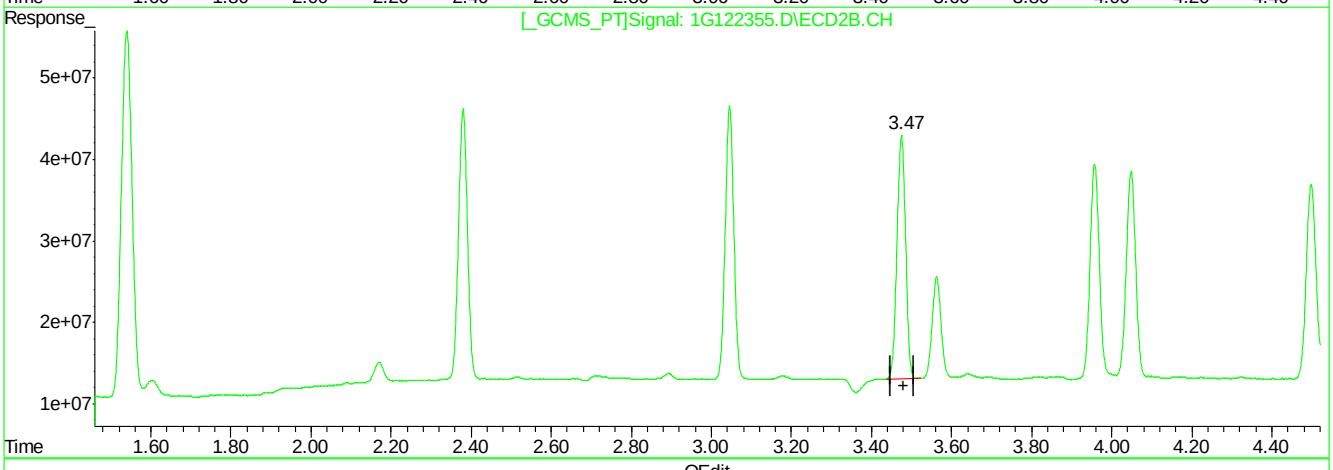
1G122355.D 1PST3951.M Thu Apr 21 11:56:46 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122355.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122355.D\ECD2B.CH
Acq On    : 21 Apr 2016  11:10 am                    Operator: brittanp
Sample    : op93237-bs1                              Inst    : GC1G
Misc      : op93237,g1g3968,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21 11:56 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(4) gamma-BHC (MA)

2.51min 26.216PPB

response 33995000

(4) gamma-BHC #2 (MA)

3.47min 25.730PPB m

response 448644470

(+) = Expected Retention Time

1G122355.D 1PST3951.M Thu Apr 21 11:56:53 2016 RPT1

9.3.1.3

9

Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Laidlaw
04/25/16 21:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34377.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 11:45 am
Operator : brittanp
Sample : op93322-bs1
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 12:07:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.303	1.575	129.2E6	46225976	50.000	50.000
25) I	1-bromo-2...	1.303	1.575	129.2E6	46225976	50.000	50.000
31) I	1-bromo-2...	1.303	1.575	129.2E6	46225976	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.980	2.472	87641314	30813361	37.007	36.895
Spiked Amount		40.000	Range	30 - 150	Recovery	= 92.52%	92.24%
24) SAB	Decachlor...	9.916f	11.761	84479328	22684878	41.024	36.126
Spiked Amount		40.000			Recovery	= 102.56%	90.31%
	Target Compounds						
3) A	alpha-BHC	2.495	3.176	62577927	22548629	20.497	20.723
4) MA	gamma-BHC	2.810	3.629	59238832	21315276	20.842	20.923
5) MA	Heptachlor	3.338	4.236	60432723	21211884	21.181	20.602
6) B	beta-BHC	2.890	3.721	29854928	10309072	21.398	20.769
7) B	delta-BHC	3.084	4.138	50593062	17477888	19.100	18.410
8) MB	Aldrin	3.690	4.713f	57718671	20434524	21.904	21.344
9) B	Heptachlo...	4.438	5.593f	49196450	18359408	19.941	20.575
10) B	gamma-Chl...	4.612	5.899f	52910983	19572358	21.312	22.437
11) B	alpha-Chl...	4.794	6.143f	52651142	18031136	21.368	20.806
12) A	Endosulfan I	4.977	6.241f	48317215	17315712	19.863	20.566
13) B	4,4'-DDE	4.925	6.441f	46409360	16607499	22.729	22.223
14) MA	Dieldrin	5.317f	6.713f	43432613	19200417	18.057m	22.326
15) MA	Endrin	5.661f	7.255f	56544488	16933063	25.915	21.671
16) A	4,4'-DDD	5.808f	7.472f	37702041	14243177	21.841	22.085
17) B	Endosulfa...	6.003f	7.638f	48516939	16073100	22.537	21.032
18) MA	4,4'-DDT	6.261f	8.053f	42484966	13220290	22.627	22.584
19) B	Endrin Al...	6.673f	8.266f	34523834	12324949	19.675	19.891
20) B	Endosulfa...	7.410f	8.780f	41794601	13984088	22.107	20.794
21) A	Methoxychlor	7.124f	9.429f	25893414	7507164	23.009	23.275m
23) B	Endrin Ke...	7.884f	9.830f	49080556	15844386	21.831	20.157
	SemiQuant Compounds - Not Calibrated on this Instrument						

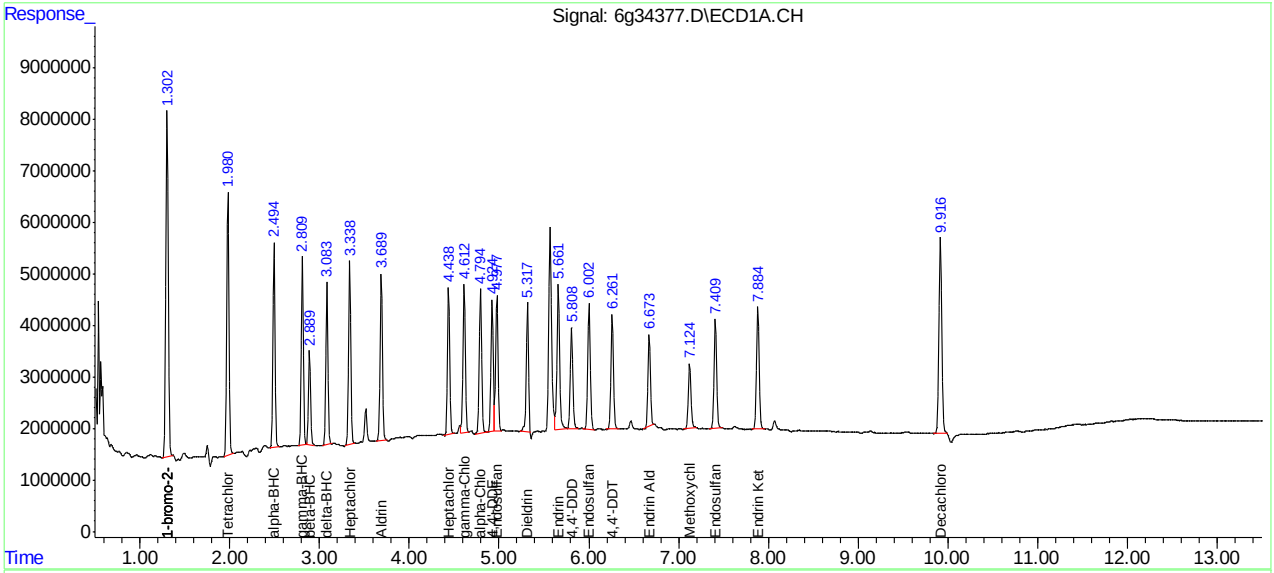
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

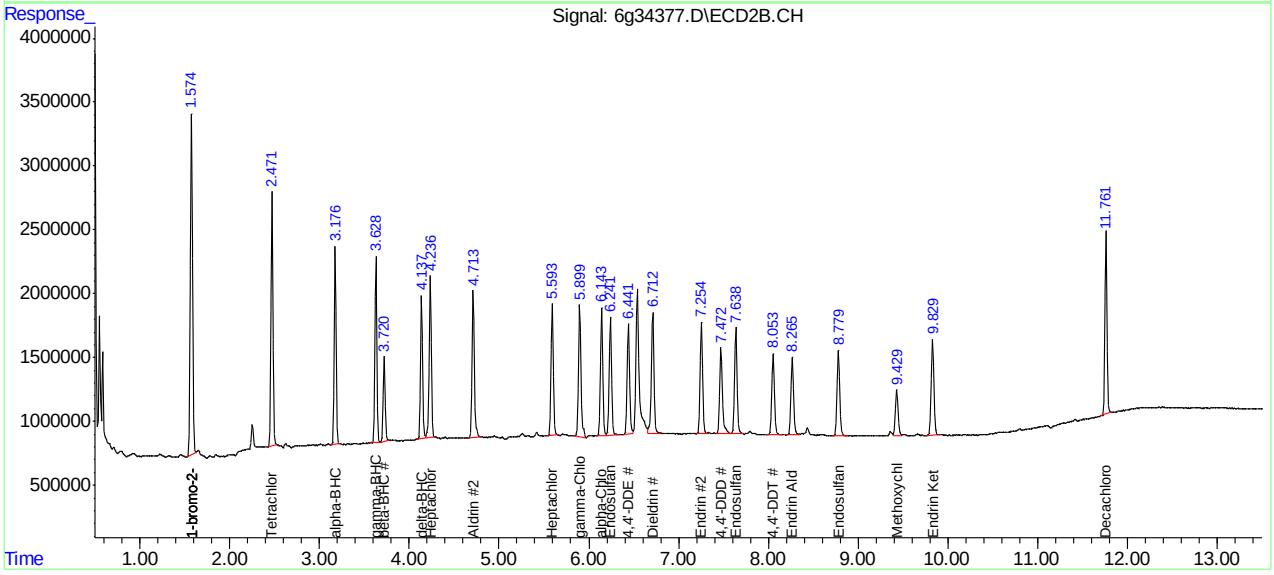
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34377.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 11:45 am
Operator : brittanp
Sample : op93322-bs1
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 12:07:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	OP93322-BS1	**Method:**	SW846 8081B
Lab FileID:	6G34377.D	**Analyst approved:**	04/25/16 12:08 Brittany Piercy
Injection Time:	04/25/16 11:45	**Supervisor approved:**	04/25/16 21:58 Jennifer Laidlaw

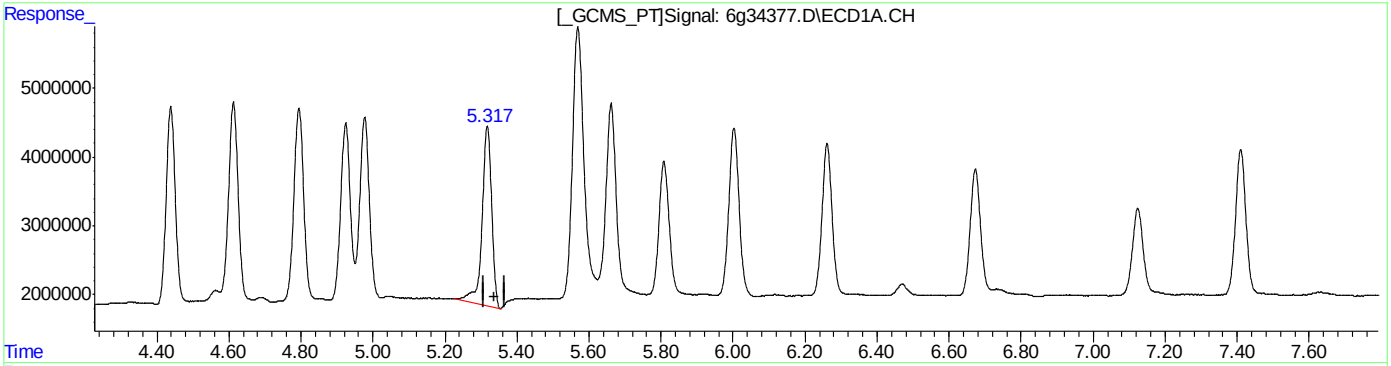
Parameter	CAS	Sig#	R.T. (min.)	Reason
Dieldrin	60-57-1	1	5.32	Poor instrument integration
Methoxychlor	72-43-5	2	9.43	Poor instrument integration

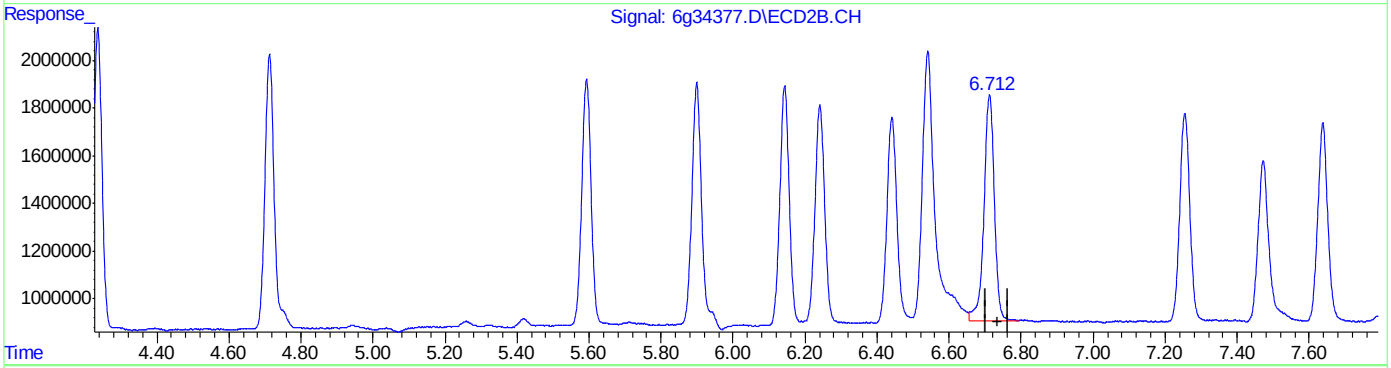
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34377.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 11:45 am
Operator : brittanp
Sample : op93322-bs1
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 11:59:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(14) Dieldrin (MA)
5.318min 20.117PPB
response 48387507

(14) Dieldrin #2 (MA)
6.713min 22.326PPB
response 19200417

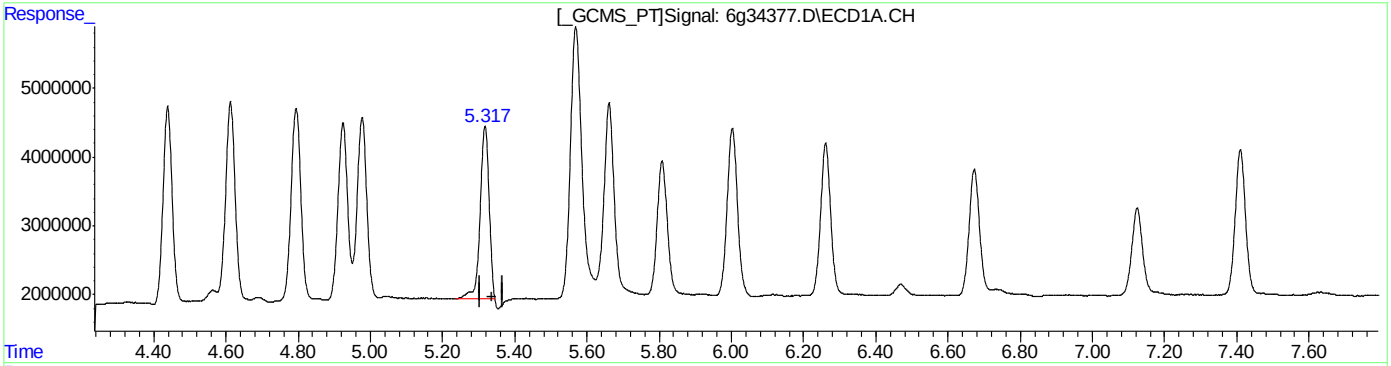
(+) = Expected Retention Time
6PST987.M Mon Apr 25 12:07:05 2016

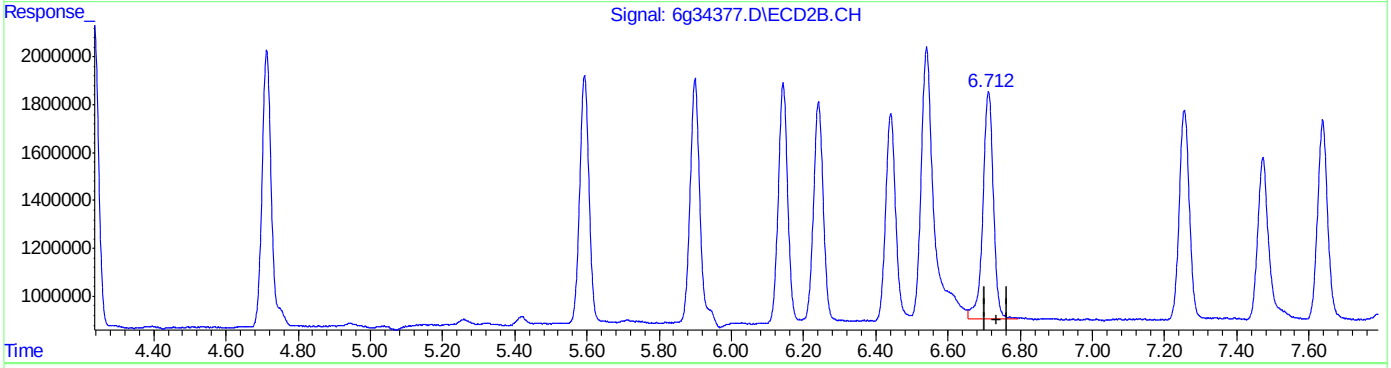
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34377.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 11:45 am
Operator : brittanp
Sample : op93322-bs1
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 11:59:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(14) Dieldrin (MA)
5.317min 18.057PPB m
response 43432613

(14) Dieldrin #2 (MA)
6.713min 22.326PPB
response 19200417

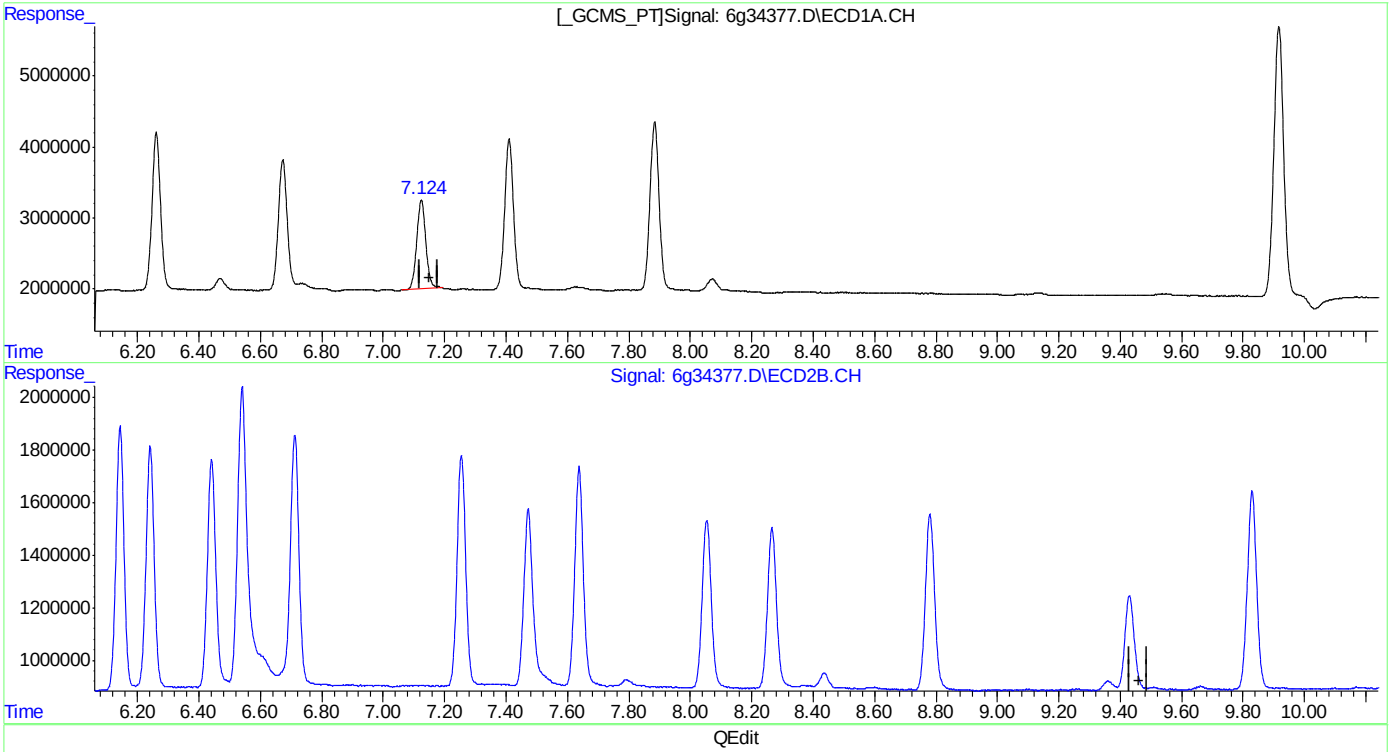
(+) = Expected Retention Time
6PST987.M Mon Apr 25 12:07:19 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34377.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 11:45 am
Operator : brittanp
Sample : op93322-bs1
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 11:59:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Methoxychlor (A)
7.124min 23.009PPB
response 25893414

(21) Methoxychlor #2 (A)
0.000min 0.000PPB
response 0

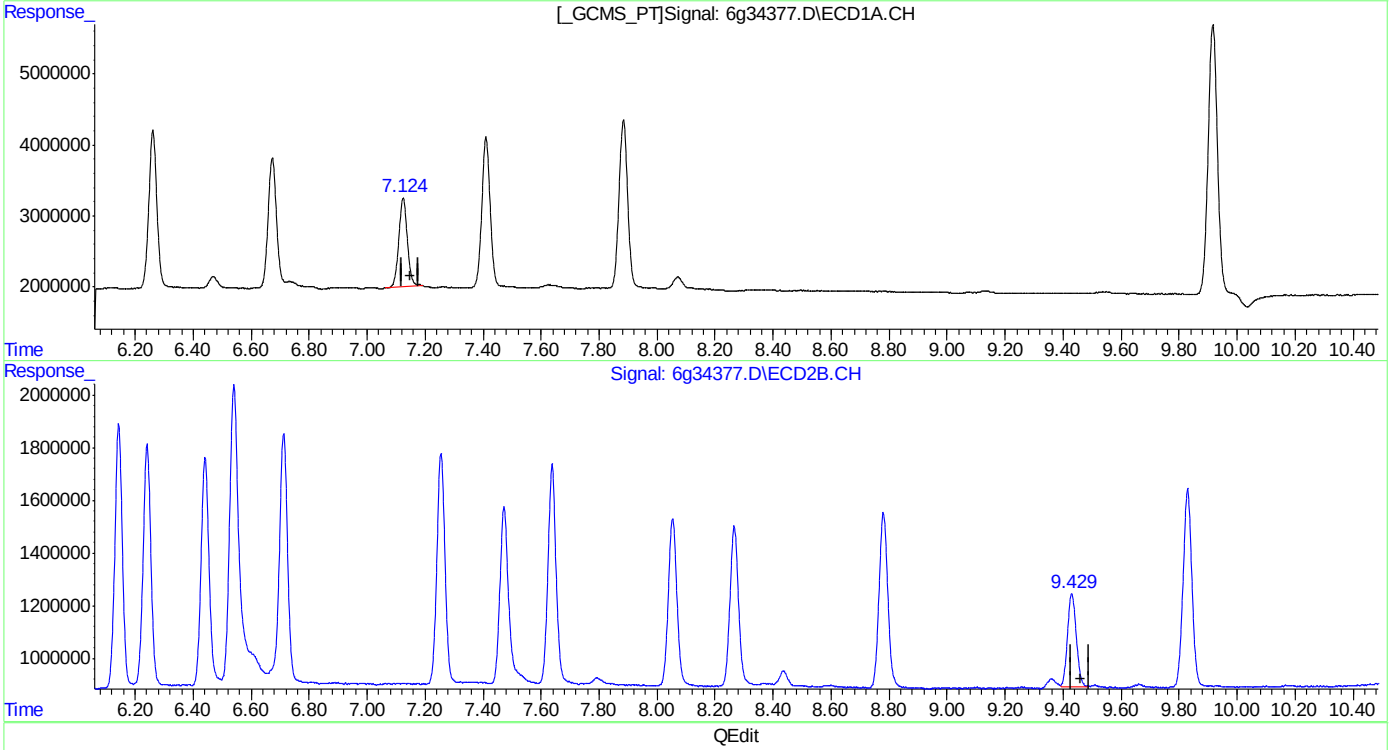
(+) = Expected Retention Time

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34377.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 25 Apr 2016  11:45 am
Operator  : brittanp
Sample    : op93322-bs1
Misc      : op93322,g6g995,15.0,,,10,1
ALS Vial  : 8   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 11:59:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title  : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(21) Methoxychlor (A)
7.124min 23.009PPB
response 25893414

(21) Methoxychlor #2 (A)
9.429min 23.275PPB m
response 7507164

(+) = Expected Retention Time

SGS ACCUTEST JC18649

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/21/16 15:10

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122364.D\ECD1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122364.D\ECD2B.CH
Acq On : 4-21-16 01:47:30 PM Operator: brittanp
Sample : op93237-ms Inst : GC1G
Misc : op93237,g1g3968,150,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 14:49 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	59430266	839.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	59430266	839.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	59430266	839.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	38547268	449.1E6	33.929	34.008
Spiked Amount	40.000	Range	30 - 150	Recovery	=	84.82%	85.02%
24) SA	Decachlorobiphen	8.94	10.87	47670511	180.0E6	30.376	20.722
Spiked Amount	40.000			Recovery	=	75.94%	51.81%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	34500920	508.7E6	25.574	25.526
4) MA	gamma-BHC	2.51	3.47	34347790	444.8E6	26.679	24.839
5) MA	Heptachlor	2.98	4.05	36739643	397.2E6	26.568	24.673
6) B	beta-BHC	2.59	3.56	16579704	202.5E6	25.306	26.620
7) B	delta-BHC	2.77	3.96	31217129	436.3E6	27.539	26.536
8) MB	Aldrin	3.30	4.50	28690991	387.4E6	22.280	24.076
9) B	Heptachlor Epoxi	4.00	5.33	37381568	873.3E6	29.169	59.938
10) B	gamma-Chlordane	4.15	5.60	35880988	356.4E6	26.565	24.452
11) B	alpha-Chlordane	4.31	5.83	97319018	353.4E6	74.747	25.076
12) A	Endosulfan I	4.49	5.92	37225986	365.6E6	30.068	26.573
13) B	4,4'-DDE	4.43	6.10	26213817	272.6E6	22.038	18.788
14) MA	Dieldrin	4.80	6.36	36602704	428.7E6	29.202	27.826
15) MA	Endrin	5.12	6.86	34764072	375.4E6	29.650	28.089
16) A	4,4'-DDD	5.25	7.05	24994342	295.6E6	25.294	24.012
17) B	Endosulfan II	5.43	7.21	35384807	354.4E6	29.741	26.625
18) MA	4,4'-DDT	5.65	7.58	20890601	191.9E6	22.186	19.918
19) B	Endrin Aldehyde	6.06	7.79	31671512	261.0E6	31.416	25.296
20) B	Endosulfan Sulfa	6.73	8.26	35899478	313.0E6	33.204	27.938
21) A	Methoxychlor	6.43	8.83	18027584	128.4E6	28.429	25.118
23) B	Endrin Ketone	7.16	9.22	40583604	330.6E6	32.139	27.741m

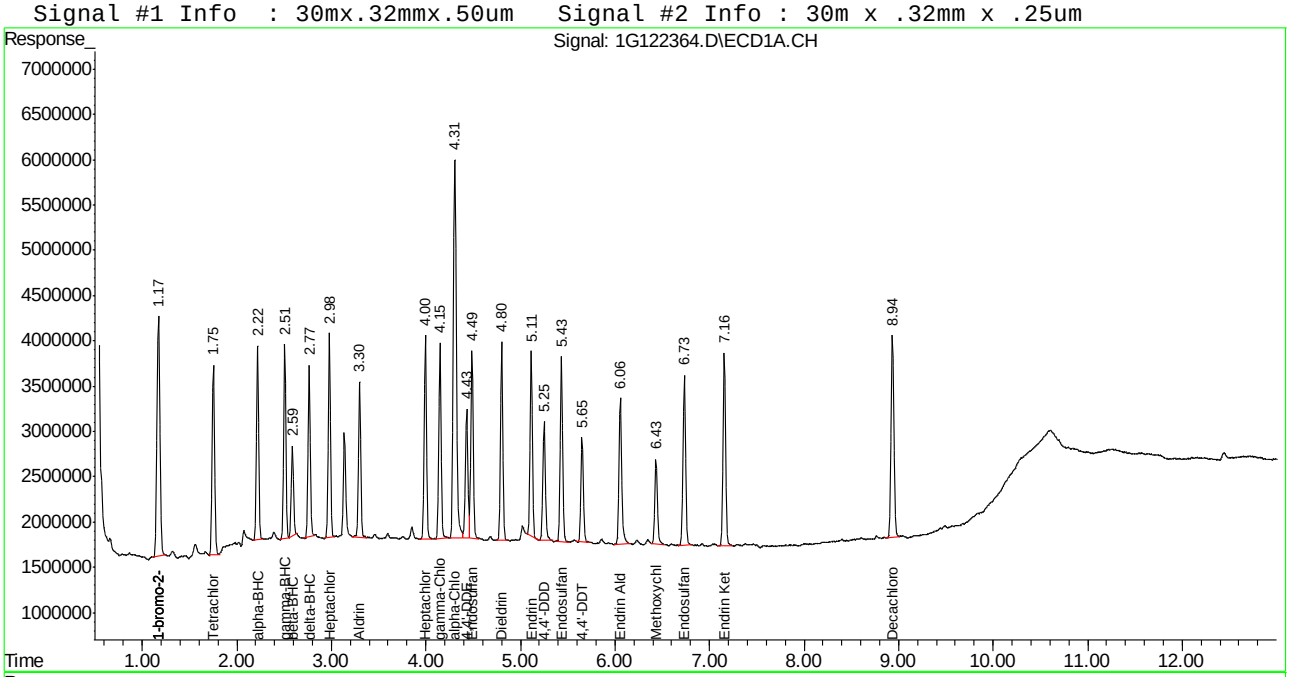
(f)=RT Delta > 1/2 Window (m)=manual int.

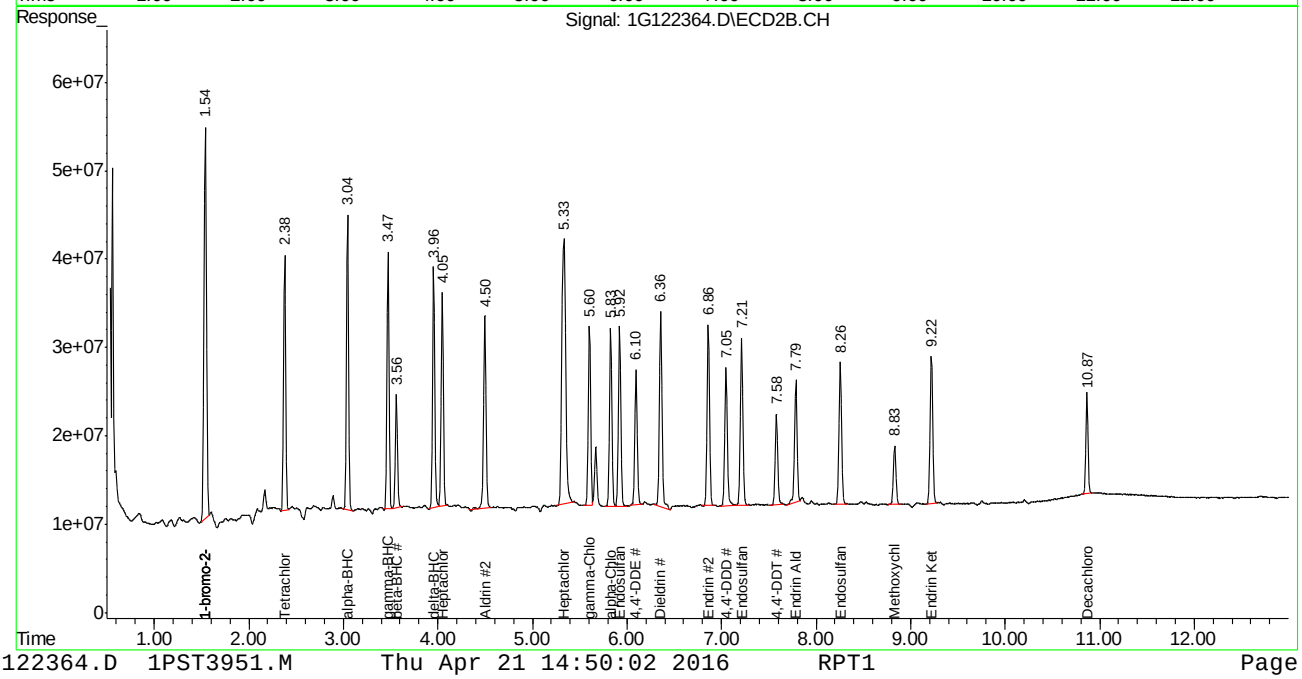
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122364.D\ECD1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122364.D\ECD2B.CH
Acq On : 4-21-16 01:47:30 PM Operator: brittanp
Sample : op93237-ms Inst : GC1G
Misc : op93237,g1g3968,150,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 14:49 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

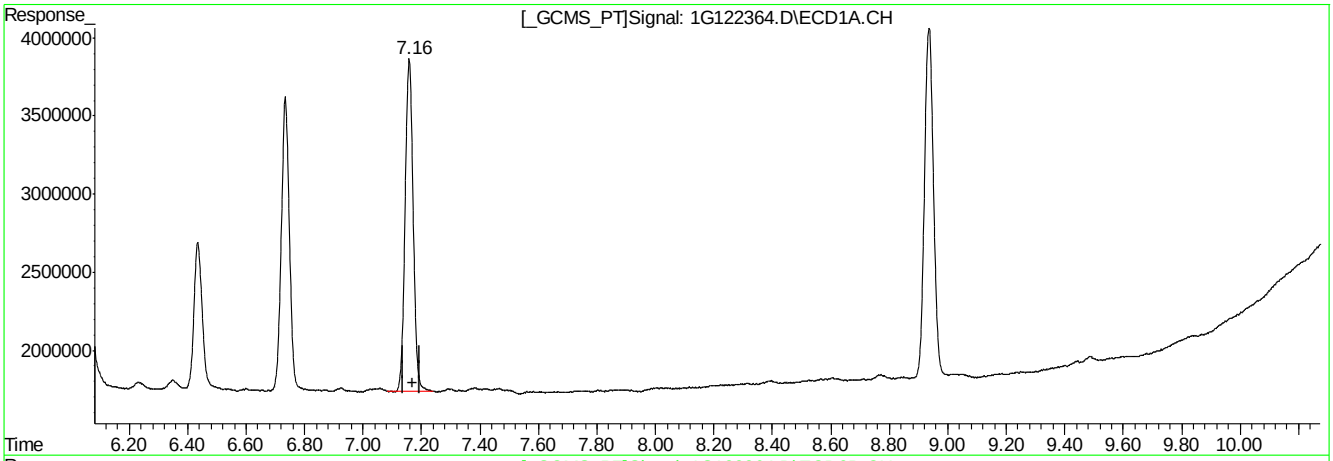
Sample Number:	OP93237-MS	**Method:**	SW846 8081B
Lab FileID:	1G122364.D	**Analyst approved:**	04/21/16 14:52 Dhara Saparia
Injection Time:	04/21/16 13:47	**Supervisor approved:**	04/21/16 15:10 Gwendolyn Burns

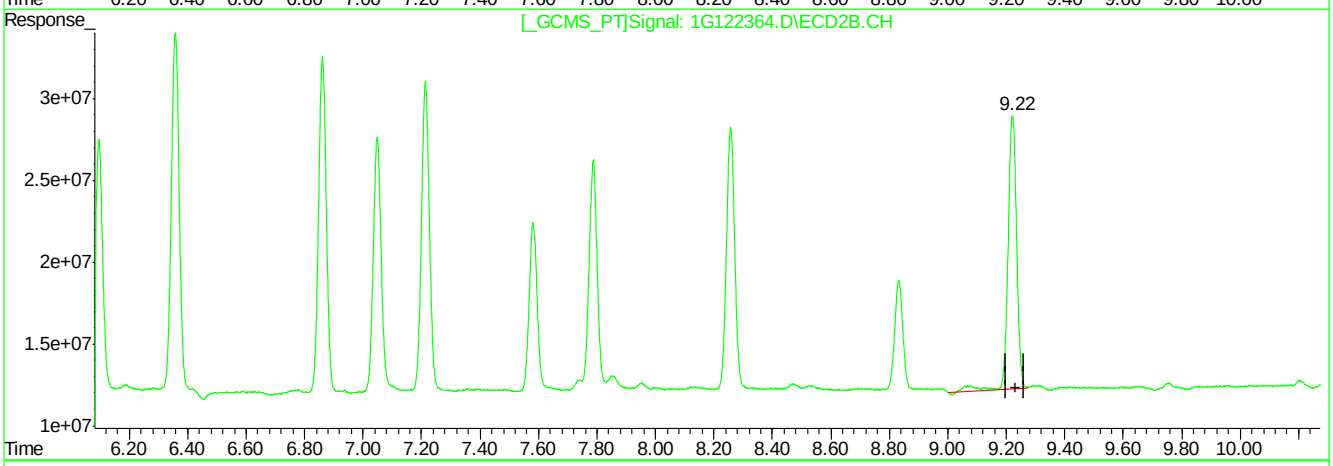
Parameter	CAS	Sig#	R.T. (min.)	Reason
Endrin ketone	53494-70-5	2	9.22	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122364.D\ECD1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122364.D\ECD2B.CH
Acq On    : 4-21-16 01:47:30 PM                      Operator: brittanp
Sample    : op93237-ms                               Inst    : GC1G
Misc      : op93237,g1g3968,150,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21 14:49 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.16min 32.139PPB

response 40583604

(23) Endrin Ketone #2 (B)

9.22min 28.778PPB

response 342941765

(+) = Expected Retention Time

1G122364.D 1PST3951.M Thu Apr 21 14:49:39 2016 RPT1

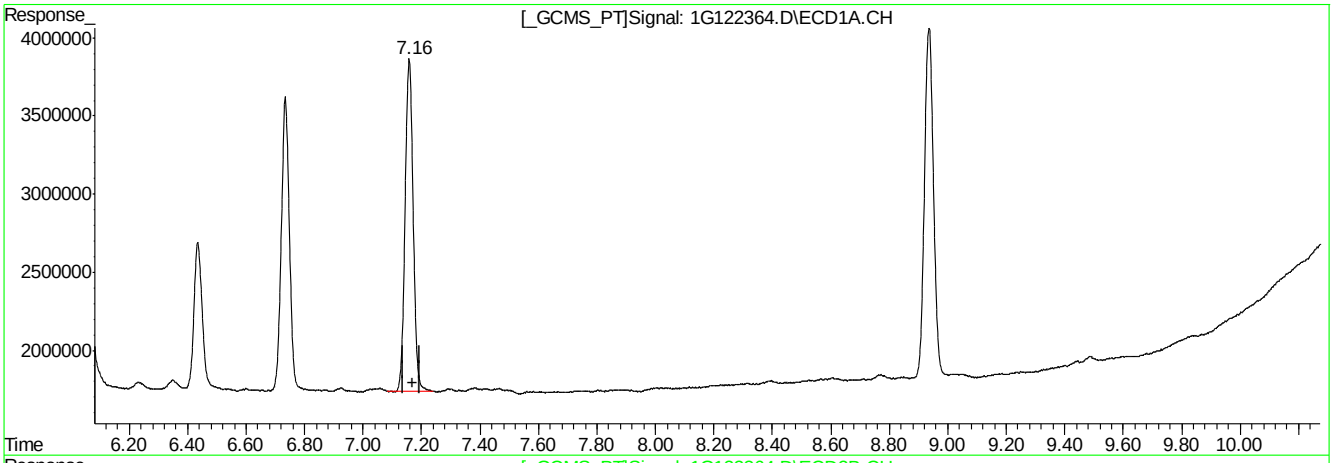
9.4.1.2

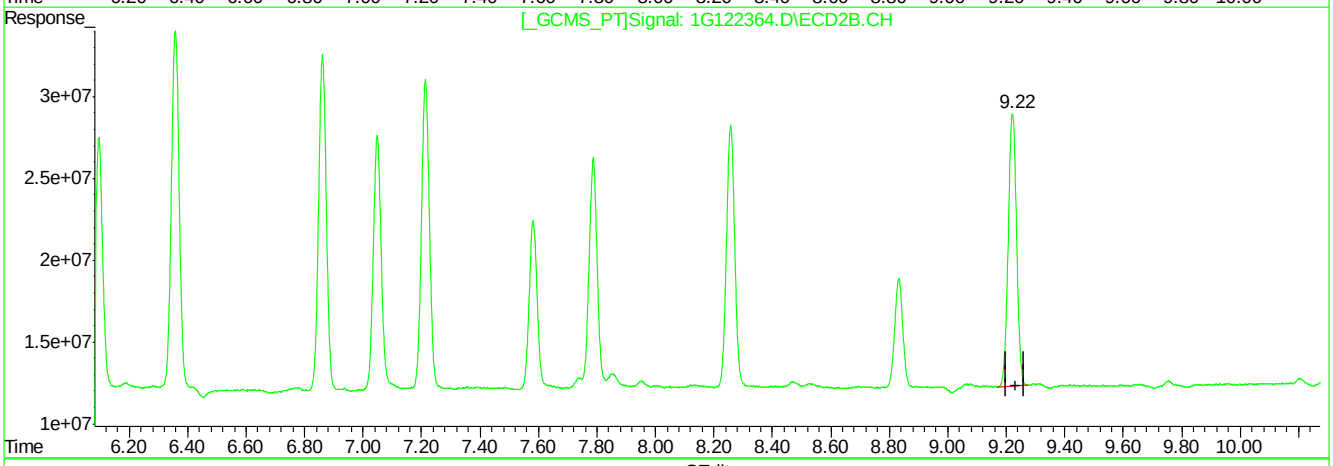
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122364.D\ECD1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122364.D\ECD2B.CH
Acq On    : 4-21-16 01:47:30 PM                      Operator: brittanp
Sample    : op93237-ms                               Inst    : GC1G
Misc      : op93237,g1g3968,150,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21 14:49 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.16min 32.139PPB

response 40583604

(23) Endrin Ketone #2 (B)

9.22min 27.741PPB m

response 330587993

(+) = Expected Retention Time

1G122364.D 1PST3951.M Thu Apr 21 14:49:48 2016 RPT1

9.4.1.3

9

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/21/16 15:10

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122365.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122365.D\ECD2B.CH
Acq On : 4-21-16 02:04:59 PM Operator: brittanp
Sample : op93237-msd Inst : GC1G
Misc : op93237,g1g3968,150,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 14:50 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	58994487	830.4E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	58994487	830.4E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	58994487	830.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	39141213	455.4E6	34.706	34.849
Spiked Amount	40.000	Range	30 - 150	Recovery	=	86.77%	87.12%
24) SA	Decachlorobiphen	8.94	10.87	48585904	184.6E6	31.188	21.479
Spiked Amount	40.000			Recovery	=	77.97%	53.70%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	32571247	488.7E6	24.322	24.786
4) MA	gamma-BHC	2.51	3.47	32755768	419.2E6	25.630	23.659
5) MA	Heptachlor	2.98	4.05	34380334	378.3E6	25.046	23.749
6) B	beta-BHC	2.59	3.56	15780648	193.8E6	24.264	25.744
7) B	delta-BHC	2.77	3.96	29670474	414.8E6	26.368	25.500
8) MB	Aldrin	3.30	4.50	26532220	373.3E6	20.756	23.445
9) B	Heptachlor Epoxi	4.00	5.34	35324799	889.0E6	27.768	61.666
10) B	gamma-Chlordane	4.15	5.60	34866521	339.2E6	26.004	23.520
11) B	alpha-Chlordane	4.31	5.83	99015671	339.7E6	76.612	24.362
12) A	Endosulfan I	4.49	5.92	35412188	352.7E6	28.815	25.906
13) B	4,4'-DDE	4.43	6.10	24702743	261.9E6	20.921	18.246
14) MA	Dieldrin	4.80	6.36	34748701	415.7E6	27.928	27.273
15) MA	Endrin	5.12	6.86	34714460	364.5E6	29.826	27.559
16) A	4,4'-DDD	5.25	7.05	24263005	289.2E6	24.735	23.739
17) B	Endosulfan II	5.43	7.21	34043739	340.4E6	28.825	25.843
18) MA	4,4'-DDT	5.65	7.58	20159036	172.6E6	21.567	18.103
19) B	Endrin Aldehyde	6.06	7.79	29636730	230.1E6	29.614	22.538
20) B	Endosulfan Sulfa	6.73	8.26	34275605	301.6E6	31.936	27.202
21) A	Methoxychlor	6.43	8.83	16044848	120.8E6	25.489	23.874
23) B	Endrin Ketone	7.16	9.22	38611353	317.3E6	30.803	26.907m

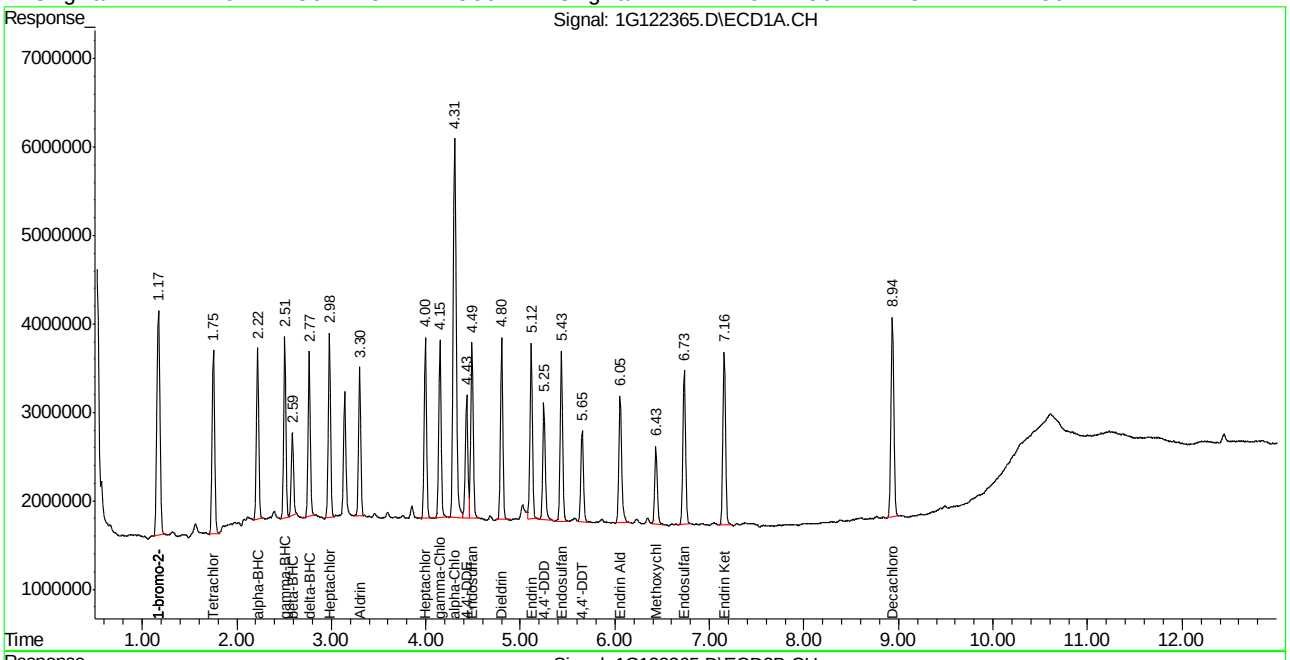
(f)=RT Delta > 1/2 Window (m)=manual int.

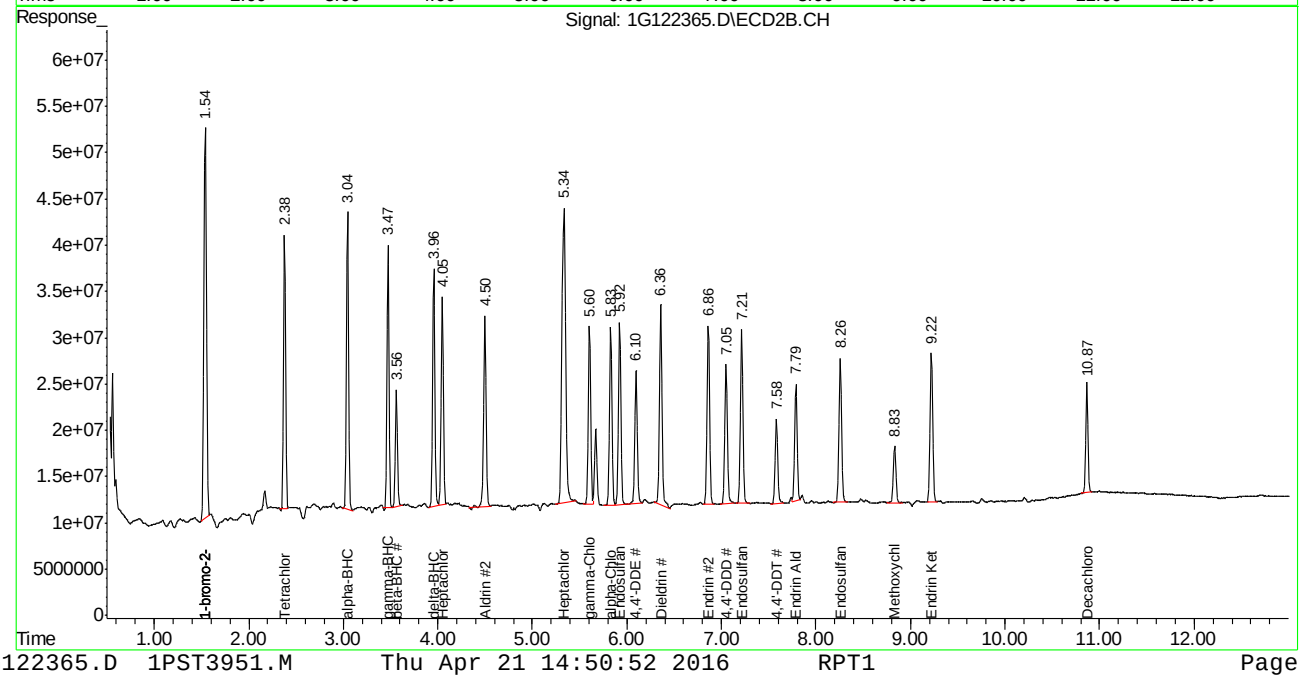
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122365.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122365.D\ECD2B.CH
Acq On : 4-21-16 02:04:59 PM Operator: brittanp
Sample : op93237-msd Inst : GC1G
Misc : op93237,g1g3968,150,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 14:50 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

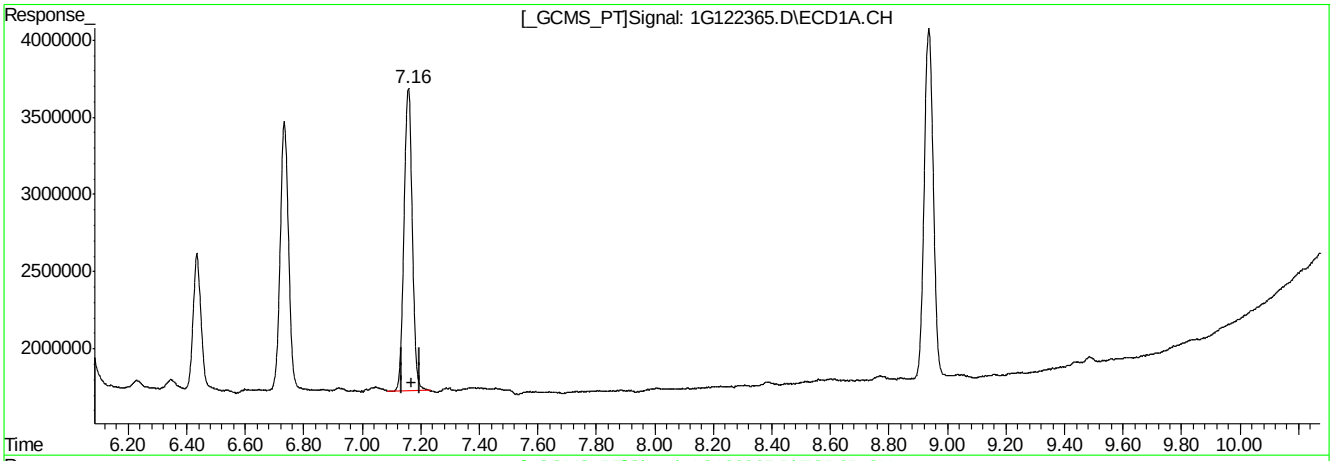
Sample Number:	OP93237-MSD	**Method:**	SW846 8081B
Lab FileID:	1G122365.D	**Analyst approved:**	04/21/16 14:52 Dhara Saparia
Injection Time:	04/21/16 14:04	**Supervisor approved:**	04/21/16 15:10 Gwendolyn Burns

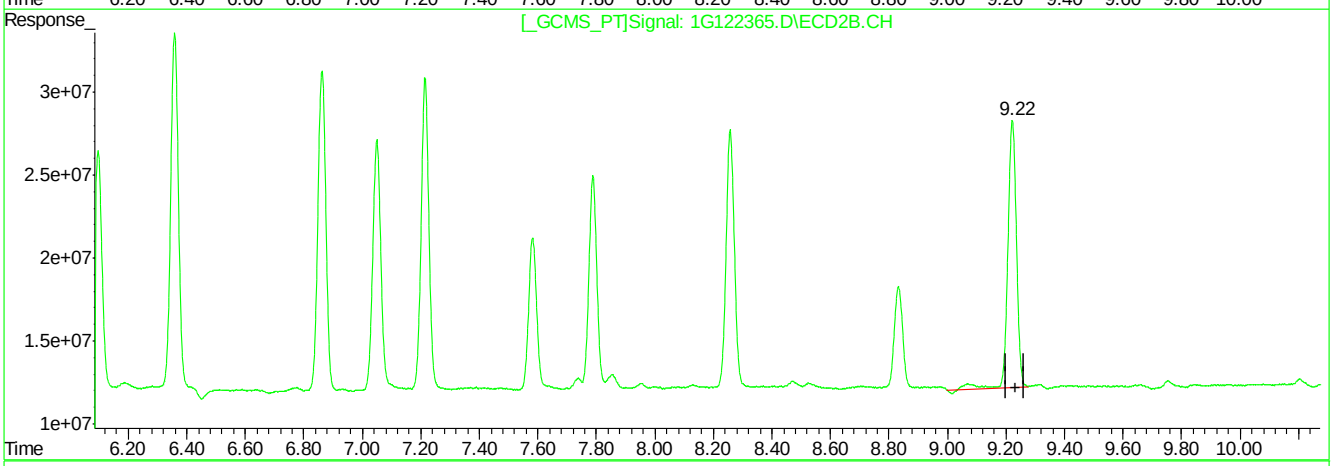
Parameter	CAS	Sig#	R.T. (min.)	Reason
Endrin ketone	53494-70-5	2	9.22	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122365.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122365.D\ECD2B.CH
Acq On    : 4-21-16 02:04:59 PM                      Operator: brittanp
Sample    : op93237-msd                              Inst    : GC1G
Misc      : op93237,g1g3968,150,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21 14:50 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.16min 30.803PPB

response 38611353

(23) Endrin Ketone #2 (B)

9.22min 28.015PPB

response 330342013

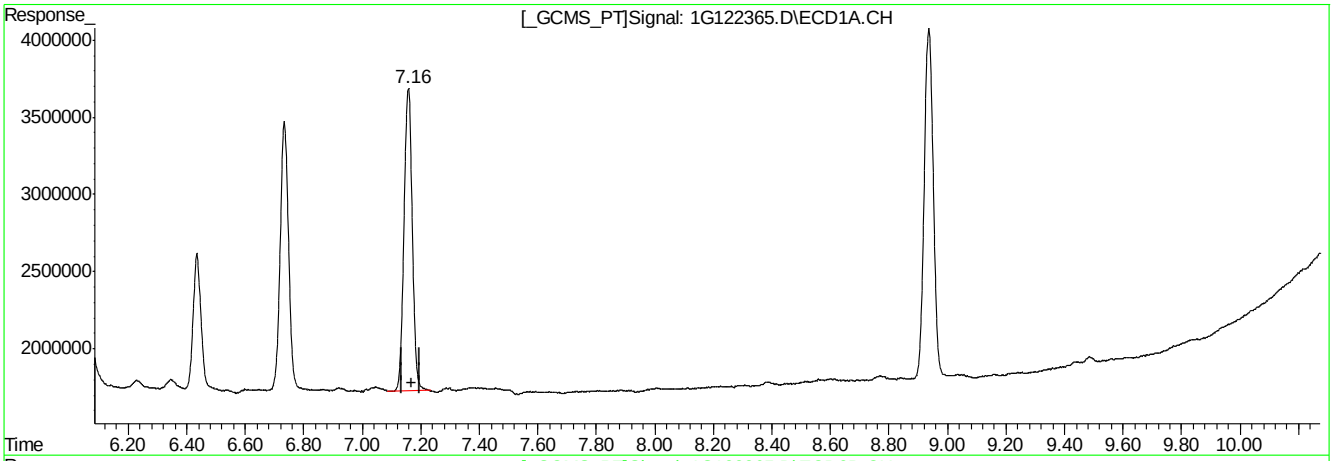
(+) = Expected Retention Time

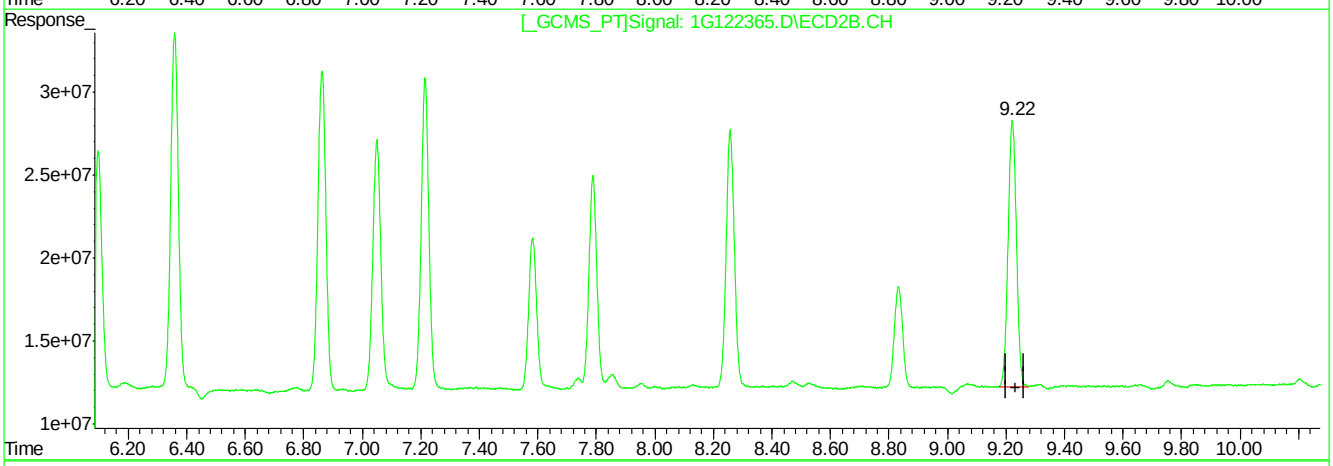
1G122365.D 1PST3951.M Thu Apr 21 14:50:29 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122365.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122365.D\ECD2B.CH
Acq On    : 4-21-16 02:04:59 PM                      Operator: brittanp
Sample    : op93237-msd                              Inst    : GC1G
Misc      : op93237,g1g3968,150,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21 14:50 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.16min 30.803PPB

response 38611353

(23) Endrin Ketone #2 (B)

9.22min 26.907PPB m

response 317279531

(+) = Expected Retention Time

1G122365.D 1PST3951.M Thu Apr 21 14:50:38 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Laidlaw
04/25/16 21:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34381.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:34 pm
Operator : brittanp
Sample : op9332-ms
Misc : op93322,g6g995,16.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:15:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.303	1.575	127.3E6	45777358	50.000	50.000
25) I	1-bromo-2...	1.303	1.575	127.3E6	45777358	50.000	50.000
31) I	1-bromo-2...	1.303	1.575	127.3E6	45777358	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.980	2.472	101.2E6	35633487	43.342	43.085
Spiked Amount		40.000 Range	30 - 150	Recovery	=	108.36%	107.71%
24) SAB	Decachlor...	9.915	11.762	89081376	26125695	43.889	42.013
Spiked Amount		40.000		Recovery	=	109.72%	105.03%
	Target Compounds						
3) A	alpha-BHC	2.495	3.176	73863348	26492725	24.546	24.587
4) MA	gamma-BHC	2.810	3.628	70669311	25102782	25.226	24.882
5) MA	Heptachlor	3.337	4.236	72132518	23866234	25.650	23.407
6) B	beta-BHC	2.890	3.721	35233819	12153900	25.622	24.726
7) B	delta-BHC	3.084	4.138	60371002	21103484	23.123	22.446
8) MB	Aldrin	3.690	4.712	65242774	23339404	25.120	24.617
9) B	Heptachlo...	4.439	5.593	58292531	21492241	23.972	24.322
10) B	gamma-Chl...	4.612	5.898	61309816	21197859	25.054	24.539m
11) B	alpha-Chl...	4.794	6.143	62311229	20867875	25.656	24.315
12) A	Endosulfan I	4.977	6.241	57106925	19971497	23.818	23.953
13) B	4,4'-DDE	4.923	6.441	53724743	18632800	26.695	25.178
14) MA	Dieldrin	5.320	6.712	58968768	21068460	24.874	24.739
15) MA	Endrin	5.662	7.256	59250241	19579379	27.551	25.303
16) A	4,4'-DDD	5.809	7.473	45730268	16355977	26.878	25.609
17) B	Endosulfa...	6.002	7.638	55256619	18491543	26.041	24.434
18) MA	4,4'-DDT	6.262	8.053	50160727	15586683	27.104	26.888
19) B	Endrin Al...	6.674	8.265	45903699	14949802	26.542	24.364
20) B	Endosulfa...	7.410	8.781	47916669	16145879	25.714m	24.243
21) A	Methoxychlor	7.124	9.431	30276078	8766692	27.295	27.446
23) B	Endrin Ke...	7.884	9.829	58741342	18519891	26.508	23.791

SemiQuant Compounds - Not Calibrated on this Instrument

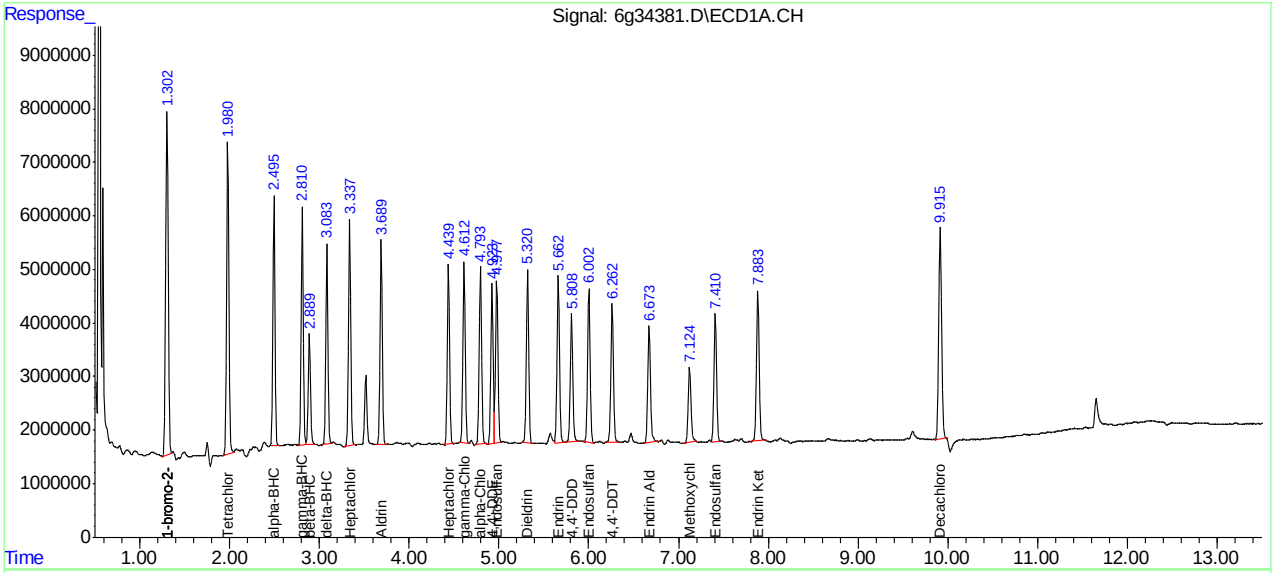
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

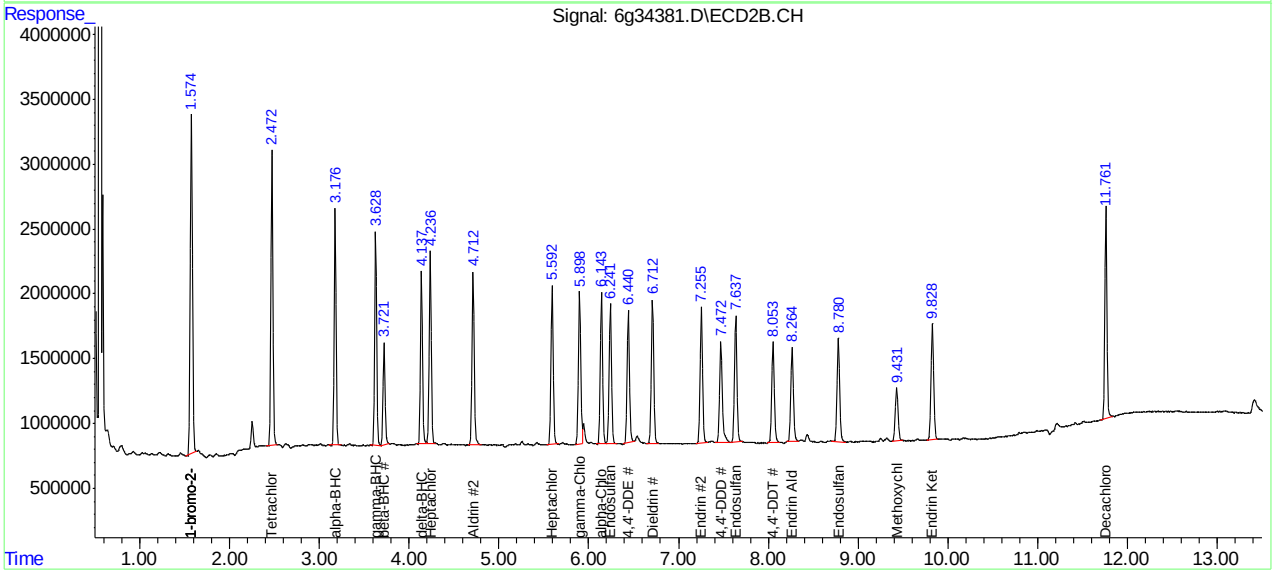
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34381.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:34 pm
Operator : brittanp
Sample : op9332-ms
Misc : op93322,g6g995,16.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:15:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	OP93322-MS	**Method:**	SW846 8081B
Lab FileID:	6G34381.D	**Analyst approved:**	04/25/16 15:01 Brittany Piercy
Injection Time:	04/25/16 12:34	**Supervisor approved:**	04/25/16 21:58 Jennifer Laidlaw

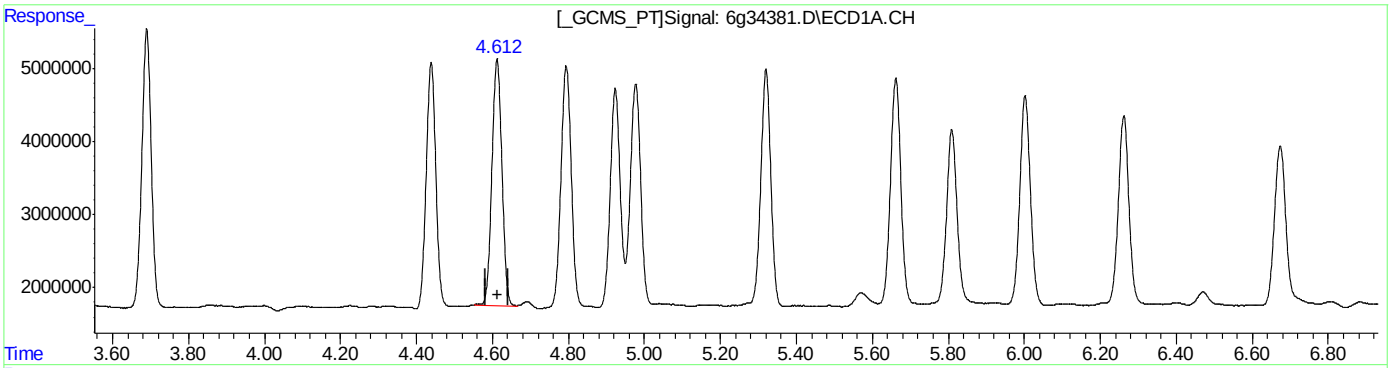
Parameter	CAS	Sig#	R.T. (min.)	Reason
gamma-Chlordane	5103-74-2	2	5.90	Poor instrument integration
Endosulfan sulfate	1031-07-8	1	7.41	Poor instrument integration

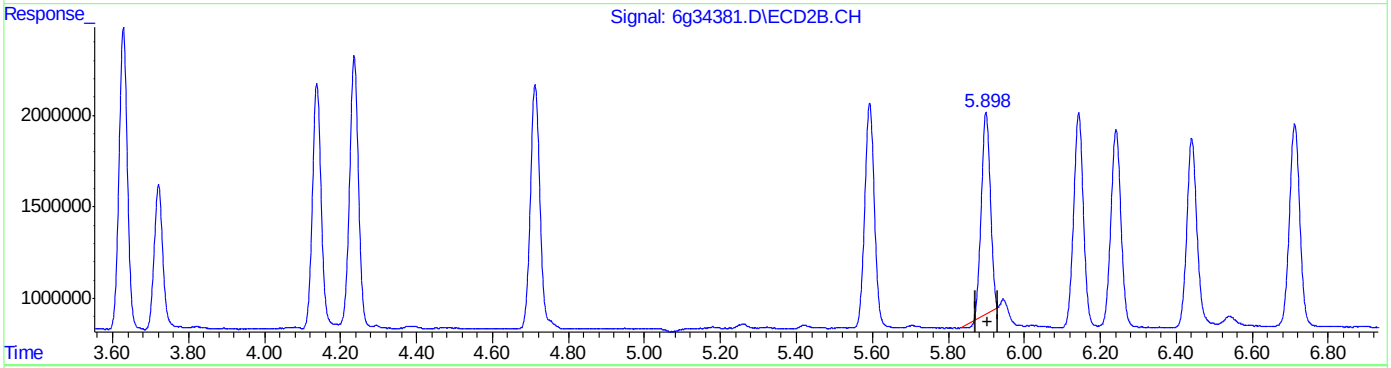
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34381.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:34 pm
Operator : brittanp
Sample : op9332-ms
Misc : op93322,g6g995,16.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:14:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(10) gamma-Chlordane (B)
4.612min 25.054PPB
response 61309816

(10) gamma-Chlordane #2 (B)
5.899min 20.910PPB
response 18062652

(+) = Expected Retention Time
6PST987.M Mon Apr 25 13:14:34 2016

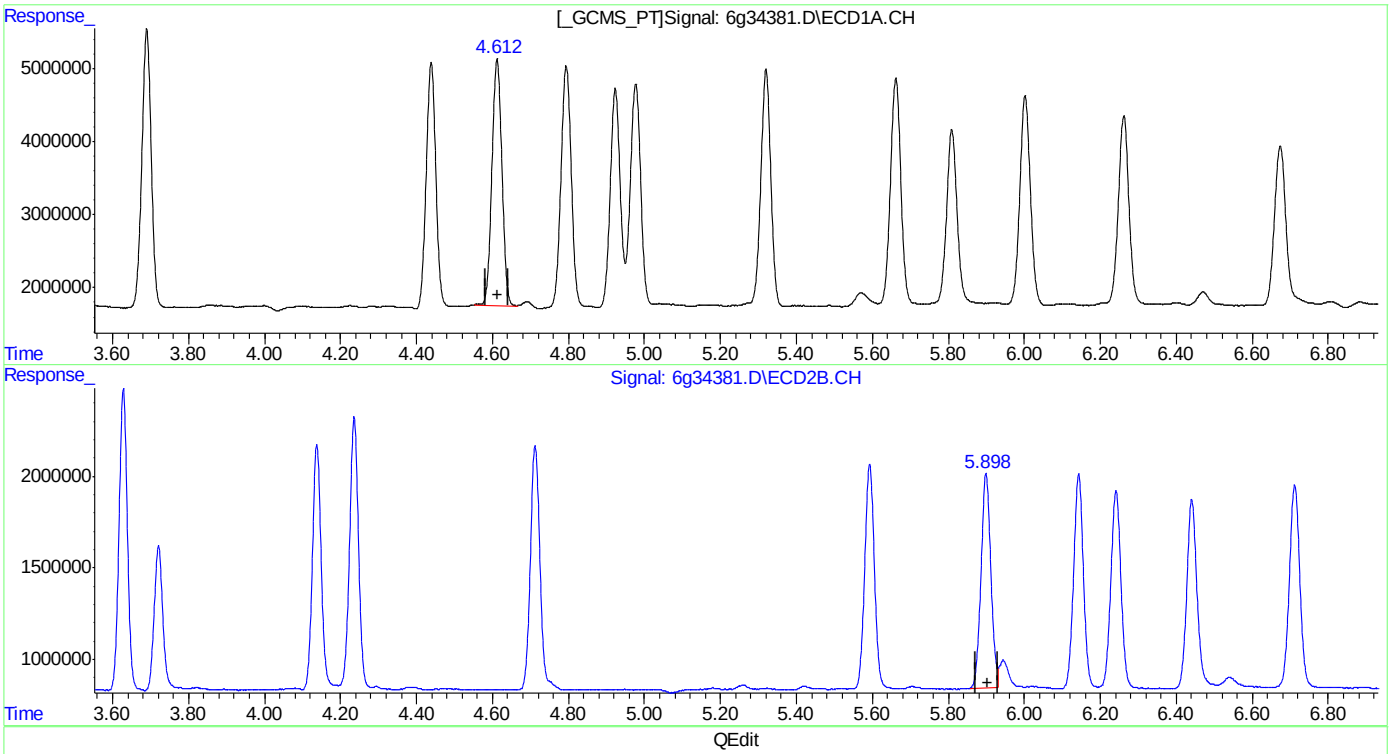
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34381.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:34 pm
Operator : brittanp
Sample : op9332-ms
Misc : op93322,g6g995,16.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:14:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(10) gamma-Chlordane (B)
4.612min 25.054PPB
response 61309816

(10) gamma-Chlordane #2 (B)
5.898min 24.539PPB m
response 21197859

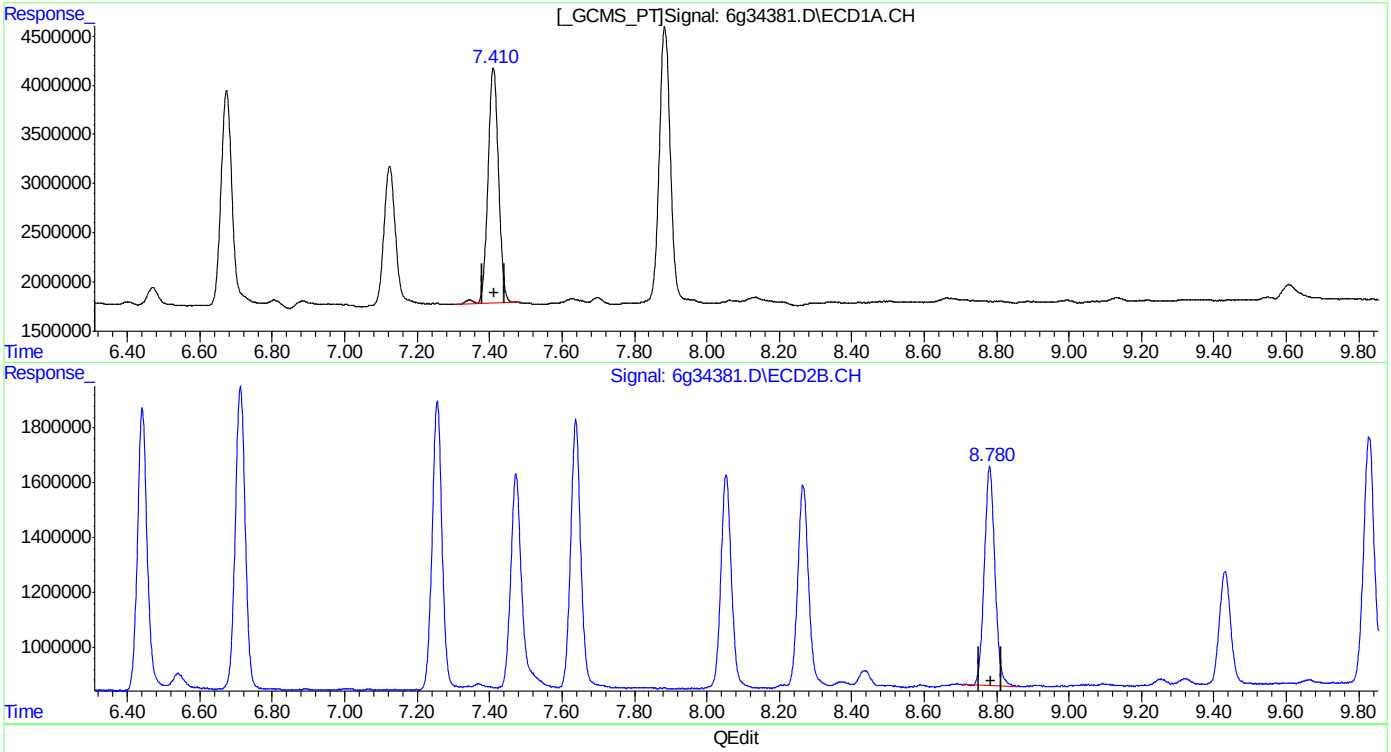
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34381.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:34 pm
Operator : brittanp
Sample : op9332-ms
Misc : op93322,g6g995,16.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:14:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(20) Endosulfan Sulfate (B)
7.410min 26.251PPB
response 48917898

(20) Endosulfan Sulfate #2 (B)
8.781min 24.243PPB
response 16145879

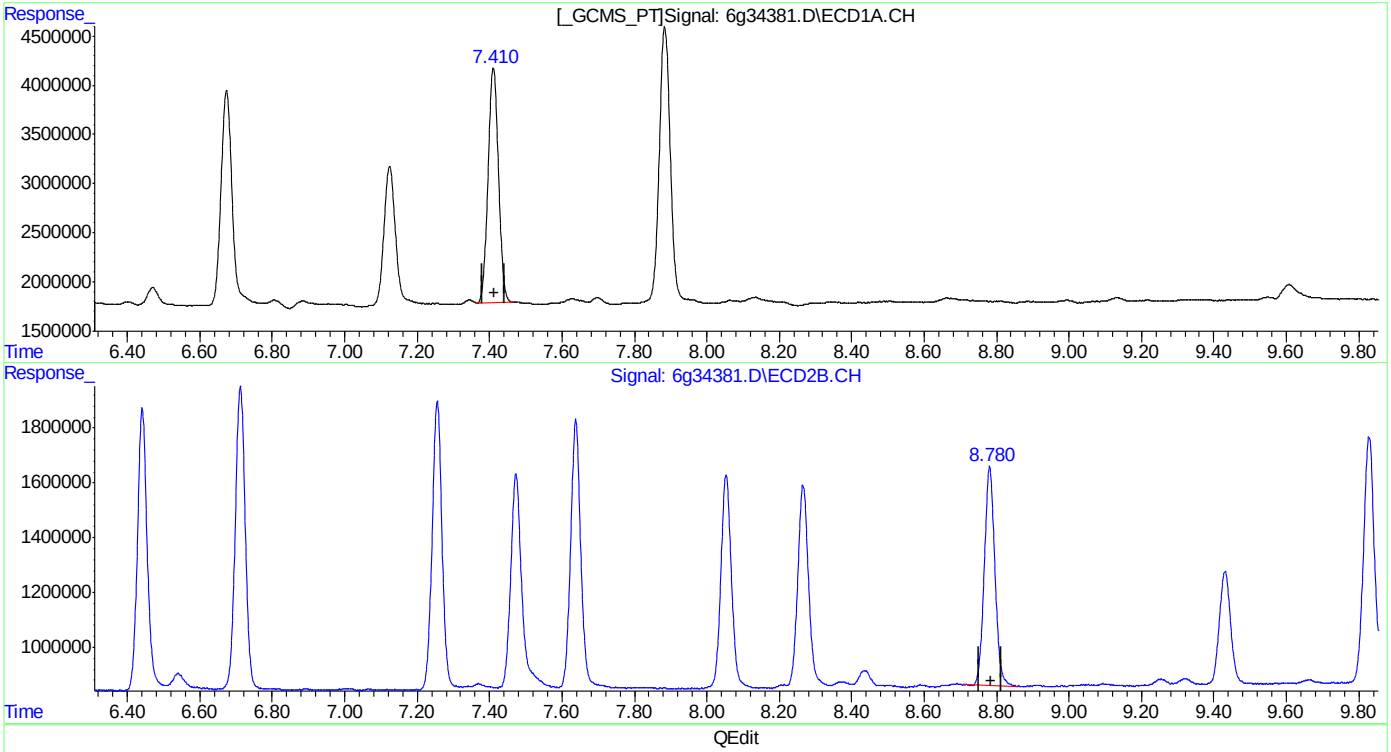
(+) = Expected Retention Time
6PST987.M Mon Apr 25 13:14:55 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34381.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:34 pm
Operator : brittanp
Sample : op9332-ms
Misc : op93322,g6g995,16.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:14:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(20) Endosulfan Sulfate (B)
7.410min 25.714PPB m
response 47916669

(20) Endosulfan Sulfate #2 (B)
8.781min 24.243PPB
response 16145879

(+) = Expected Retention Time
6PST987.M Mon Apr 25 13:15:00 2016

SGS ACCUTEST JC18649

Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Laidlaw
04/25/16 21:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34382.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:51 pm
Operator : brittanp
Sample : op9332-msd
Misc : op93322,g6g995,15.7,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:16:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.303	1.575	135.9E6	48400218	50.000	50.000
25) I	1-bromo-2...	1.303	1.575	135.9E6	48400218	50.000	50.000
31) I	1-bromo-2...	1.303	1.575	135.9E6	48400218	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.981	2.472	85815066	30063171	34.450	34.380
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	86.13%	85.95%
24)	SAB Decachlor...	9.916	11.762	77672989	22861527	35.860	34.772
	Spiked Amount 40.000			Recovery	=	89.65%	86.93%
	Target Compounds						
3) A	alpha-BHC	2.494	3.176	62674849	22289239	19.517	19.565
4) MA	gamma-BHC	2.810	3.628	59628080	21267615	19.945	19.938
5) MA	Heptachlor	3.337	4.236	60262552	19926260	20.080	18.484
6) B	beta-BHC	2.889	3.721	30339794	10499520	20.674	20.203
7) B	delta-BHC	3.083	4.138	51680715	17668115	18.549	17.774
8) MB	Aldrin	3.689	4.713	54693964	19818096	19.733	19.770
9) B	Heptachlo...	4.439	5.593	49286488	18498860	18.993	19.800
10) B	gamma-Chl...	4.612	5.899	52633990	18270916	20.155	20.004m
11) B	alpha-Chl...	4.794	6.143	53780231	17919583	20.750	19.749
12) A	Endosulfan I	4.978	6.242	48972236	17193292	19.140	19.504
13) B	4,4'-DDE	4.924	6.441	45995852	16001013	21.416	20.450
14) MA	Dieldrin	5.321	6.713	52968757	17874336	20.937	19.851
15) MA	Endrin	5.662	7.256	51119032	16789532	22.274	20.522
16) A	4,4'-DDD	5.809	7.474	39310776	13923675	21.651	20.620
17) B	Endosulfa...	6.003	7.638	47204327	15908471	20.847	19.881
18) MA	4,4'-DDT	6.262	8.055	43996908	13247896	22.277	21.615
19) B	Endrin Al...	6.674	8.267	37653894	12226858	20.402	18.846
20) B	Endosulfa...	7.410	8.781	41445872	14030771	20.842	19.926
21) A	Methoxychlor	7.125	9.431	25535062	7448301	21.572	22.055
23) B	Endrin Ke...	7.885	9.830	50981239	16011441	21.559	19.454

SemiQuant Compounds - Not Calibrated on this Instrument

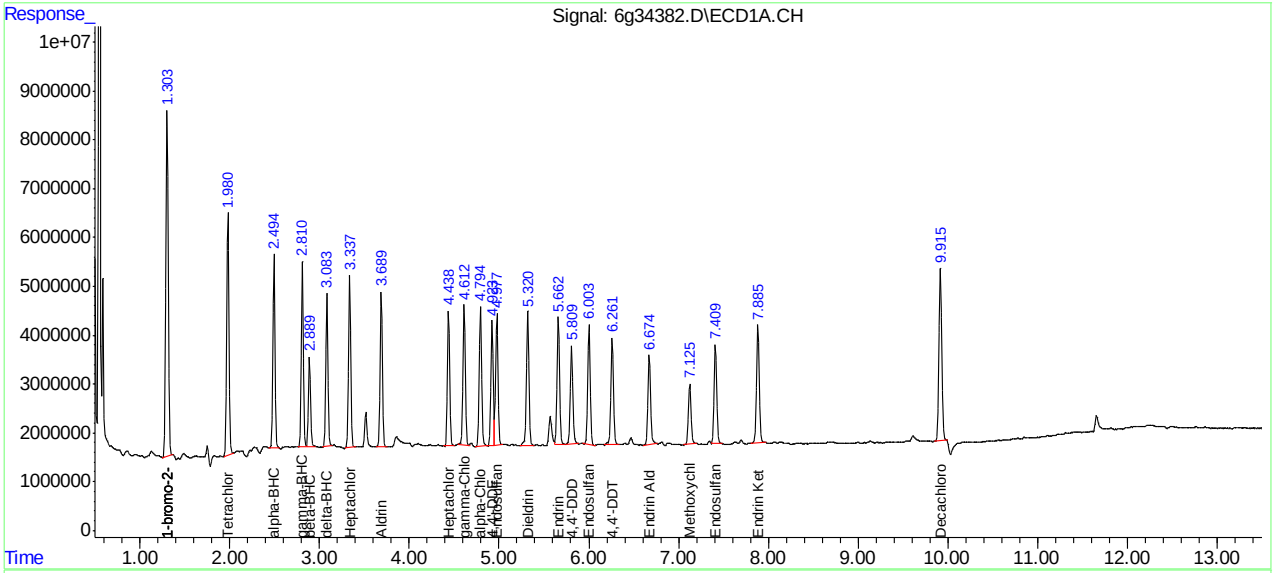
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

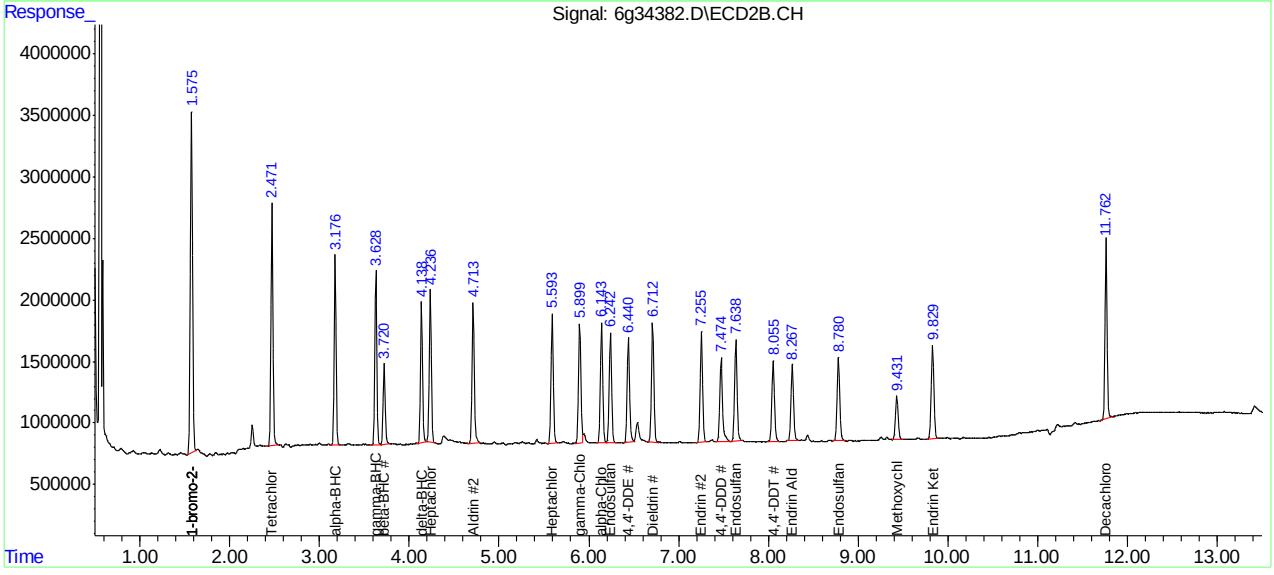
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34382.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:51 pm
Operator : brittanp
Sample : op9332-msd
Misc : op93322,g6g995,15.7,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:16:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC18649

Manual Integration Approval Summary

Sample Number:	OP93322-MSD	**Method:**	SW846 8081B
Lab FileID:	6G34382.D	**Analyst approved:**	04/25/16 15:01 Brittany Piercy
Injection Time:	04/25/16 12:51	**Supervisor approved:**	04/25/16 21:58 Jennifer Laidlaw

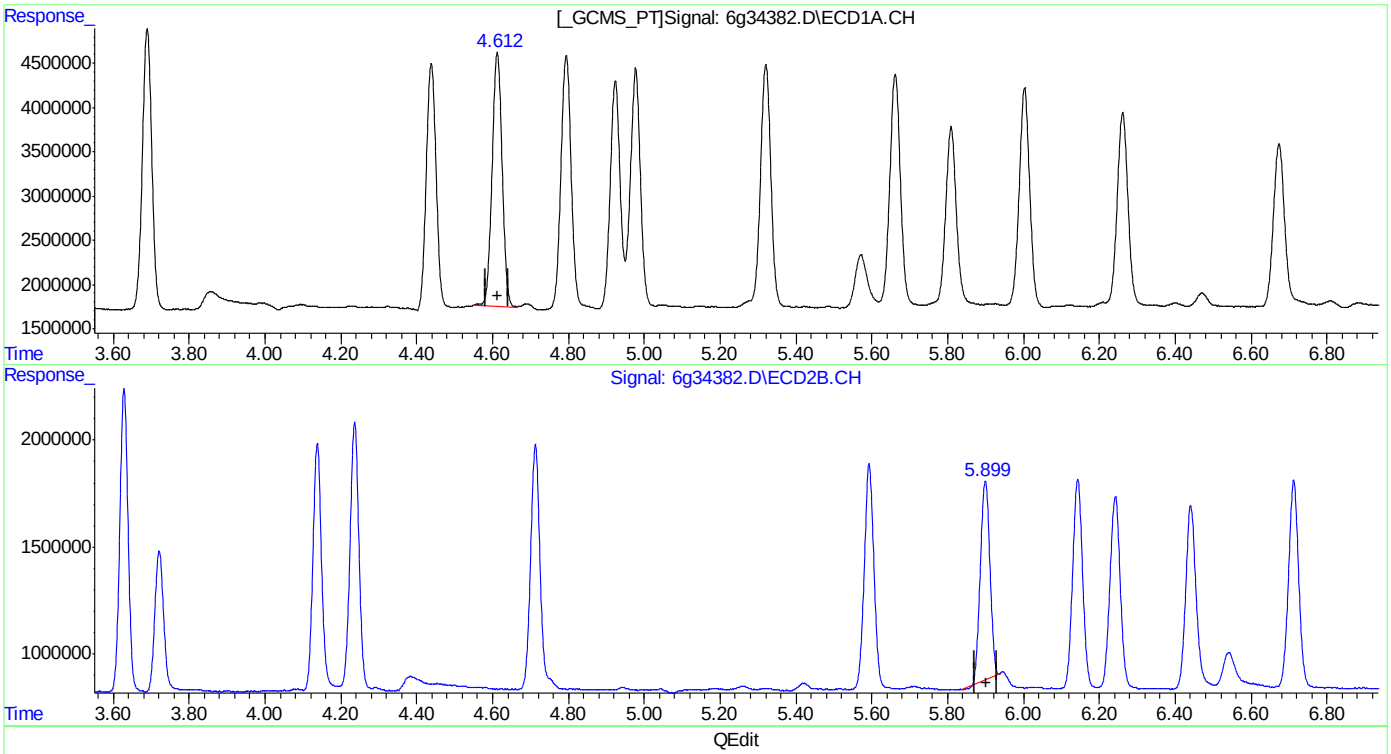
Parameter	CAS	Sig#	R.T. (min.)	Reason
gamma-Chlordane	5103-74-2	2	5.90	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34382.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:51 pm
Operator : brittanp
Sample : op9332-msd
Misc : op93322,g6g995,15.7,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:15:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(10) gamma-Chlordane (B)
4.612min 20.155PPB
response 52633990

(10) gamma-Chlordane #2 (B)
5.900min 17.827PPB
response 16282163

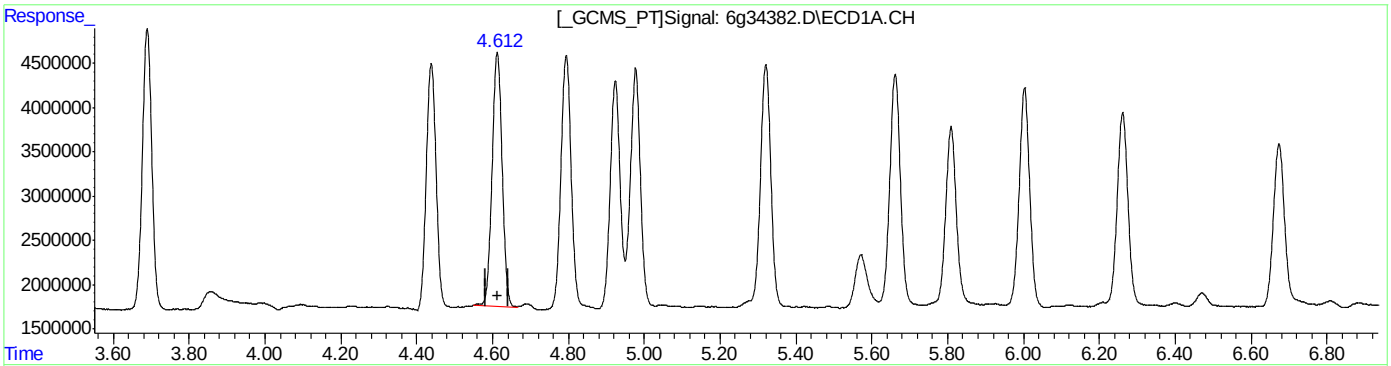
(+) = Expected Retention Time
6PST987.M Mon Apr 25 13:15:52 2016

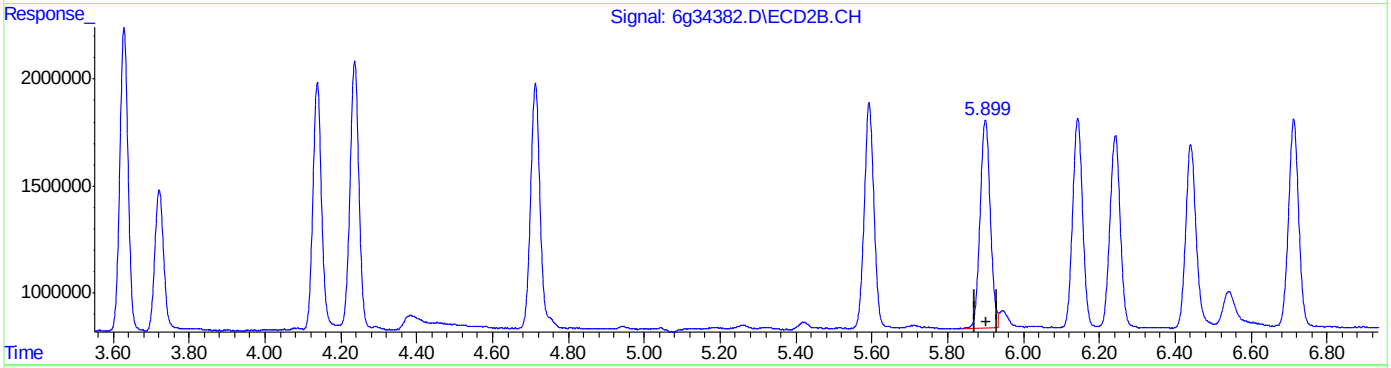
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34382.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:51 pm
Operator : brittanp
Sample : op9332-msd
Misc : op93322,g6g995,15.7,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:15:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(10) gamma-Chlordane (B)
4.612min 20.155PPB
response 52633990

(10) gamma-Chlordane #2 (B)
5.899min 20.004PPB m
response 18270916

(+) = Expected Retention Time
6PST987.M Mon Apr 25 13:15:58 2016

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On : 01 Apr 2016 10:37 am Operator: dharas
Sample : ddt Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:25 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:59:16 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	65968593	847.6E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	65968593	847.6E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	65968593	847.6E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.76	2.38	24690596	281.2E6	16.374	17.286
Spiked Amount	40.000	Range	30 - 150	Recovery	=	40.94%	43.22%
24) SA	Decachlorobiphen	8.96	10.88	35680104	189.8E6	19.712	20.111m
Spiked Amount	40.000			Recovery	=	49.28%	50.28%
	Target Compounds						
13) B	4,4'-DDE	4.45	6.11	1293527	17237832	0.940	1.033
15) MA	Endrin	5.14	6.88	70219660	687.5E6	49.945	42.035
16) A	4,4'-DDD	5.27	7.06	2081667	26843936	1.766	1.858
18) MA	4,4'-DDT	5.68	7.60	138.6E6	1157.8E6	123.056	113.957m
19) B	Endrin Aldehyde	6.08	7.80	1241326	14533971	0.977	1.218m
23) B	Endrin Ketone	7.18	9.24	3577865	33672314	2.267	2.402m

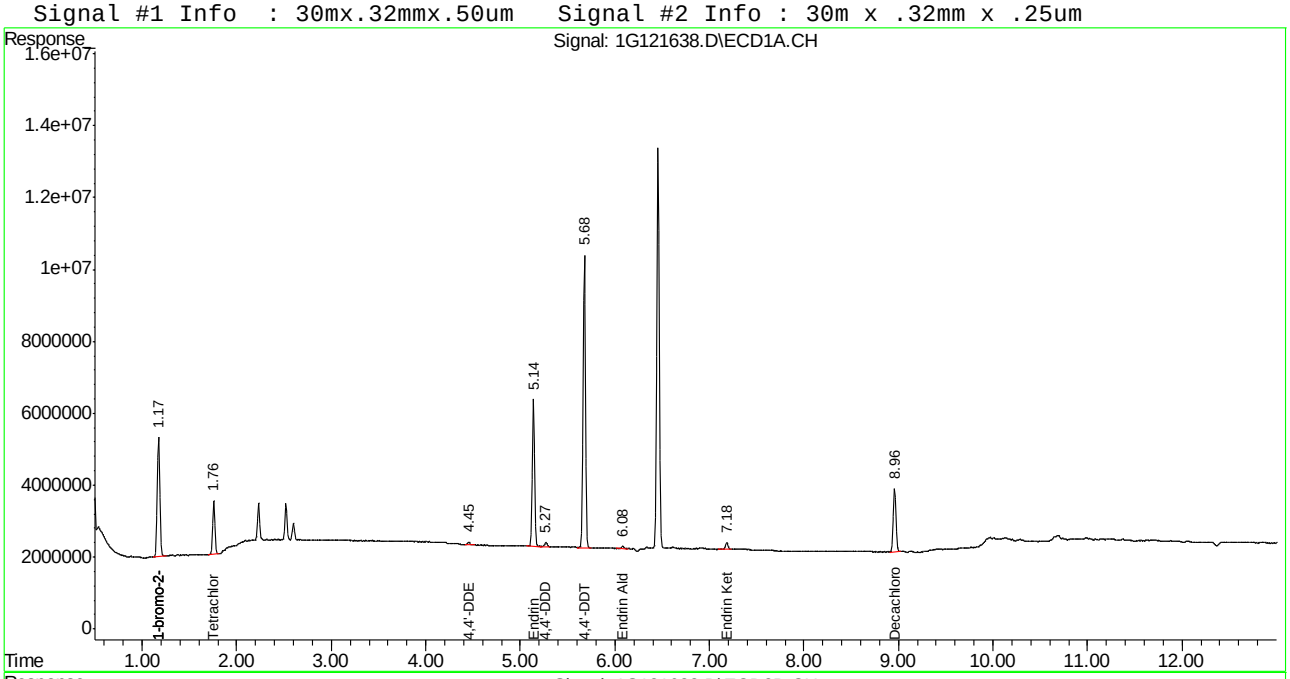
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121638.D 1PST3951.M Fri Apr 01 16:25:07 2016 RPT1 Page 1

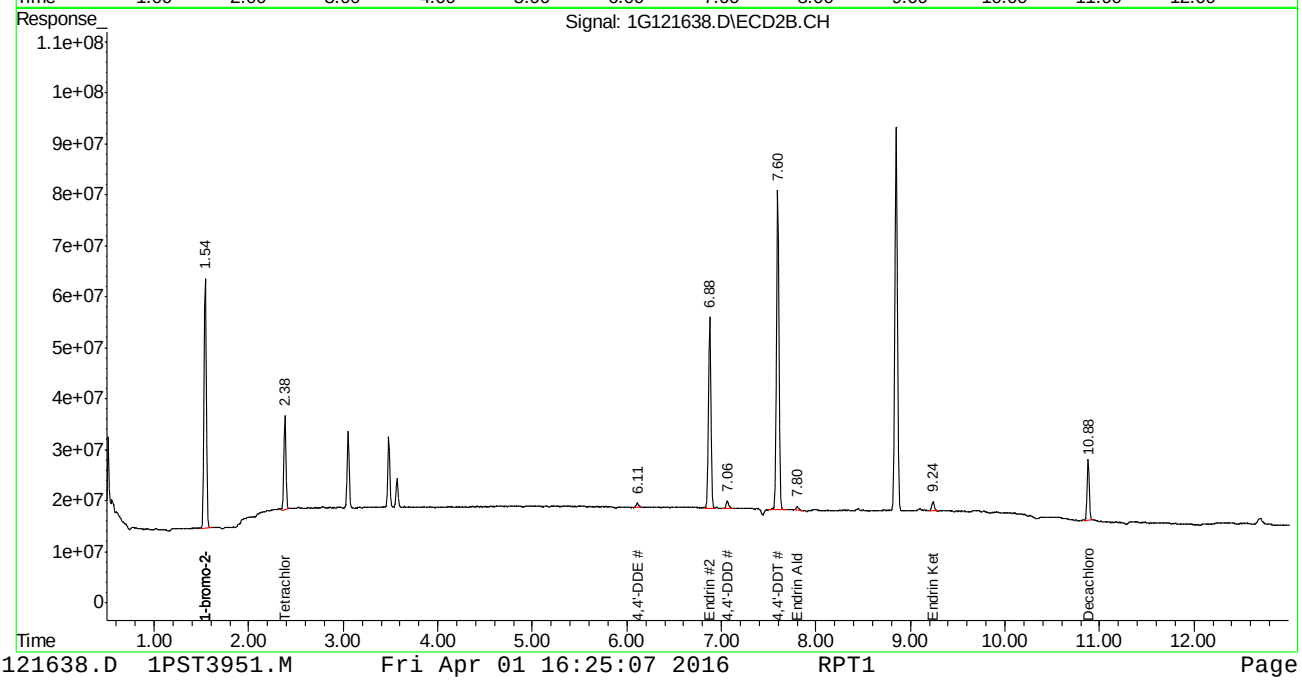
Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:25 2016  Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```





Manual Integration Approval Summary

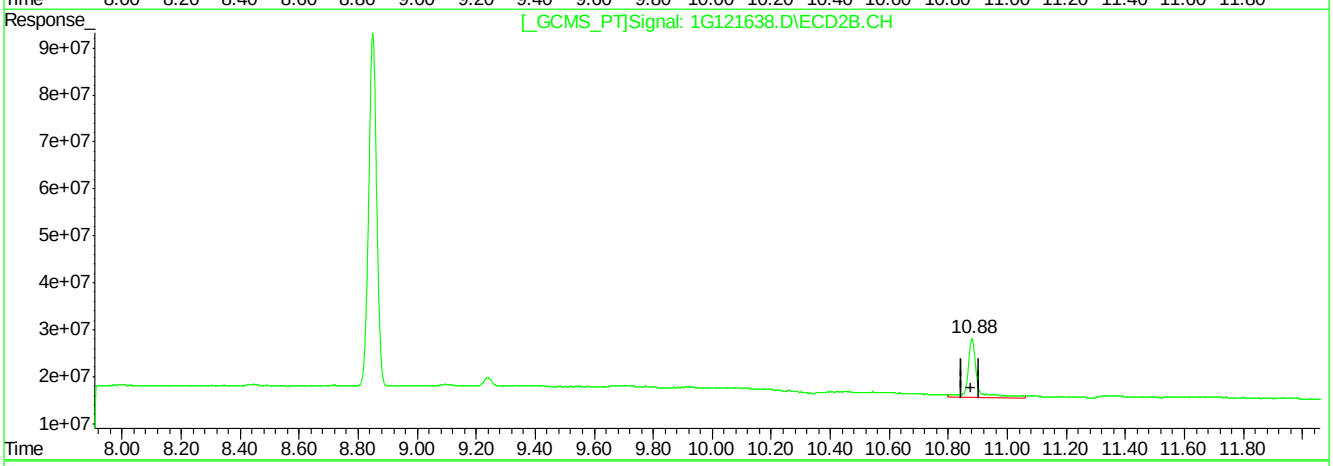
Sample Number:	G1G3951-DDT	**Method:**	SW846 8081B
Lab FileID:	1G121638.D	**Analyst approved:**	04/01/16 16:29 Joseph Ravino
Injection Time:	04/01/16 10:37	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDT	50-29-3	2	7.60	Poorly defined baseline
Endrin aldehyde	7421-93-4	2	7.80	Poorly defined baseline
Endrin ketone	53494-70-5	2	9.24	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	10.88	Poorly defined baseline

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```



QEdit

(24) Decachlorobiphenyl (SA)

8.96min 19.712PPB

response 35680104

(24) Decachlorobiphenyl #2 (SA)

10.88min 28.256PPB

response 266630809

(+) = Expected Retention Time

1G121638.D 1PST3951.M Fri Apr 01 16:24:17 2016 RPT1

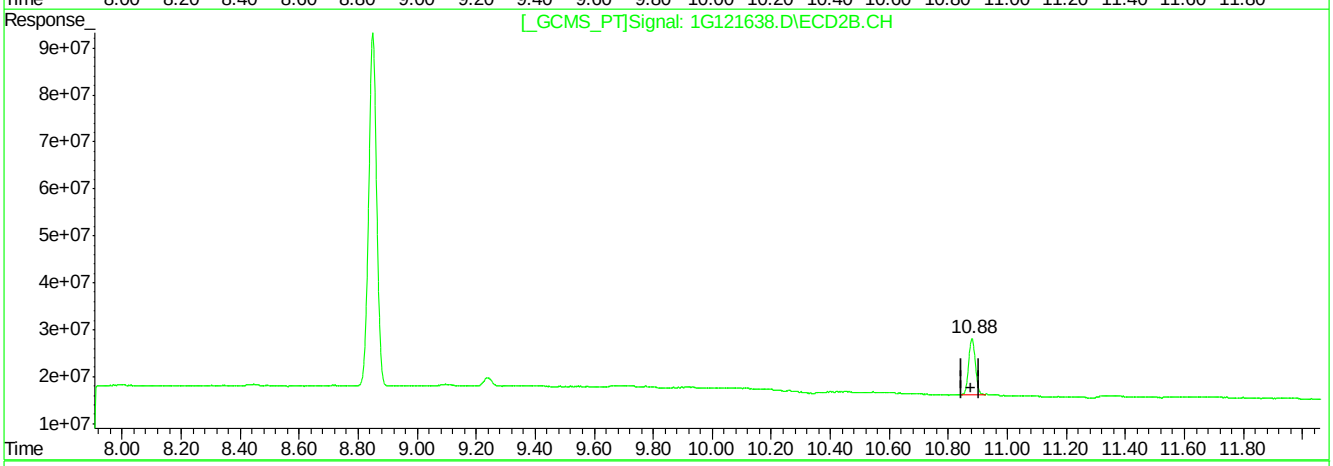
9.5.1.2

9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```



QEdit

(24) Decachlorobiphenyl (SA)

8.96min 19.712PPB

response 35680104

(24) Decachlorobiphenyl #2 (SA)

10.88min 20.111PPB m

response 189773025

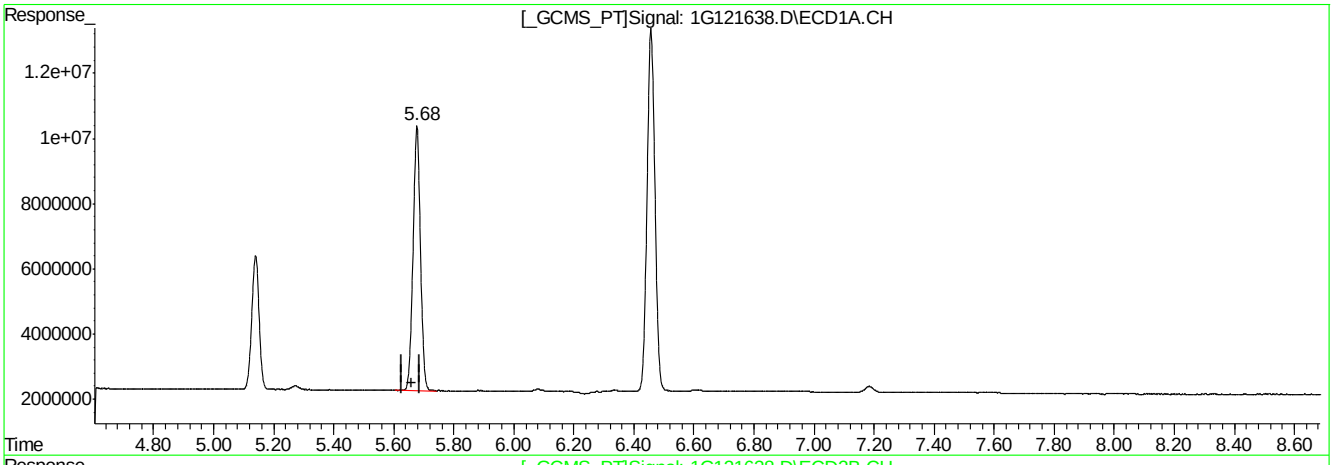
(+) = Expected Retention Time

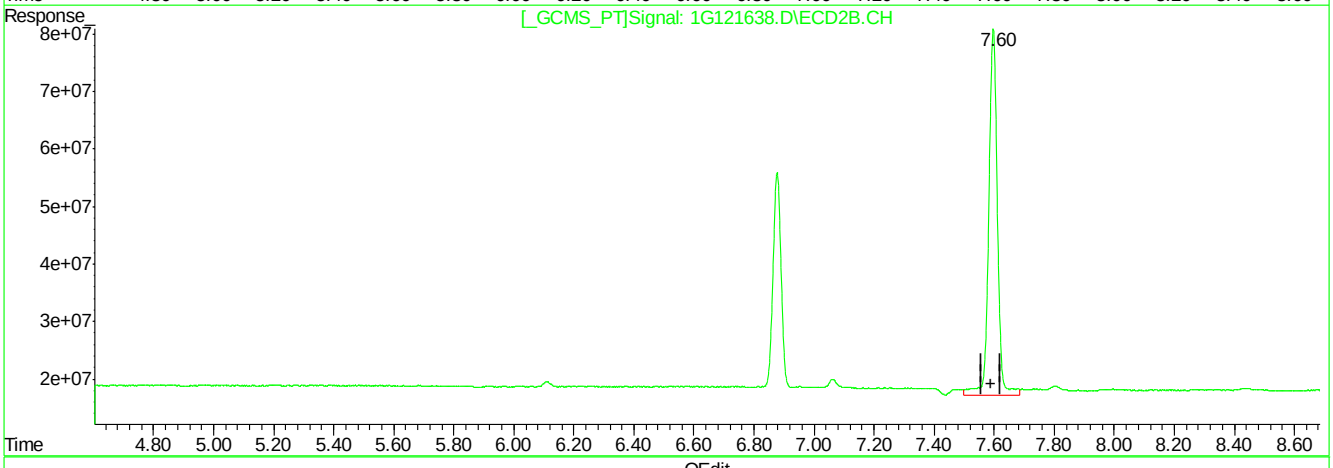
1G121638.D 1PST3951.M Fri Apr 01 16:24:22 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.68min 123.056PPB

response 138550612

(18) 4,4'-DDT #2 (MA)

7.60min 125.765PPB

response 1277788102

(+) = Expected Retention Time

1G121638.D 1PST3951.M Fri Apr 01 16:24:35 2016 RPT1

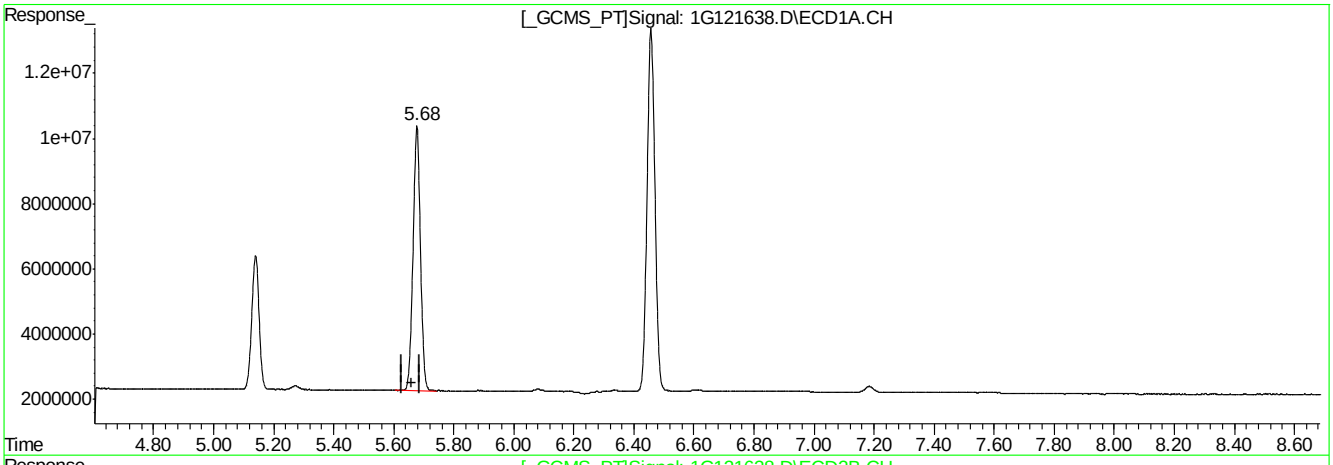
9.5.1.4

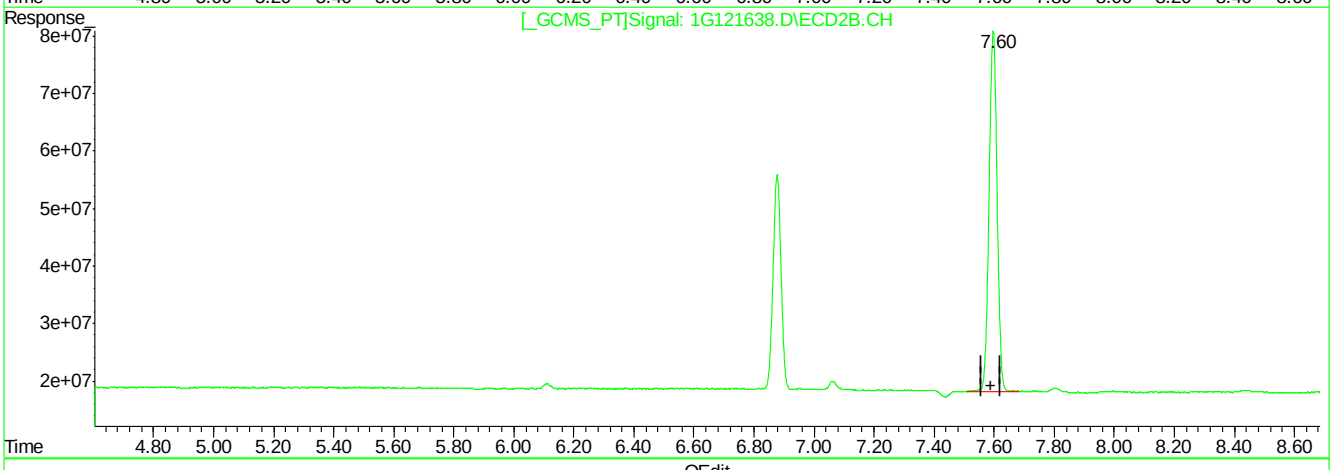
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.68min 123.056PPB

response 138550612

(18) 4,4'-DDT #2 (MA)

7.60min 113.957PPB m

response 1157819905

(+) = Expected Retention Time

1G121638.D 1PST3951.M Fri Apr 01 16:24:40 2016 RPT1

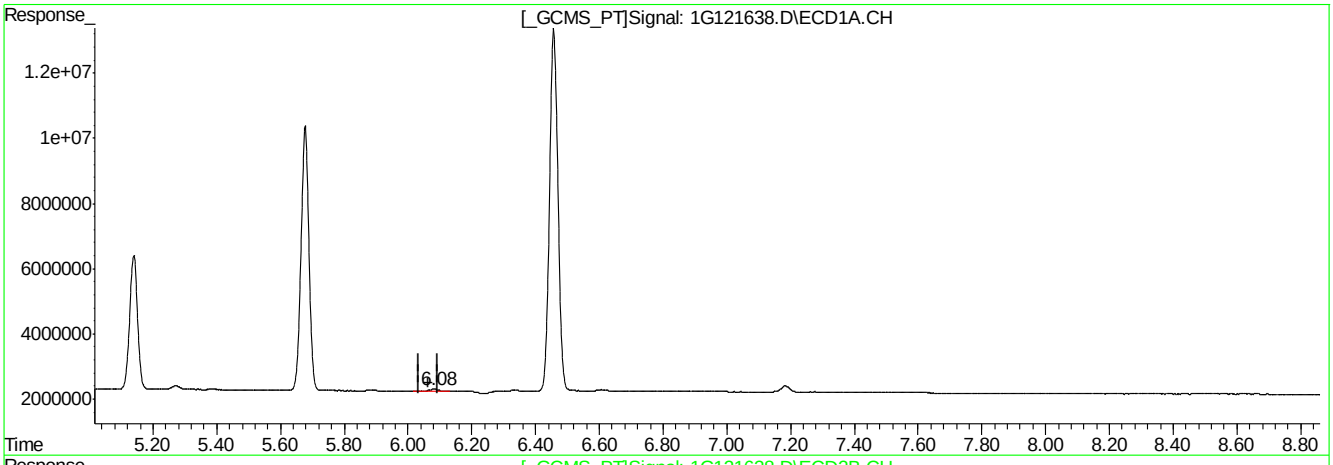
9.5.1.5

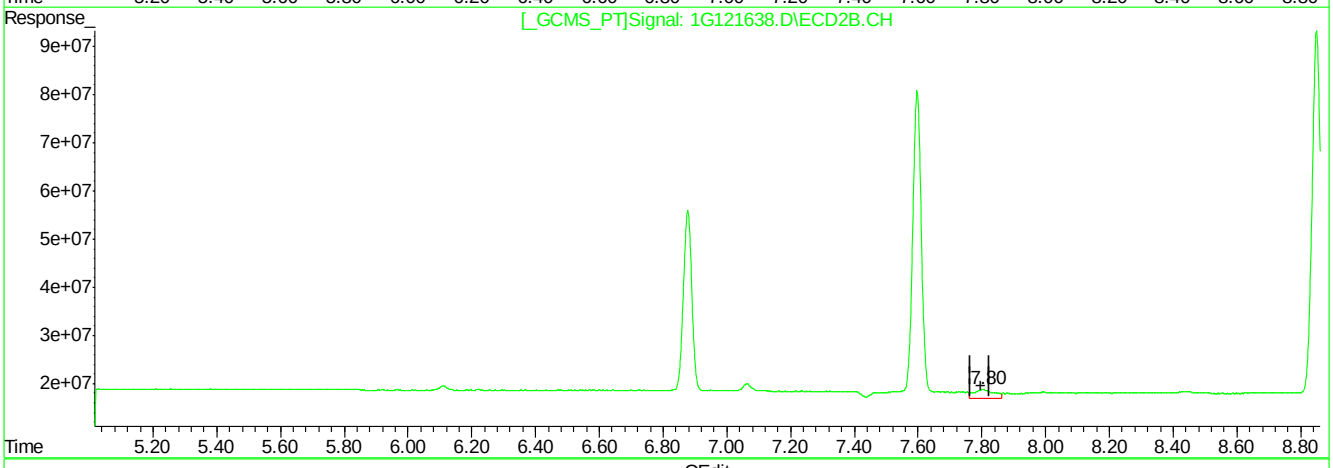
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.08min 0.977PPB

response 1241326

(19) Endrin Aldehyde #2 (B)

7.80min 6.526PPB

response 77854319

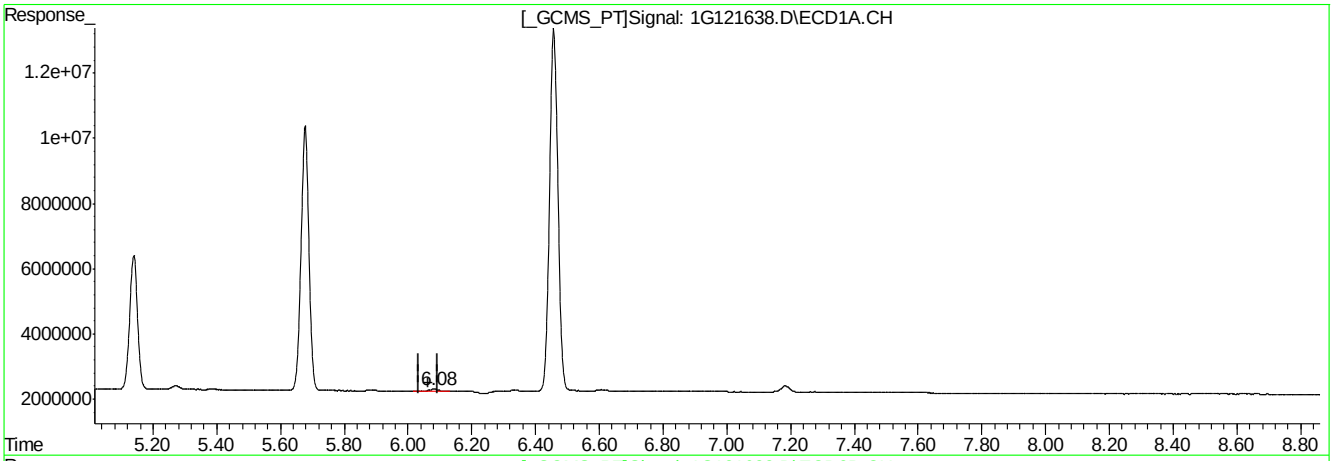
(+) = Expected Retention Time

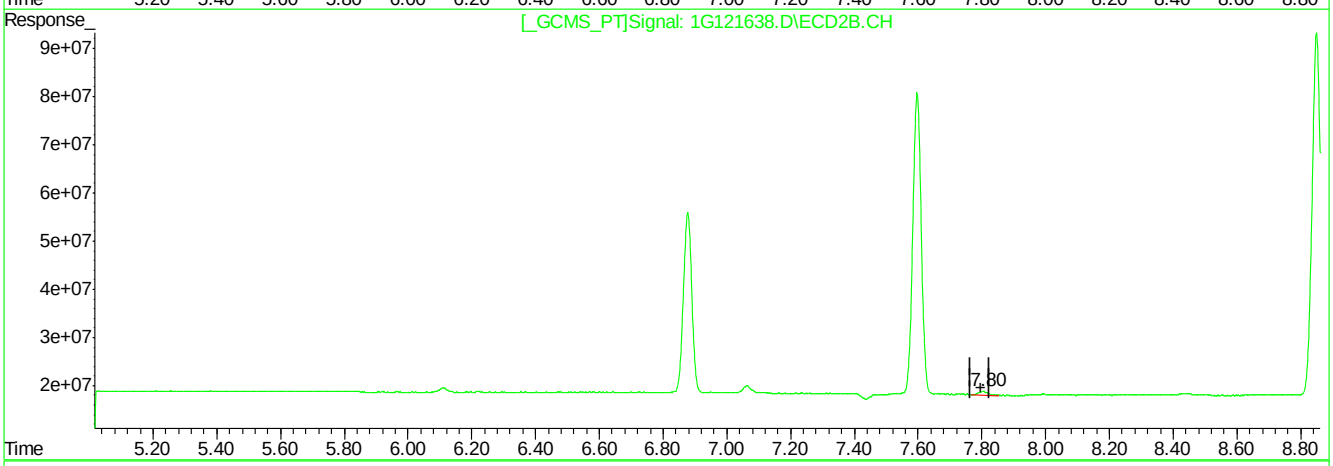
1G121638.D 1PST3951.M Fri Apr 01 16:24:43 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.08min 0.977PPB

response 1241326

(19) Endrin Aldehyde #2 (B)

7.80min 1.218PPB m

response 14533971

(+) = Expected Retention Time

1G121638.D 1PST3951.M Fri Apr 01 16:24:50 2016 RPT1

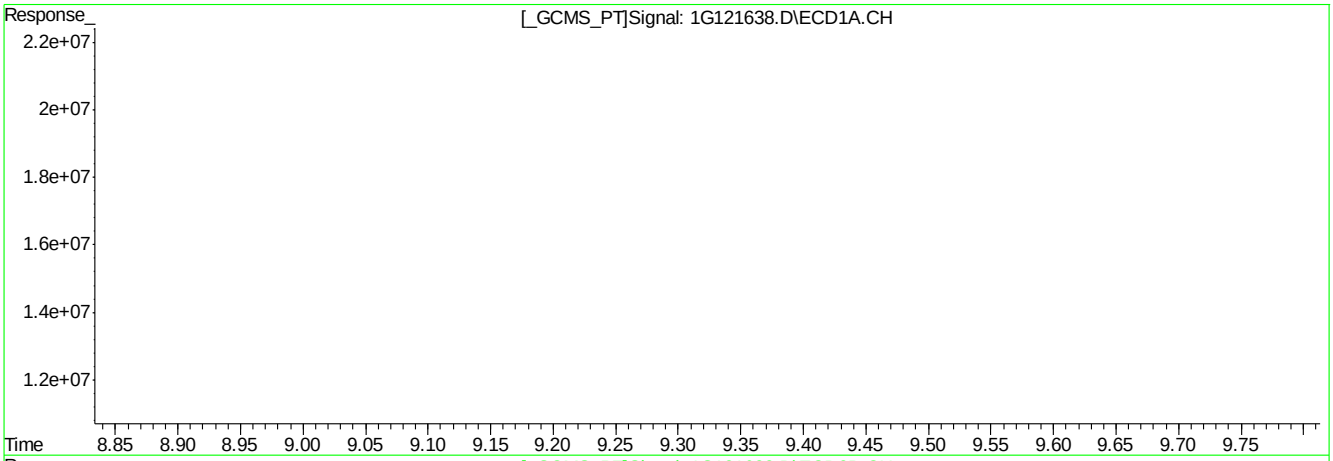
9.5.1.7

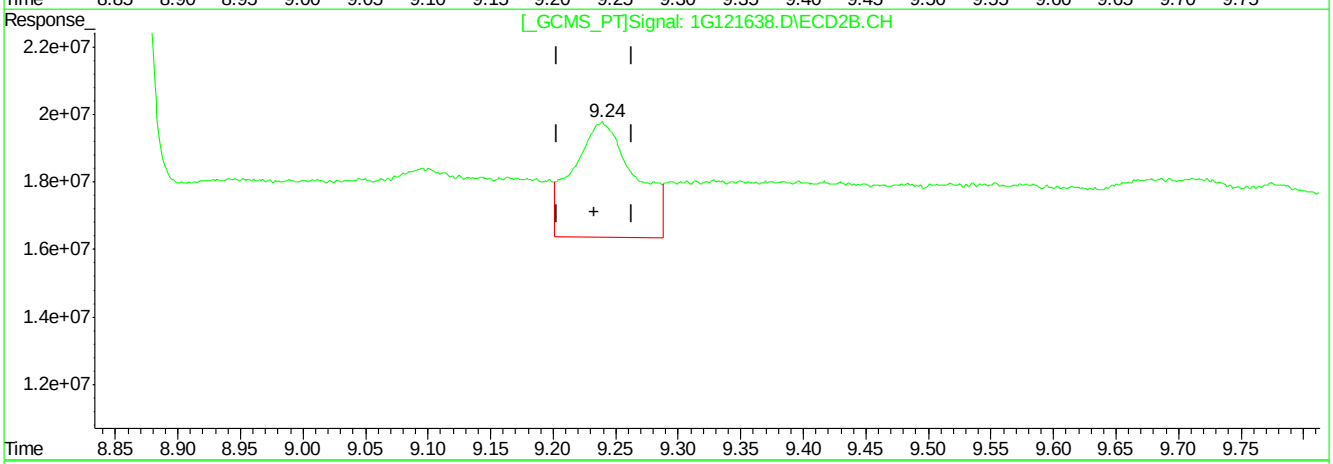
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.18min 2.267PPB

response 3577865

(23) Endrin Ketone #2 (B)

9.24min 8.425PPB

response 118095464

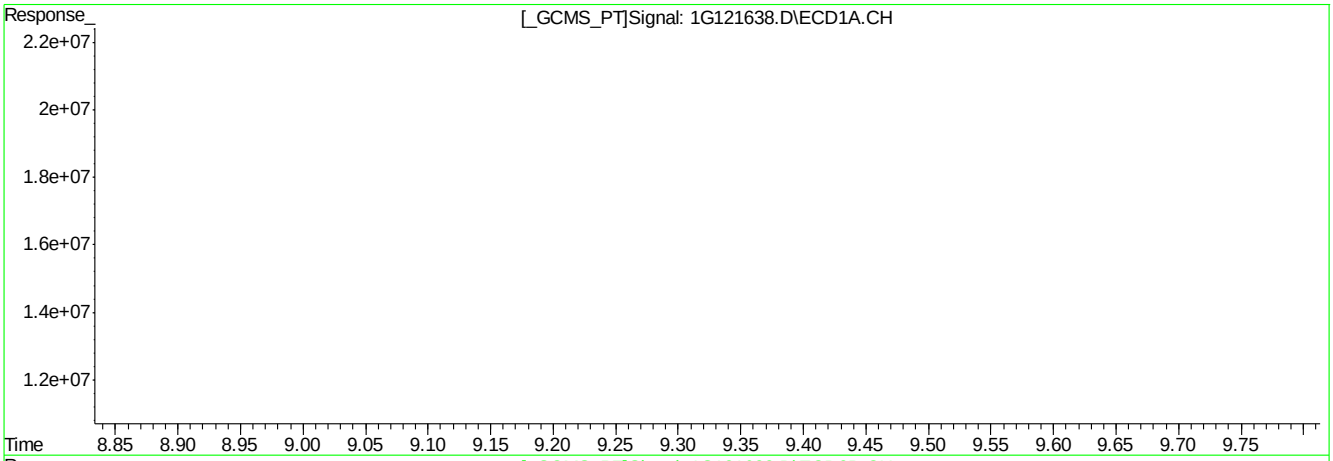
(+) = Expected Retention Time

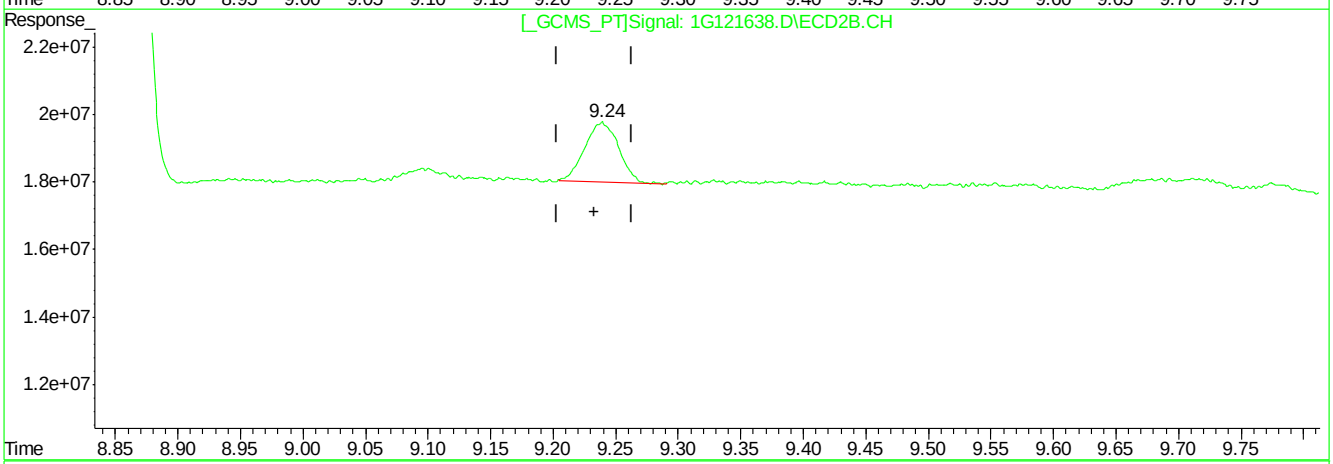
1G121638.D 1PST3951.M Fri Apr 01 16:24:58 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.18min 2.267PPB

response 3577865

(23) Endrin Ketone #2 (B)

9.24min 2.402PPB m

response 33672314

(+) = Expected Retention Time

1G121638.D 1PST3951.M Fri Apr 01 16:25:02 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/21/16 12:46

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD2B.CH
Acq On : 4-21-16 08:57:03 AM Operator: brittanp
Sample : ddt Inst : GC1G
Misc : op93213,g1g3968,15.3,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 11:45 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	76841790	1067.1E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	76841790	1067.1E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	76841790	1067.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	31747396	370.6E6	21.612	22.070
Spiked Amount	40.000	Range	30 - 150	Recovery	=	54.03%	55.17%
24) SA	Decachlorobiphen	8.93	10.86	47992265	176.8E6	23.652	16.005
Spiked Amount	40.000			Recovery	=	59.13%	40.01%
	Target Compounds						
13) B	4,4'-DDE	4.43	6.09	732715	9111929	0.476m	0.494m
15) MA	Endrin	5.10	6.86	96590309	858.3E6	63.714	50.504
16) A	4,4'-DDD	5.24	7.05	2909890	37063884	2.277m	2.368
18) MA	4,4'-DDT	5.64	7.58	188.4E6	1372.8E6	154.724	112.071
19) B	Endrin Aldehyde	6.05	7.78	2042524	15220036	1.567m	1.160m
23) B	Endrin Ketone	7.15	9.22	5023268	44476203	3.077	2.935

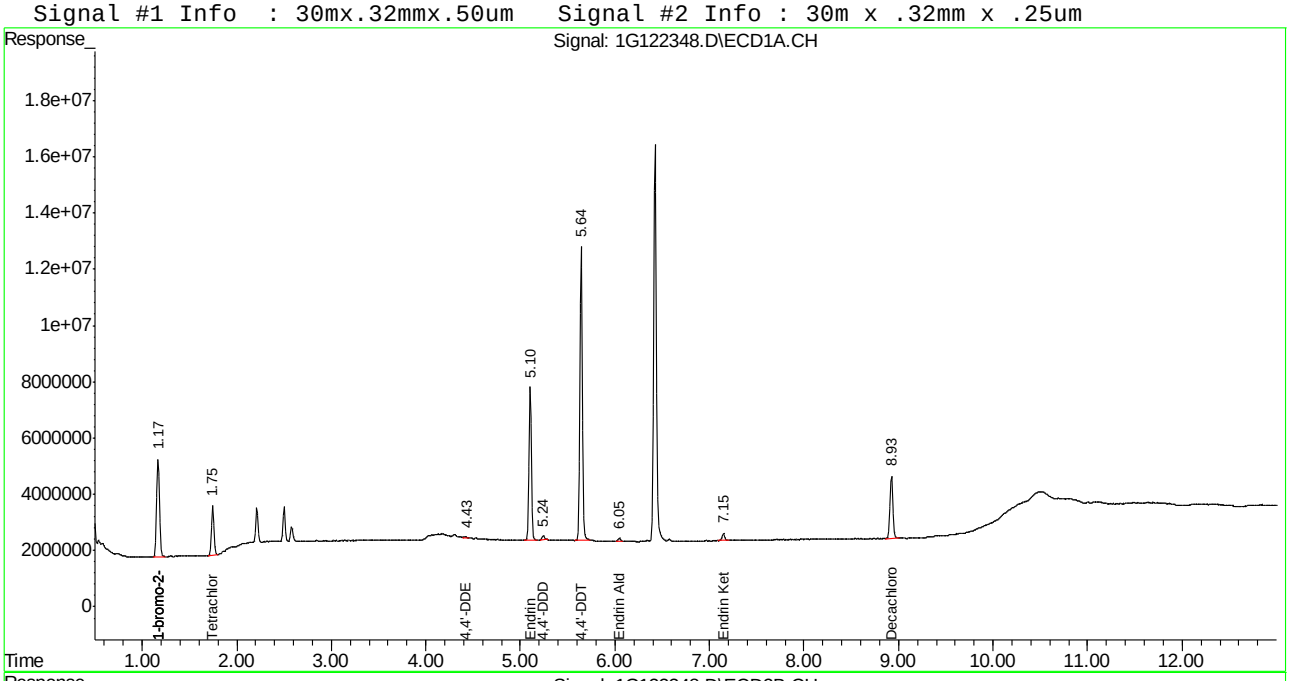
(f)=RT Delta > 1/2 Window (m)=manual int.

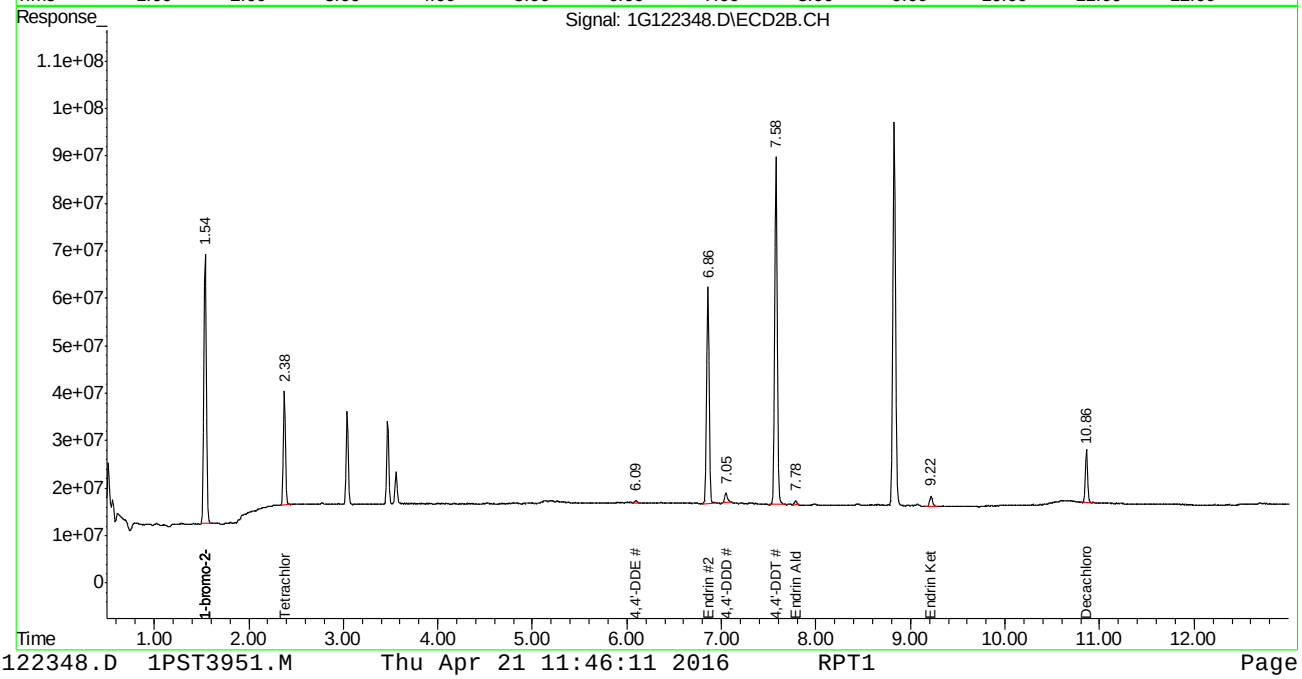
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD2B.CH
Acq On : 4-21-16 08:57:03 AM Operator: brittanp
Sample : ddt Inst : GC1G
Misc : op93213,g1g3968,15.3,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 11:45 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

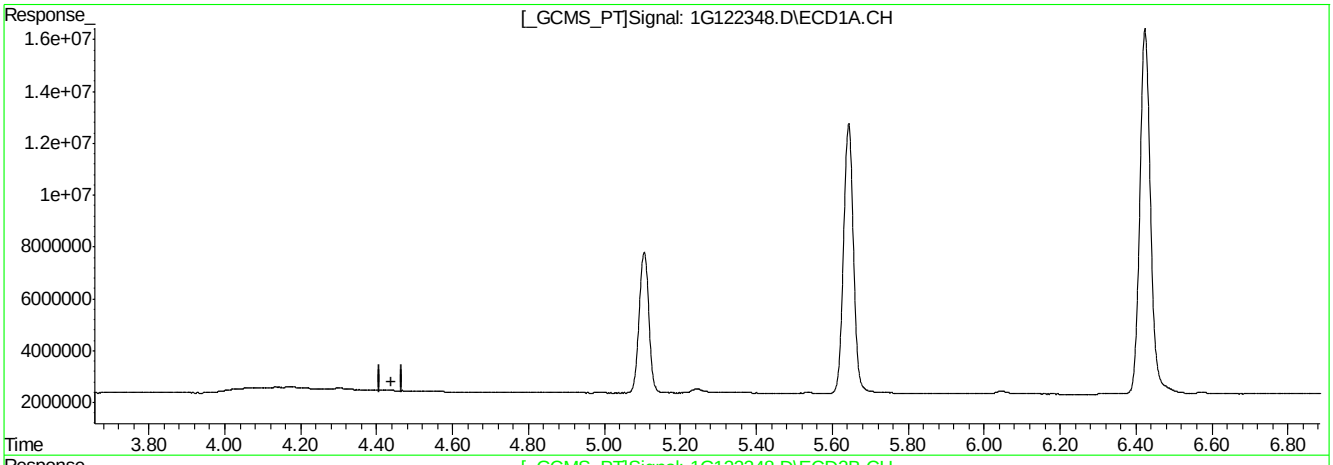
Sample Number:	G1G3968-DDT	**Method:**	SW846 8081B
Lab FileID:	1G122348.D	**Analyst approved:**	04/21/16 11:54 Brittany Piercy
Injection Time:	04/21/16 08:57	**Supervisor approved:**	04/21/16 12:46 Gwendolyn Burns

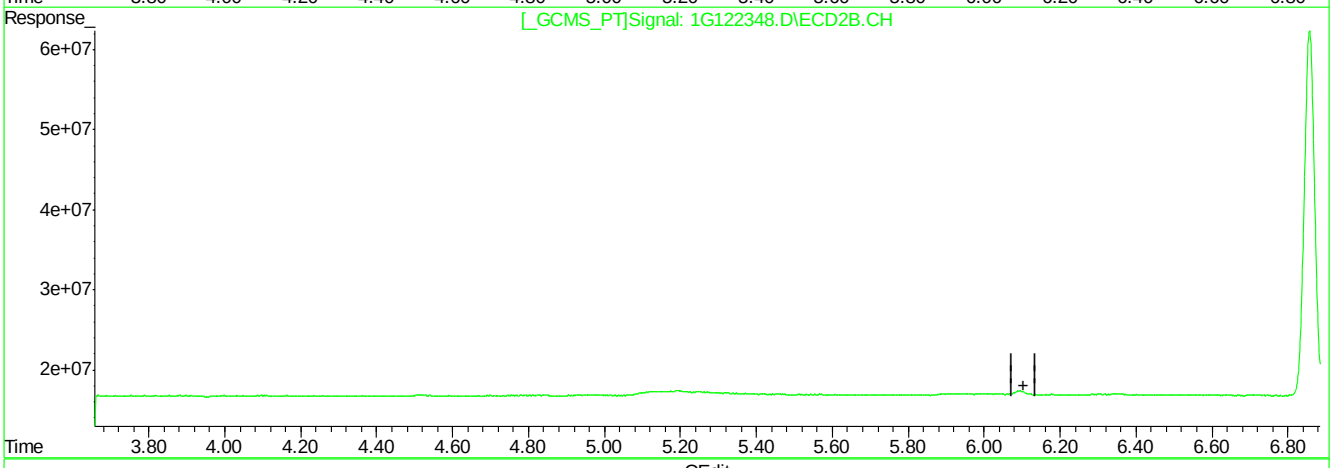
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.43	Poor instrument integration
4,4'-DDD	72-54-8	1	5.24	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.05	Poor instrument integration
4,4'-DDE	72-55-9	2	6.09	Poor instrument integration
Endrin aldehyde	7421-93-4	2	7.78	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD2B.CH
Acq On    : 4-21-16 08:57:03 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op93213,g1g3968,15.3,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21  9:10 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 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

1G122348.D 1PST3951.M Thu Apr 21 11:44:33 2016 RPT1

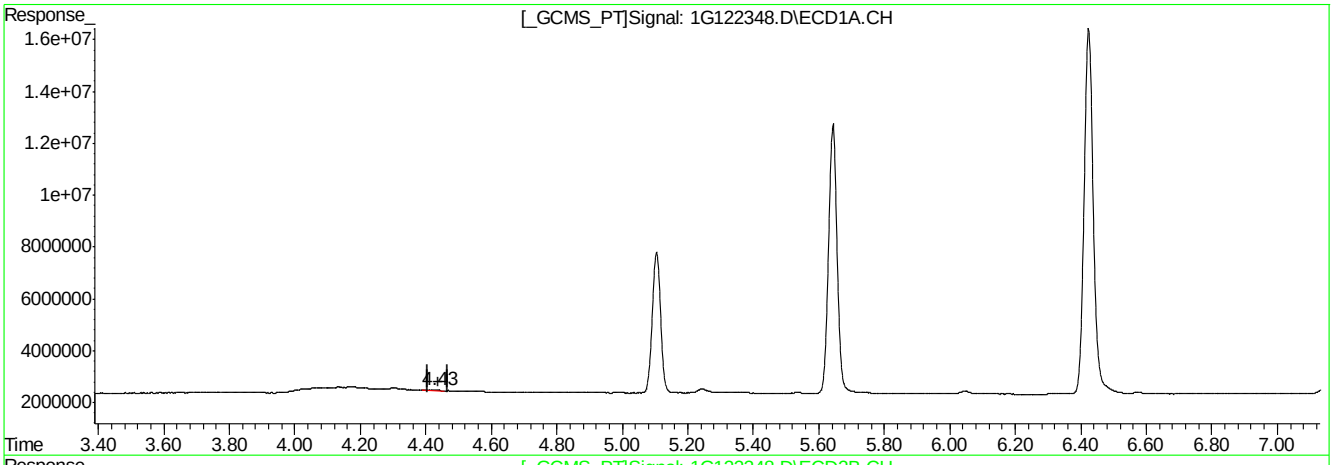
9.5.2.2

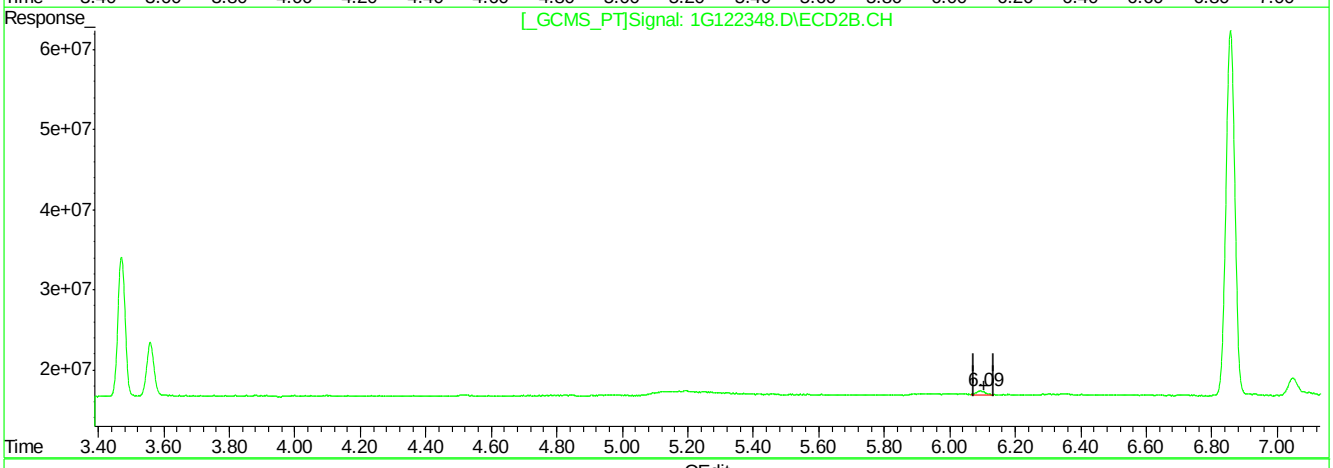
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD2B.CH
Acq On    : 4-21-16 08:57:03 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op93213,g1g3968,15.3,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21  9:10 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(13) 4,4'-DDE (B)

4.43min 0.476PPB m

response 732715

(13) 4,4'-DDE #2 (B)

6.09min 0.494PPB m

response 9111929

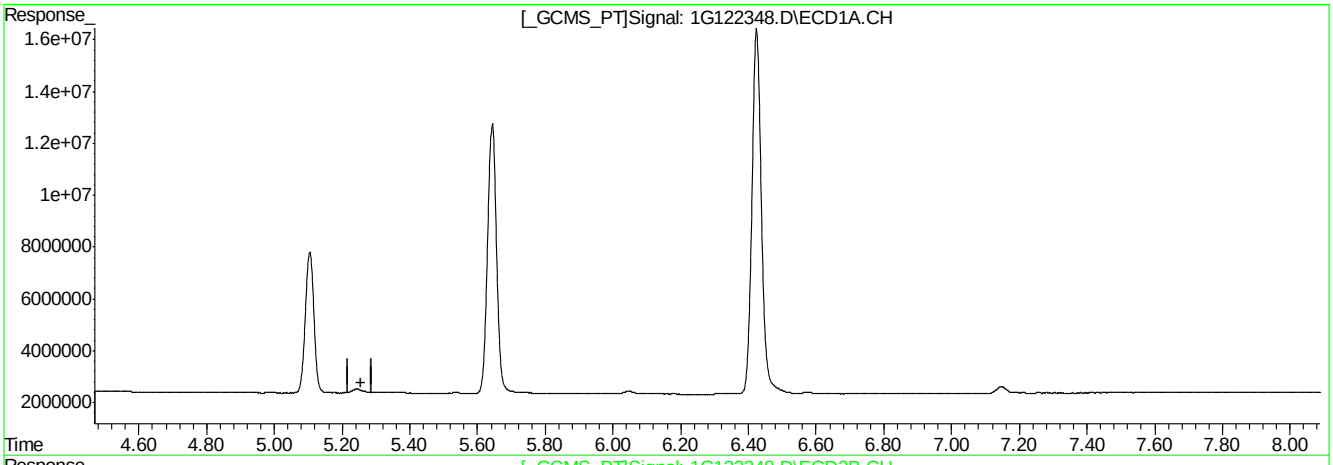
(+) = Expected Retention Time

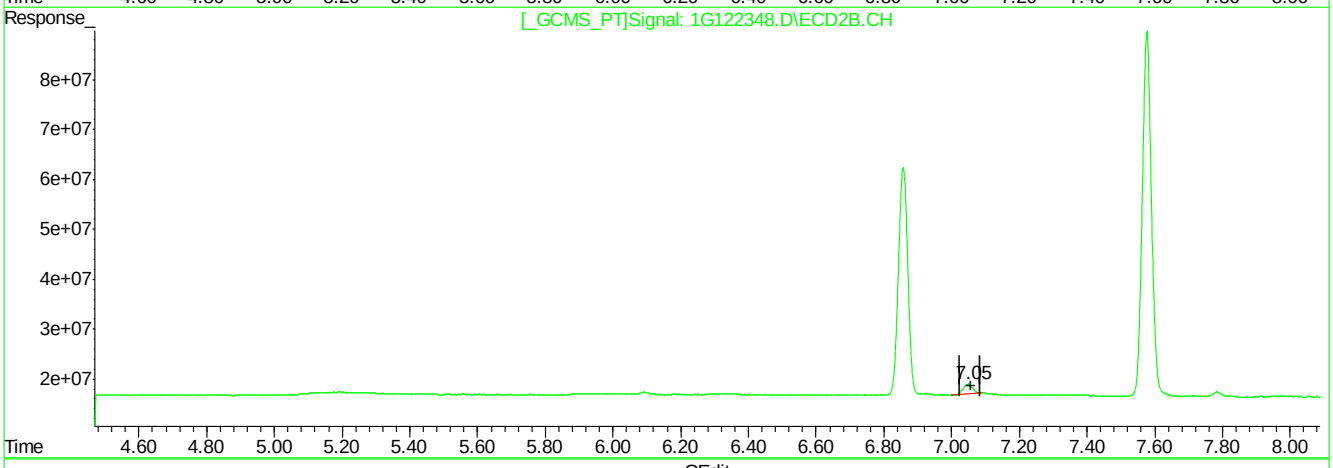
1G122348.D 1PST3951.M Thu Apr 21 11:45:05 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD2B.CH
Acq On    : 4-21-16 08:57:03 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op93213,g1g3968,15.3,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21  9:10 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 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 2.368PPB

response 37063884

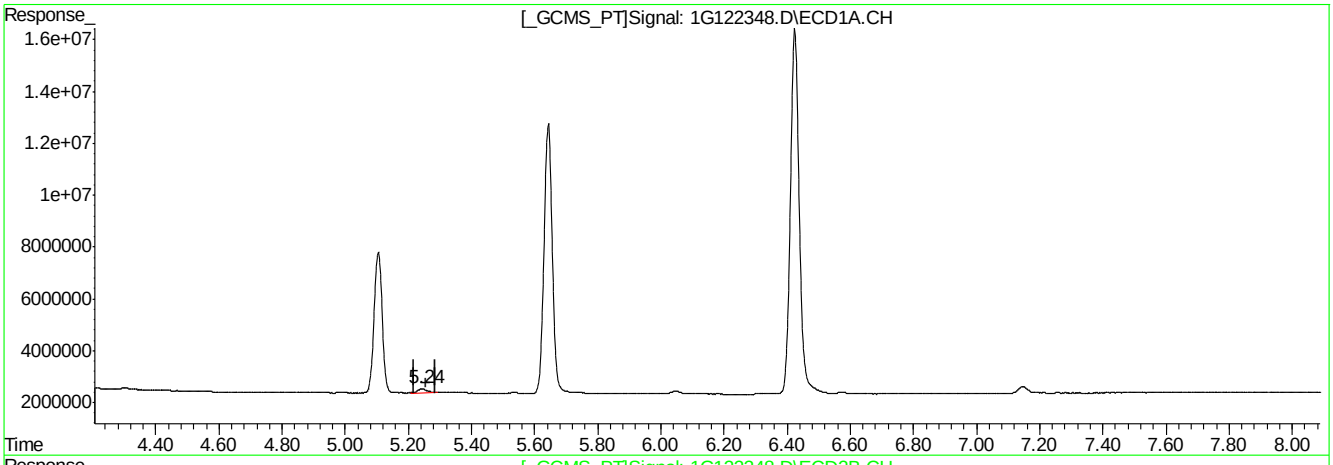
(+) = Expected Retention Time

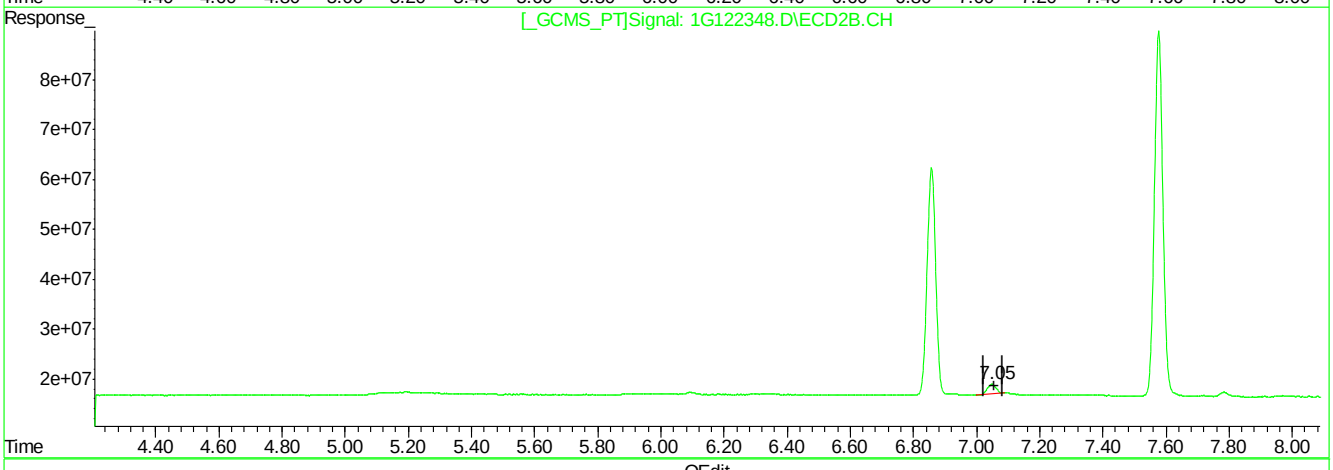
1G122348.D 1PST3951.M Thu Apr 21 11:45:11 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD2B.CH
Acq On    : 4-21-16 08:57:03 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op93213,g1g3968,15.3,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21  9:10 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

5.24min 2.277PPB m

response 2909890

(16) 4,4'-DDD #2 (A)

7.05min 2.368PPB

response 37063884

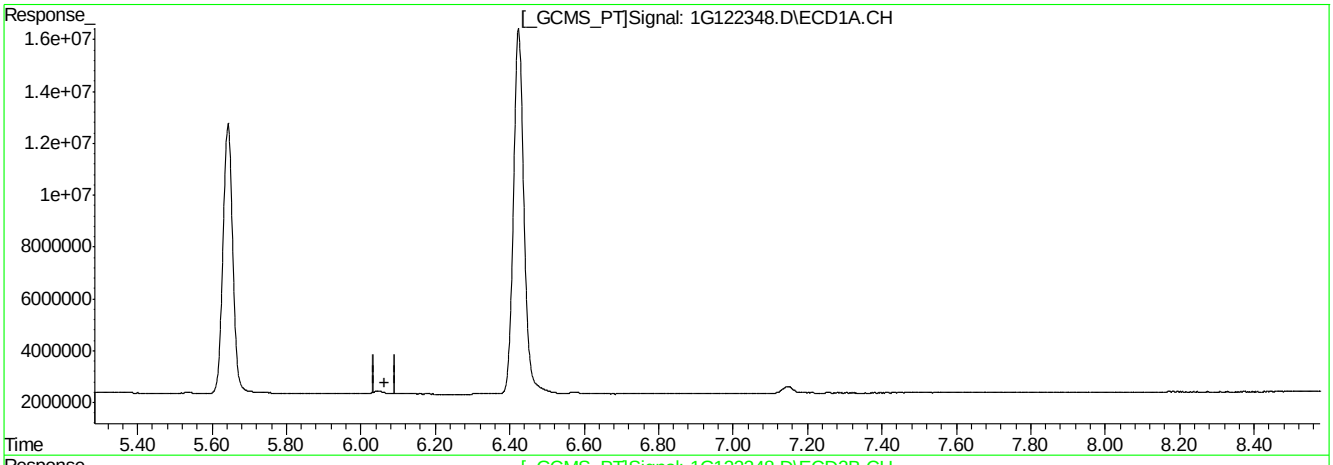
(+) = Expected Retention Time

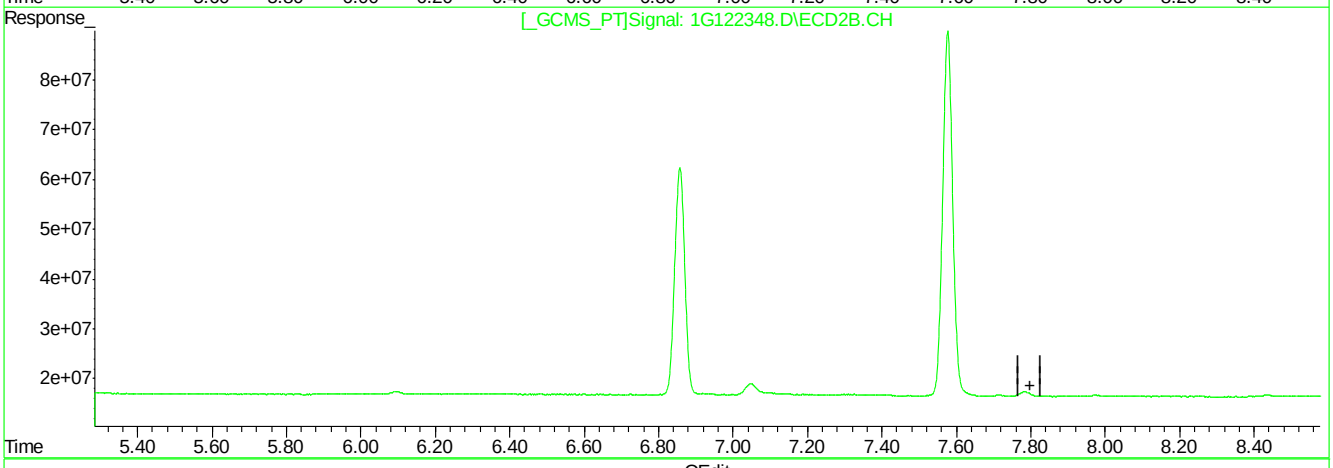
1G122348.D 1PST3951.M Thu Apr 21 11:45:20 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD2B.CH
Acq On    : 4-21-16 08:57:03 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op93213,g1g3968,15.3,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21  9:10 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 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

1G122348.D 1PST3951.M Thu Apr 21 11:45:27 2016 RPT1

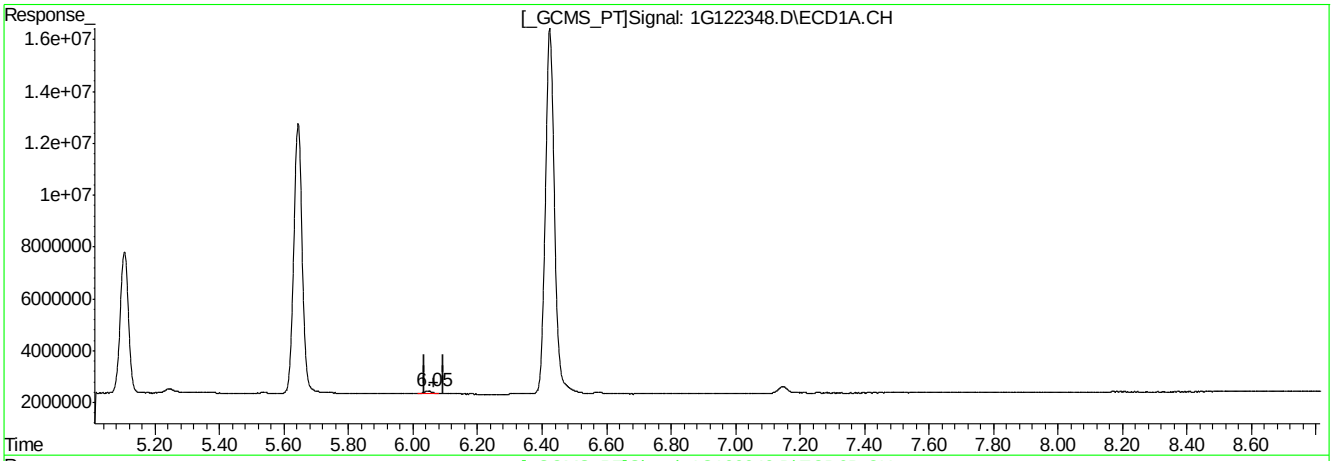
9.5.2.6

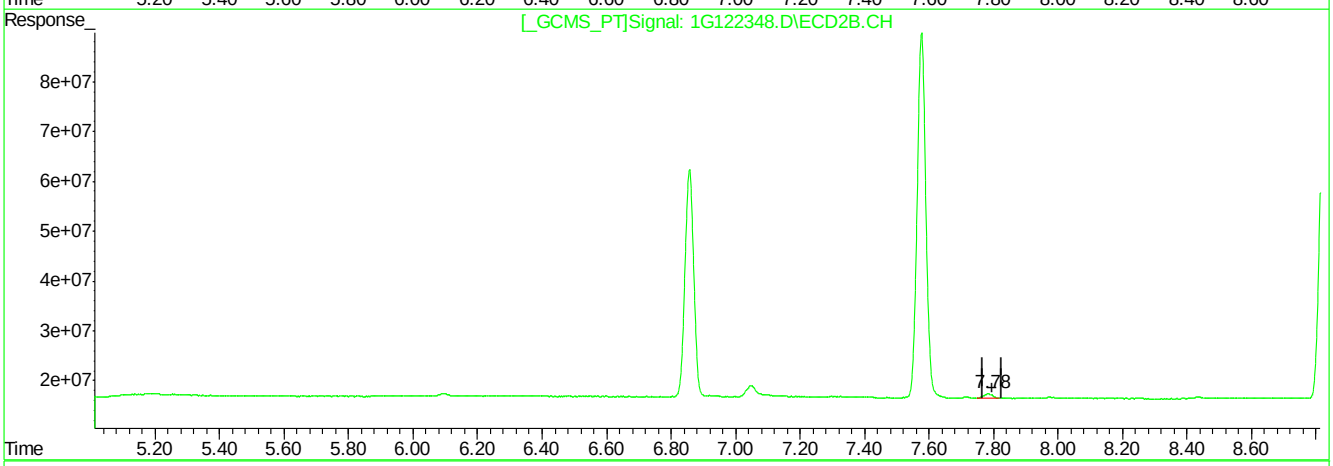
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122348.D\ECD2B.CH
Acq On    : 4-21-16 08:57:03 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op93213,g1g3968,15.3,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 21  9:10 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.05min 1.567PPB m

response 2042524

(19) Endrin Aldehyde #2 (B)

7.78min 1.160PPB m

response 15220036

(+) = Expected Retention Time

1G122348.D 1PST3951.M Thu Apr 21 11:45:37 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:42:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.320	1.584	129.3E6	43986456	50.000	50.000
25) I	1-bromo-2...	1.320	1.584	129.3E6	43986456	50.000	50.000
31) I	1-bromo-2...	1.320	1.584	129.3E6	43986456	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.995	2.479	45371018	16357012	19.148	20.583
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 47.87%	51.46%
24) SAB	Decachlor...	9.934	11.769	44657093	13929406	21.674	23.312
	Spiked Amount	40.000			Recovery	= 54.18%	58.28%
	Target Compounds						
13) B	4,4'-DDE	4.944	6.453	1018177	323855	0.498m	0.455m
15) MA	Endrin	5.682	7.268	120.9E6	37292116	55.394	50.157
16) A	4,4'-DDD	5.833	7.488	1311683	538829	0.759m	0.878m
18) MA	4,4'-DDT	6.281	8.068	241.7E6	69919881	128.653	125.525
19) B	Endrin Al...	6.695	8.285	837149	354536	0.477m	0.601m#
23) B	Endrin Ke...	7.904	9.843	4035110	1631820	1.794	2.182

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

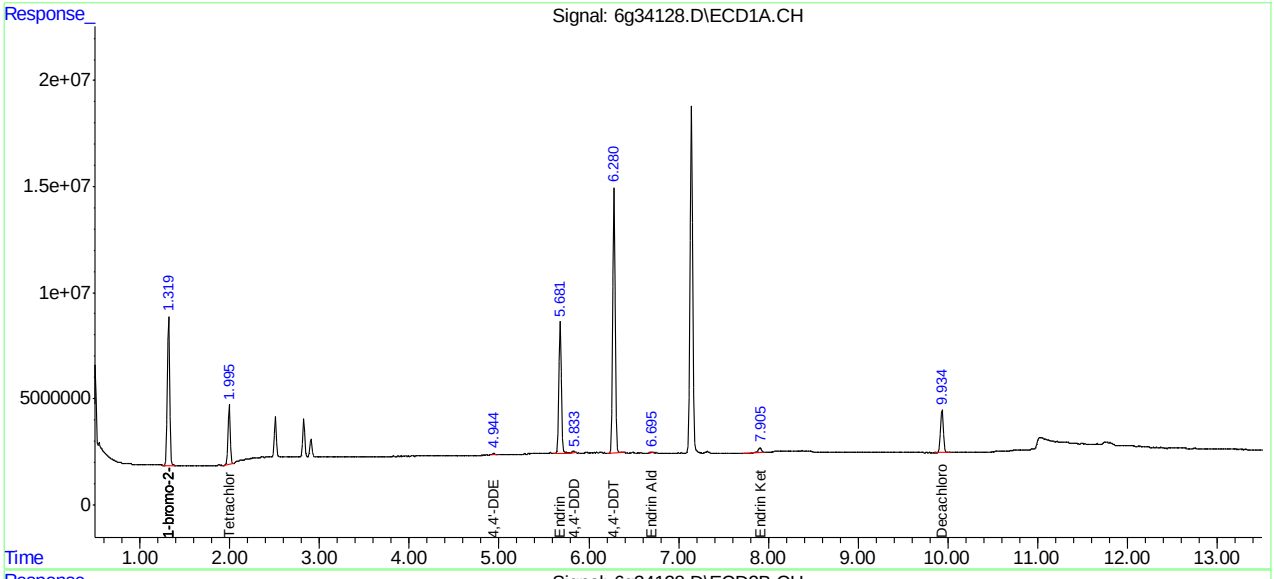
9.5.3
9

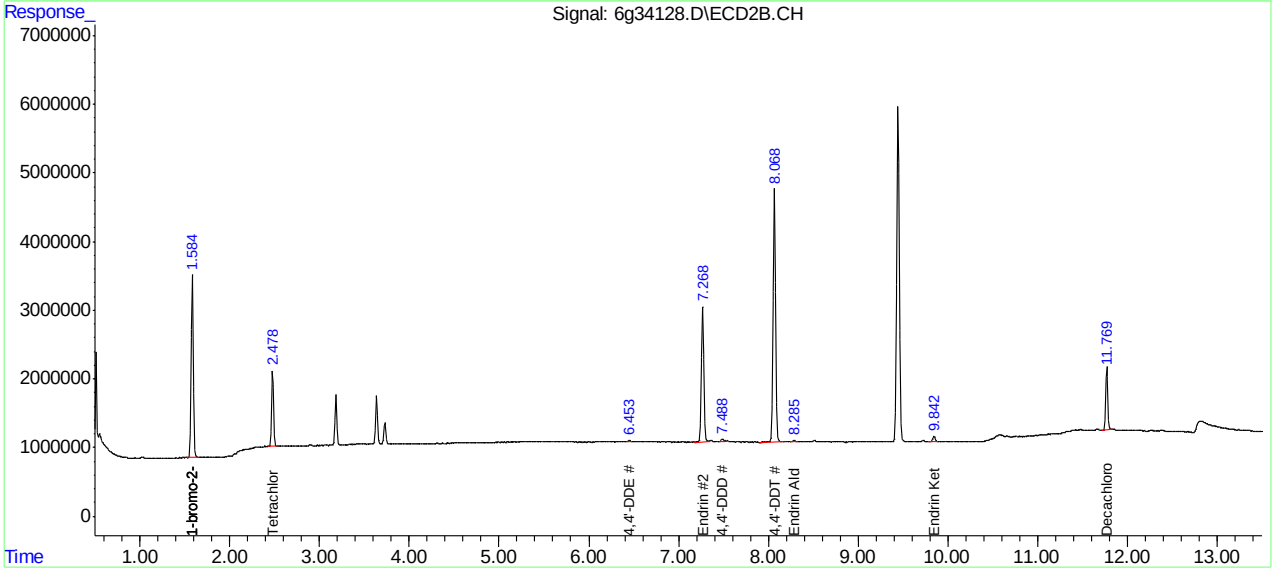
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:42:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G6G987-DDT	**Method:**	SW846 8081B
Lab FileID:	6G34128.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 15:16	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

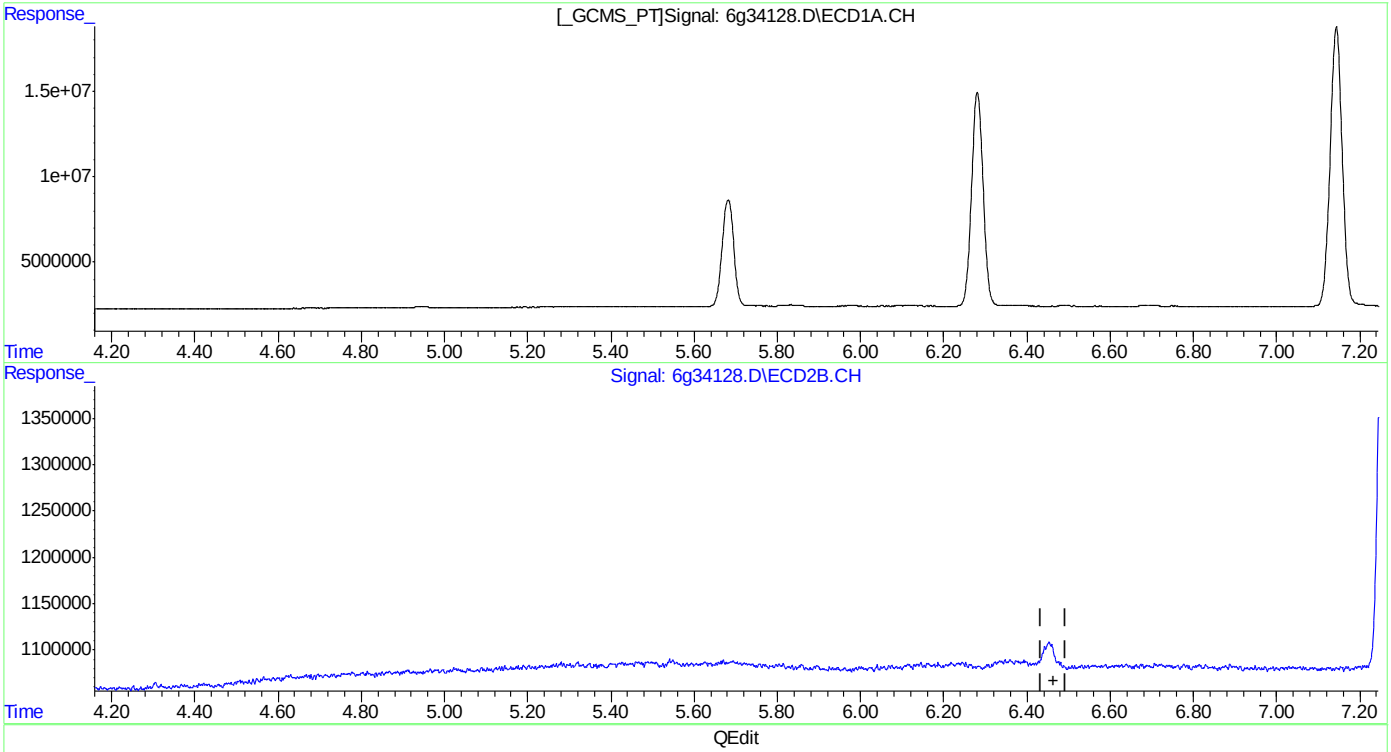
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.94	Poor instrument integration
4,4'-DDD	72-54-8	1	5.83	Poor instrument integration
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.70	Poor instrument integration
4,4'-DDD	72-54-8	2	7.49	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.28	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(13) 4,4'-DDE (B)
0.000min 0.000PPB
response 0

(13) 4,4'-DDE #2 (B)
0.000min 0.000PPB
response 0

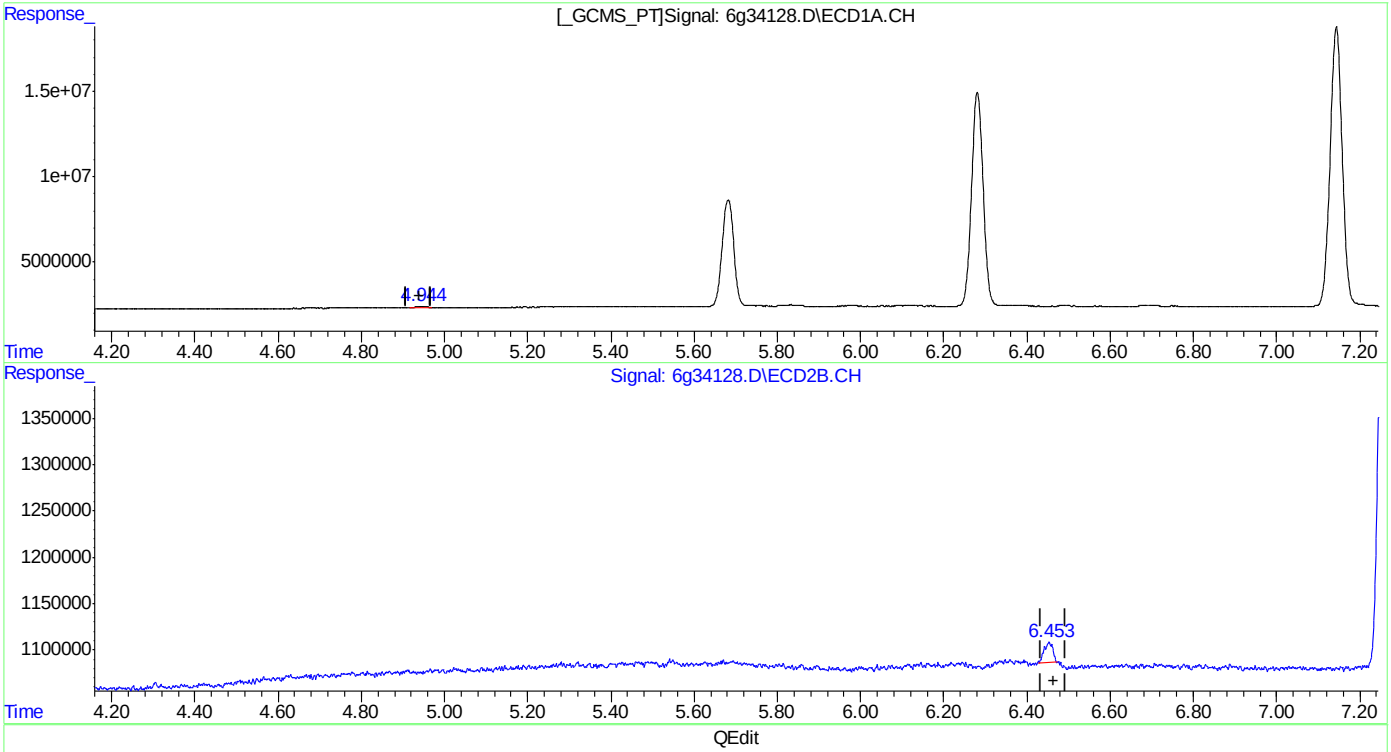
(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:41:26 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(13) 4,4'-DDE (B)
4.944min 0.498PPB m
response 1018177

(13) 4,4'-DDE #2 (B)
6.453min 0.455PPB m
response 323855

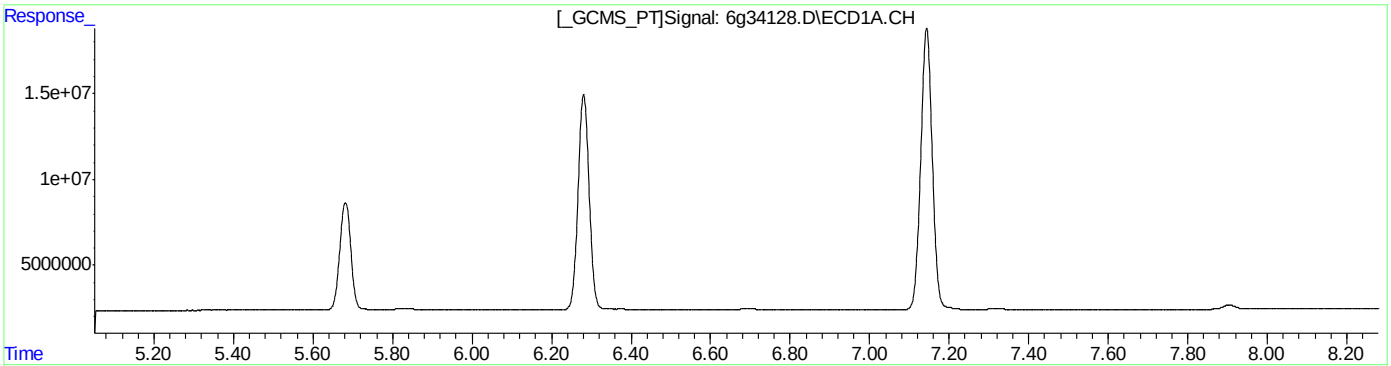
(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:41:43 2016

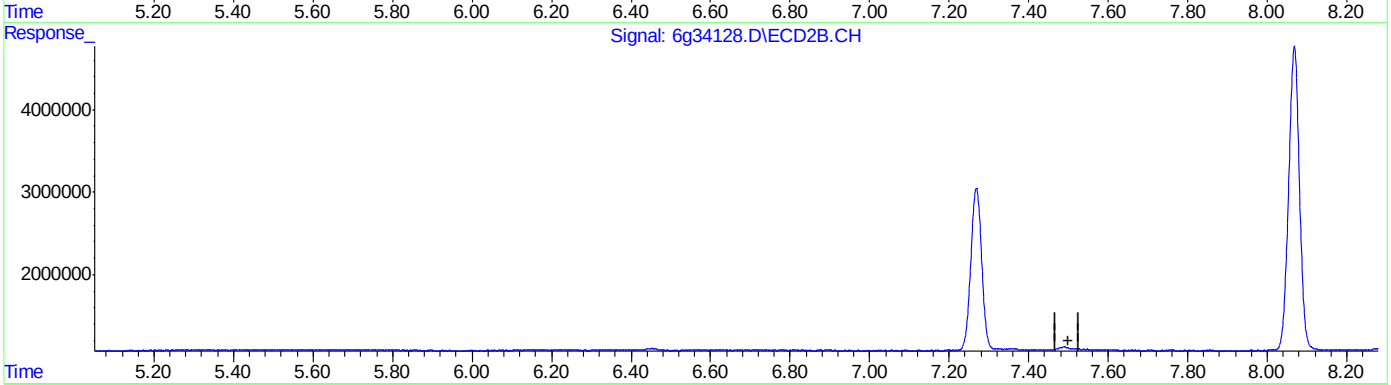
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
0.000min 0.000PPB
response 0

(16) 4,4'-DDD #2 (A)
0.000min 0.000PPB
response 0

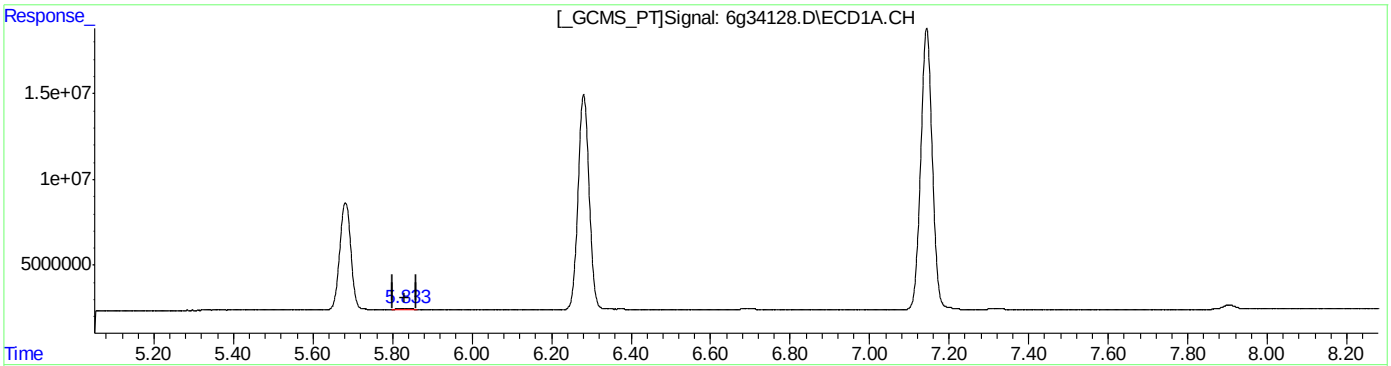
(+) = Expected Retention Time

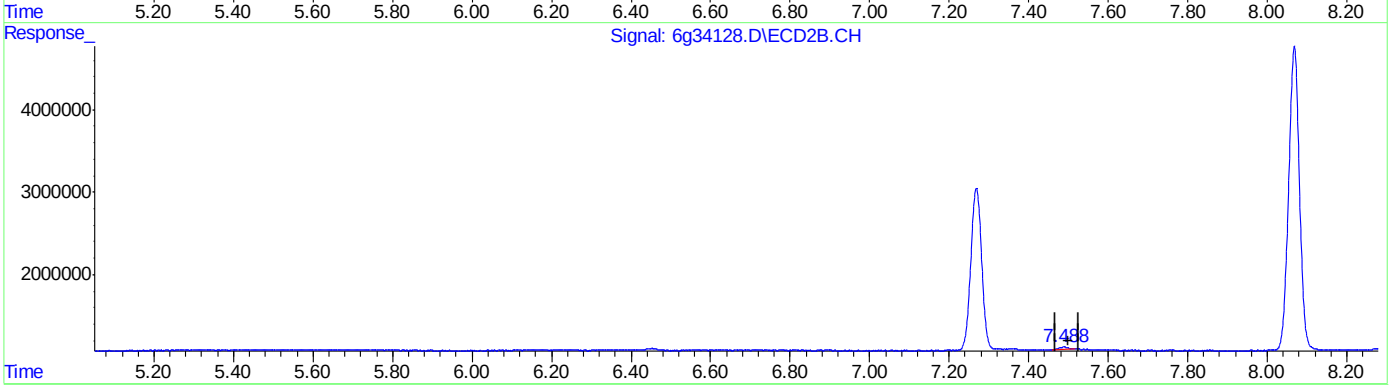
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
5.833min 0.759PPB m
response 1311683

(16) 4,4'-DDD #2 (A)
7.488min 0.878PPB m
response 538829

(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:42:19 2016

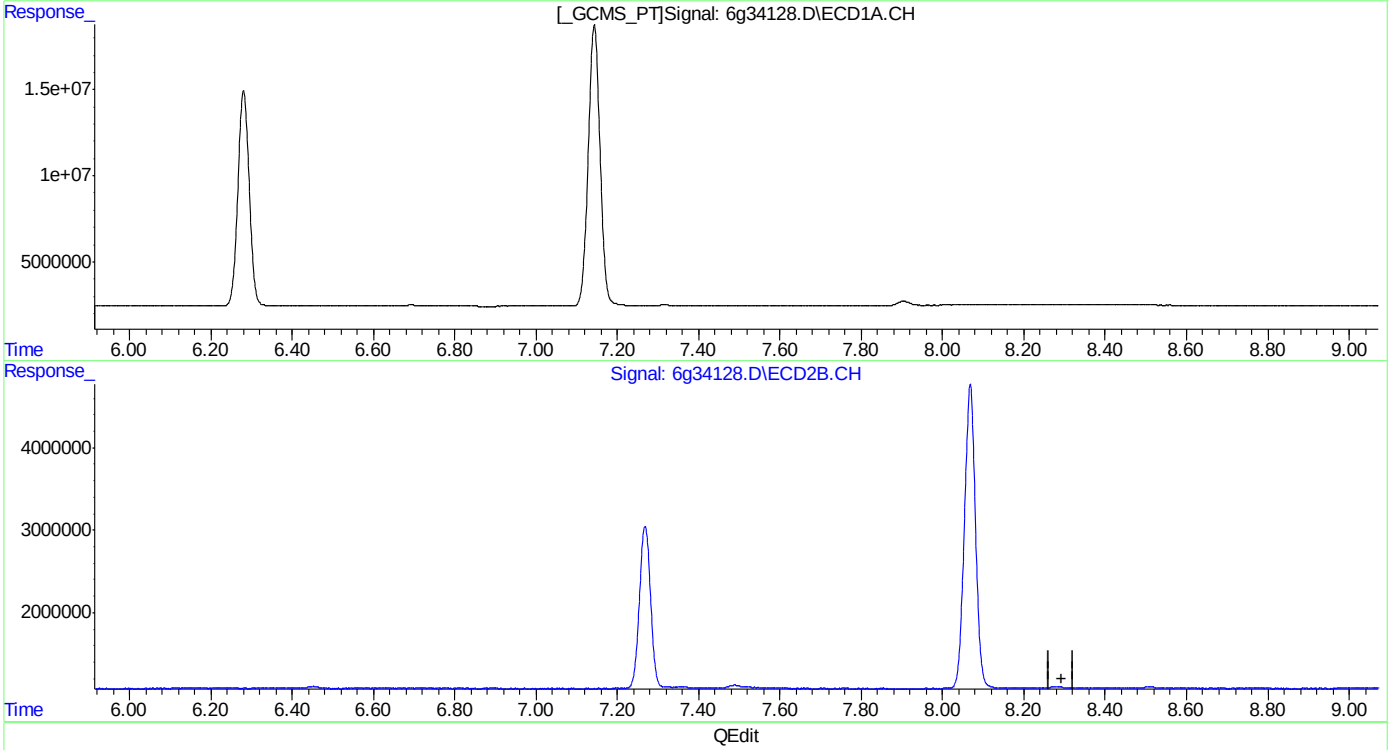
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(19) Endrin Aldehyde (B)
0.000min 0.000PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000PPB
response 0

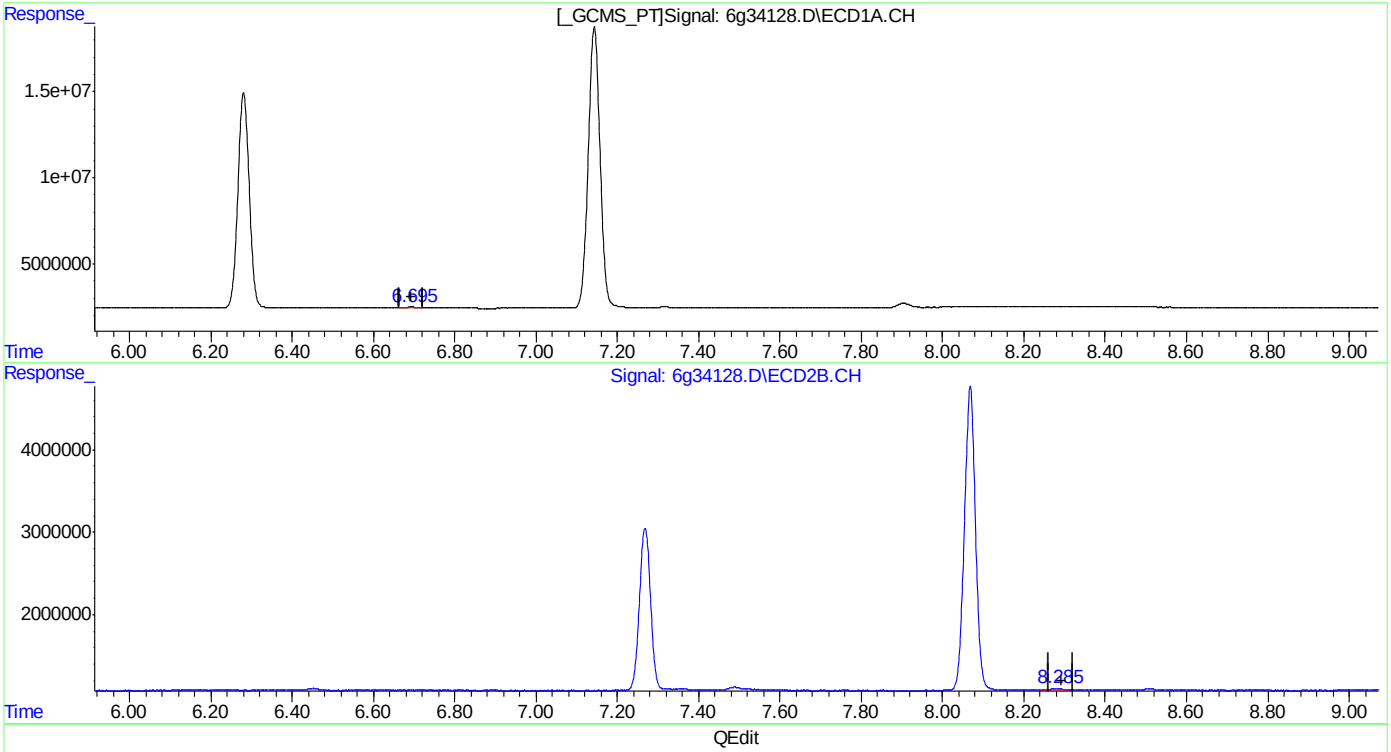
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(19) Endrin Aldehyde (B)
6.695min 0.477PPB m
response 837149

(19) Endrin Aldehyde #2 (B)
8.285min 0.601PPB m
response 354536

(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:42:42 2016

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/25/16 11:17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:59:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.308	1.574	115.8E6	46448027	50.000	50.000
25) I	1-bromo-2...	1.308	1.574	115.8E6	46448027	50.000	50.000
31) I	1-bromo-2...	1.308	1.574	115.8E6	46448027	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.988	2.472	44268000	17850638	20.849	21.272
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 52.12%	53.18%
24)	SAB Decachlor...	9.927	11.771	42294452	13000054	22.908	20.604
	Spiked Amount	40.000			Recovery	= 57.27%	51.51%
	Target Compounds						
13) B	4,4'-DDE	4.939	6.443f	1232422	542611	0.673m	0.723m
15) MA	Endrin	5.677	7.261f	112.5E6	36720545	57.493	46.770
16) A	4,4'-DDD	5.822	7.481f	1948326	996545	1.259m	1.538m
18) MA	4,4'-DDT	6.276	8.061f	222.2E6	66427045	131.967	112.935
19) B	Endrin Al...	6.686	8.271f	852181	432241	0.542m	0.694m#
23) B	Endrin Ke...	7.899	9.836f	4679405	1647017	2.321m	2.085m

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

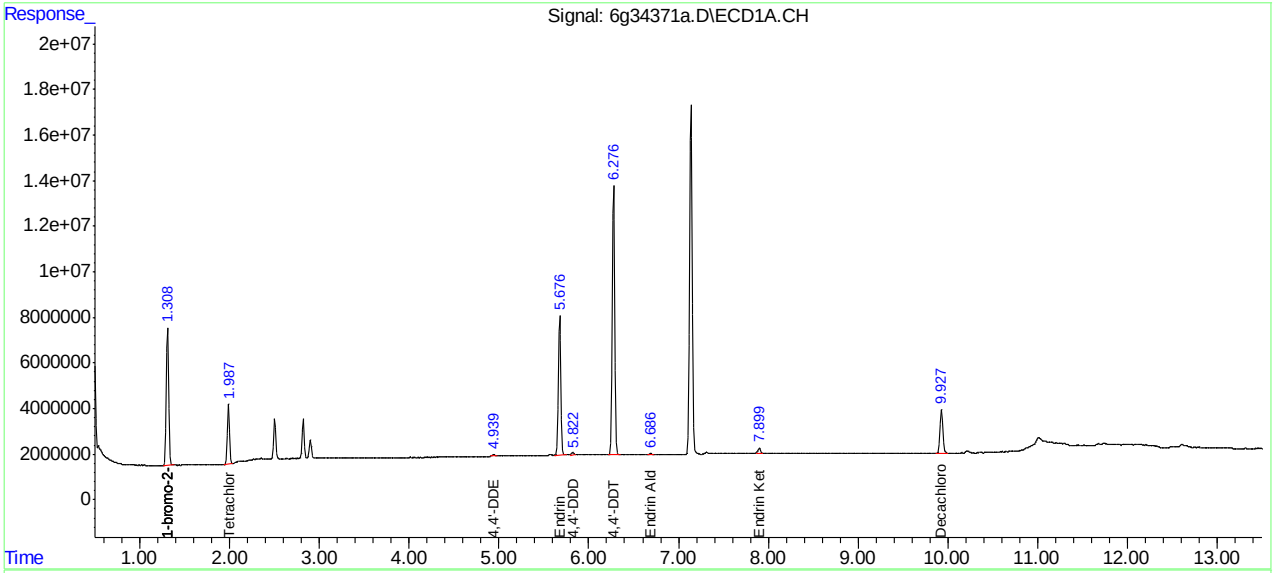
9.5.4
9

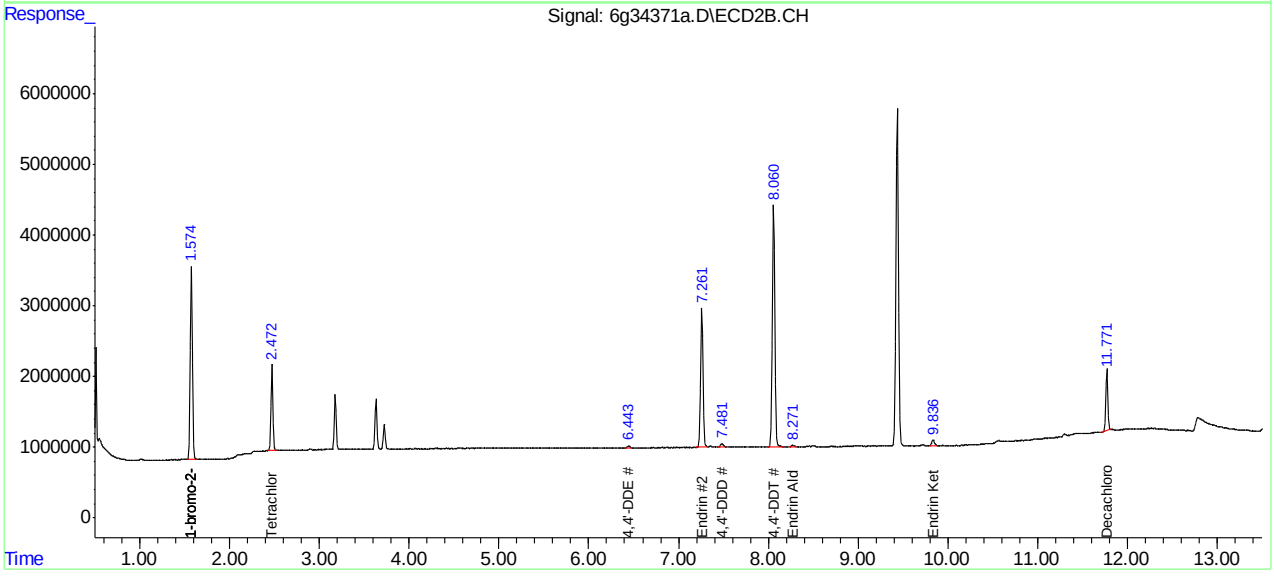
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:59:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G6G995-DDT	**Method:**	SW846 8081B
Lab FileID:	6G34371A.D	**Analyst approved:**	04/25/16 11:06 Brittany Piercy
Injection Time:	04/25/16 09:50	**Supervisor approved:**	04/25/16 11:17 Gwendolyn Burns

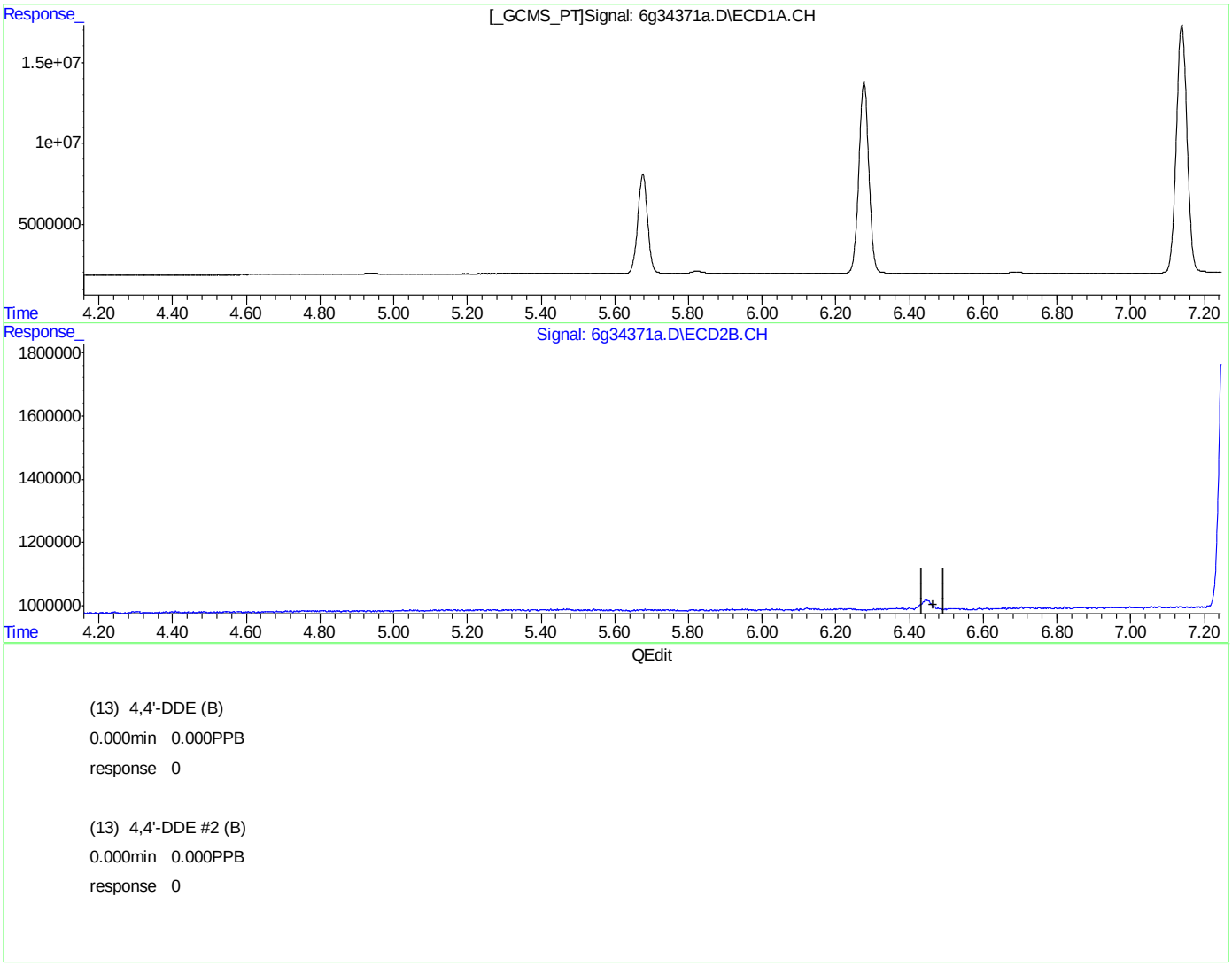
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.94	Poor instrument integration
4,4'-DDD	72-54-8	1	5.82	Poor instrument integration
4,4'-DDE	72-55-9	2	6.44	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.69	Poor instrument integration
4,4'-DDD	72-54-8	2	7.48	Poor instrument integration
Endrin ketone	53494-70-5	1	7.90	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.27	Poor instrument integration
Endrin ketone	53494-70-5	2	9.84	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



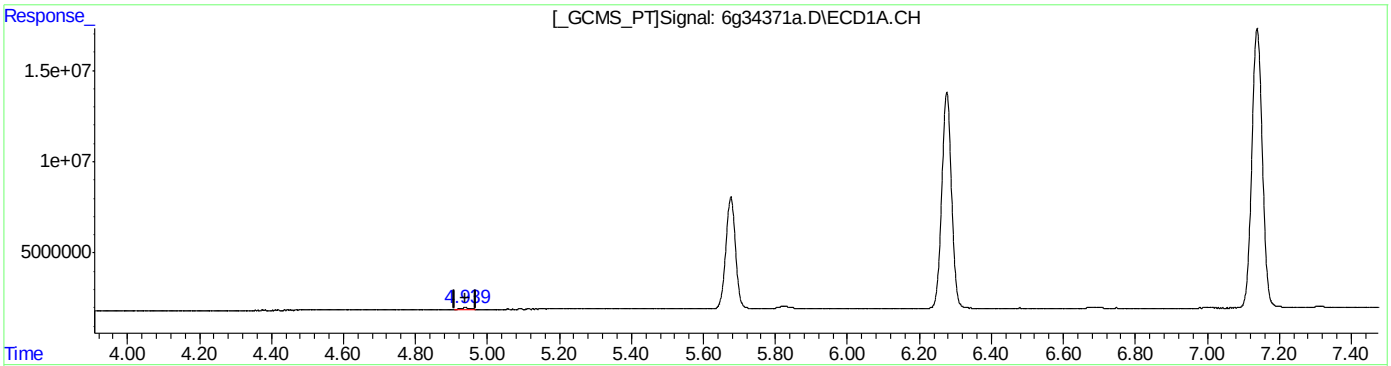
(+) = Expected Retention Time
6PST987.M Mon Apr 25 10:58:14 2016

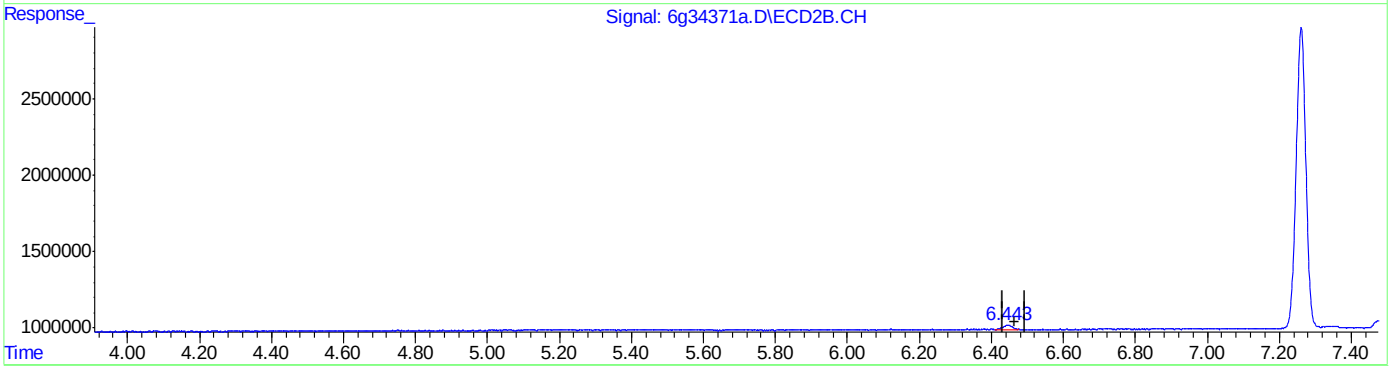
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) 4,4'-DDE (B)
4.939min 0.673PPB m
response 1232422

(13) 4,4'-DDE #2 (B)
6.443min 0.723PPB m
response 542611

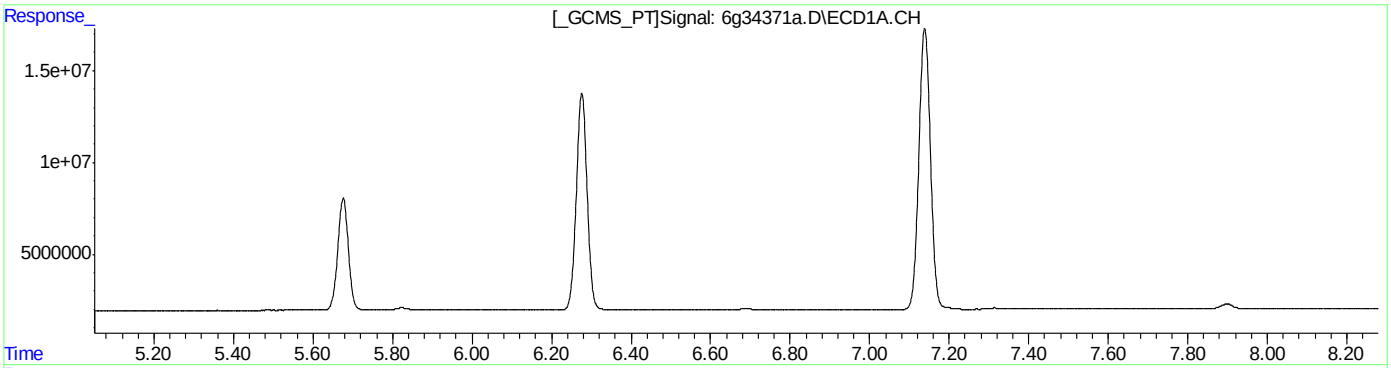
(+) = Expected Retention Time

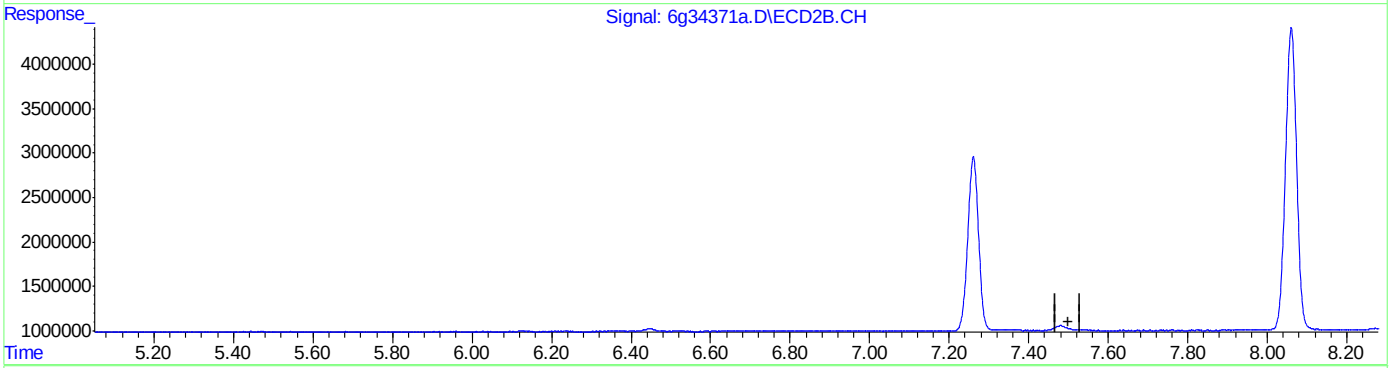
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
0.000min 0.000PPB
response 0

(16) 4,4'-DDD #2 (A)
0.000min 0.000PPB
response 0

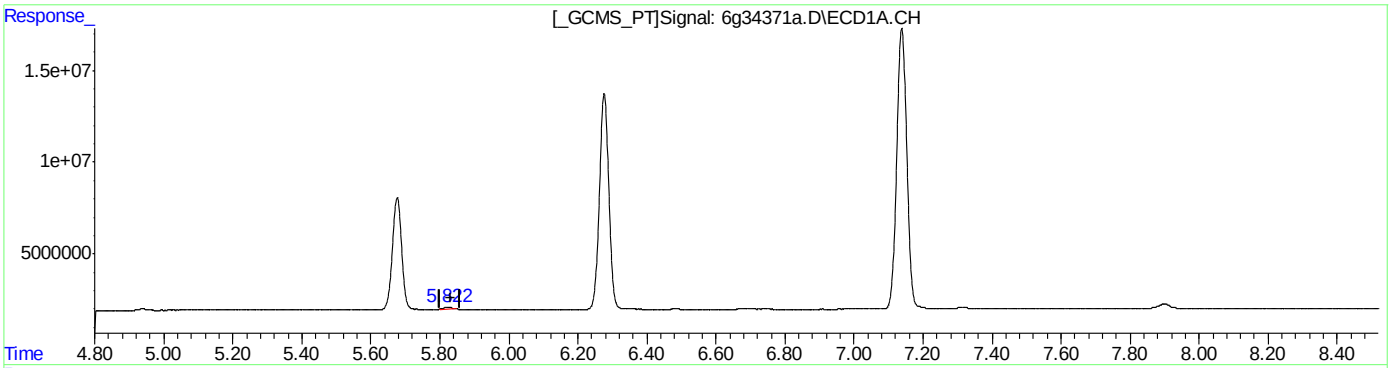
(+) = Expected Retention Time

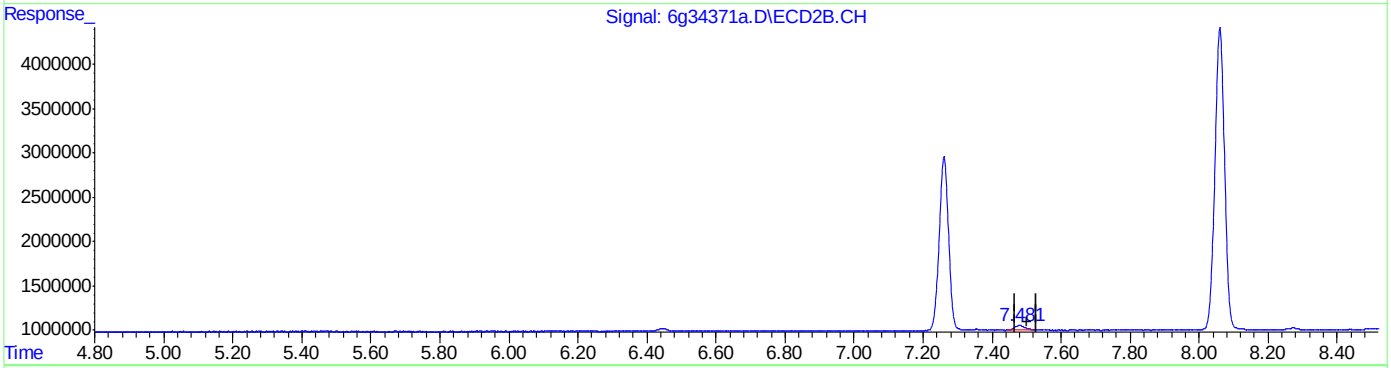
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
5.822min 1.259PPB m
response 1948326

(16) 4,4'-DDD #2 (A)
7.481min 1.538PPB m
response 996545

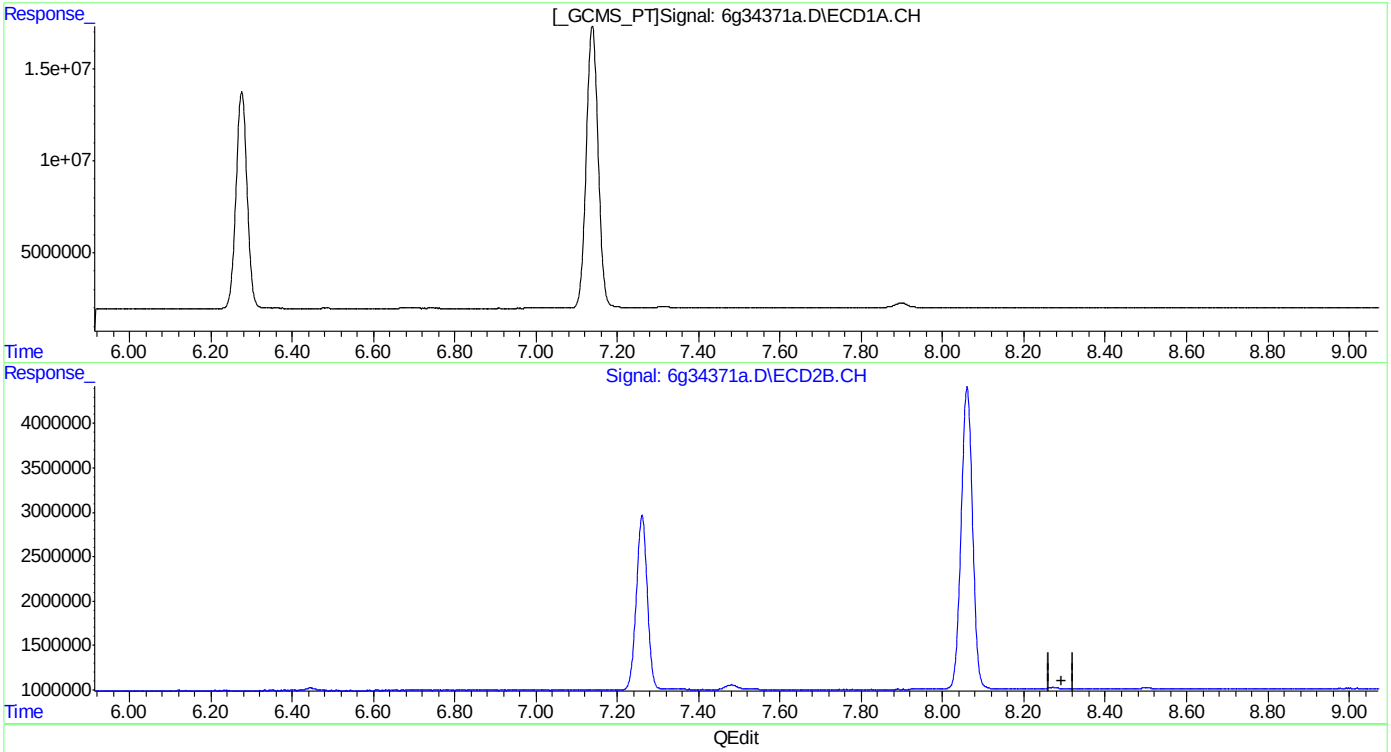
(+) = Expected Retention Time
6PST987.M Mon Apr 25 10:58:44 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(19) Endrin Aldehyde (B)
0.000min 0.000PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000PPB
response 0

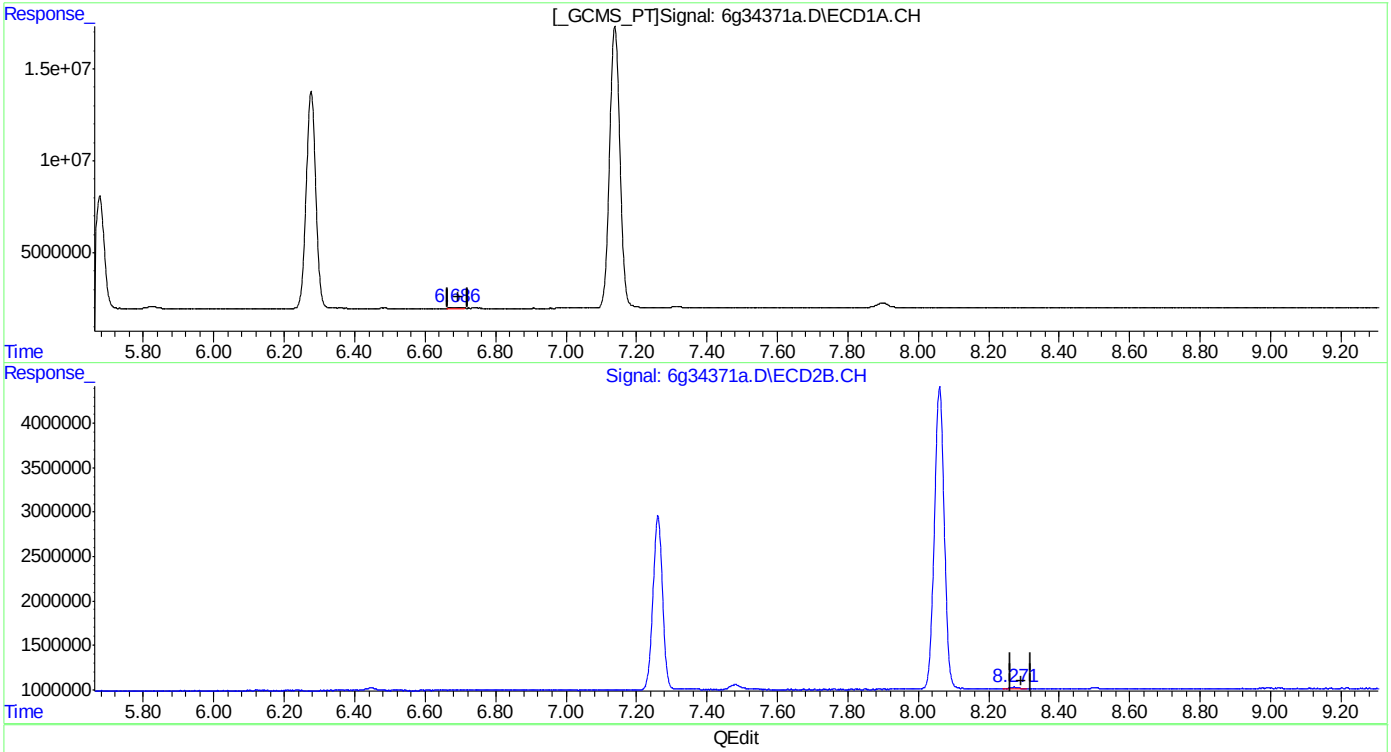
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(19) Endrin Aldehyde (B)
6.686min 0.542PPB m
response 852181

(19) Endrin Aldehyde #2 (B)
8.271min 0.694PPB m
response 432241

(+) = Expected Retention Time
6PST987.M Mon Apr 25 10:59:06 2016

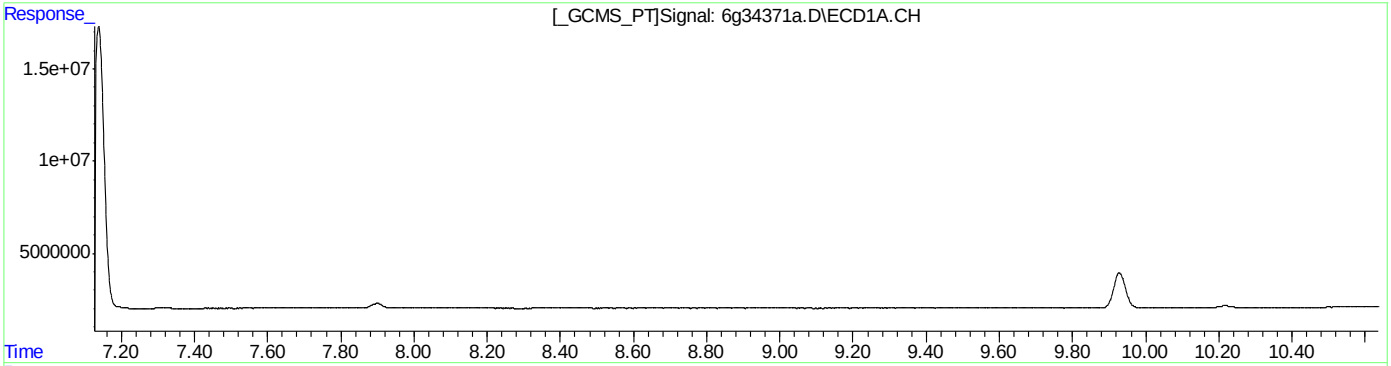
SGS ACCUTEST JC18649

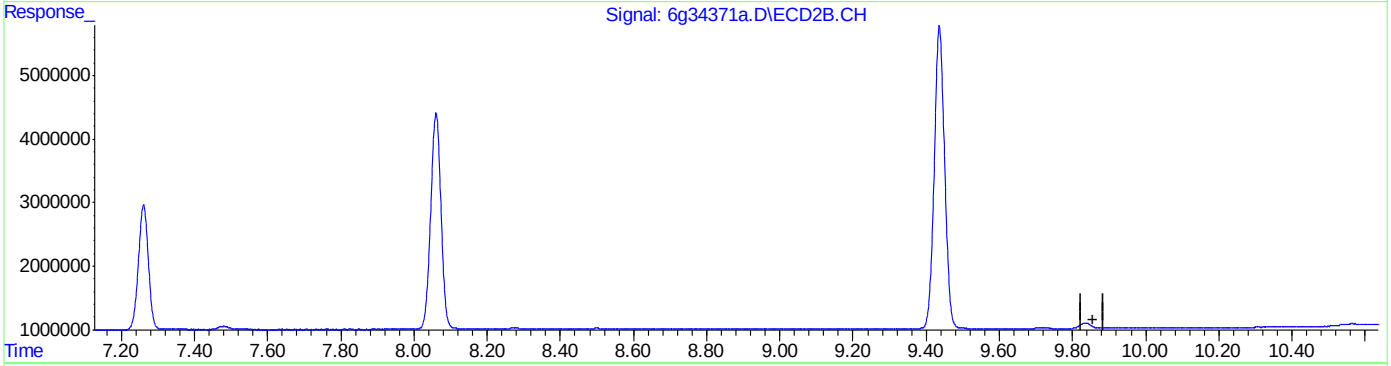
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(23) Endrin Ketone (B)
0.000min 0.000PPB
response 0

(23) Endrin Ketone #2 (B)
0.000min 0.000PPB
response 0

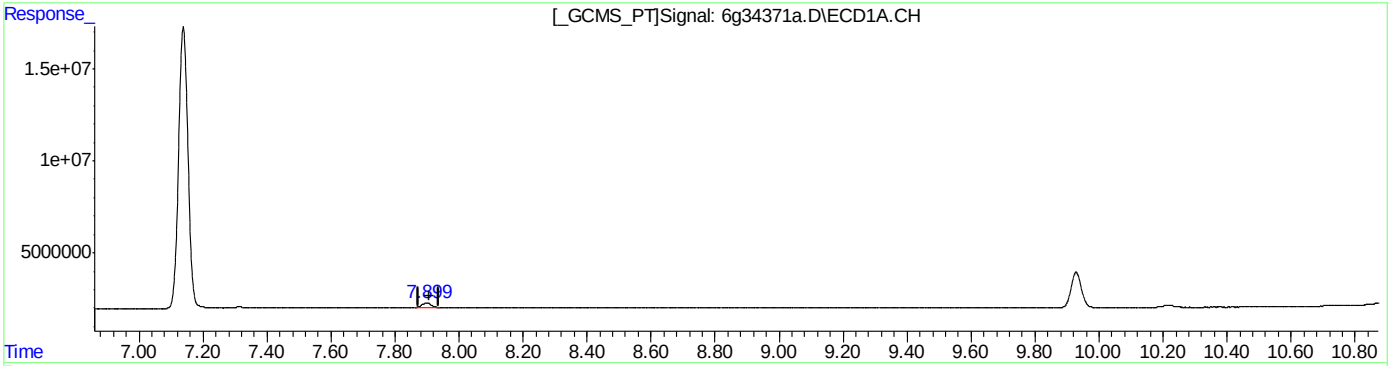
(+) = Expected Retention Time

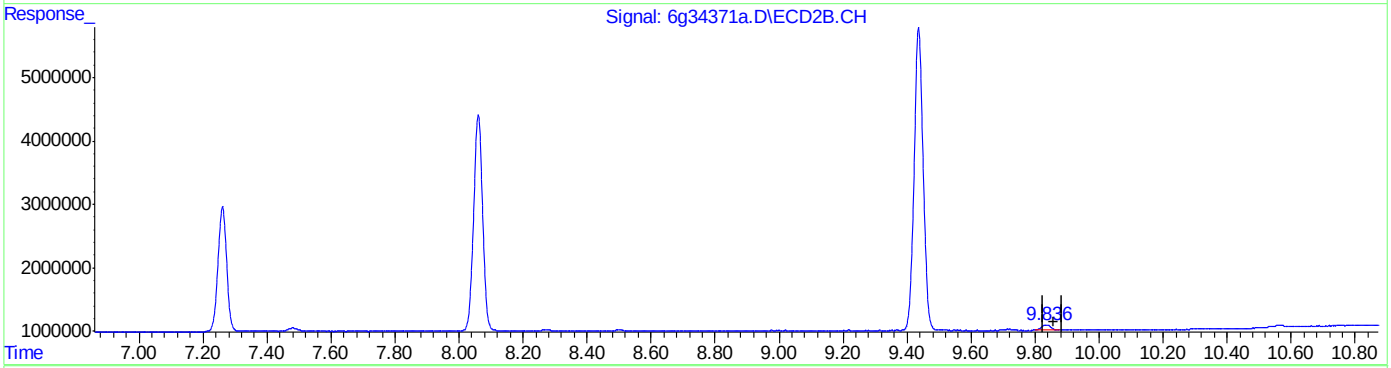
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 25 Apr 2016   9:50 am
Operator  : brittanp
Sample    : ddt
Misc      : op93284,g6g995,15.2,,,10,10
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title  : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```





QEdit

(23) Endrin Ketone (B)
7.899min 2.321PPB m
response 4679405

(23) Endrin Ketone #2 (B)
9.836min 2.085PPB m
response 1647017

(+) = Expected Retention Time

Manual Integrations
APPROVED
(compounds with "m" flag)
Jennifer Laidlaw
04/25/16 21:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:53:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.303	1.576	146.0E6	50733936	50.000	50.000
25) I	1-bromo-2...	1.303	1.576	146.0E6	50733936	50.000	50.000
31) I	1-bromo-2...	1.303	1.576	146.0E6	50733936	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.978	2.471	58172778	19533760	21.744	21.311
Spiked Amount		40.000	Range	30 - 150	Recovery	= 54.36%	53.28%
24) SAB	Decachlor...	9.911f	11.754f	51945836	14933926	22.329	21.669
Spiked Amount		40.000			Recovery	= 55.82%	54.17%
	Target Compounds						
13) B	4,4'-DDE	4.917f	6.443f	888704	396032	0.385m	0.483m#
15) MA	Endrin	5.656f	7.253f	141.1E6	43026549	57.260	50.173
16) A	4,4'-DDD	5.808f	7.481f	2755069	2647372	1.413m	3.740m#
18) MA	4,4'-DDT	6.257f	8.052f	269.7E6	73100962	127.167	113.782
19) B	Endrin Al...	6.666f	8.262f	1155619	472844	0.583m	0.695m
23) B	Endrin Ke...	7.881f	9.825f	6312819	3220307	2.486	3.733m#

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

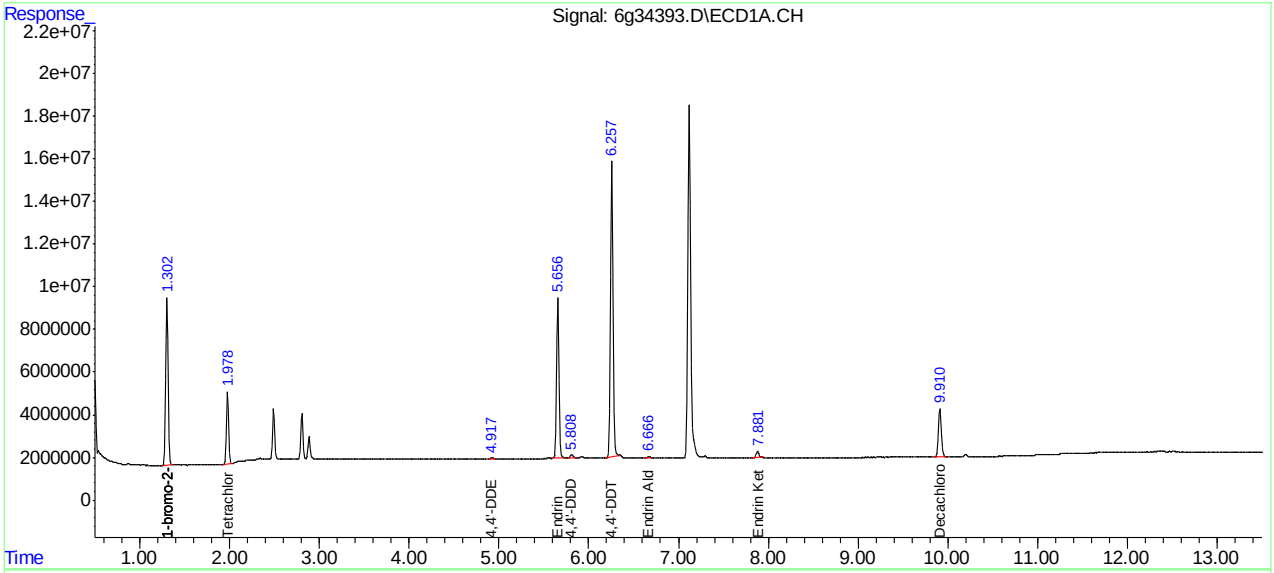
9.5.5
9

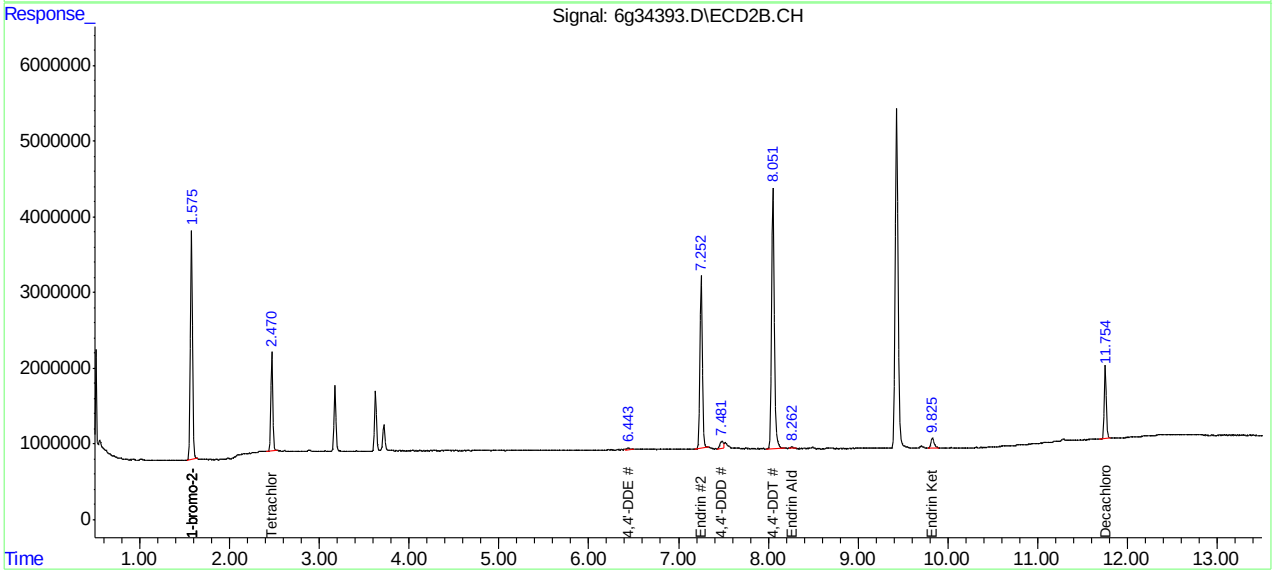
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:53:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC18649

Manual Integration Approval Summary

Sample Number:	G6G995-DDT	**Method:**	SW846 8081B
Lab FileID:	6G34393.D	**Analyst approved:**	04/25/16 17:54 Dhara Saparia
Injection Time:	04/25/16 17:16	**Supervisor approved:**	04/25/16 21:58 Jennifer Laidlaw

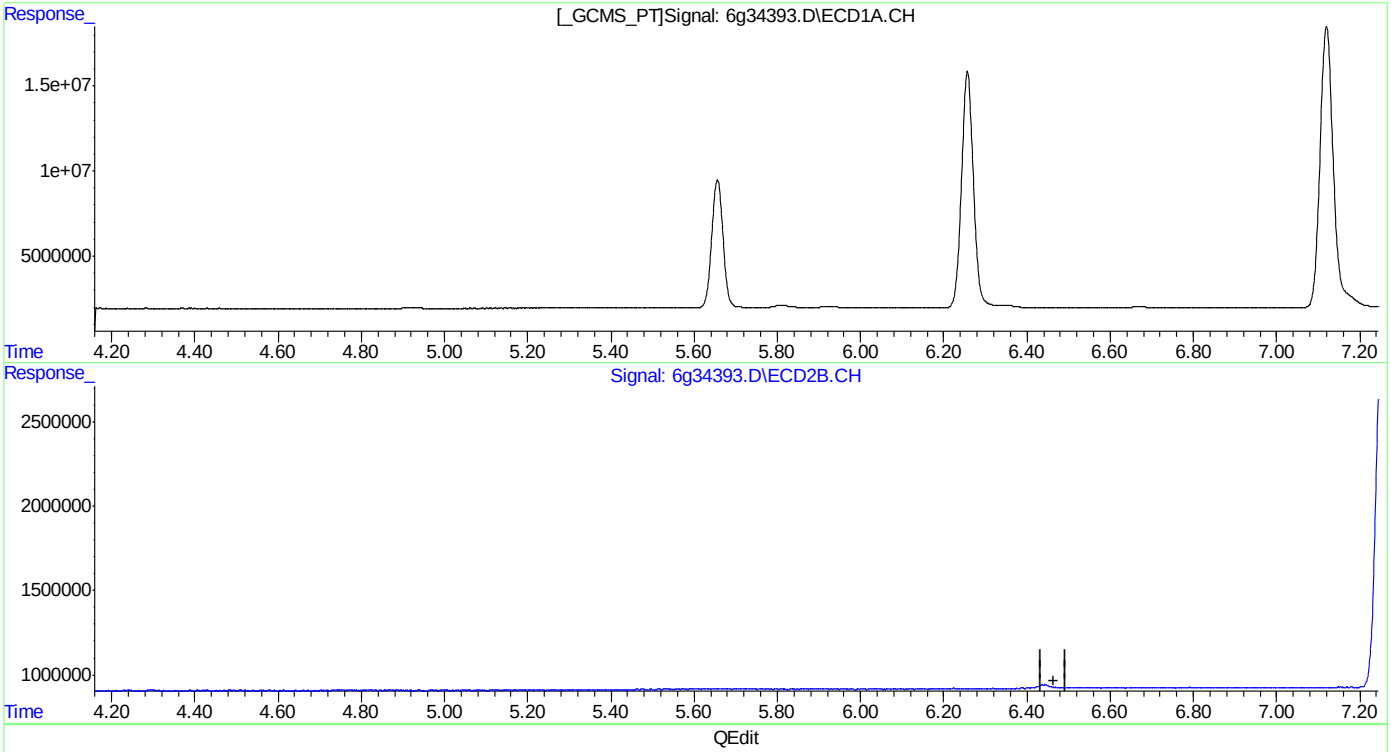
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.92	Poor instrument integration
4,4'-DDD	72-54-8	1	5.81	Poor instrument integration
4,4'-DDE	72-55-9	2	6.44	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.67	Poor instrument integration
4,4'-DDD	72-54-8	2	7.48	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.26	Poor instrument integration
Endrin ketone	53494-70-5	2	9.83	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(13) 4,4'-DDE (B)
0.000min 0.000PPB
response 0

(13) 4,4'-DDE #2 (B)
0.000min 0.000PPB
response 0

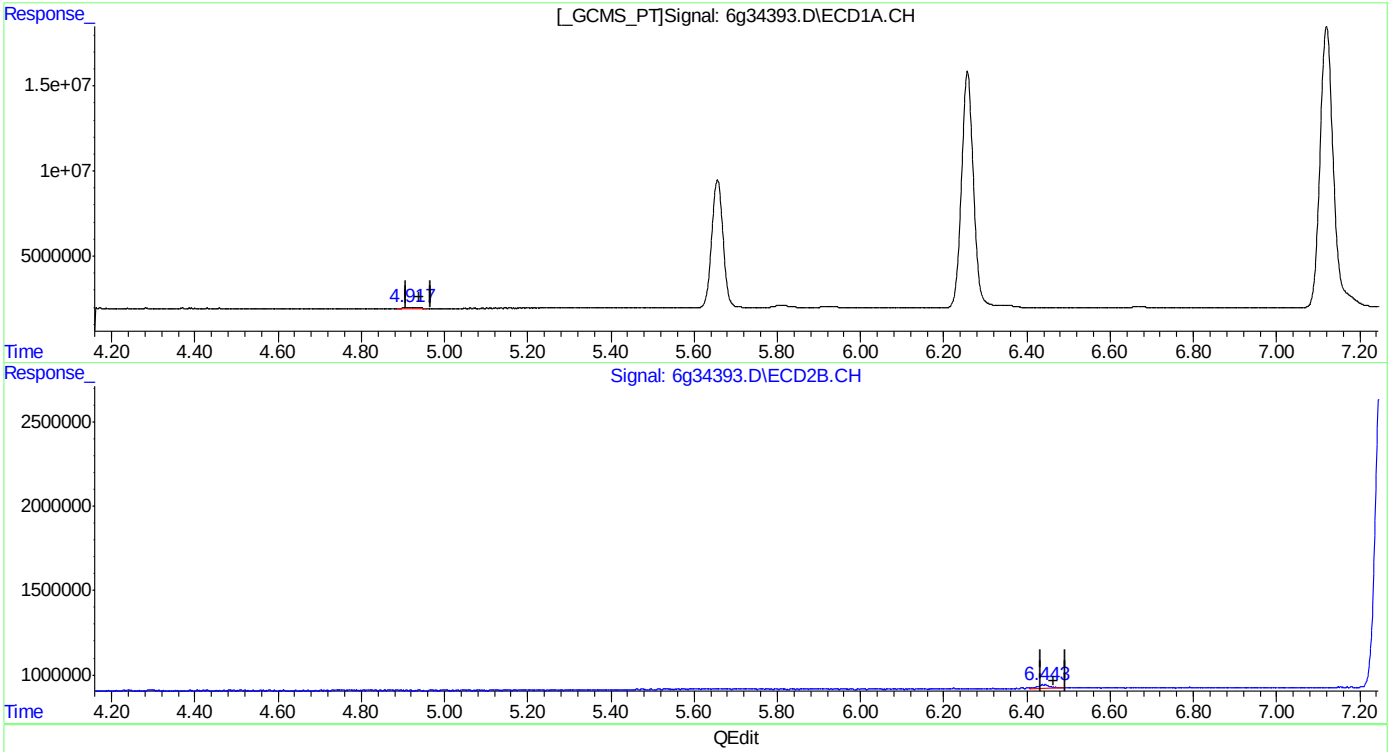
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(13) 4,4'-DDE (B)
4.917min 0.385PPB m
response 888704

(13) 4,4'-DDE #2 (B)
6.443min 0.483PPB m
response 396032

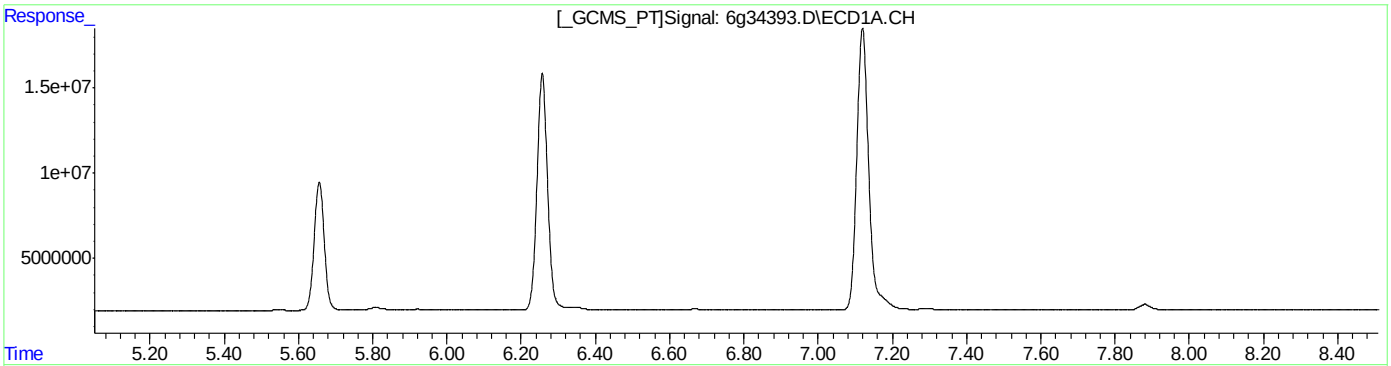
(+) = Expected Retention Time
6PST987.M Mon Apr 25 17:51:58 2016

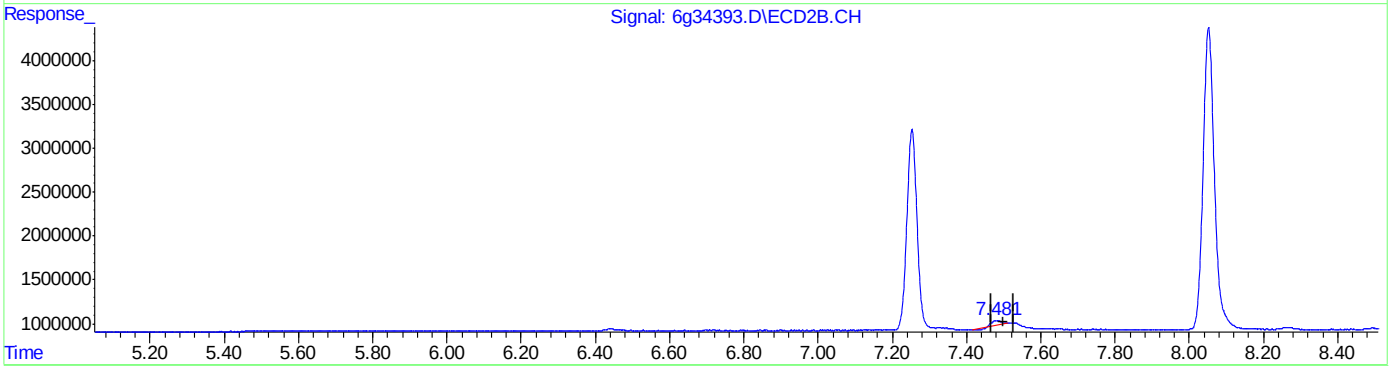
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
0.000min 0.000PPB
response 0

(16) 4,4'-DDD #2 (A)
7.481min 1.028PPB
response 727623

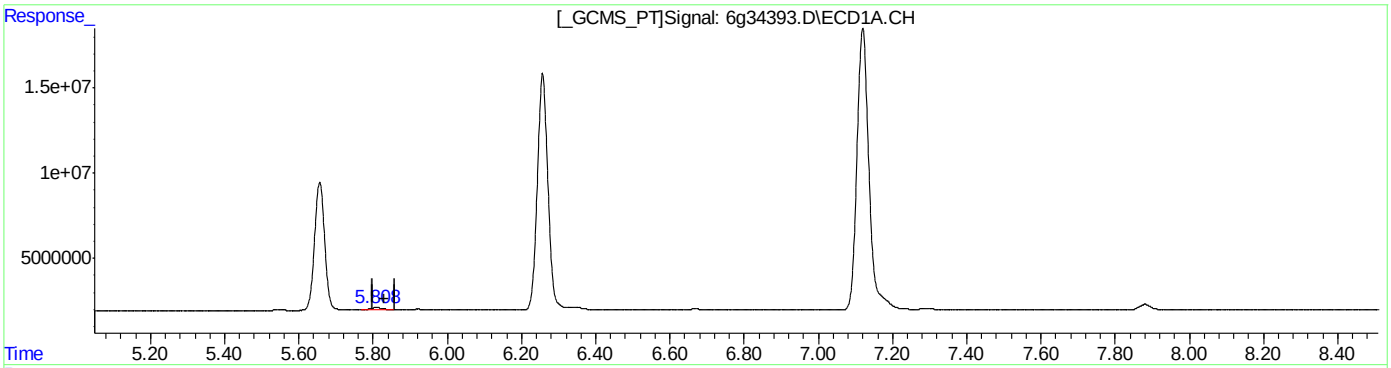
(+) = Expected Retention Time

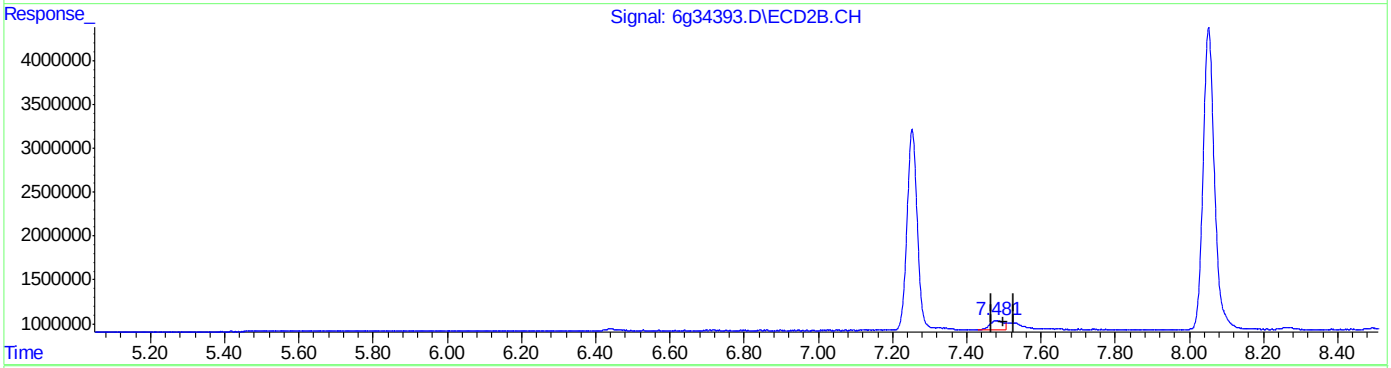
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
5.808min 1.413PPB m
response 2755069

(16) 4,4'-DDD #2 (A)
7.481min 3.740PPB m
response 2647372

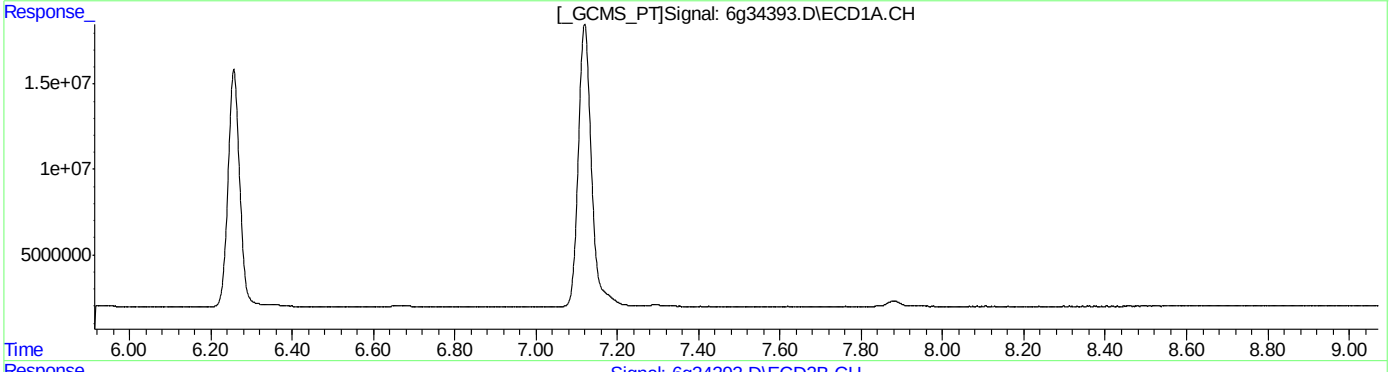
(+) = Expected Retention Time

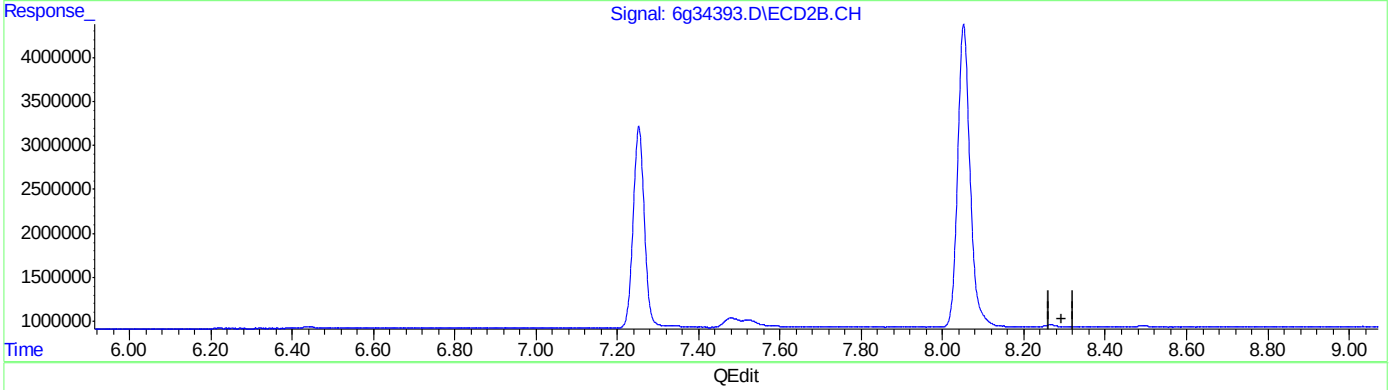
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endrin Aldehyde (B)
0.000min 0.000PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

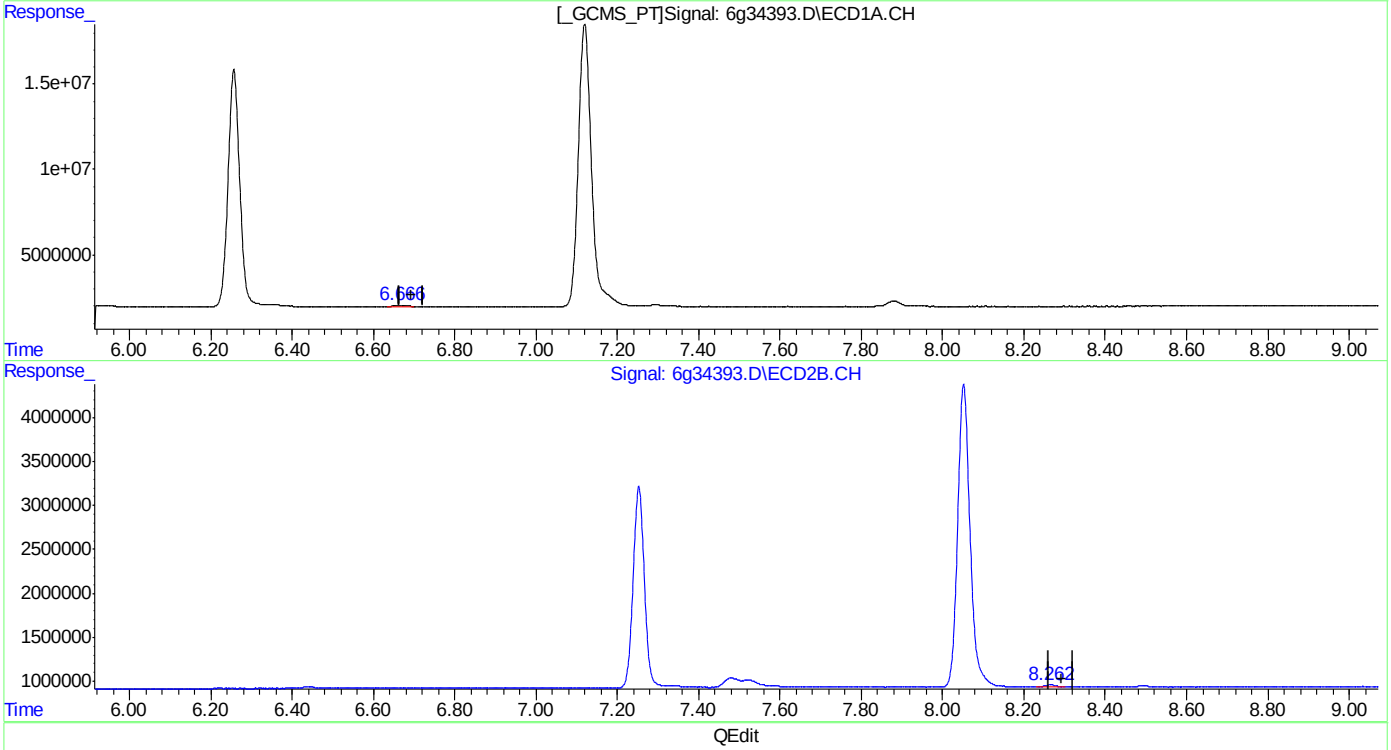
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(19) Endrin Aldehyde (B)
6.666min 0.583PPB m
response 1155619

(19) Endrin Aldehyde #2 (B)
8.262min 0.695PPB m
response 472844

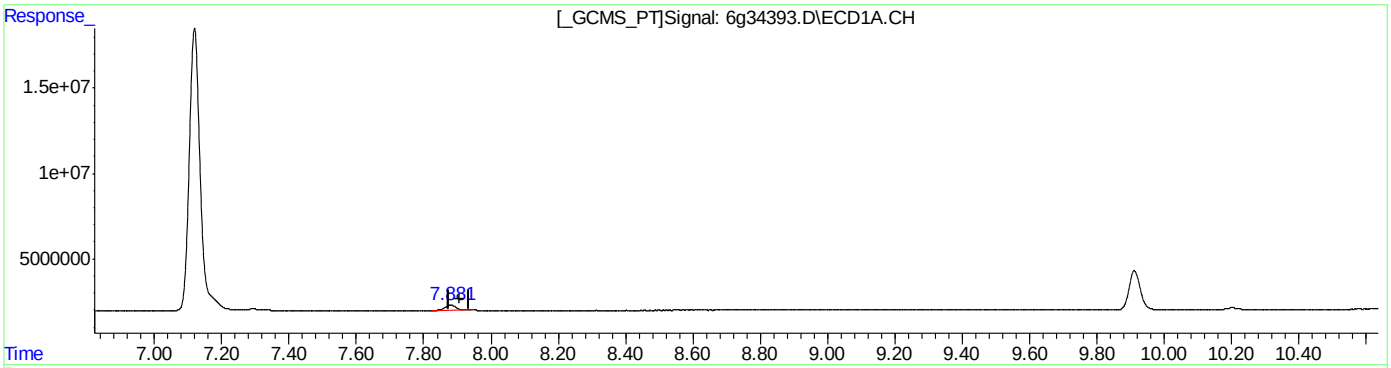
(+) = Expected Retention Time
6PST987.M Mon Apr 25 17:52:59 2016

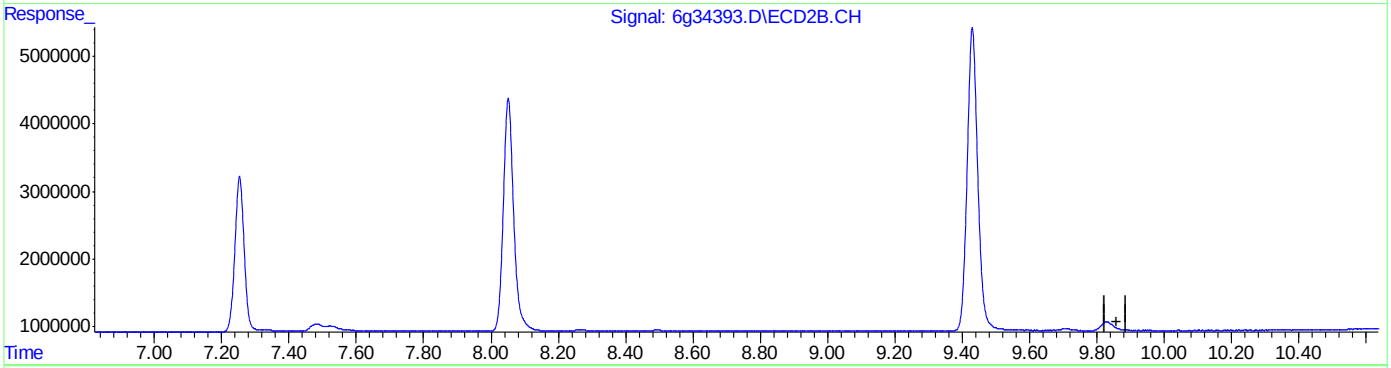
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(23) Endrin Ketone (B)
7.881min 2.486PPB
response 6312819

(23) Endrin Ketone #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST987.M Mon Apr 25 17:53:06 2016

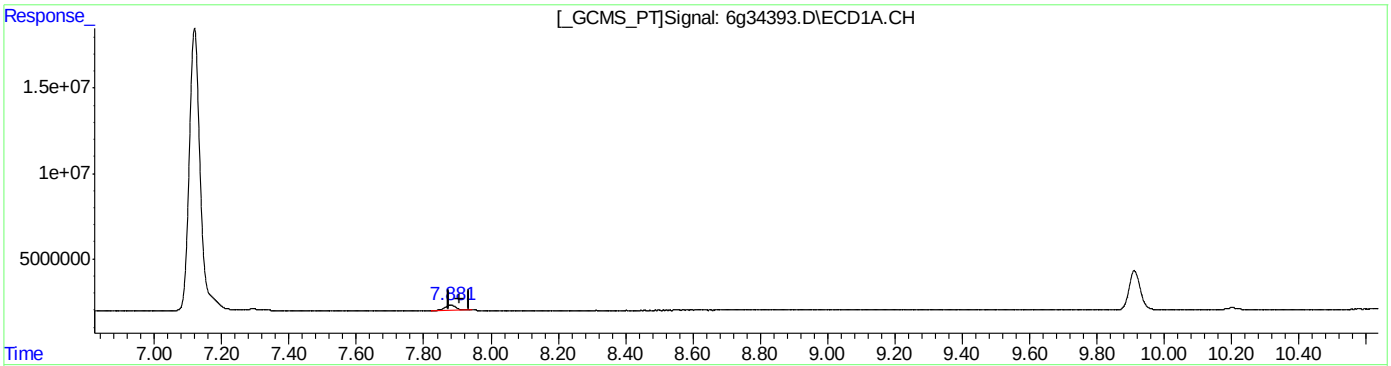
SGS ACCUTEST JC18649

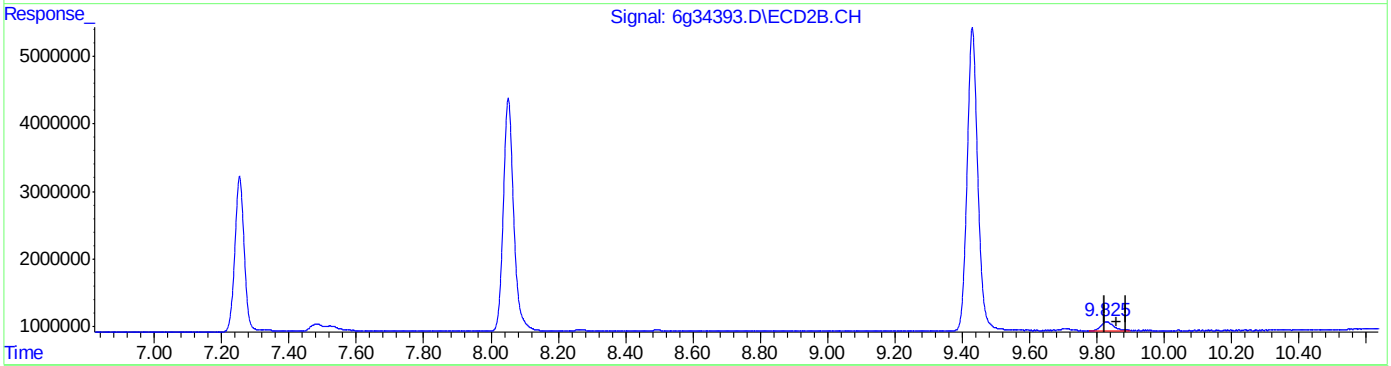
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(23) Endrin Ketone (B)
7.881min 2.486PPB
response 6312819

(23) Endrin Ketone #2 (B)
9.825min 3.733PPB m
response 3220307

(+) = Expected Retention Time
6PST987.M Mon Apr 25 17:53:18 2016

SGS ACCUTEST JC18649

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On : 01 Apr 2016 11:12 am Operator: dharas
Sample : ic3951-1 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:59:16 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	71647690	929.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	1549239	14404442	0.946m	0.808m
	Spiked Amount 40.000	Range 30 - 150		Recovery	=	2.36%#	2.02%#
24) SA	Decachlorobiphen	8.95	10.88	2242284	11699809	1.141	1.131
	Spiked Amount 40.000			Recovery	=	2.85%	2.83%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	1477798	23476734	0.780m	0.886
4) MA	gamma-BHC	2.51	3.48	1552497	20642785	0.859	0.865
5) MA	Heptachlor	2.99	4.05	1612343	19268658	0.826	0.914
6) B	beta-BHC	2.59	3.57	956496	9328680	1.002	0.907
7) B	delta-BHC	2.77	3.96	1205309	17959324	0.712	0.753
8) MB	Aldrin	3.30	4.50	1500180	20059082	0.861	0.960
9) B	Heptachlor Epoxi	4.00	5.33	1493866	17810734	0.837m	0.926
10) B	gamma-Chlordane	4.15	5.61	1953513	17982476	1.105m	0.967
11) B	alpha-Chlordane	4.32	5.84	1580594	18182600	0.890	0.981
12) A	Endosulfan I	4.49	5.93	1522095	16289762	0.897	0.918
13) B	4,4'-DDE	4.44	6.10	1401372	18641027	0.938	1.019
14) MA	Dieldrin	4.81	6.37	1544036	19886559	0.913	1.024
15) MA	Endrin	5.12	6.87	1536947	15932098	1.007	0.889
16) A	4,4'-DDD	5.25	7.06	1249919	15122761	0.976	0.955
17) B	Endosulfan II	5.44	7.22	1398628	16279956	0.842	0.944
18) MA	4,4'-DDT	5.66	7.59	1013719	9492594	0.829	0.852m
19) B	Endrin Aldehyde	6.07	7.80	1235216	11810133	0.895m	0.903m
20) B	Endosulfan Sulfa	6.74	8.27	1341367	14248692	0.859	0.969m
21) A	Methoxychlor	6.44	8.84	872392	5793293	0.986m	0.991m
22)	Mirex	6.54	9.16	1557076	9798496	0.899	0.907
23) B	Endrin Ketone	7.17	9.23	1758017	12650750	1.026	0.823m

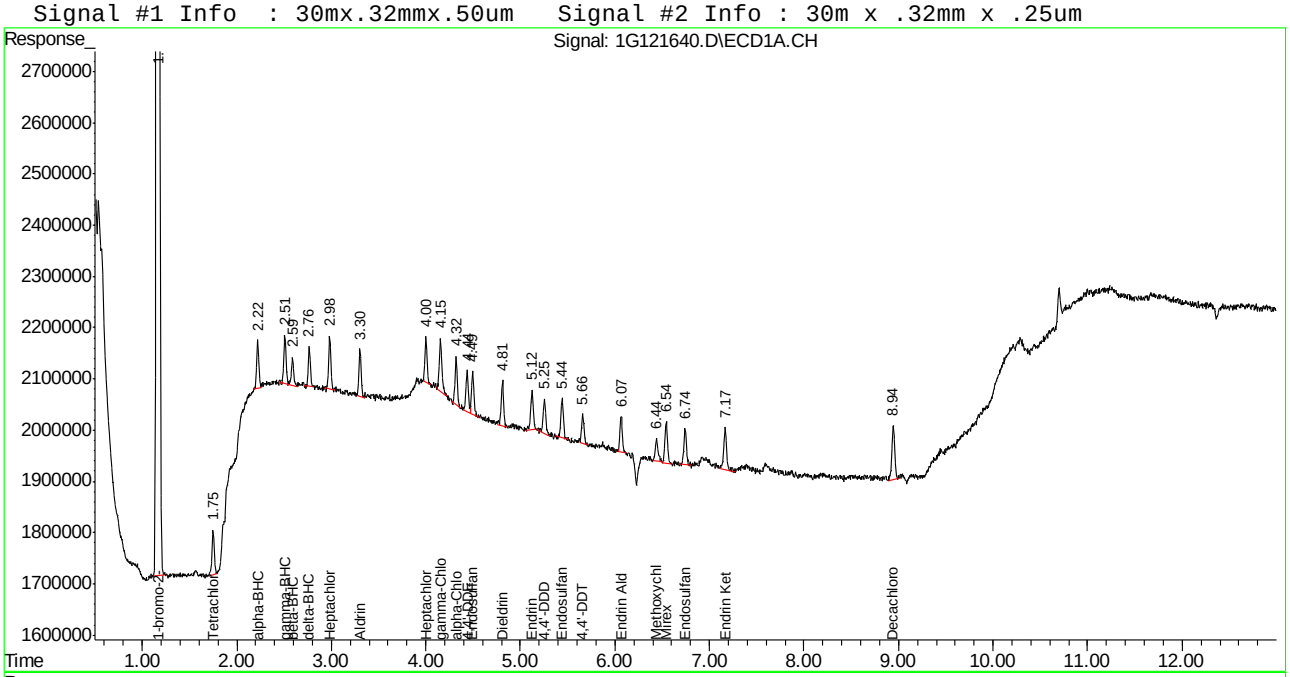
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121640.D 1PST3951.M Fri Apr 01 16:48:05 2016 RPT1 Page 1

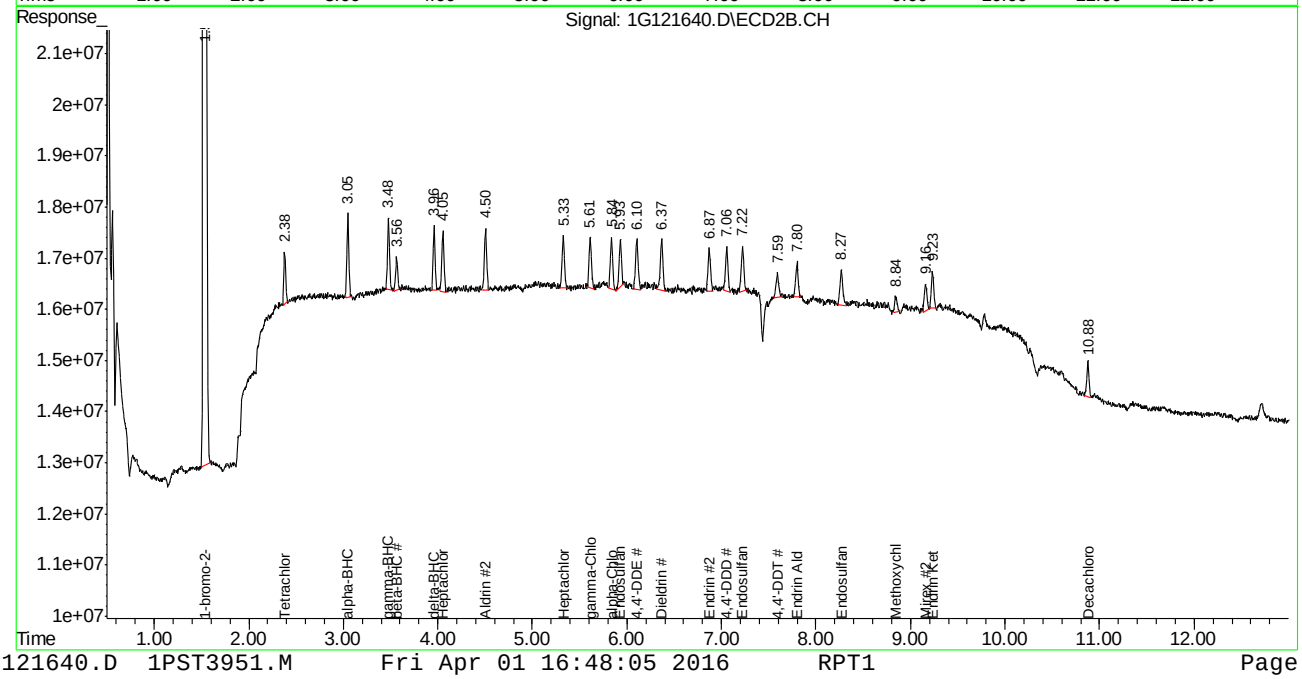
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On : 01 Apr 2016 11:12 am Operator: dharas
Sample : ic3951-1 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

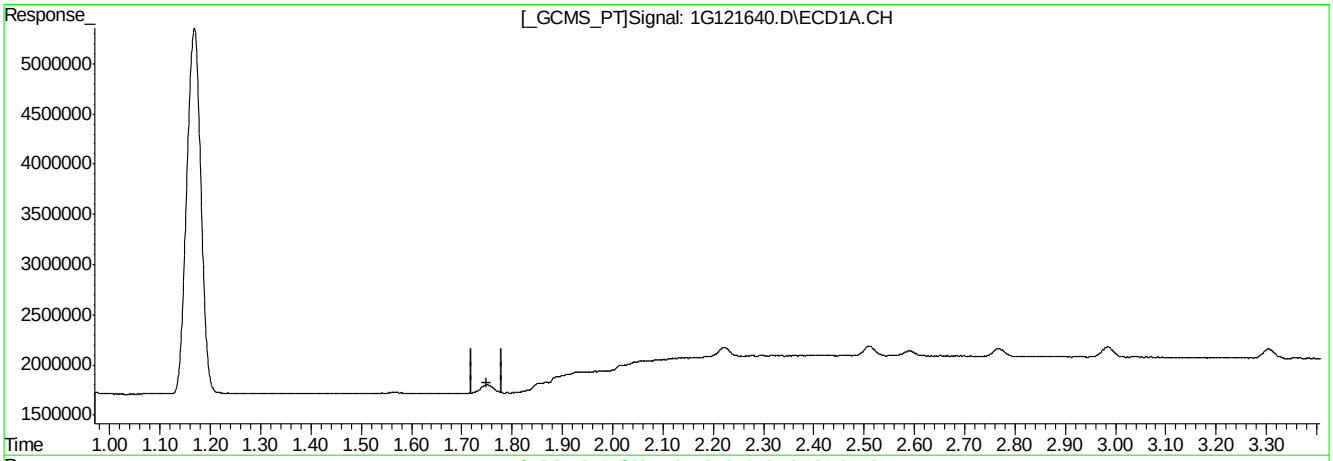
Sample Number: G1G3951-IC3951 **Method:** SW846 8081B
Lab FileID: 1G121640.D **Analyst approved:** 04/01/16 16:29 Joseph Ravino
Injection Time: 04/01/16 11:12 **Supervisor approved:** 04/04/16 12:58 Gwendolyn Burns

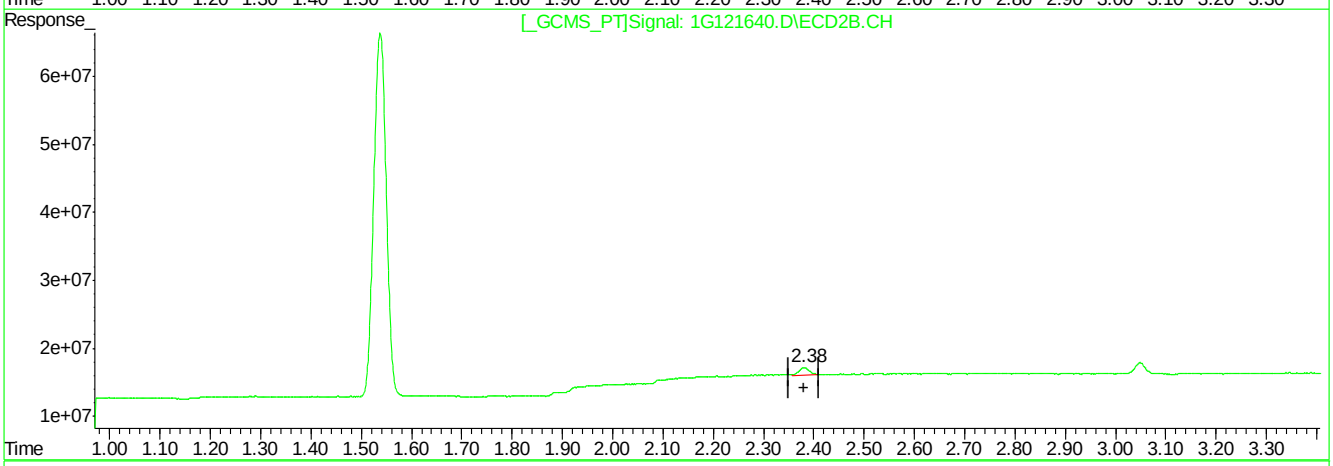
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.75	Poor instrument integration
alpha-BHC	319-84-6	1	2.22	Poor instrument integration
Tetrachloro-m-xylene	877-09-8	2	2.38	Poor instrument integration
Heptachlor epoxide	1024-57-3	1	4.00	Poor instrument integration
gamma-Chlordane	5103-74-2	1	4.15	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.07	Poor instrument integration
Methoxychlor	72-43-5	1	6.44	Poor instrument integration
4,4'-DDT	50-29-3	2	7.59	Poor instrument integration
Endrin aldehyde	7421-93-4	2	7.80	Poor instrument integration
Endosulfan sulfate	1031-07-8	2	8.27	Poor instrument integration
Methoxychlor	72-43-5	2	8.84	Poor instrument integration
Endrin ketone	53494-70-5	2	9.23	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

0.00min 0.000PPB

response 0

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 0.925PPB

response 16489900

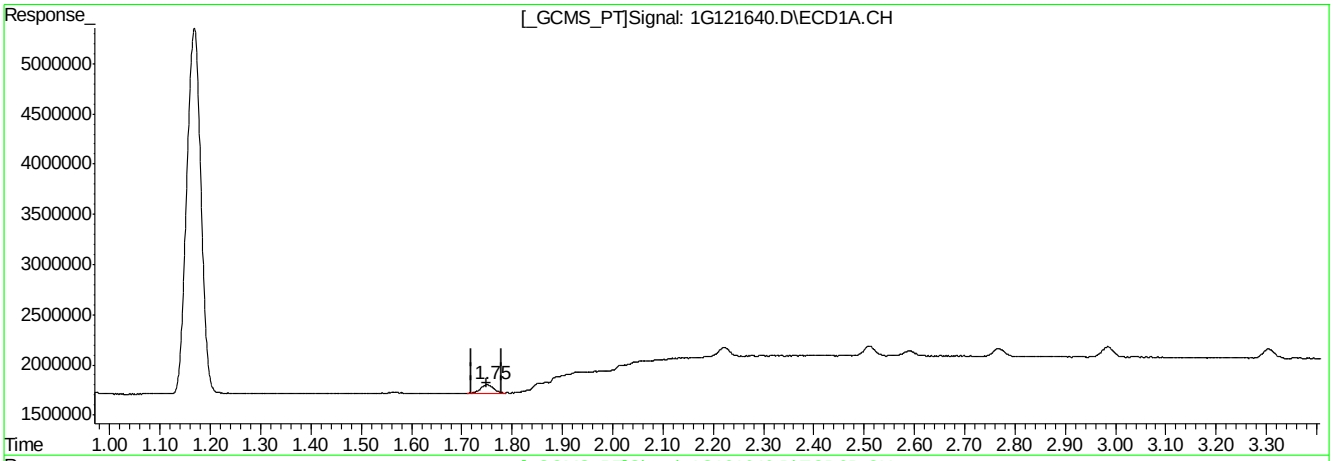
(+) = Expected Retention Time

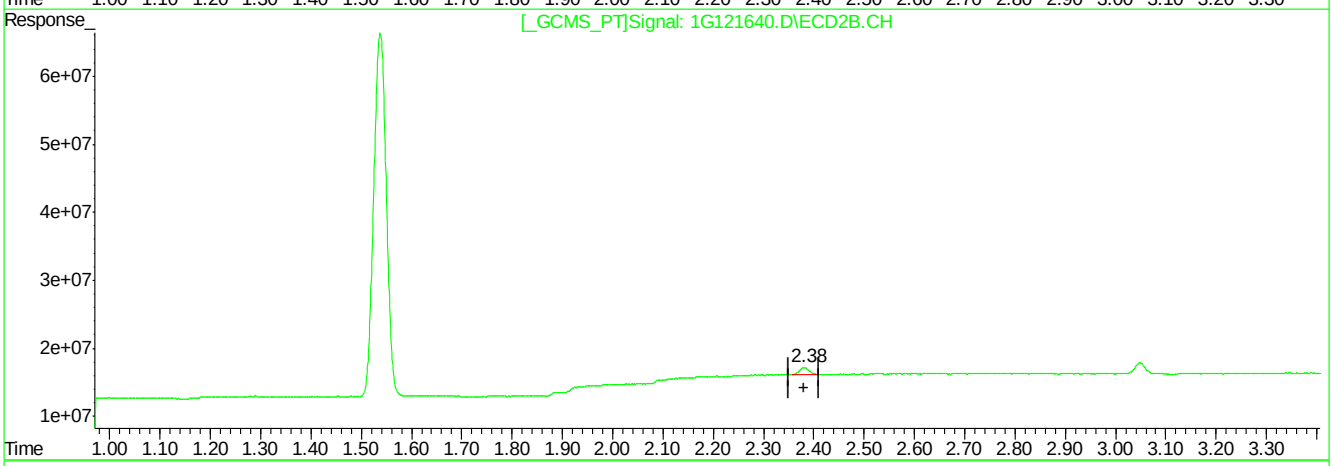
1G121640.D 1PST3951.M Fri Apr 01 16:04:24 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 0.946PPB m

response 1549239

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 0.808PPB m

response 14404442

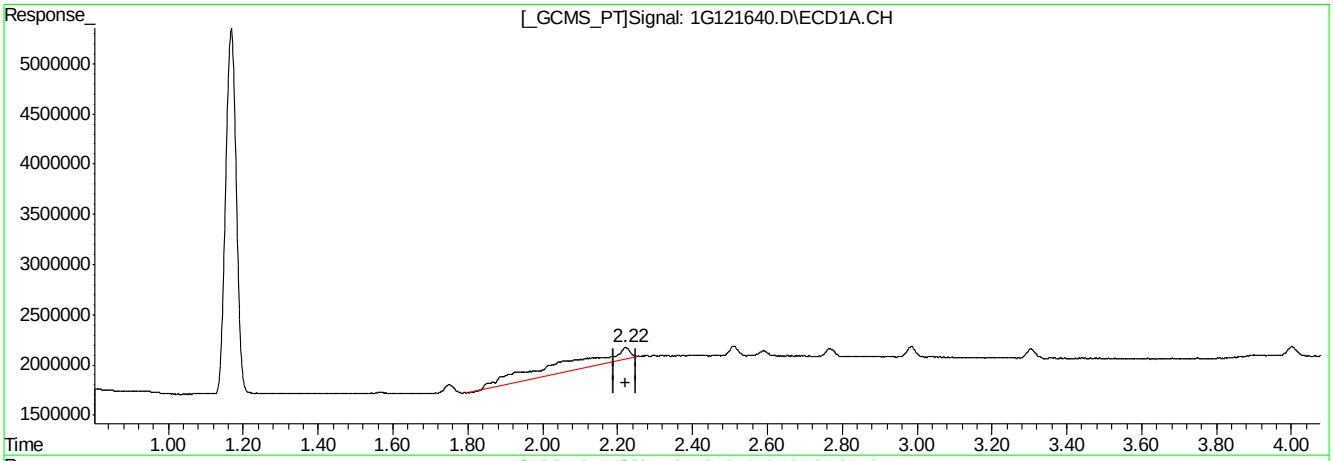
(+) = Expected Retention Time

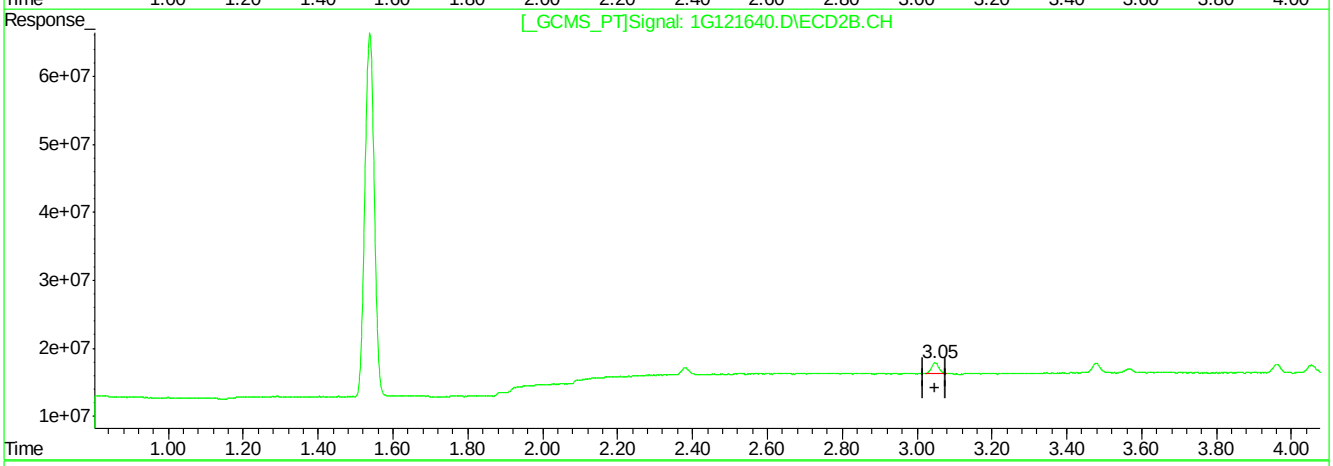
1G121640.D 1PST3951.M Fri Apr 01 16:04:42 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 10.267PPB

response 19452780

(3) alpha-BHC #2 (A)

3.05min 0.886PPB

response 23476734

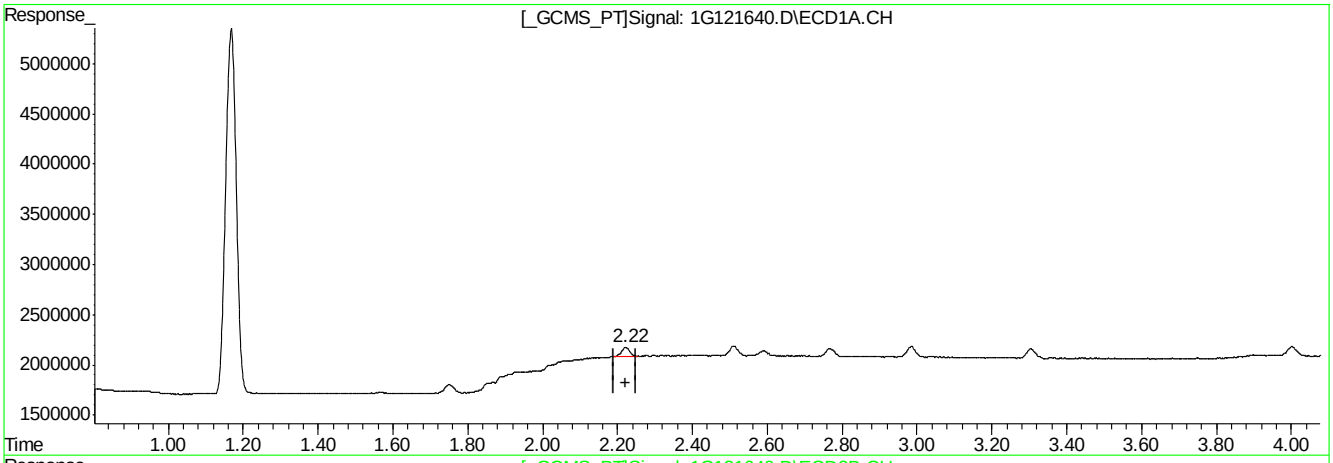
(+) = Expected Retention Time

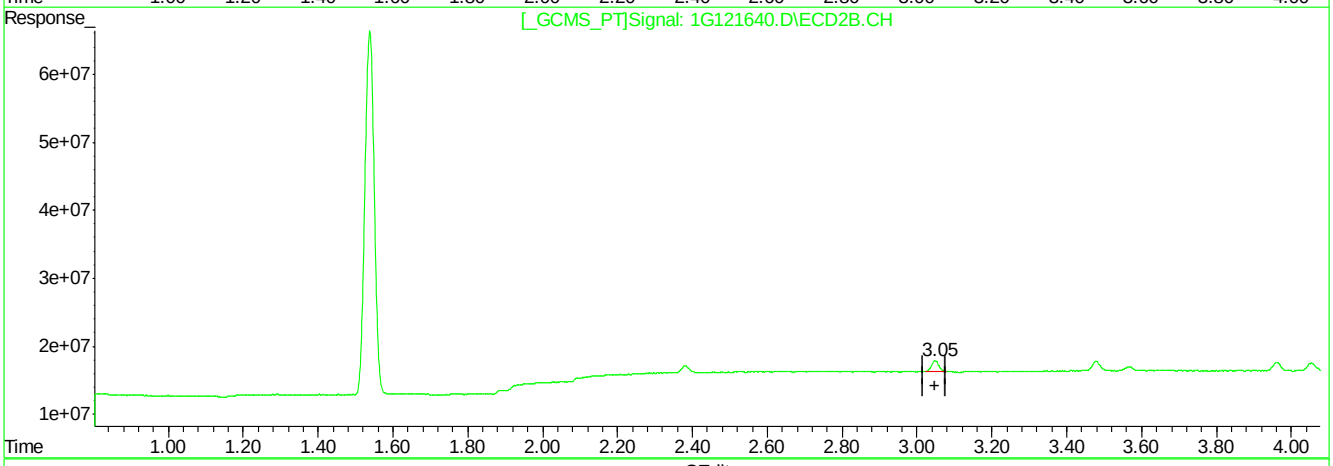
1G121640.D 1PST3951.M Fri Apr 01 16:04:50 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 0.780PPB m

response 1477798

(3) alpha-BHC #2 (A)

3.05min 0.886PPB

response 23476734

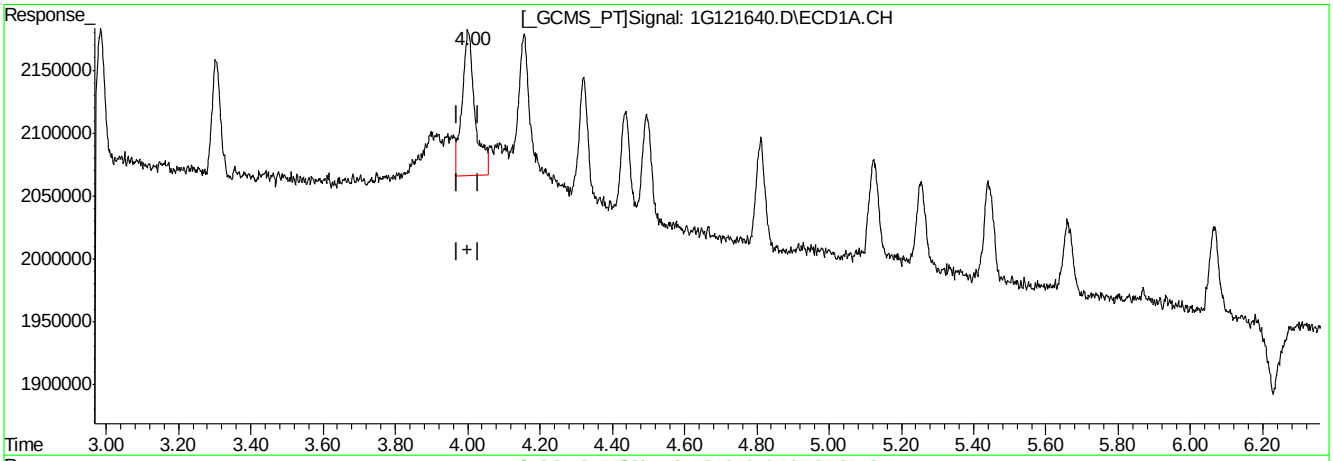
(+) = Expected Retention Time

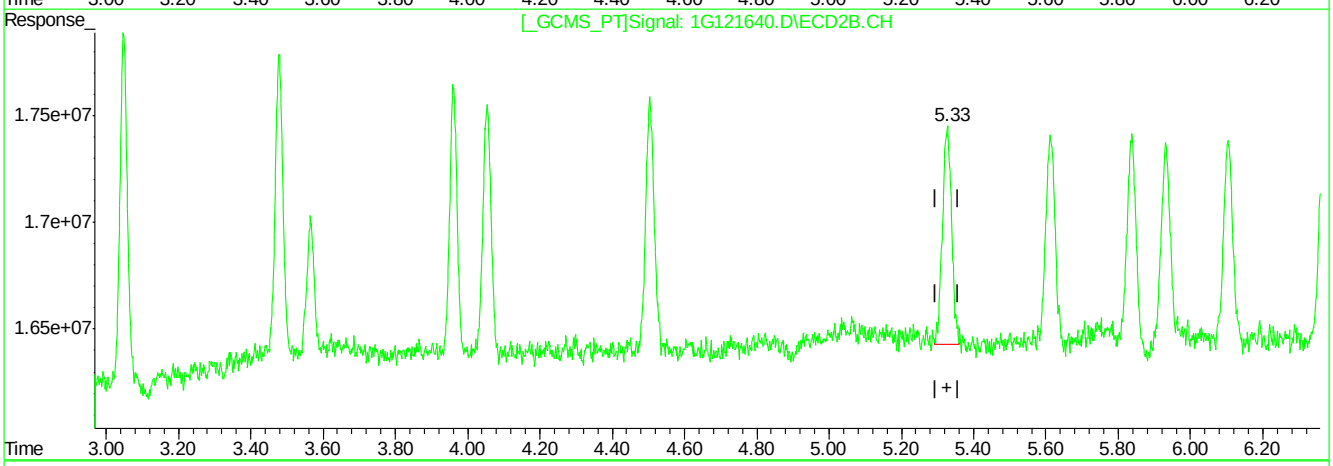
1G121640.D 1PST3951.M Fri Apr 01 16:04:59 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.00min 1.595PPB

response 2845675

(9) Heptachlor Epoxide #2 (B)

5.33min 0.926PPB

response 17810734

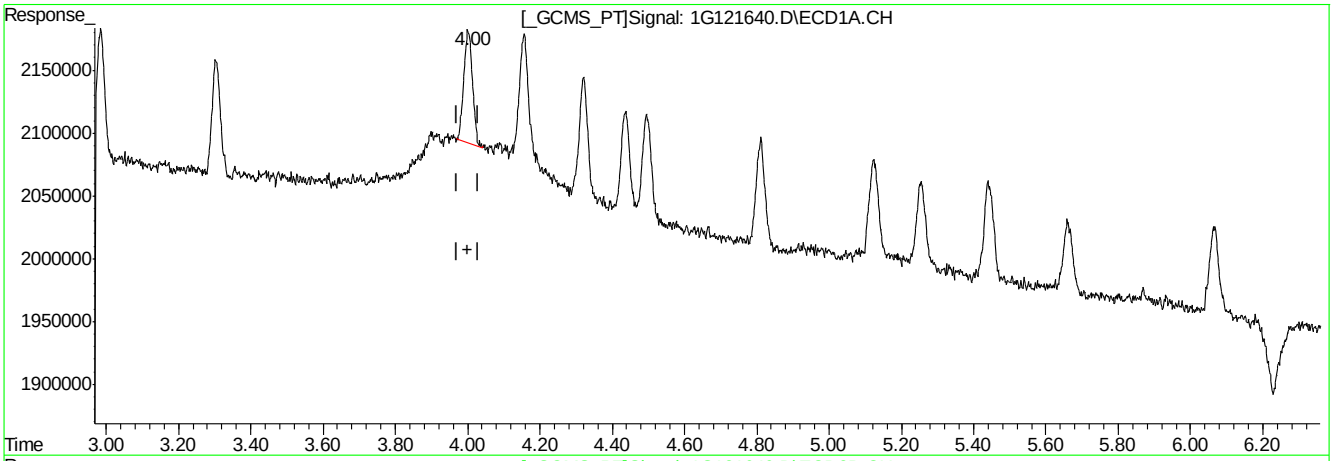
(+) = Expected Retention Time

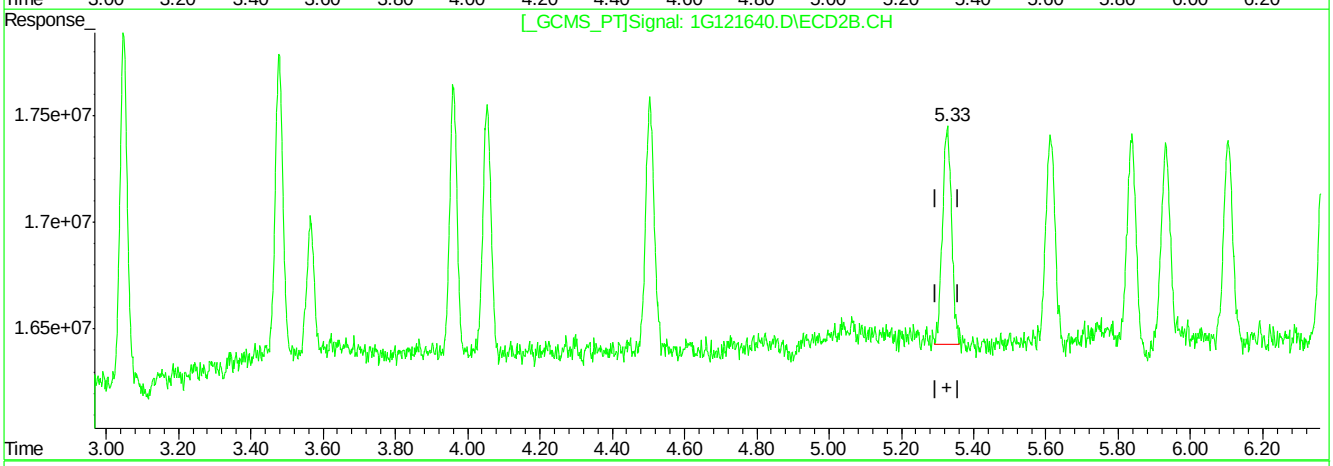
1G121640.D 1PST3951.M Fri Apr 01 16:05:20 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.00min 0.837PPB m

response 1493866

(9) Heptachlor Epoxide #2 (B)

5.33min 0.926PPB

response 17810734

(+) = Expected Retention Time

1G121640.D 1PST3951.M Fri Apr 01 16:05:26 2016 RPT1

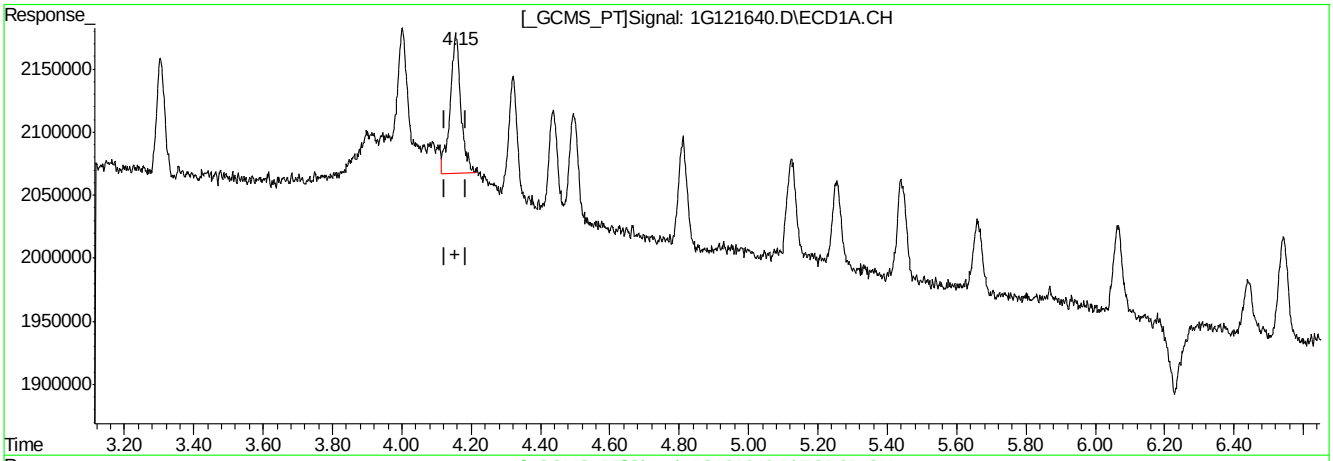
9.6.1.7

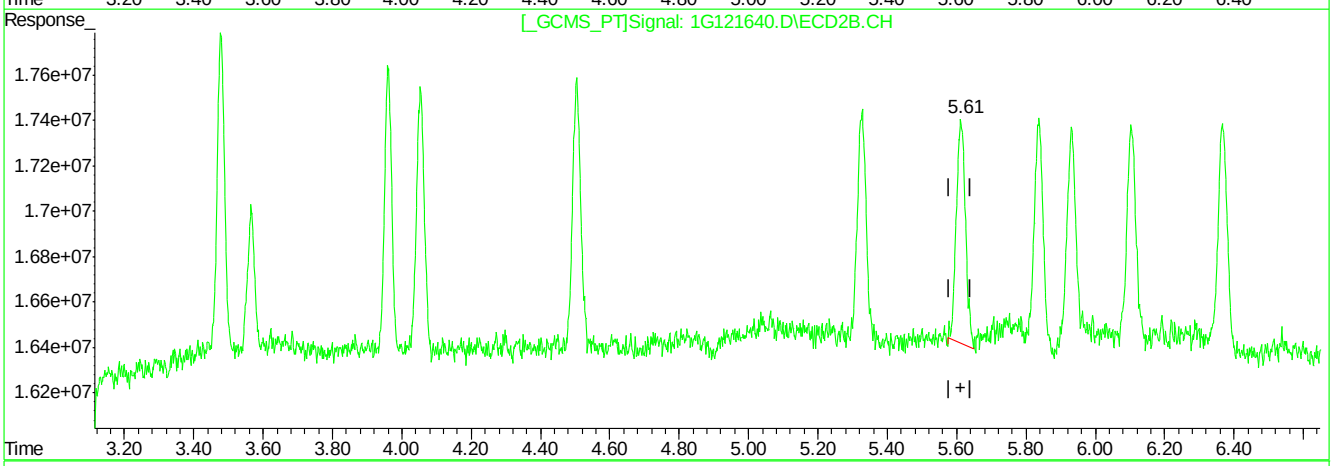
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(10) gamma-Chlordane (B)

4.16min 1.343PPB

response 2375618

(10) gamma-Chlordane #2 (B)

5.61min 0.967PPB

response 17982476

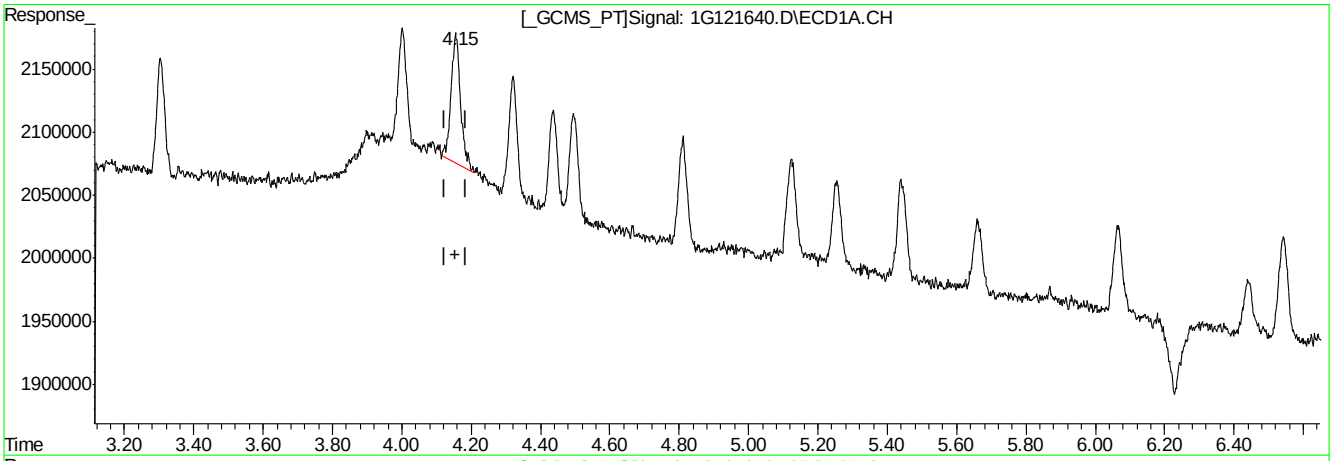
(+) = Expected Retention Time

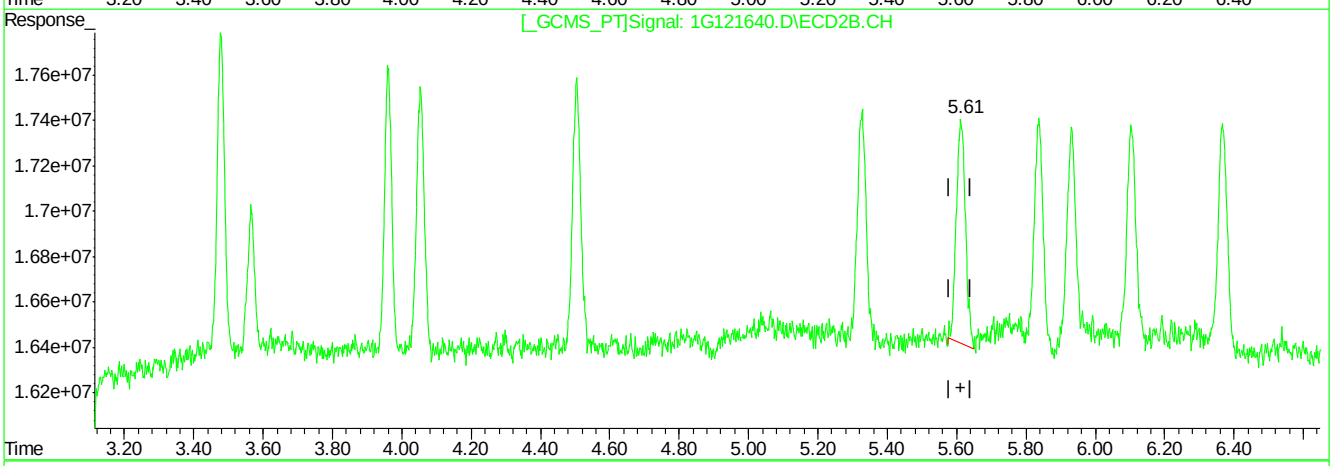
1G121640.D 1PST3951.M Fri Apr 01 16:05:35 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(10) gamma-Chlordane (B)

4.15min 1.105PPB m

response 1953513

(10) gamma-Chlordane #2 (B)

5.61min 0.967PPB

response 17982476

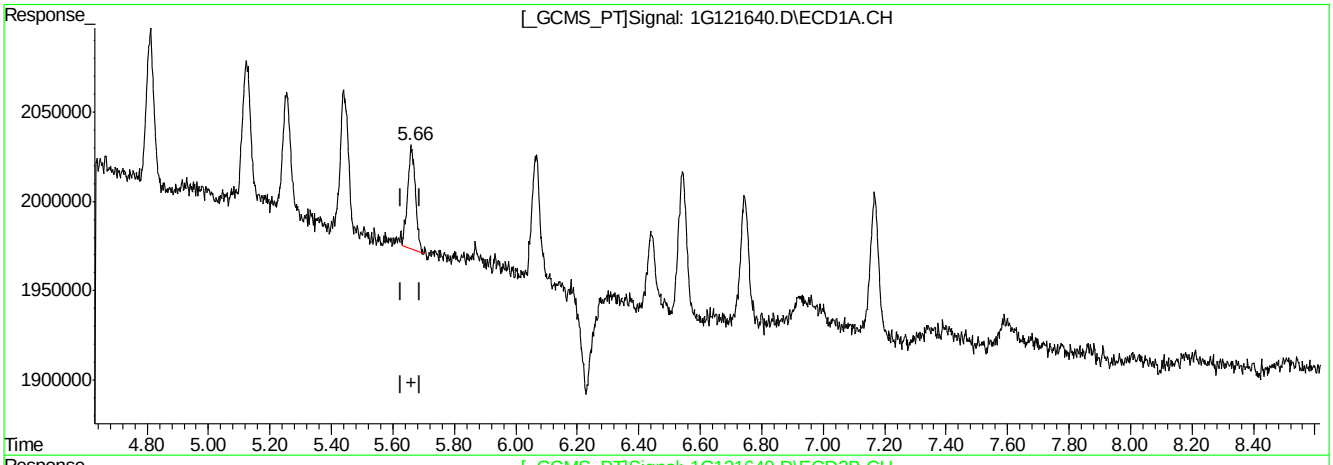
(+) = Expected Retention Time

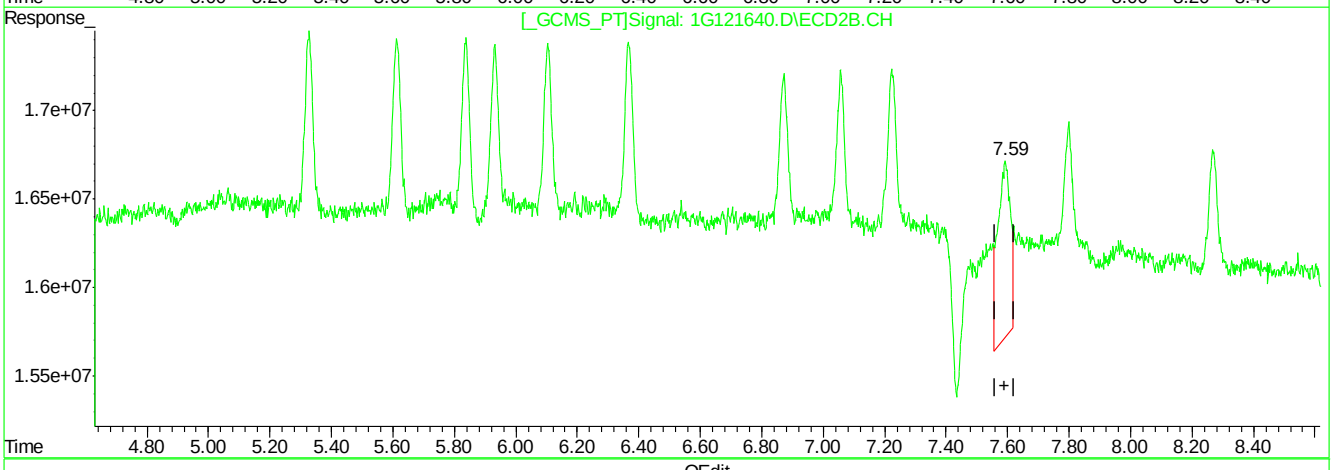
1G121640.D 1PST3951.M Fri Apr 01 16:05:41 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 0.829PPB

response 1013719

(18) 4,4'-DDT #2 (MA)

7.59min 2.562PPB

response 28535570

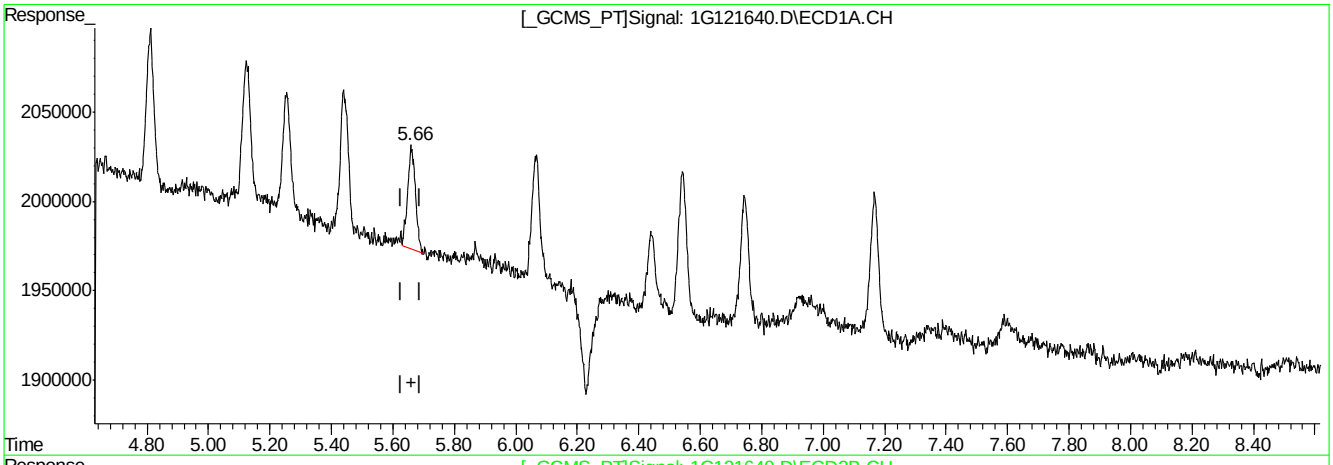
(+) = Expected Retention Time

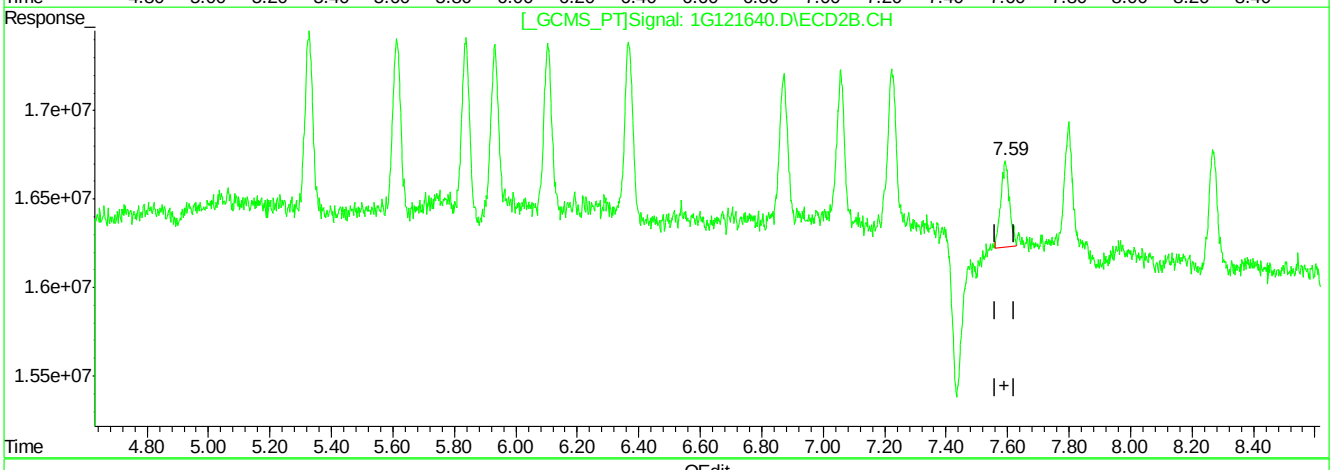
1G121640.D 1PST3951.M Fri Apr 01 16:06:08 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 0.829PPB

response 1013719

(18) 4,4'-DDT #2 (MA)

7.59min 0.852PPB m

response 9492594

(+) = Expected Retention Time

1G121640.D 1PST3951.M Fri Apr 01 16:06:15 2016 RPT1

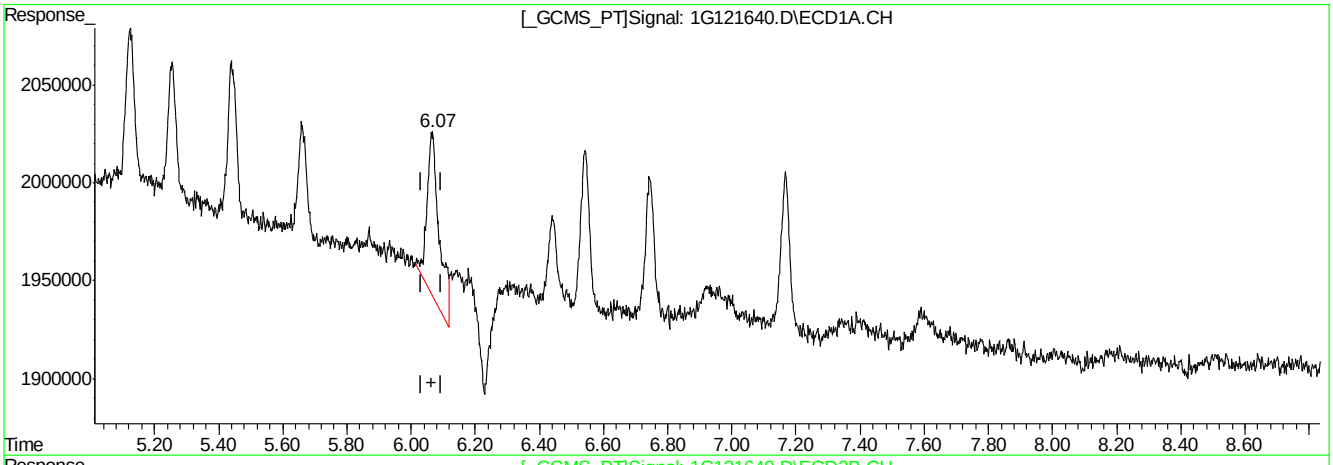
9.6.1.11

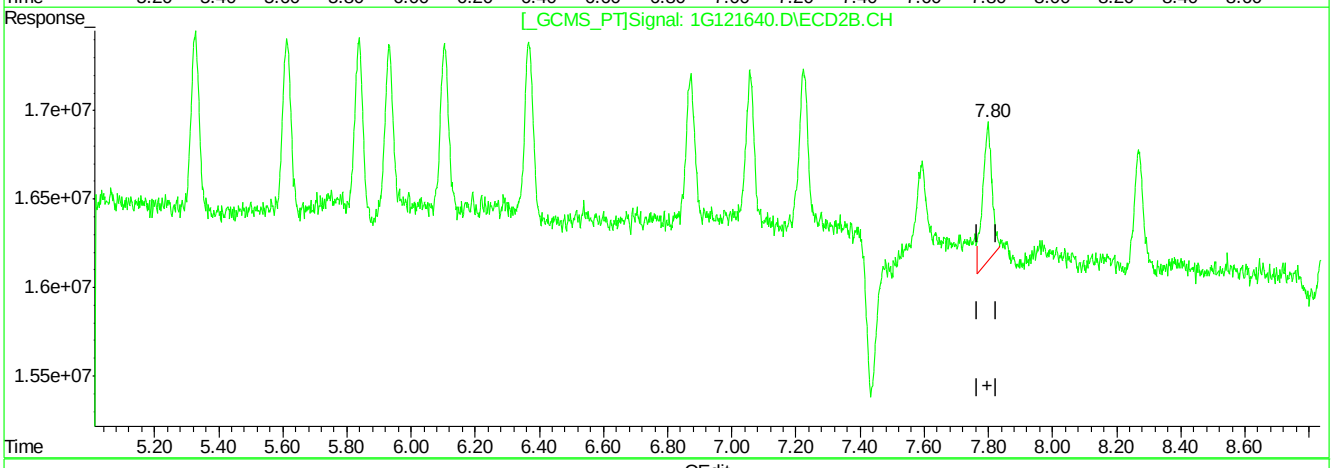
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.07min 1.581PPB

response 2182480

(19) Endrin Aldehyde #2 (B)

7.80min 1.190PPB

response 15556111

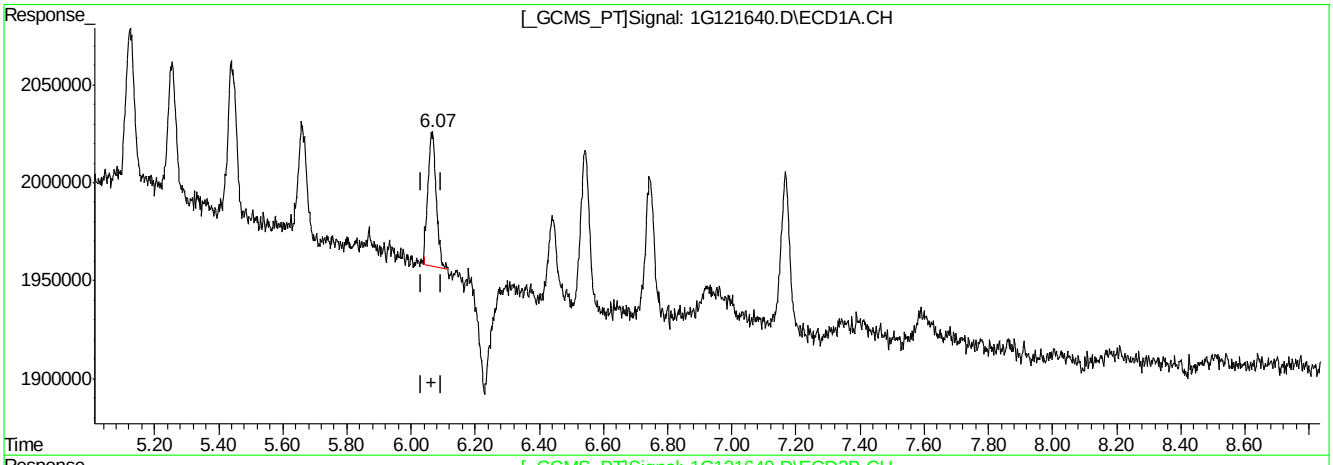
(+) = Expected Retention Time

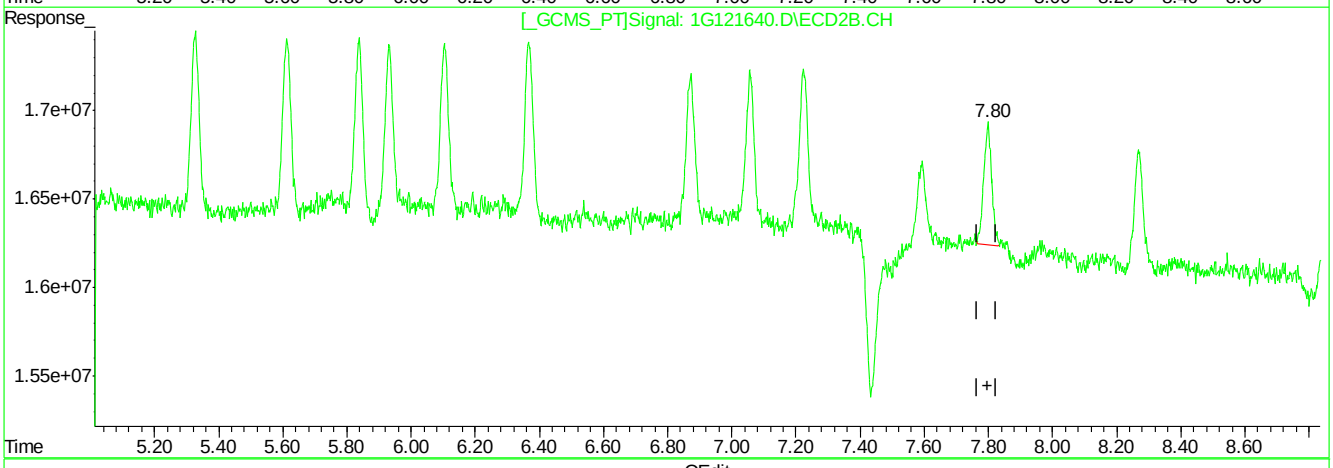
1G121640.D 1PST3951.M Fri Apr 01 16:06:20 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.07min 0.895PPB m

response 1235216

(19) Endrin Aldehyde #2 (B)

7.80min 0.903PPB m

response 11810133

(+) = Expected Retention Time

1G121640.D 1PST3951.M Fri Apr 01 16:06:36 2016 RPT1

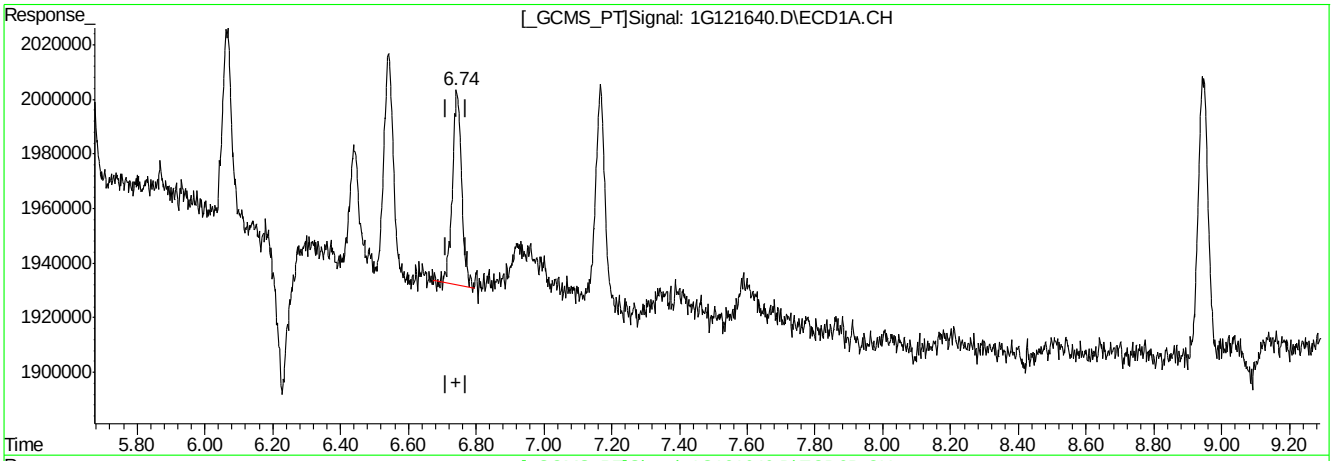
9.6.1.13

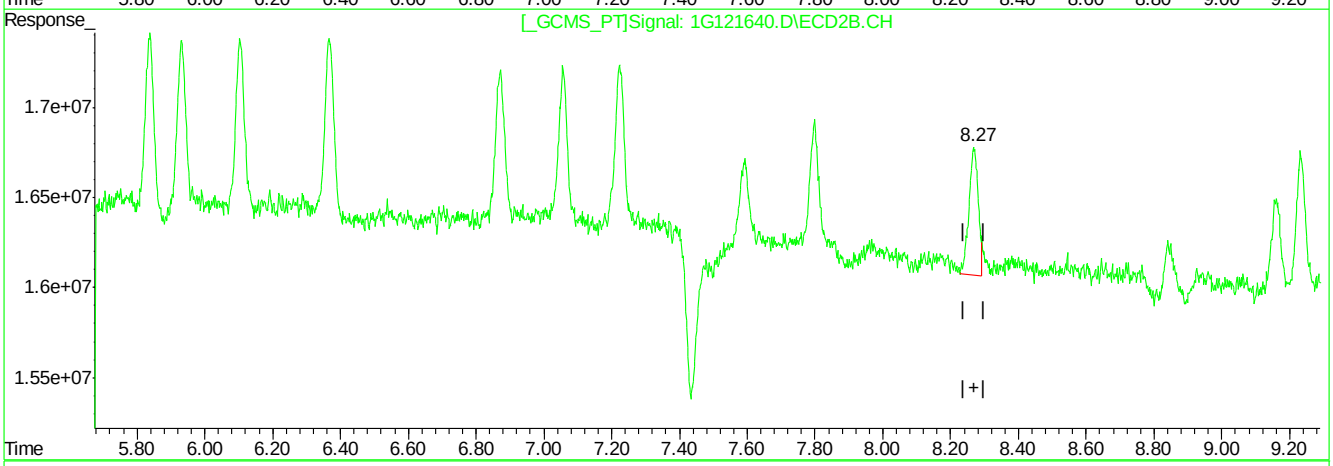
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(20) Endosulfan Sulfate (B)

6.74min 0.859PPB

response 1341367

(20) Endosulfan Sulfate #2 (B)

8.27min 0.909PPB

response 13366017

(+) = Expected Retention Time

1G121640.D 1PST3951.M Fri Apr 01 16:06:42 2016 RPT1

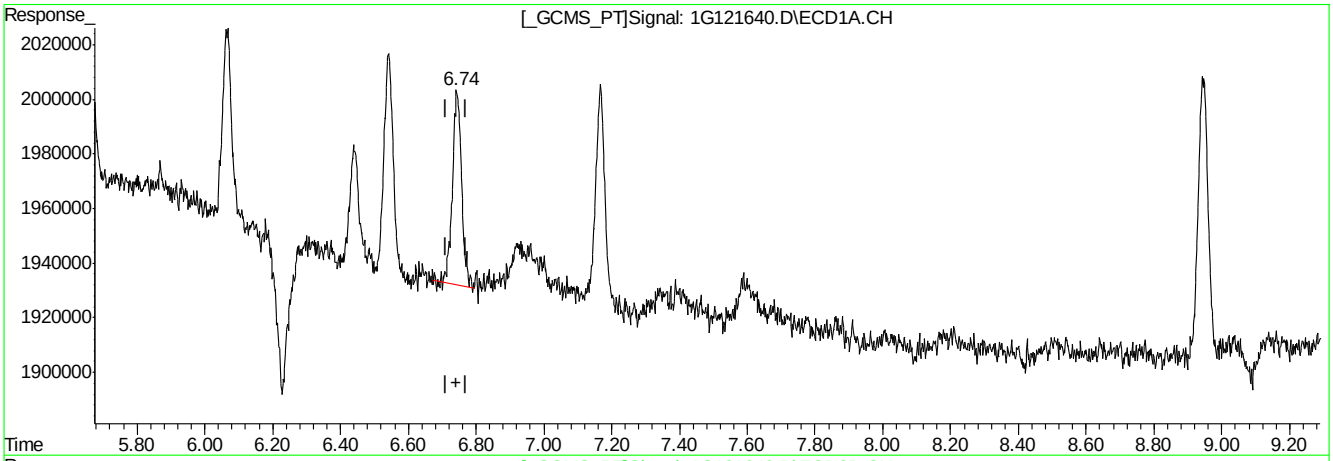
9.6.1.14

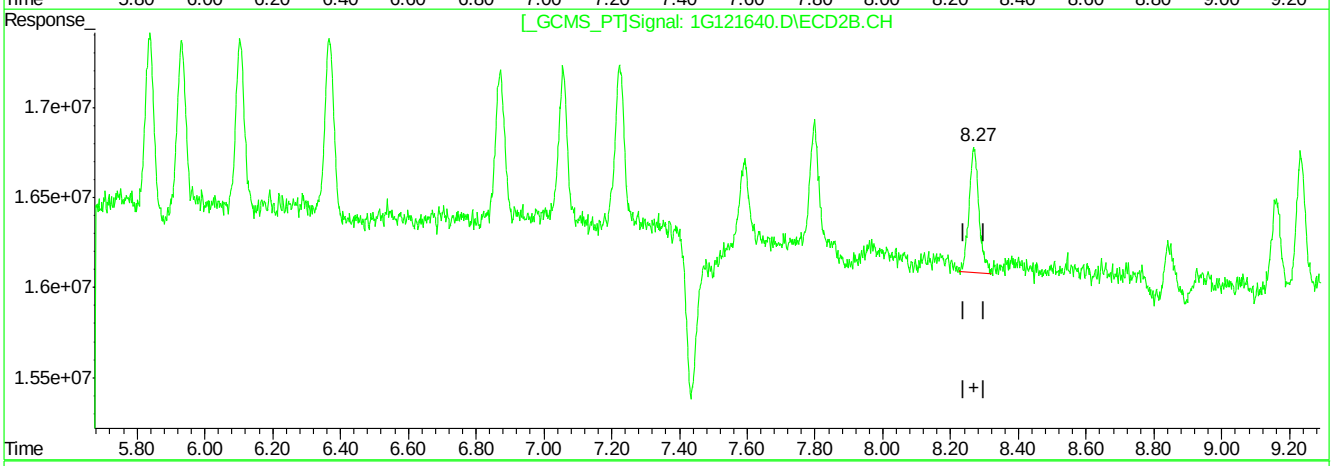
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(20) Endosulfan Sulfate (B)

6.74min 0.859PPB

response 1341367

(20) Endosulfan Sulfate #2 (B)

8.27min 0.969PPB m

response 14248692

(+) = Expected Retention Time

1G121640.D 1PST3951.M Fri Apr 01 16:06:49 2016 RPT1

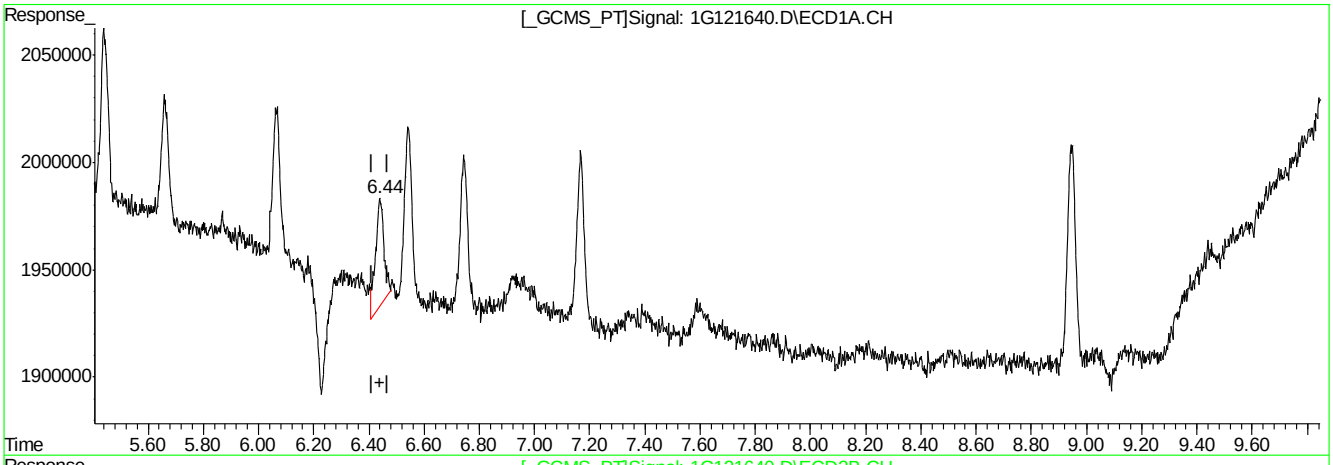
9.6.1.15

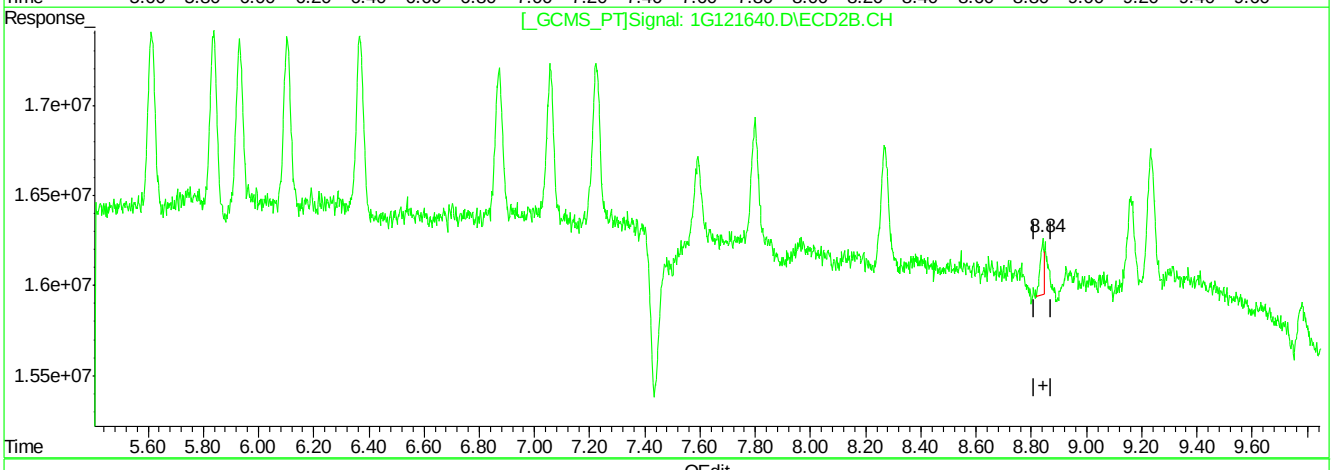
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.44min 1.215PPB

response 1074848

(21) Methoxychlor #2 (A)

8.84min 0.480PPB

response 2803437

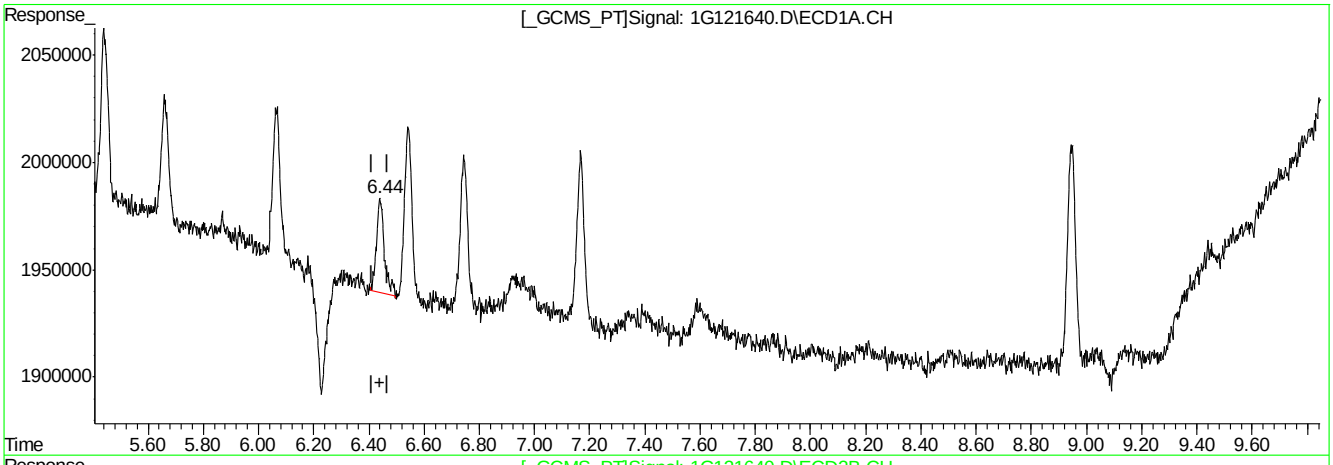
(+) = Expected Retention Time

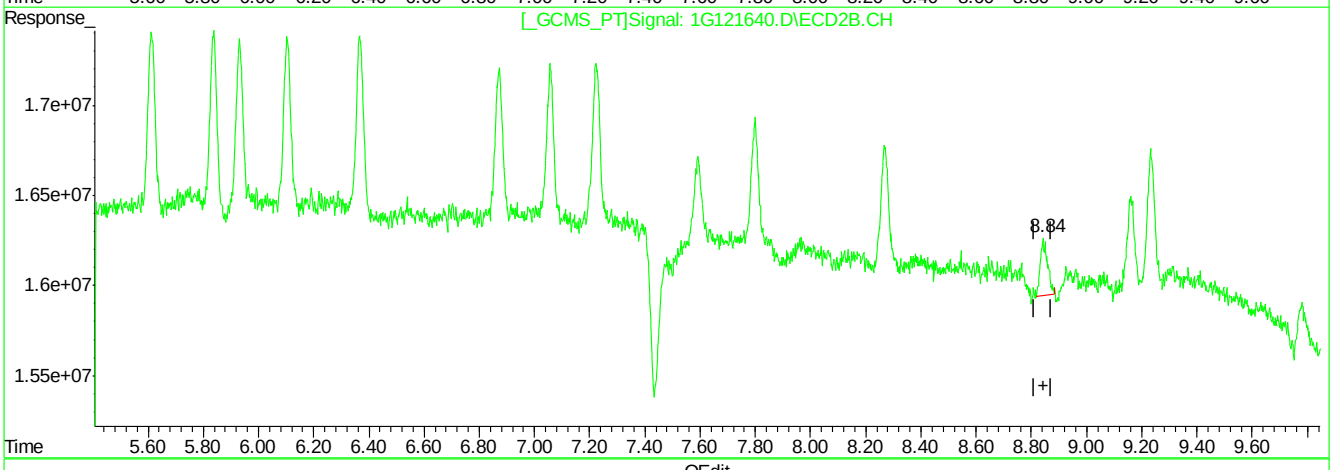
1G121640.D 1PST3951.M Fri Apr 01 16:06:54 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.44min 0.986PPB m

response 872392

(21) Methoxychlor #2 (A)

8.84min 0.991PPB m

response 5793293

(+) = Expected Retention Time

1G121640.D 1PST3951.M Fri Apr 01 16:07:03 2016 RPT1

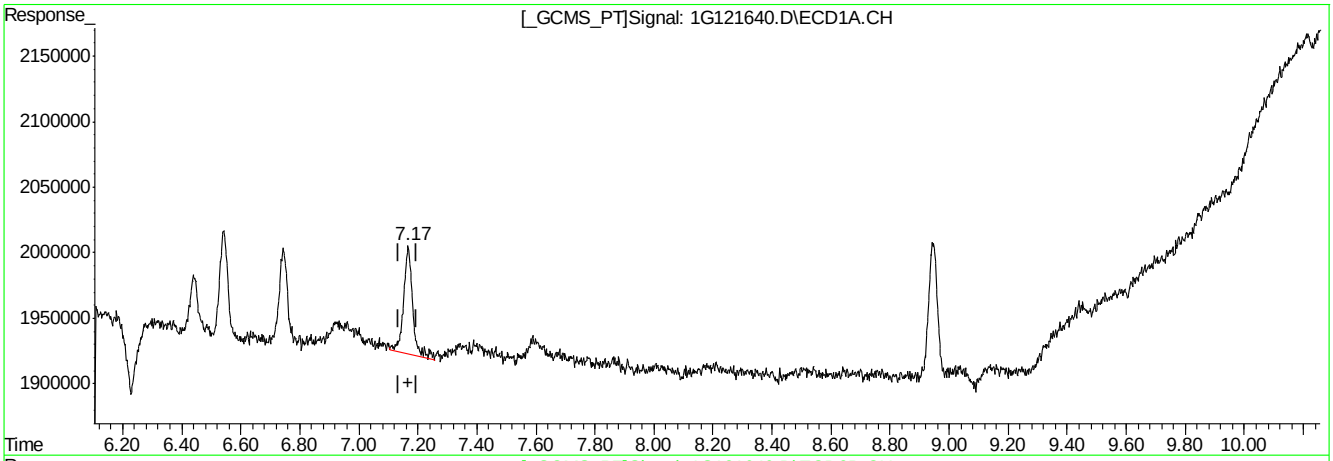
9.6.1.17

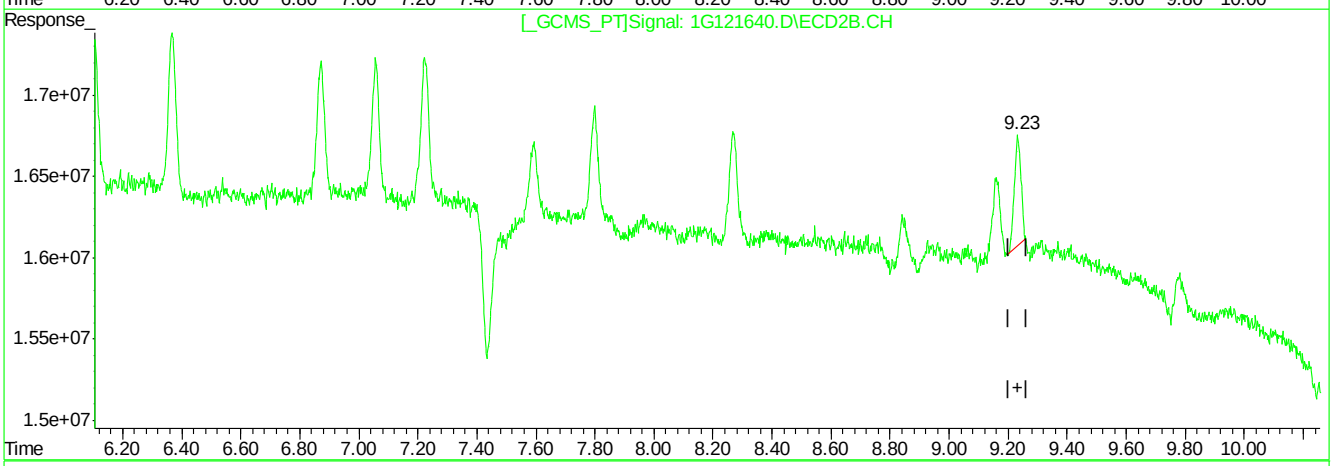
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.17min 1.026PPB

response 1758017

(23) Endrin Ketone #2 (B)

9.23min 0.695PPB

response 10673222

(+) = Expected Retention Time

1G121640.D 1PST3951.M Fri Apr 01 16:07:16 2016 RPT1

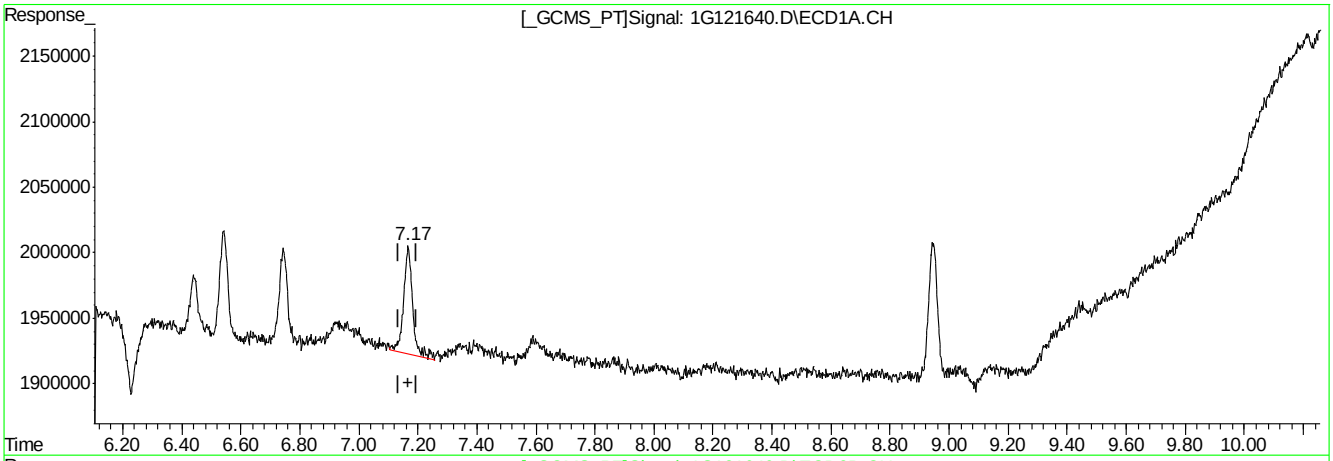
9.6.1.18

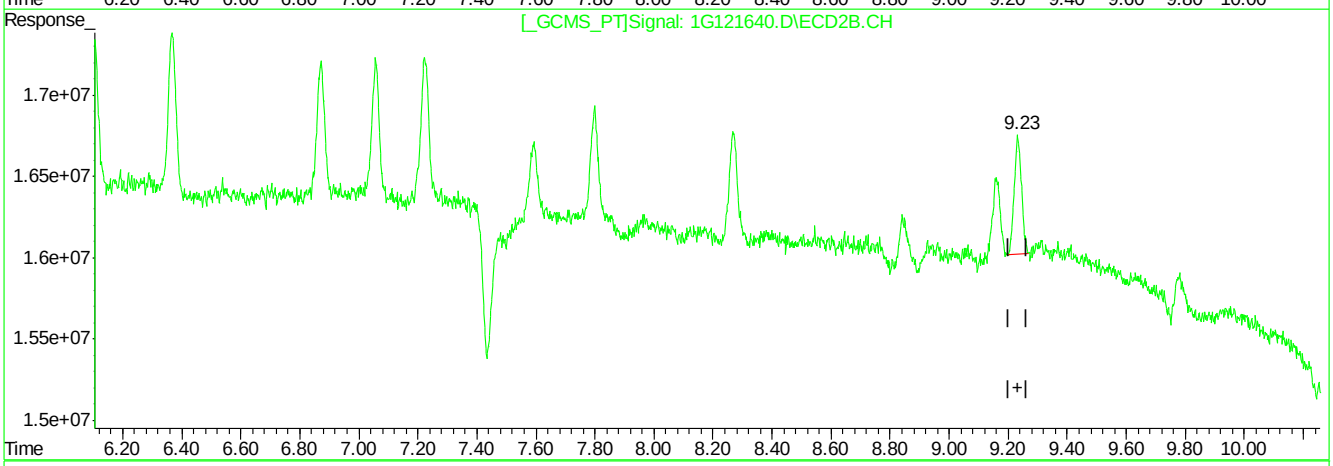
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.17min 1.026PPB

response 1758017

(23) Endrin Ketone #2 (B)

9.23min 0.823PPB m

response 12650750

(+) = Expected Retention Time

1G121640.D 1PST3951.M Fri Apr 01 16:07:25 2016 RPT1

9.6.1.19

9

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On : 01 Apr 2016 11:30 am Operator: dharas
Sample : ic3951-2 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:59:16 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	74155865	964.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	2727448	31610646	1.609	1.708m
Spiked Amount	40.000	Range	30 - 150	Recovery	=	4.02%#	4.27%#
24) SA	Decachlorobiphen	8.94	10.88	4008368	20078267	1.970	1.871
Spiked Amount	40.000			Recovery	=	4.92%	4.68%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	3092451	46898401	1.577m	1.705
4) MA	gamma-BHC	2.51	3.48	2844656	44033519	1.520	1.778
5) MA	Heptachlor	2.98	4.06	3245831	38906048	1.606	1.778
6) B	beta-BHC	2.59	3.57	1596944	18265891	1.616	1.712
7) B	delta-BHC	2.77	3.96	2478208	36739459	1.415	1.484
8) MB	Aldrin	3.30	4.50	3132072	38023230	1.736	1.754
9) B	Heptachlor Epoxi	4.00	5.33	3105345	34140779	1.682m	1.710
10) B	gamma-Chlordane	4.16	5.61	3385042	34643518	1.850m	1.795
11) B	alpha-Chlordane	4.32	5.84	3307471	33751499	1.800	1.755
12) A	Endosulfan I	4.50	5.93	3046776	33016527	1.734	1.793
13) B	4,4'-DDE	4.44	6.10	2755265	34523128	1.782	1.818
14) MA	Dieldrin	4.81	6.37	2889653	38258182	1.651	1.899
15) MA	Endrin	5.12	6.87	2944200	31471993	1.863	1.692
16) A	4,4'-DDD	5.26	7.06	2371480	28379318	1.790	1.727
17) B	Endosulfan II	5.44	7.22	3008264	32387807	1.749	1.810
18) MA	4,4'-DDT	5.66	7.59	2185176	22025107	1.727	1.906m
19) B	Endrin Aldehyde	6.06	7.80	2523884	23804257	1.767	1.754
20) B	Endosulfan Sulfa	6.74	8.27	2649032	25741491	1.639	1.687
21) A	Methoxychlor	6.44	8.84	1500625	11641792	1.638	1.919m
22)	Mirex	6.54	9.16	3111730	21435018	1.735	1.912
23) B	Endrin Ketone	7.17	9.23	2896524	27014567	1.633	1.694

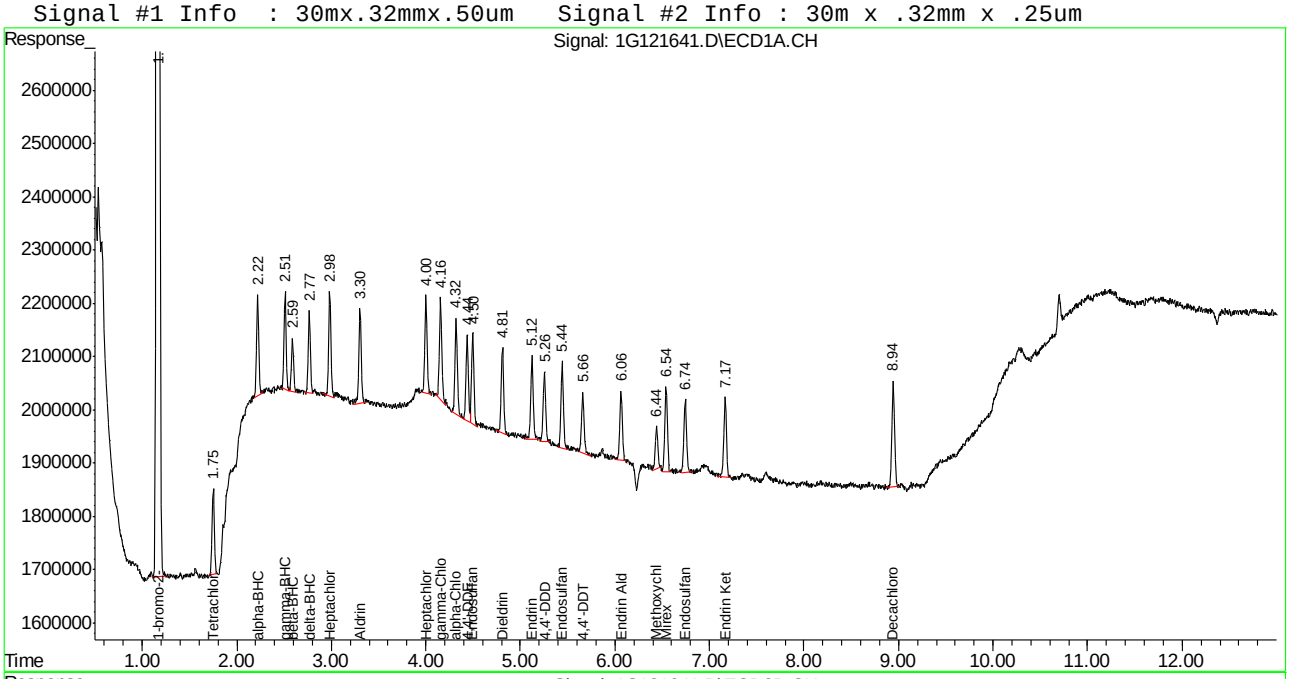
(f)=RT Delta > 1/2 Window (m)=manual int.

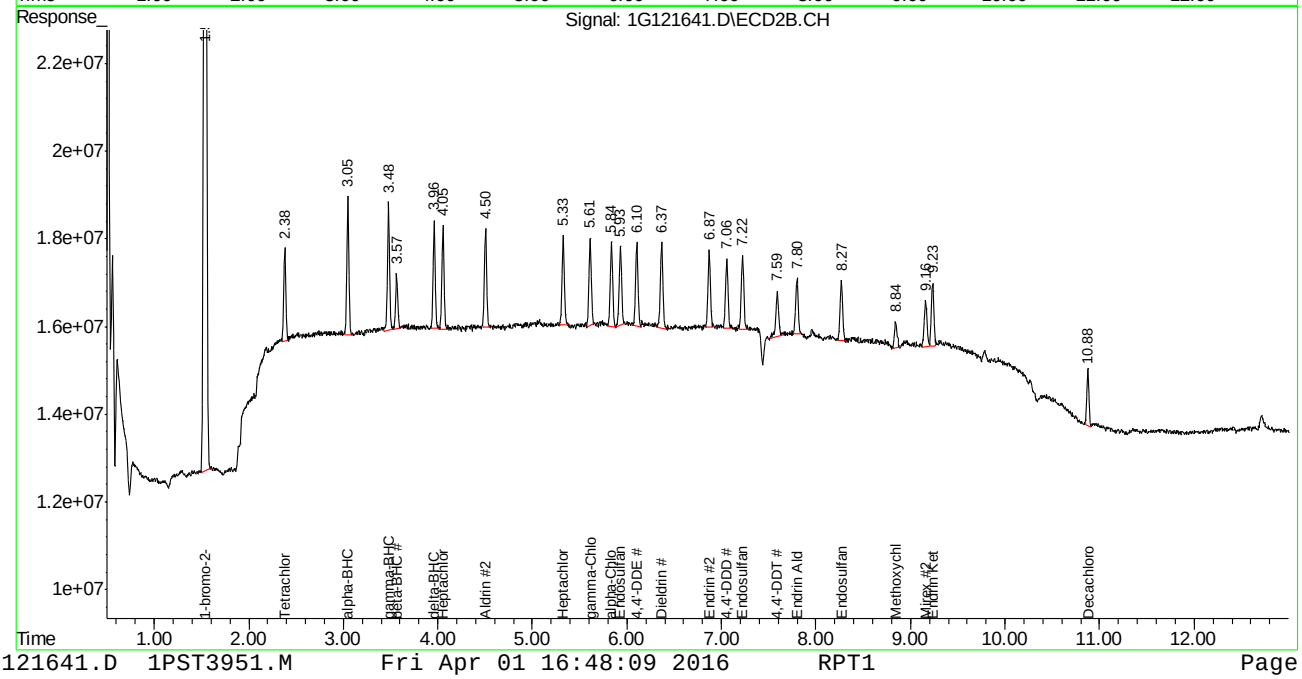
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On : 01 Apr 2016 11:30 am Operator: dharas
Sample : ic3951-2 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

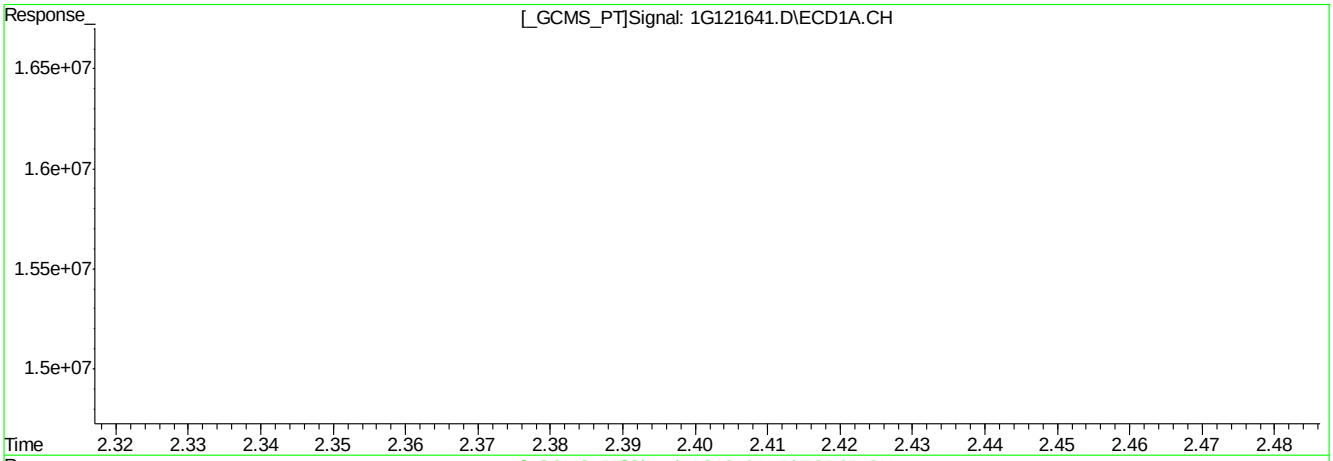
Sample Number:	G1G3951-IC3951	**Method:**	SW846 8081B
Lab FileID:	1G121641.D	**Analyst approved:**	04/01/16 16:29 Joseph Ravino
Injection Time:	04/01/16 11:30	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

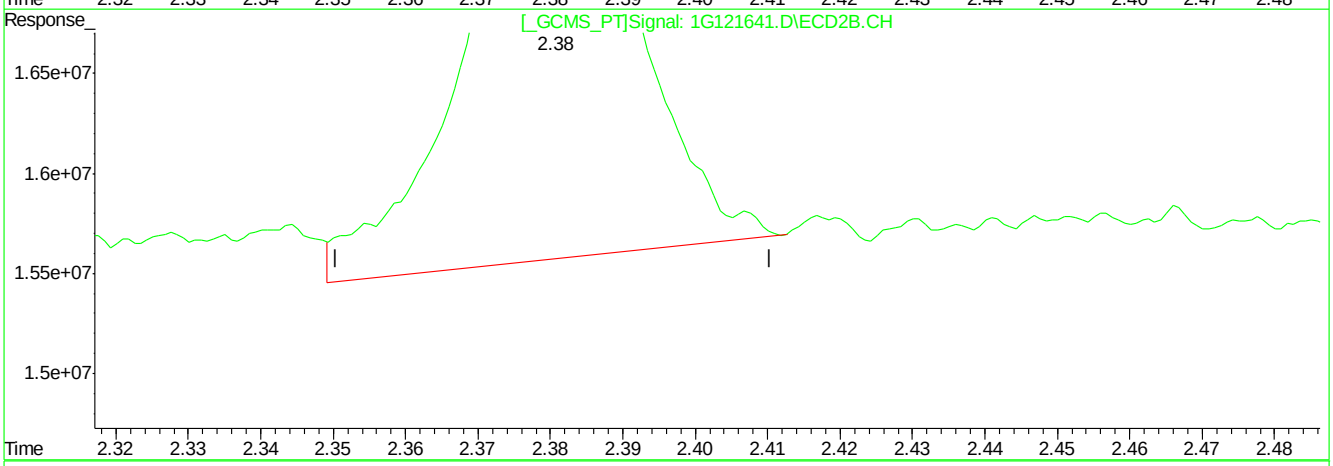
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.22	Poor instrument integration
Tetrachloro-m-xylene	877-09-8	2	2.38	Poor instrument integration
Heptachlor epoxide	1024-57-3	1	4.00	Poor instrument integration
gamma-Chlordane	5103-74-2	1	4.16	Poor instrument integration
4,4'-DDT	50-29-3	2	7.59	Poor instrument integration
Methoxychlor	72-43-5	2	8.84	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 1.609PPB

response 2727448

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 1.921PPB

response 35541063

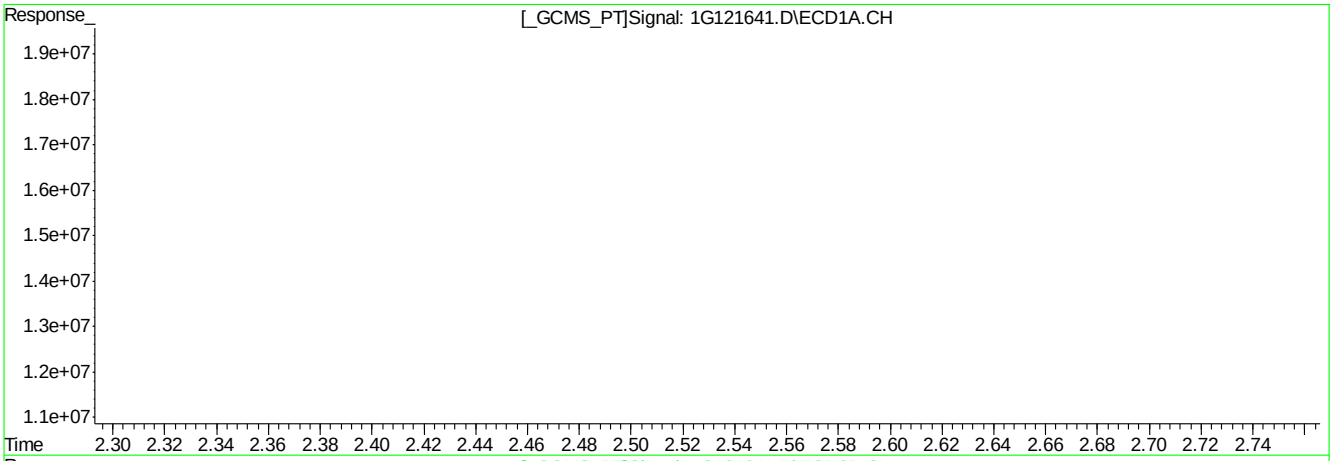
(+) = Expected Retention Time

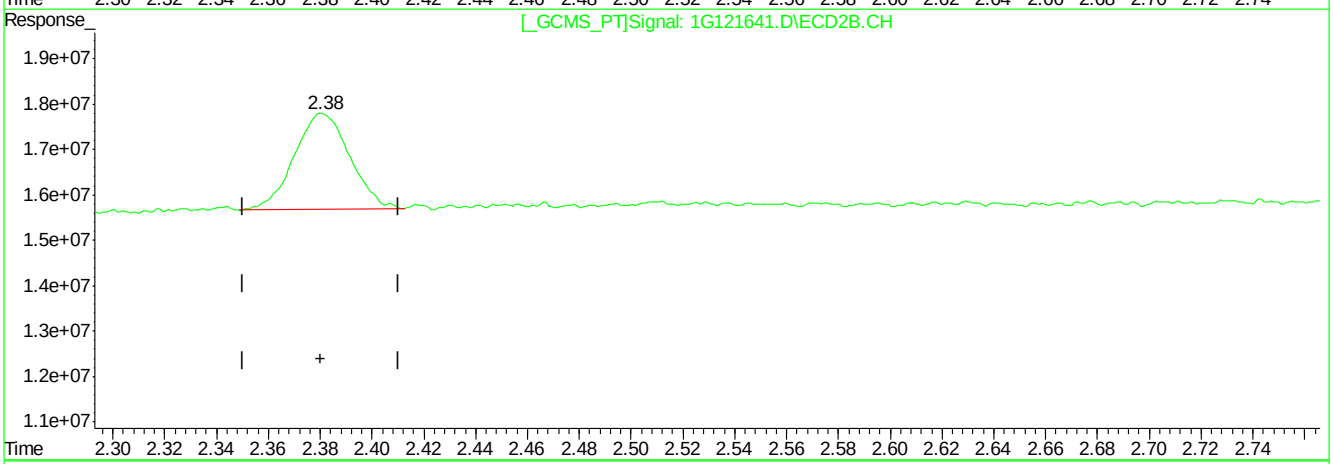
1G121641.D 1PST3951.M Fri Apr 01 16:09:11 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 1.609PPB

response 2727448

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 1.708PPB m

response 31610646

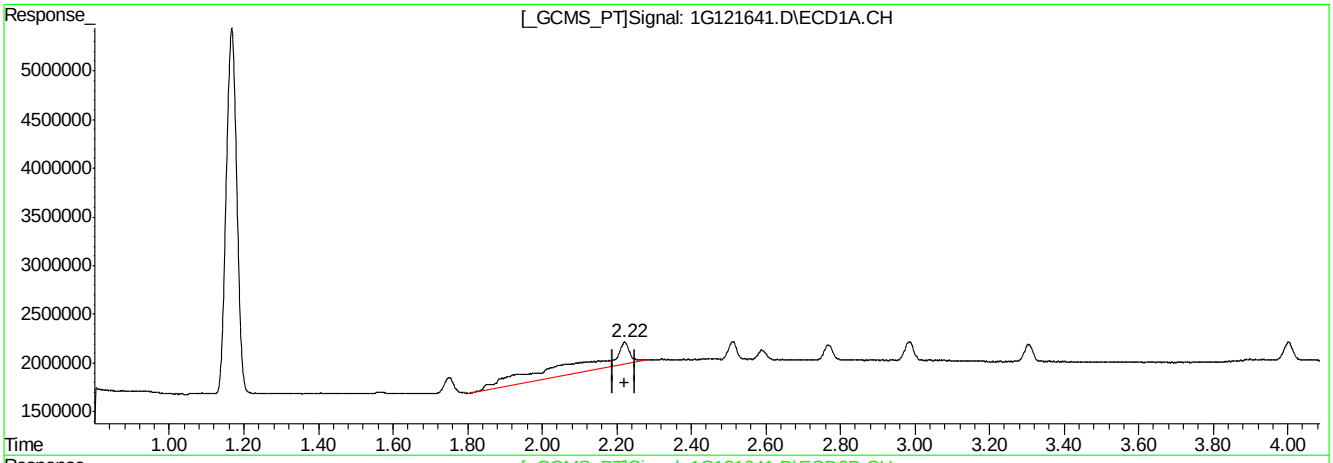
(+) = Expected Retention Time

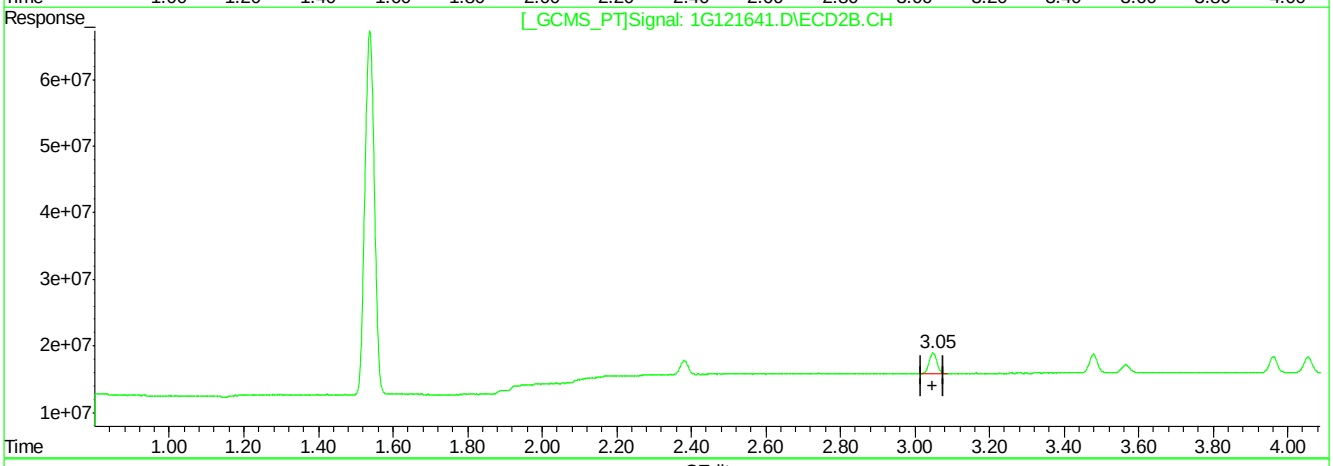
1G121641.D 1PST3951.M Fri Apr 01 16:09:16 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 11.244PPB

response 22049354

(3) alpha-BHC #2 (A)

3.05min 1.705PPB

response 46898401

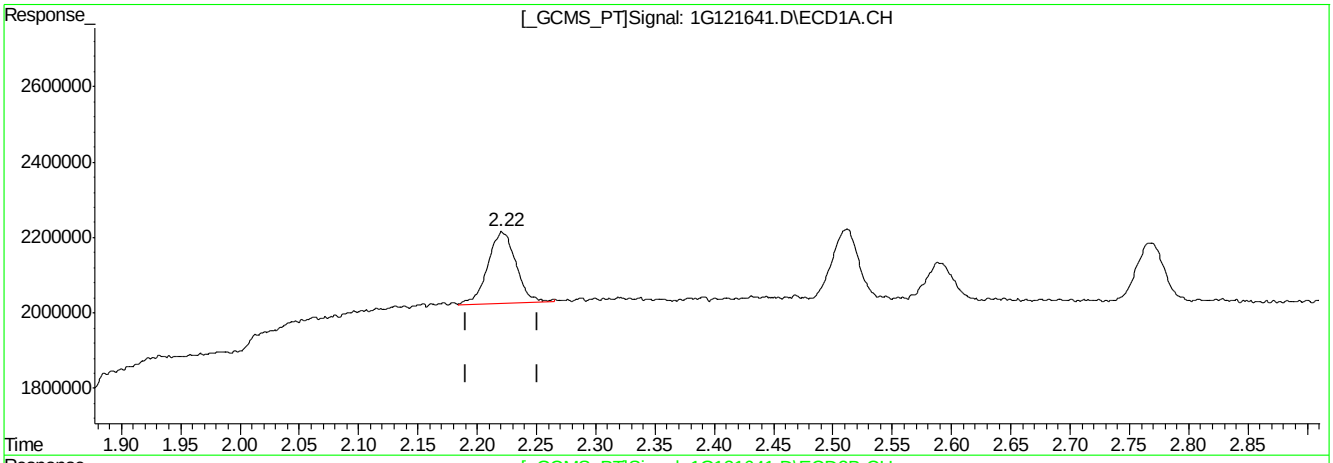
(+) = Expected Retention Time

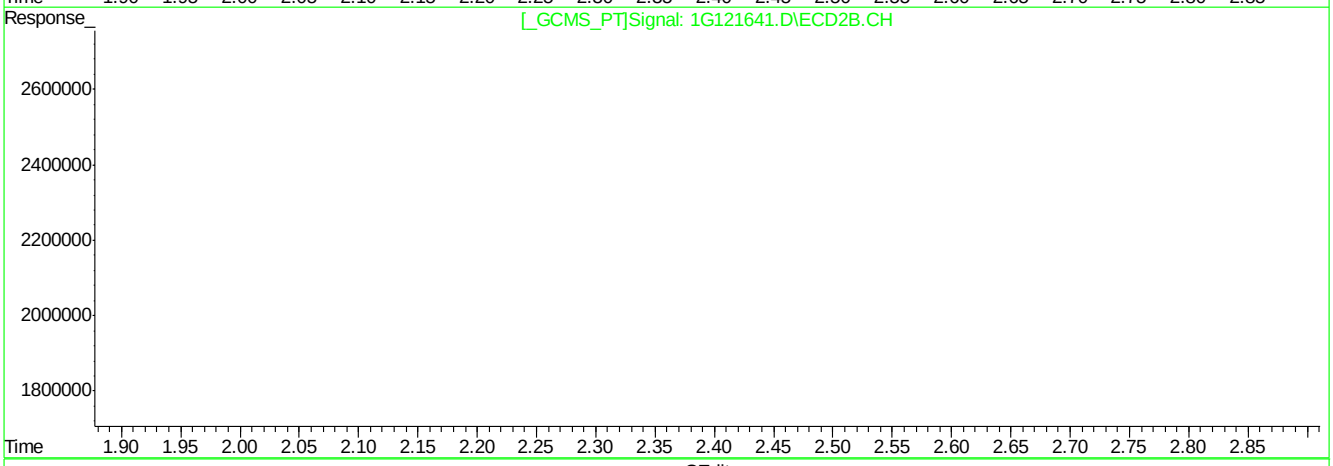
1G121641.D 1PST3951.M Fri Apr 01 16:09:20 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 1.577PPB m

response 3092451

(3) alpha-BHC #2 (A)

3.05min 1.705PPB

response 46898401

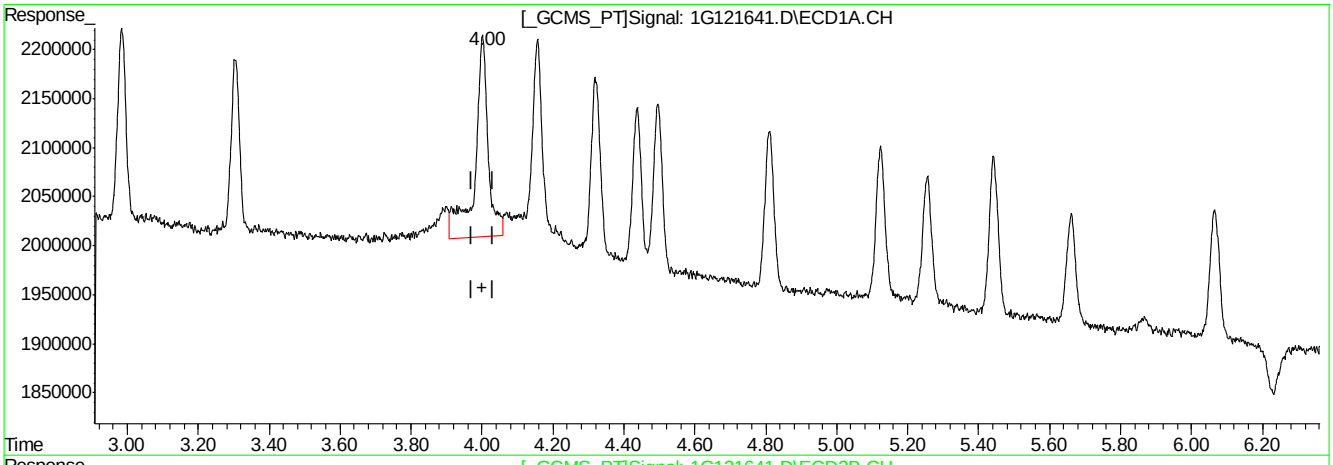
(+) = Expected Retention Time

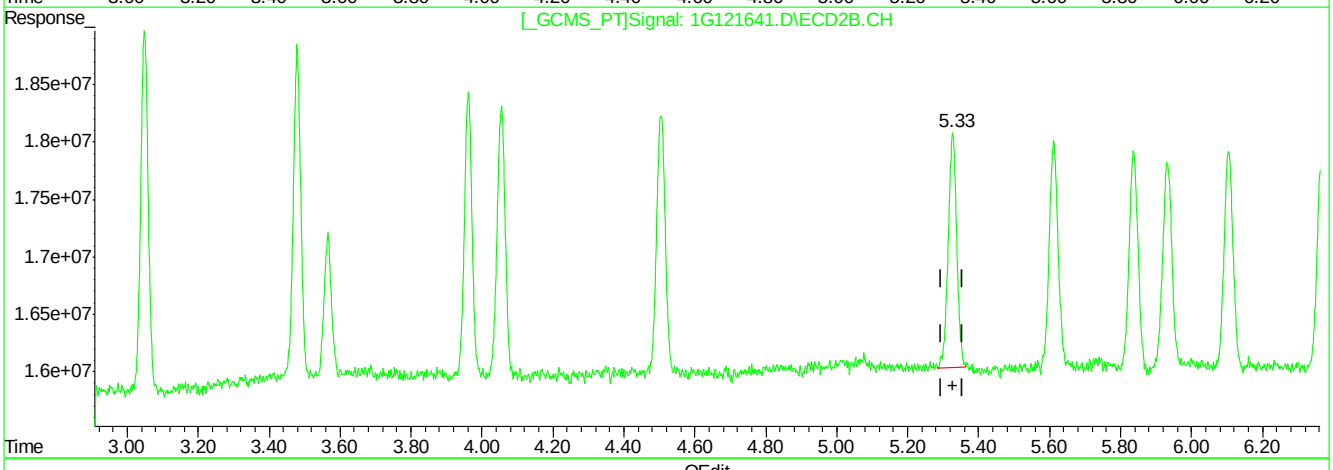
1G121641.D 1PST3951.M Fri Apr 01 16:09:29 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.00min 2.857PPB

response 5275589

(9) Heptachlor Epoxide #2 (B)

5.33min 1.710PPB

response 34140779

(+) = Expected Retention Time

1G121641.D 1PST3951.M Fri Apr 01 16:09:39 2016 RPT1

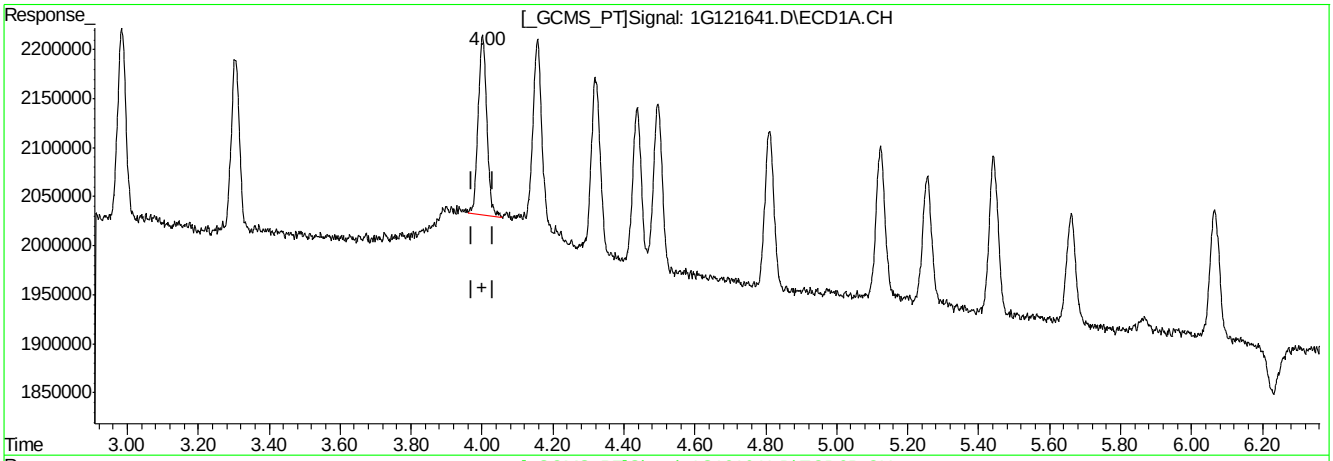
9.6.2.6

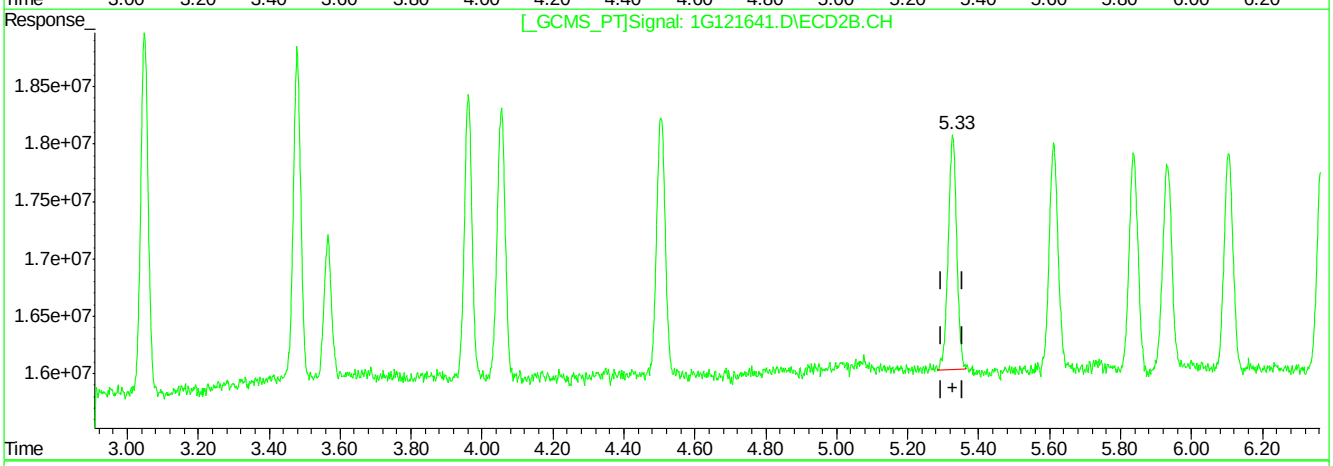
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.00min 1.682PPB m

response 3105345

(9) Heptachlor Epoxide #2 (B)

5.33min 1.710PPB

response 34140779

(+) = Expected Retention Time

1G121641.D 1PST3951.M Fri Apr 01 16:09:45 2016 RPT1

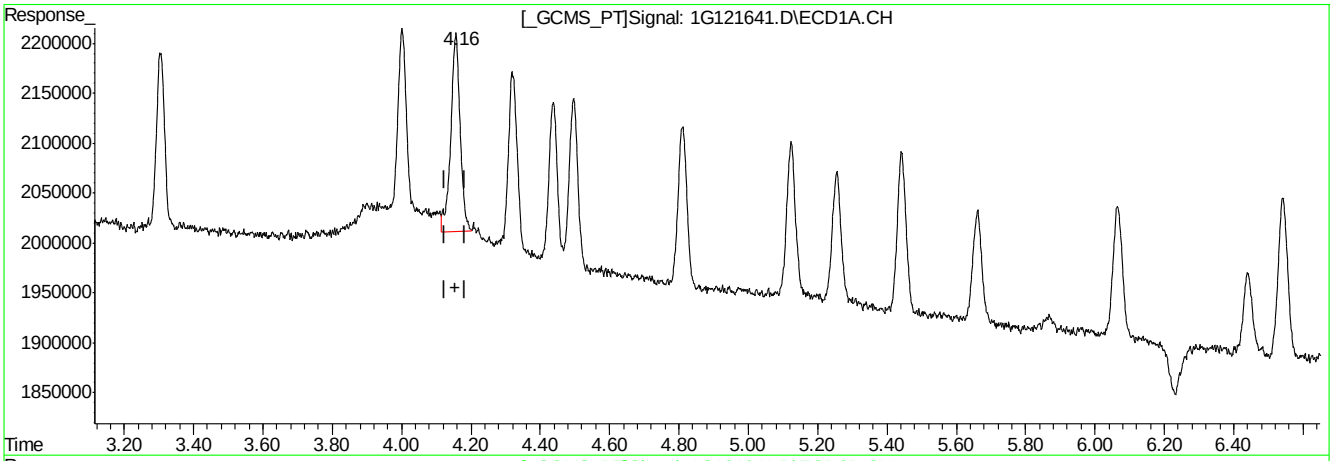
9.6.2.7

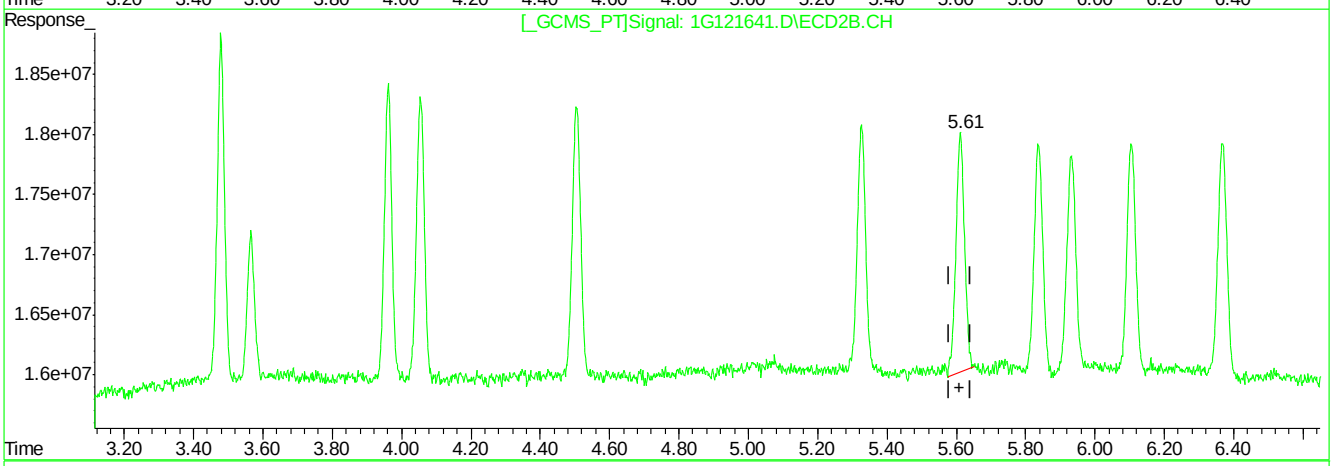
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(10) gamma-Chlordane (B)

4.16min 2.037PPB

response 3727735

(10) gamma-Chlordane #2 (B)

5.61min 1.795PPB

response 34643518

(+) = Expected Retention Time

1G121641.D 1PST3951.M Fri Apr 01 16:09:48 2016 RPT1

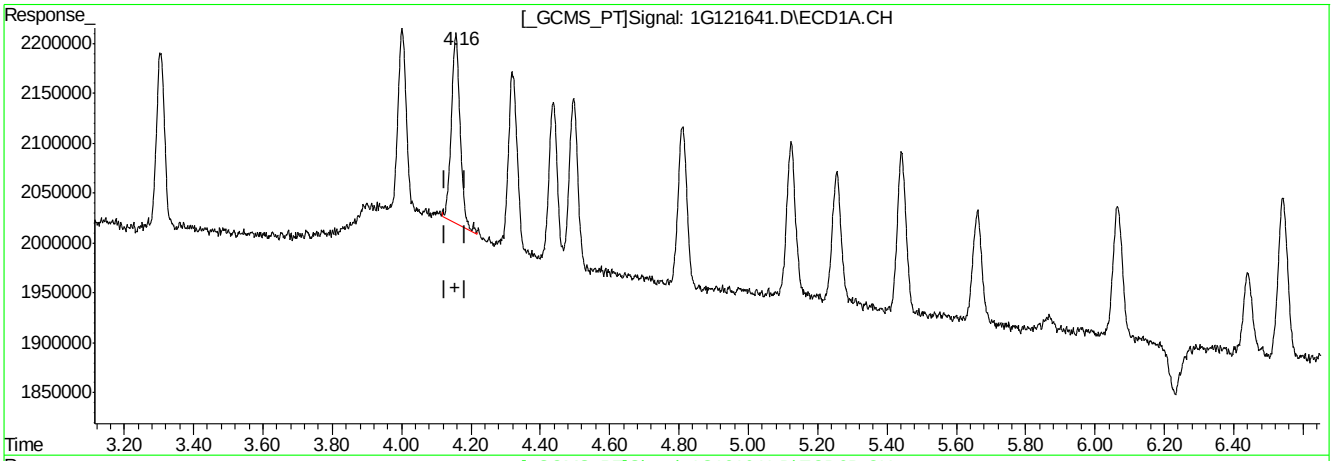
9.6.2.8

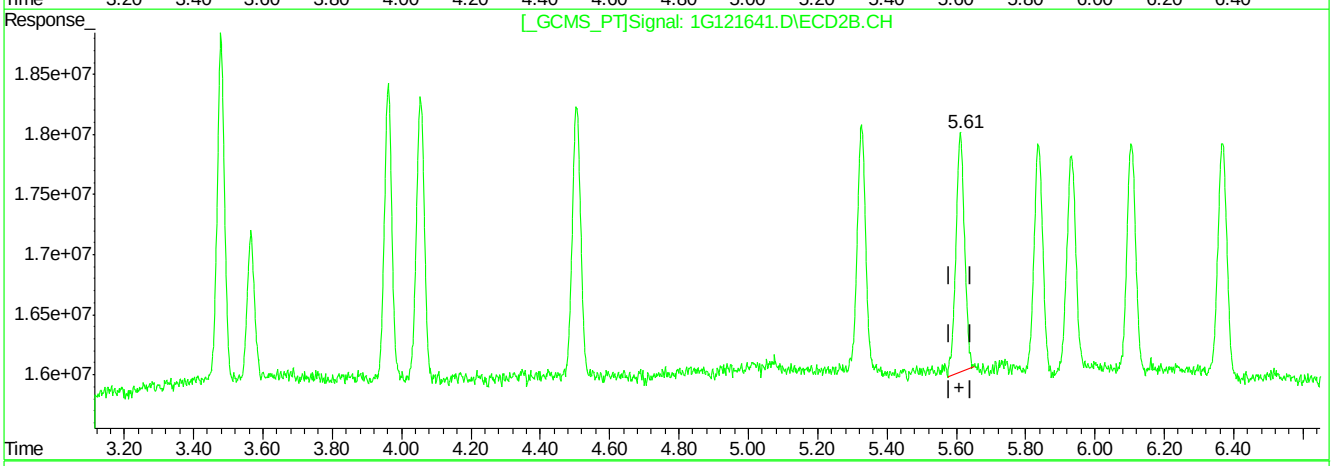
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(10) gamma-Chlordane (B)

4.16min 1.850PPB m

response 3385042

(10) gamma-Chlordane #2 (B)

5.61min 1.795PPB

response 34643518

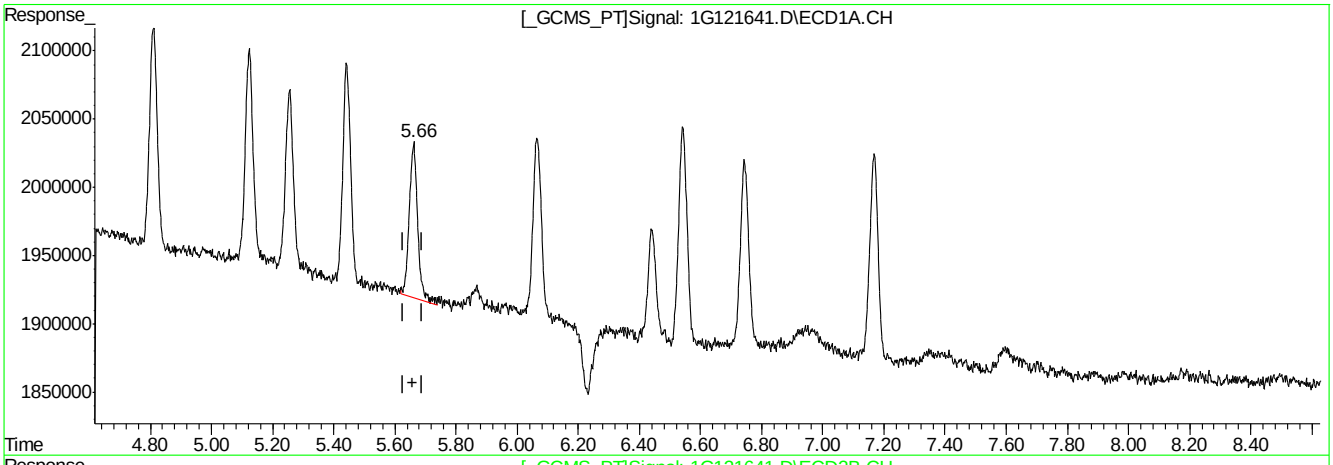
(+) = Expected Retention Time

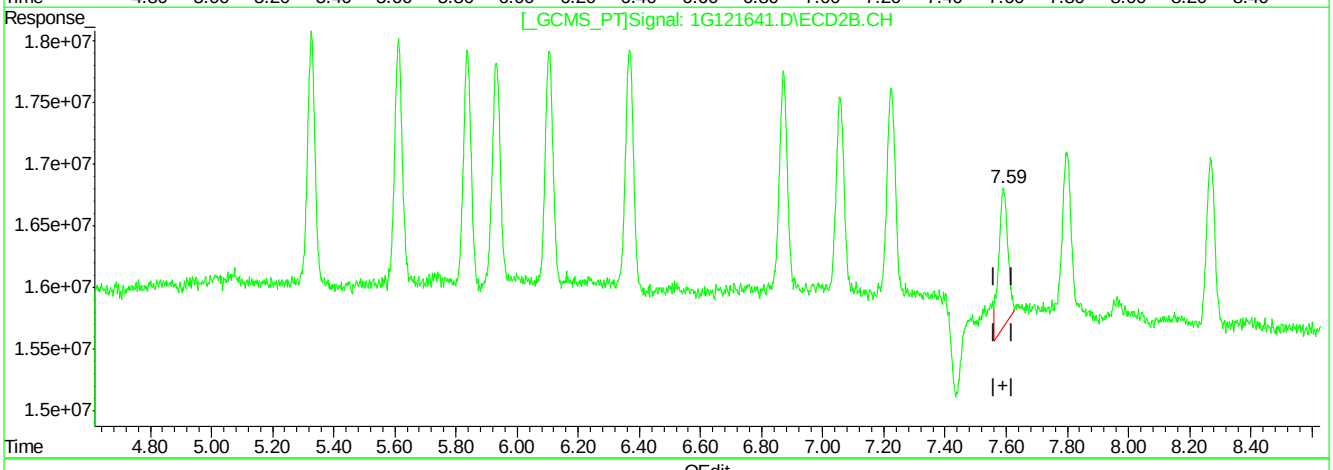
1G121641.D 1PST3951.M Fri Apr 01 16:09:54 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 1.727PPB

response 2185176

(18) 4,4'-DDT #2 (MA)

7.59min 2.014PPB

response 23275523

(+) = Expected Retention Time

1G121641.D 1PST3951.M Fri Apr 01 16:10:05 2016 RPT1

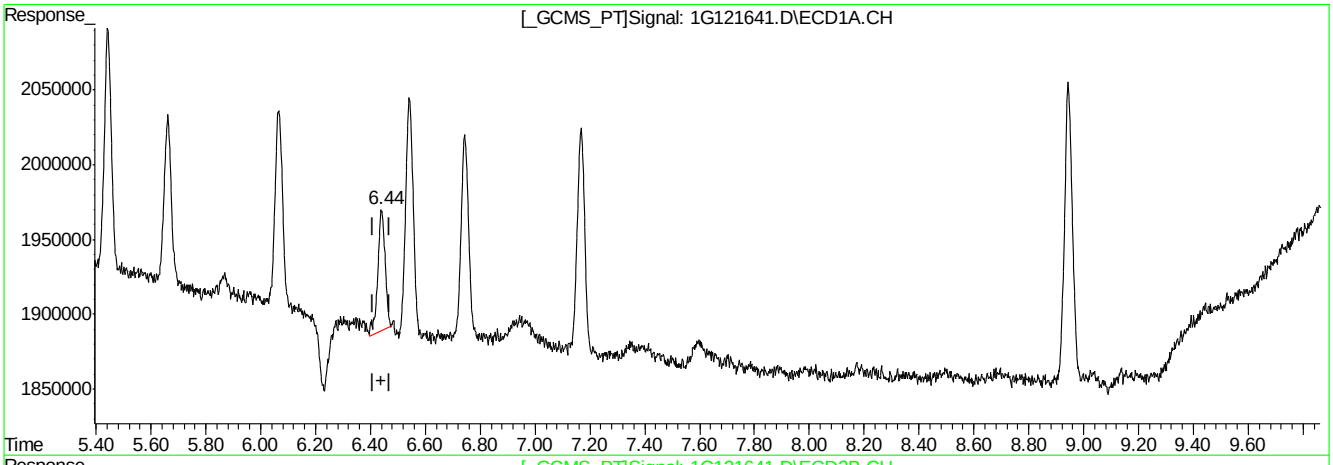
9.6.2.10

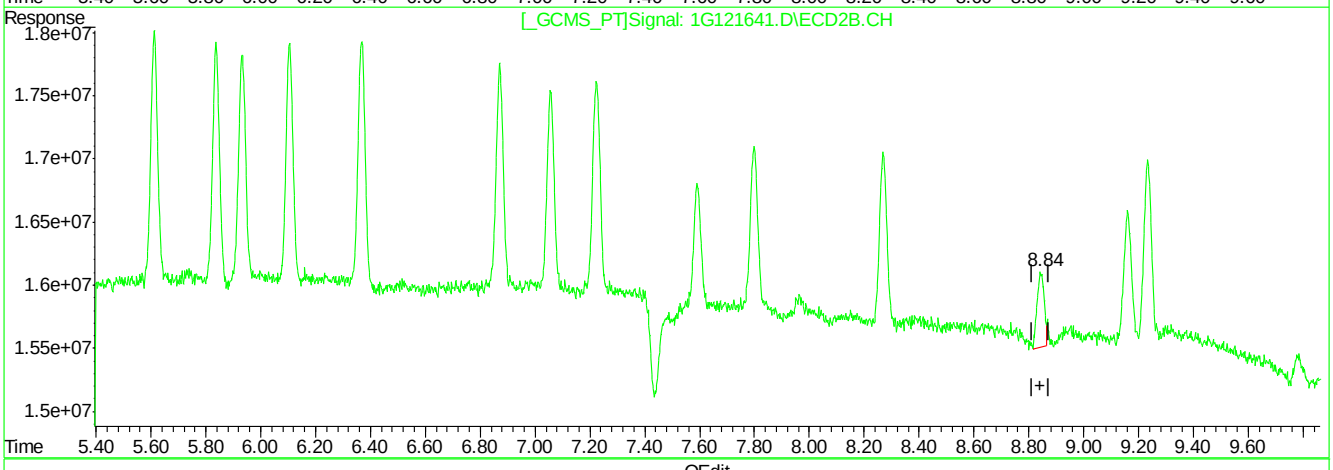
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.44min 1.638PPB

response 1500625

(21) Methoxychlor #2 (A)

8.84min 1.703PPB

response 10329597

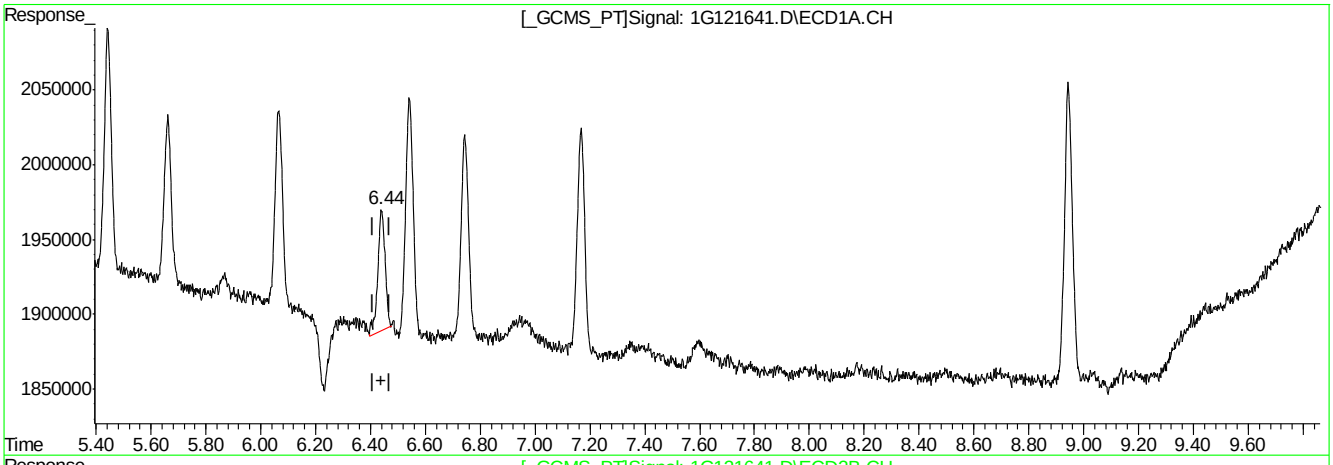
(+) = Expected Retention Time

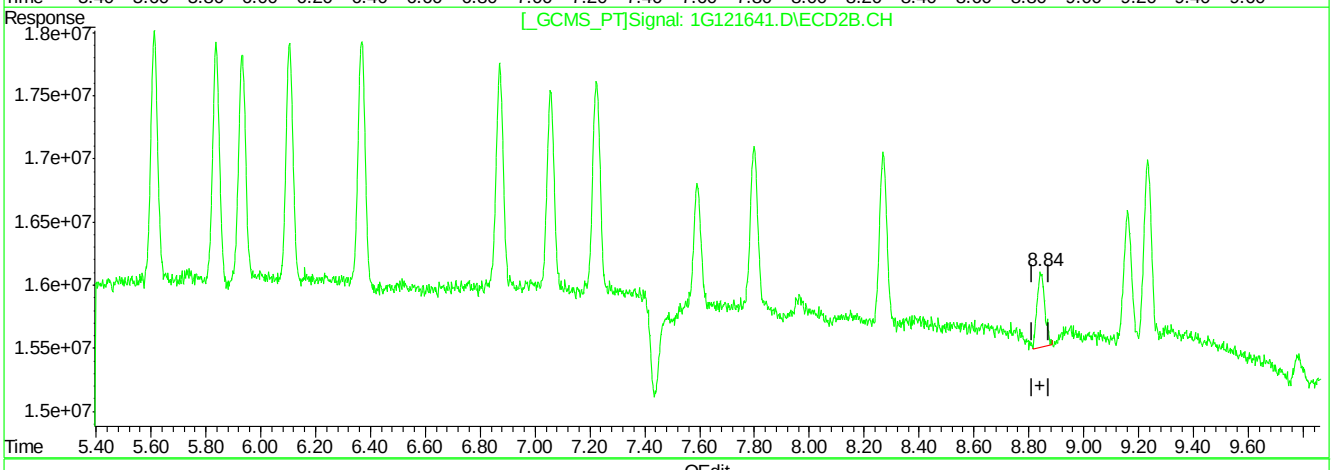
1G121641.D 1PST3951.M Fri Apr 01 16:10:20 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.44min 1.638PPB

response 1500625

(21) Methoxychlor #2 (A)

8.84min 1.919PPB m

response 11641792

(+) = Expected Retention Time

1G121641.D 1PST3951.M Fri Apr 01 16:10:28 2016 RPT1

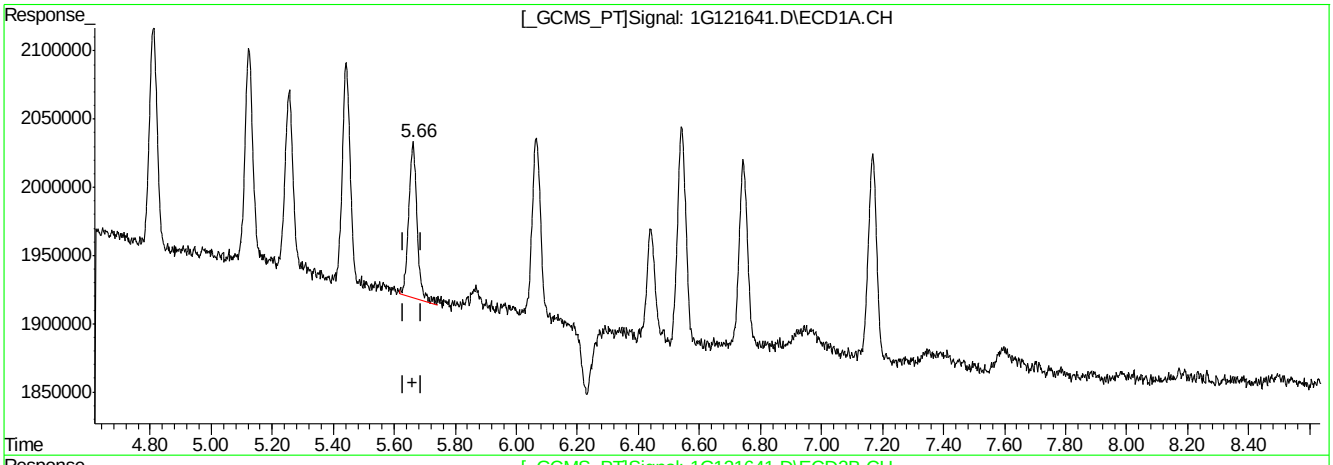
9.6.2.12

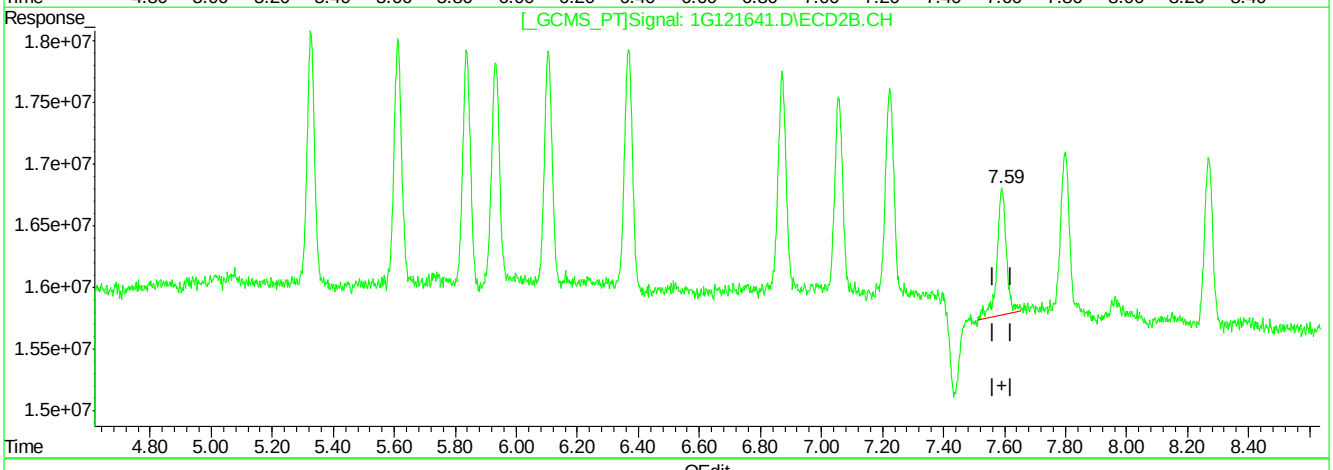
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:10 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:30:08 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 1.727PPB

response 2185176

(18) 4,4'-DDT #2 (MA)

7.59min 1.906PPB m

response 22025107

(+) = Expected Retention Time

1G121641.D 1PST3951.M Fri Apr 01 16:31:38 2016 RPT1

9.6.2.13

9

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On : 01 Apr 2016 11:48 am Operator: dharas
Sample : ic3951-5 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	74893808	967.7E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	6912592	77143153	4.038	4.153
Spiked Amount	40.000	Range	30 - 150	Recovery	=	10.10%#	10.38%#
24) SA	Decachlorobiphen	8.94	10.88	9786606	50153632	4.762	4.655
Spiked Amount	40.000			Recovery	=	11.90%	11.64%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	7246241	113.3E6	3.659m	4.105
4) MA	gamma-BHC	2.51	3.48	7005373	102.4E6	3.706	4.120
5) MA	Heptachlor	2.98	4.05	8024128	92886298	3.931	4.228
6) B	beta-BHC	2.59	3.57	3878463	44513432	3.885	4.157
7) B	delta-BHC	2.77	3.96	6194511	93985408	3.503	3.781
8) MB	Aldrin	3.31	4.50	7165619	91862743	3.933	4.222
9) B	Heptachlor Epoxi	4.00	5.33	7586569	84272955	4.069	4.205
10) B	gamma-Chlordane	4.16	5.61	7773821	84903598	4.206	4.382
11) B	alpha-Chlordane	4.32	5.84	7782104	81001119	4.193	4.195
12) A	Endosulfan I	4.50	5.93	7222875	82489664	4.071	4.463
13) B	4,4'-DDE	4.44	6.10	6887469	81737323	4.410	4.289
14) MA	Dieldrin	4.81	6.37	7170517	88118788	4.056	4.358
15) MA	Endrin	5.12	6.87	6590681	78448072	4.129	4.201
16) A	4,4'-DDD	5.26	7.06	5546292	73203984	4.145	4.438
17) B	Endosulfan II	5.44	7.23	6980394	79849892	4.019	4.445
18) MA	4,4'-DDT	5.66	7.59	5173678	48450266	4.047	4.177m
19) B	Endrin Aldehyde	6.07	7.80	6013477	62409648	4.168	4.582
20) B	Endosulfan Sulfa	6.75	8.27	6430599	63778084	3.939	4.163
21) A	Methoxychlor	6.44	8.84	3733303	26821385	4.036m	4.405
22)	Mirex	6.54	9.16	7465280	49520526	4.122	4.401
23) B	Endrin Ketone	7.17	9.24	7167304	68606688	4.001	4.287

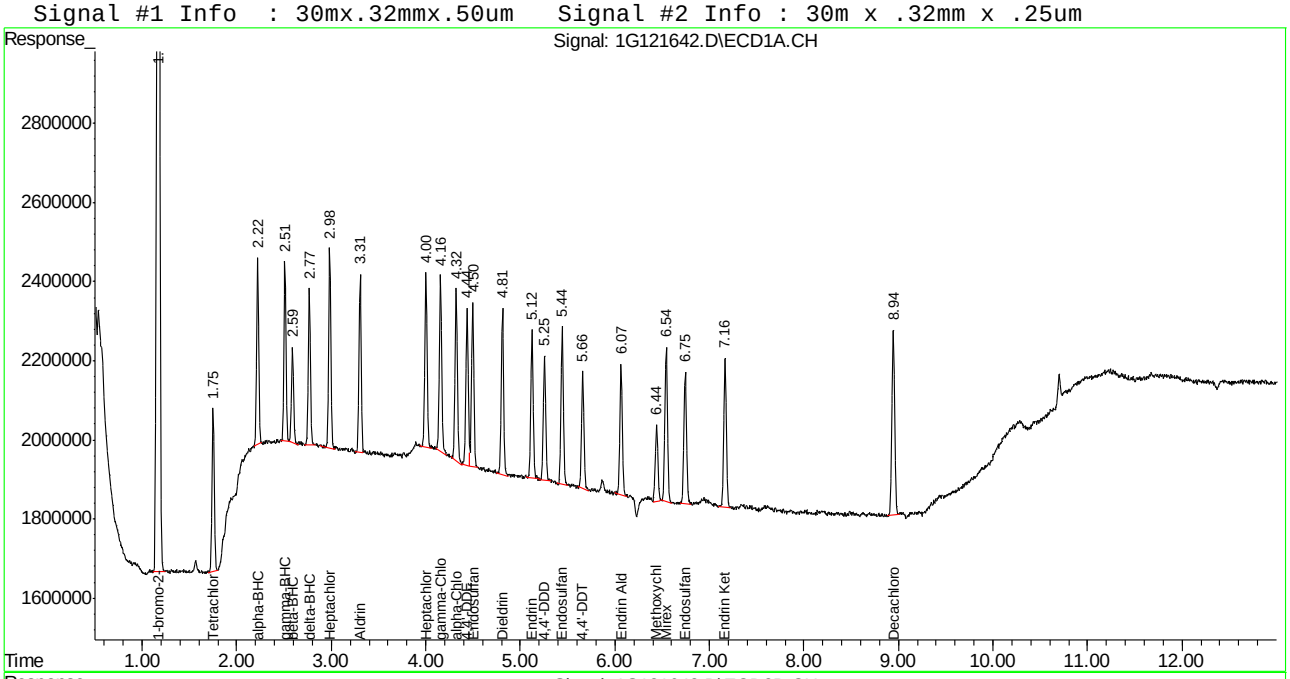
(f)=RT Delta > 1/2 Window (m)=manual int.

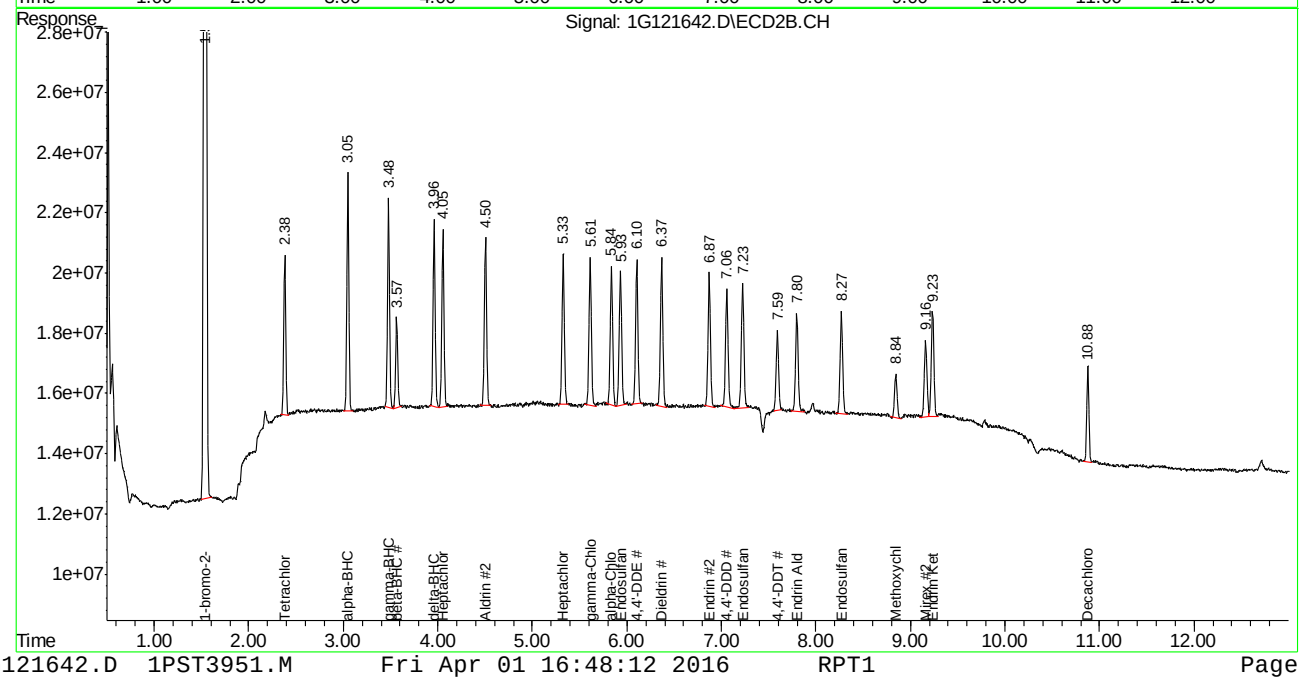
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On : 01 Apr 2016 11:48 am Operator: dharas
Sample : ic3951-5 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

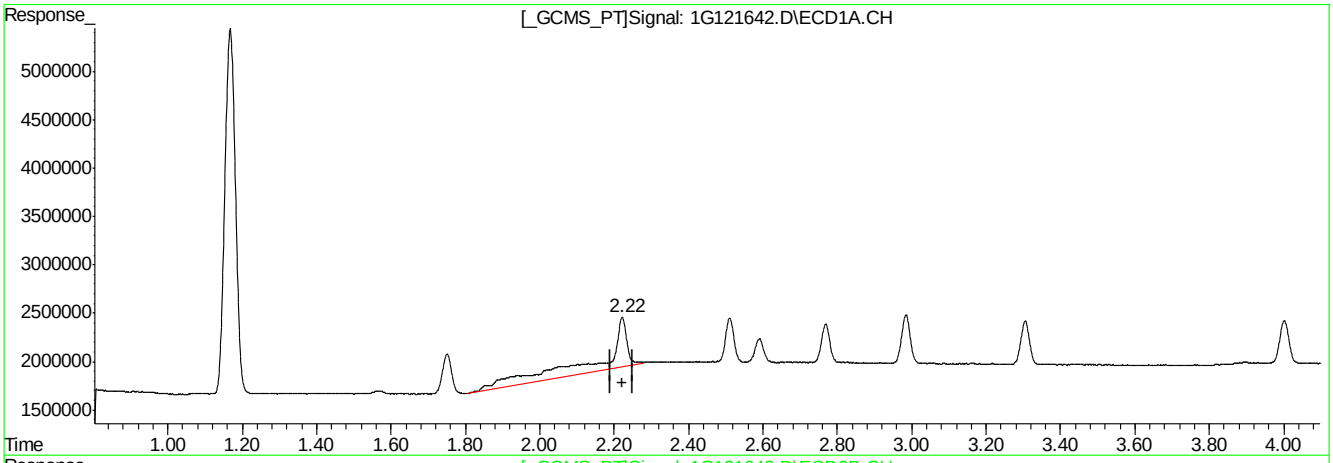
Sample Number:	G1G3951-IC3951	**Method:**	SW846 8081B
Lab FileID:	1G121642.D	**Analyst approved:**	04/01/16 16:29 Joseph Ravino
Injection Time:	04/01/16 11:48	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

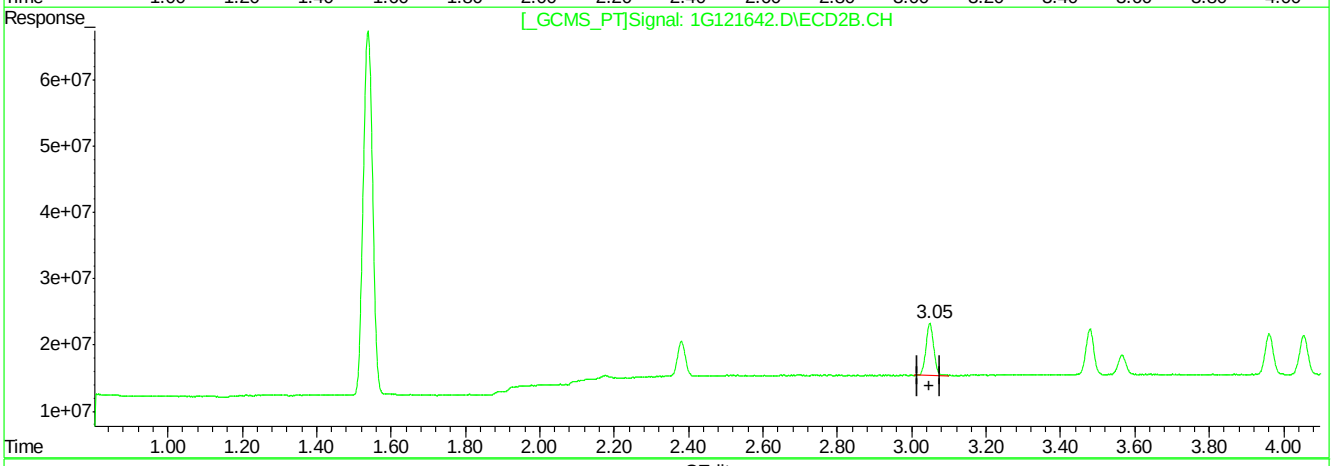
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.22	Poor instrument integration
Methoxychlor	72-43-5	1	6.44	Poor instrument integration
4,4'-DDT	50-29-3	2	7.59	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:48 am                    Operator: dharas
Sample    : ic3951-5                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:38 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 12.969PPB

response 25683796

(3) alpha-BHC #2 (A)

3.05min 4.105PPB

response 113326456

(+) = Expected Retention Time

1G121642.D 1PST3951.M Fri Apr 01 15:38:52 2016 RPT1

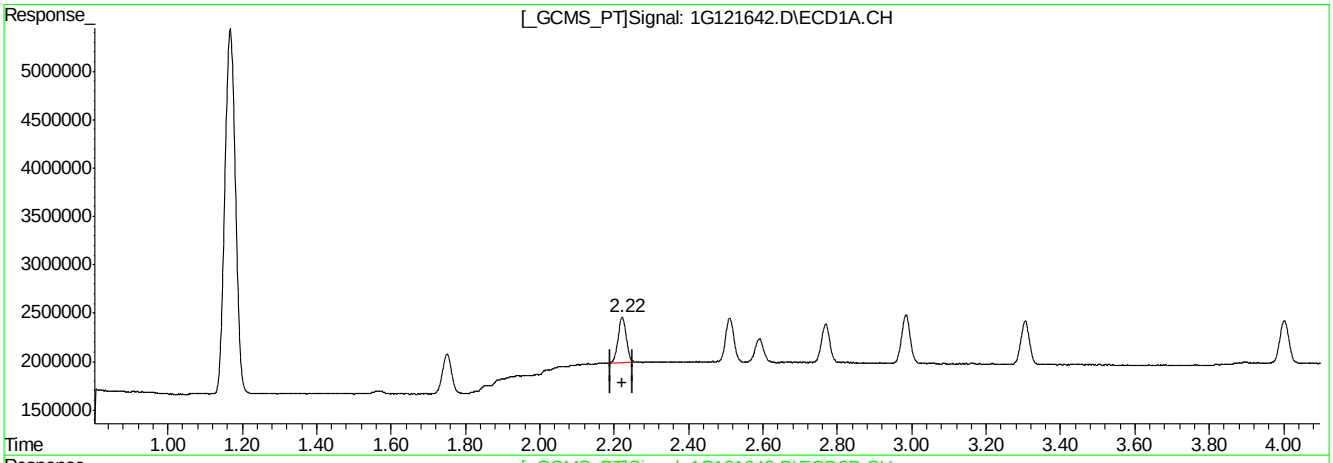
9.6.3.2

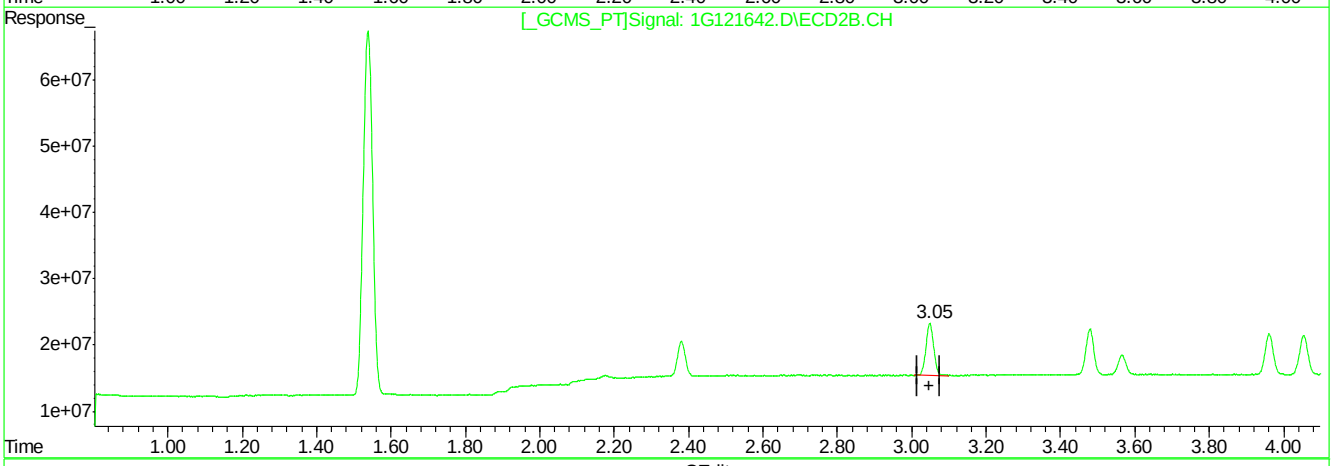
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:48 am                    Operator: dharas
Sample    : ic3951-5                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:38 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 3.659PPB m

response 7246241

(3) alpha-BHC #2 (A)

3.05min 4.105PPB

response 113326456

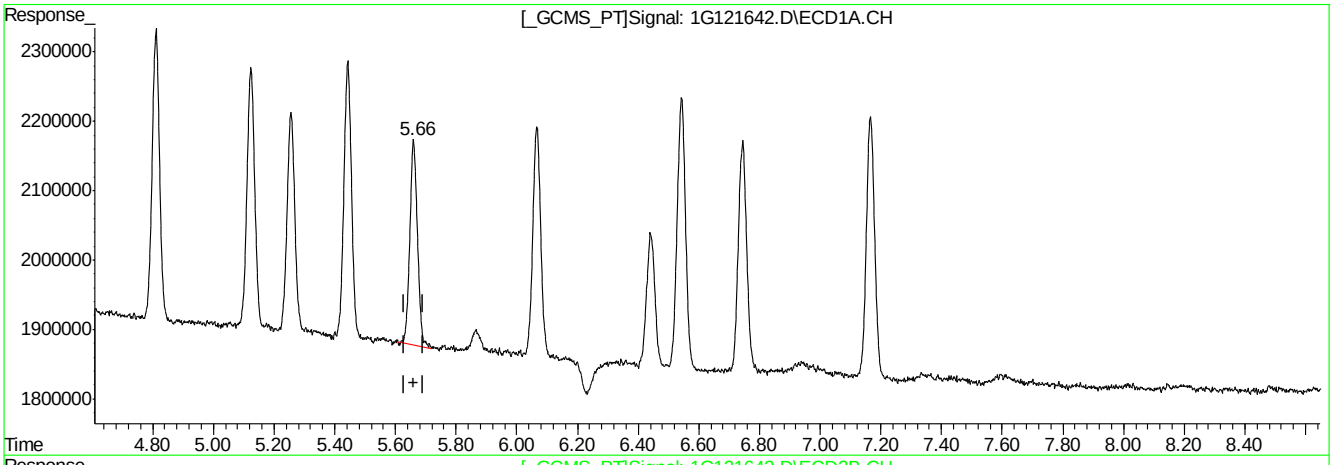
(+) = Expected Retention Time

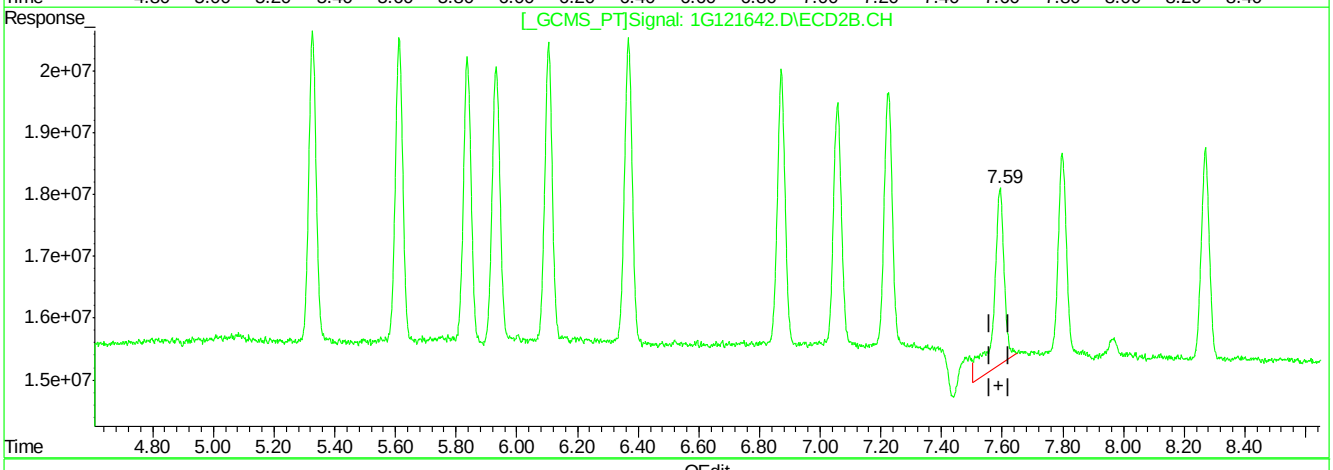
1G121642.D 1PST3951.M Fri Apr 01 15:39:00 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:48 am                    Operator: dharas
Sample    : ic3951-5                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:38 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 4.047PPB

response 5173678

(18) 4,4'-DDT #2 (MA)

7.59min 5.954PPB

response 69065027

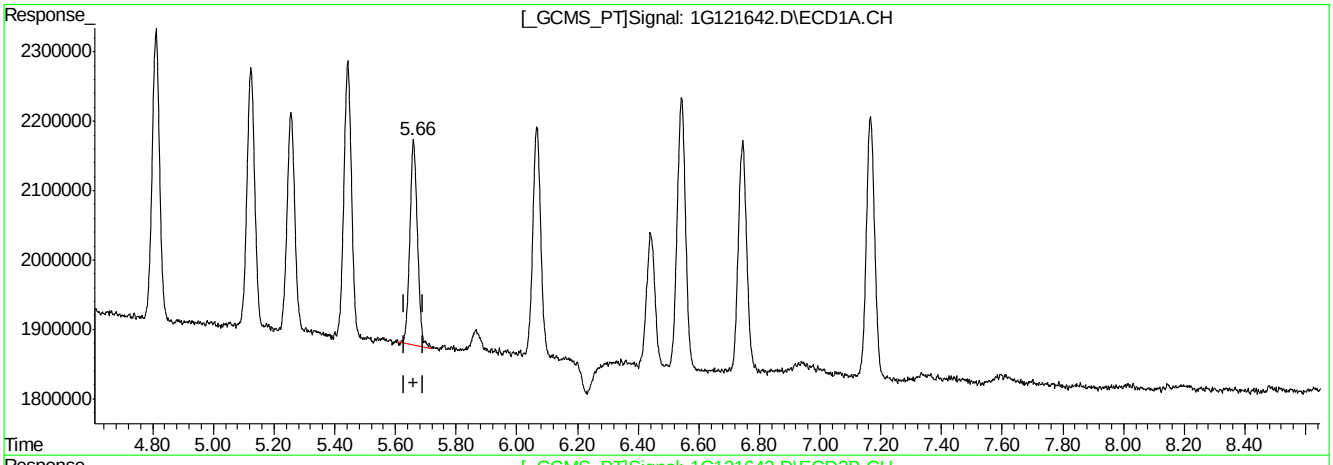
(+) = Expected Retention Time

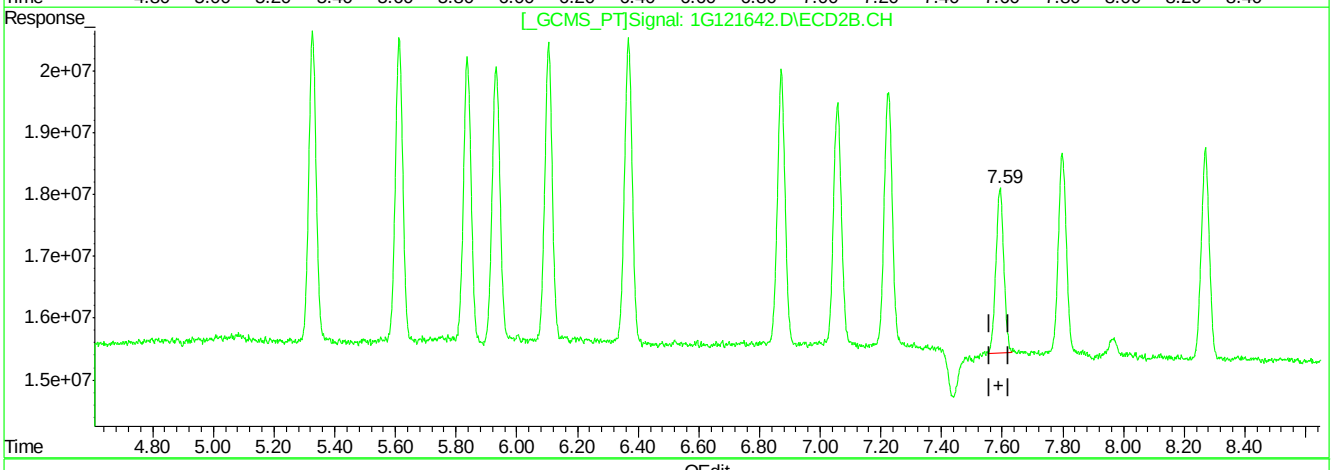
1G121642.D 1PST3951.M Fri Apr 01 15:39:11 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:48 am                    Operator: dharas
Sample    : ic3951-5                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:38 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 4.047PPB

response 5173678

(18) 4,4'-DDT #2 (MA)

7.59min 4.177PPB m

response 48450266

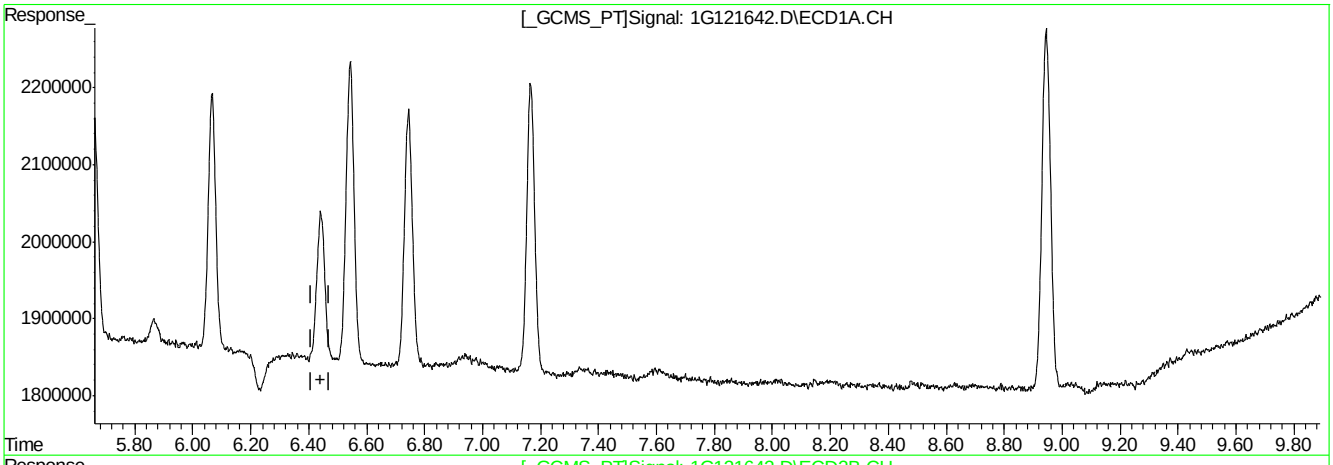
(+) = Expected Retention Time

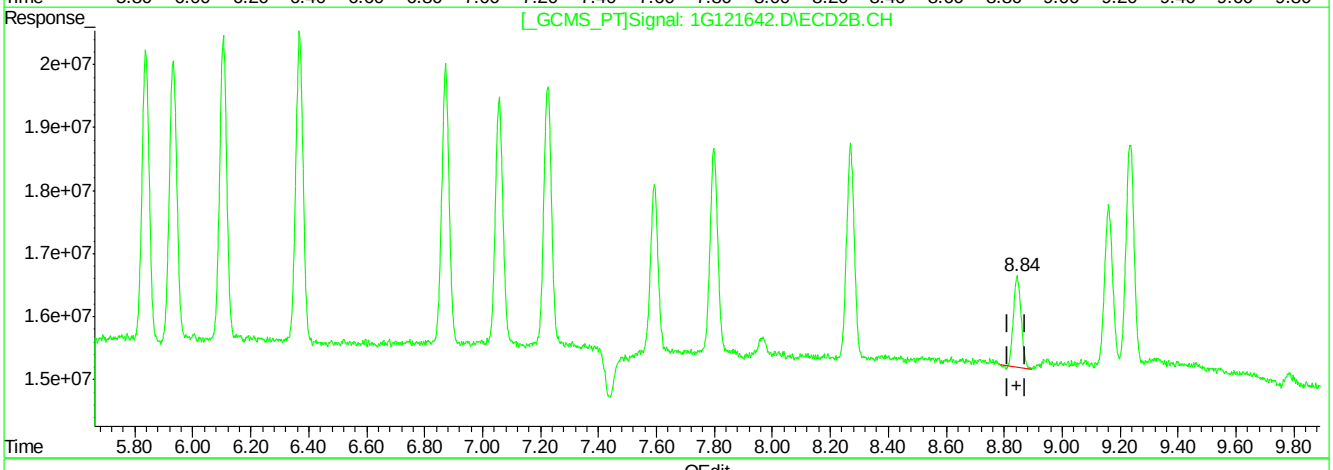
1G121642.D 1PST3951.M Fri Apr 01 15:39:22 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On : 01 Apr 2016 11:48 am Operator: dharas
Sample : ic3951-5 Inst : GC1G
Misc : op92644,g1g3950,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 15:38 2016 Quant Results File: 1PST3951.RES

Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration





QEdit

(21) Methoxychlor (A)

0.00min 0.000PPB

response 0

(21) Methoxychlor #2 (A)

8.84min 4.405PPB

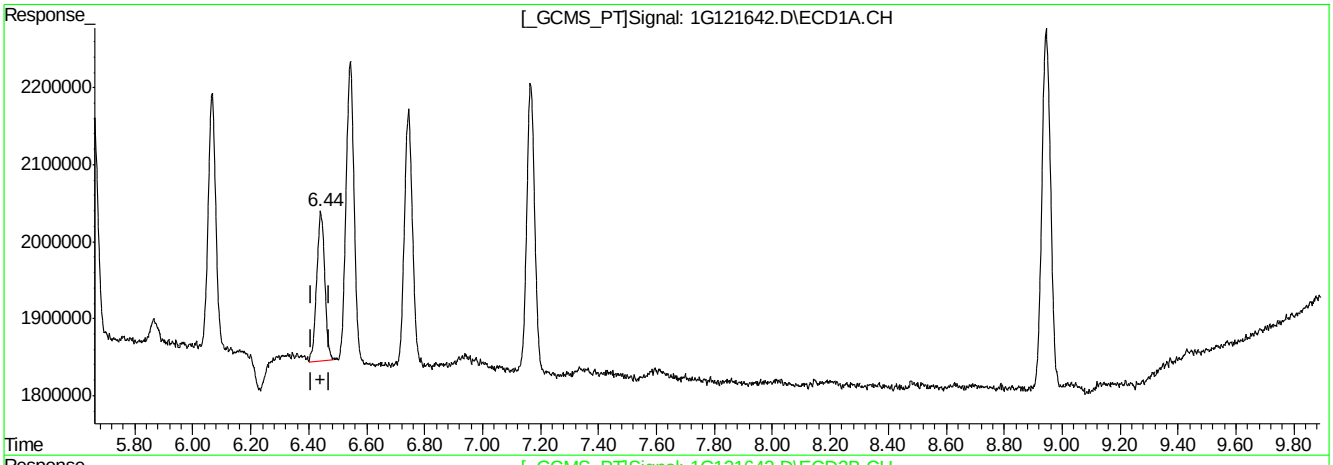
response 26821385

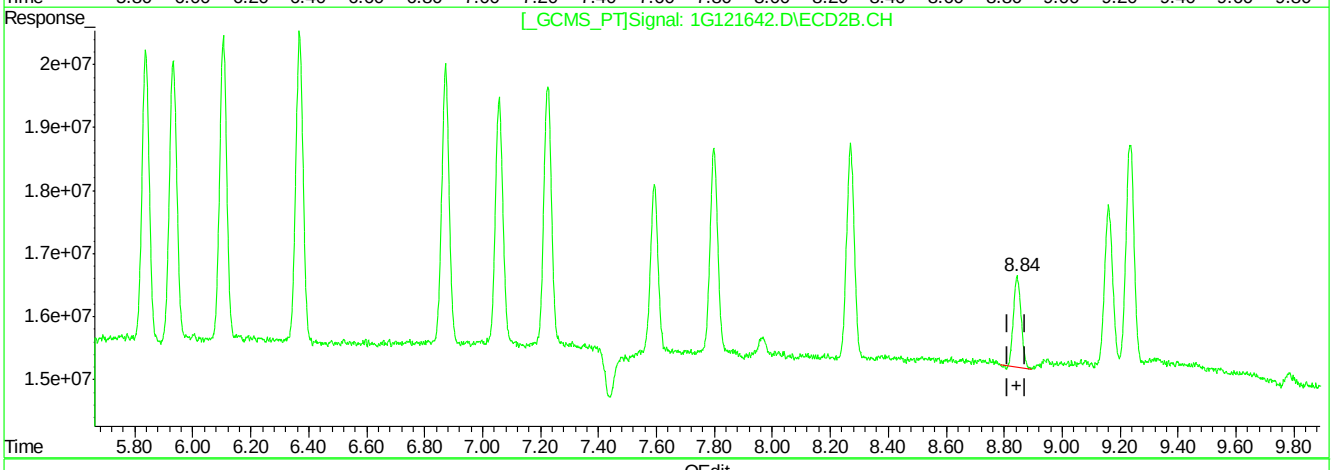
(+) = Expected Retention Time
1G121642.D 1PST3951.M Fri Apr 01 15:39:27 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:48 am                    Operator: dharas
Sample    : ic3951-5                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:38 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.44min 4.036PPB m

response 3733303

(21) Methoxychlor #2 (A)

8.84min 4.405PPB

response 26821385

(+) = Expected Retention Time

1G121642.D 1PST3951.M Fri Apr 01 15:39:42 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On : 01 Apr 2016 12:05 pm Operator: dharas
Sample : ic3951-10 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	73730059	960.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	13547050	155.6E6	8.038	8.442
Spiked Amount	40.000	Range	30 - 150	Recovery	=	20.10%#	21.11%#
24) SA	Decachlorobiphen	8.94	10.88	19109609	98667668	9.446	9.228
Spiked Amount	40.000			Recovery	=	23.61%	23.07%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	14876123	229.7E6	7.630m	8.385
4) MA	gamma-BHC	2.51	3.48	14373975	206.7E6	7.724	8.381
5) MA	Heptachlor	2.99	4.05	16071936	185.4E6	7.998	8.502
6) B	beta-BHC	2.59	3.57	7520616	85746448	7.652	8.069
7) B	delta-BHC	2.77	3.96	12666148	190.4E6	7.275	7.719
8) MB	Aldrin	3.31	4.50	14615504	187.2E6	8.148	8.669
9) B	Heptachlor Epoxi	4.00	5.33	15209828	169.5E6	8.286m	8.524
10) B	gamma-Chlordane	4.16	5.61	15181604	166.7E6	8.343	8.668
11) B	alpha-Chlordane	4.32	5.84	14954944	161.7E6	8.184	8.438
12) A	Endosulfan I	4.50	5.93	14393781	159.2E6	8.241	8.677
13) B	4,4'-DDE	4.44	6.10	13633595	166.0E6	8.867	8.776
14) MA	Dieldrin	4.81	6.37	14313459	174.9E6	8.224	8.714
15) MA	Endrin	5.12	6.87	13310212	154.0E6	8.471	8.310
16) A	4,4'-DDD	5.25	7.06	11191090	140.7E6	8.496	8.594
17) B	Endosulfan II	5.44	7.22	14038503	152.1E6	8.209	8.532
18) MA	4,4'-DDT	5.66	7.59	10662176	103.6E6	8.473	9.000m
19) B	Endrin Aldehyde	6.06	7.80	12096342	119.8E6	8.516	8.860
20) B	Endosulfan Sulfa	6.74	8.27	12924870	127.4E6	8.041	8.383
21) A	Methoxychlor	6.44	8.84	7419343	56583837	8.147	9.364
22)	Mirex	6.54	9.16	15041244	96891129	8.437	8.677
23) B	Endrin Ketone	7.17	9.23	14453201	138.2E6	8.195	8.702

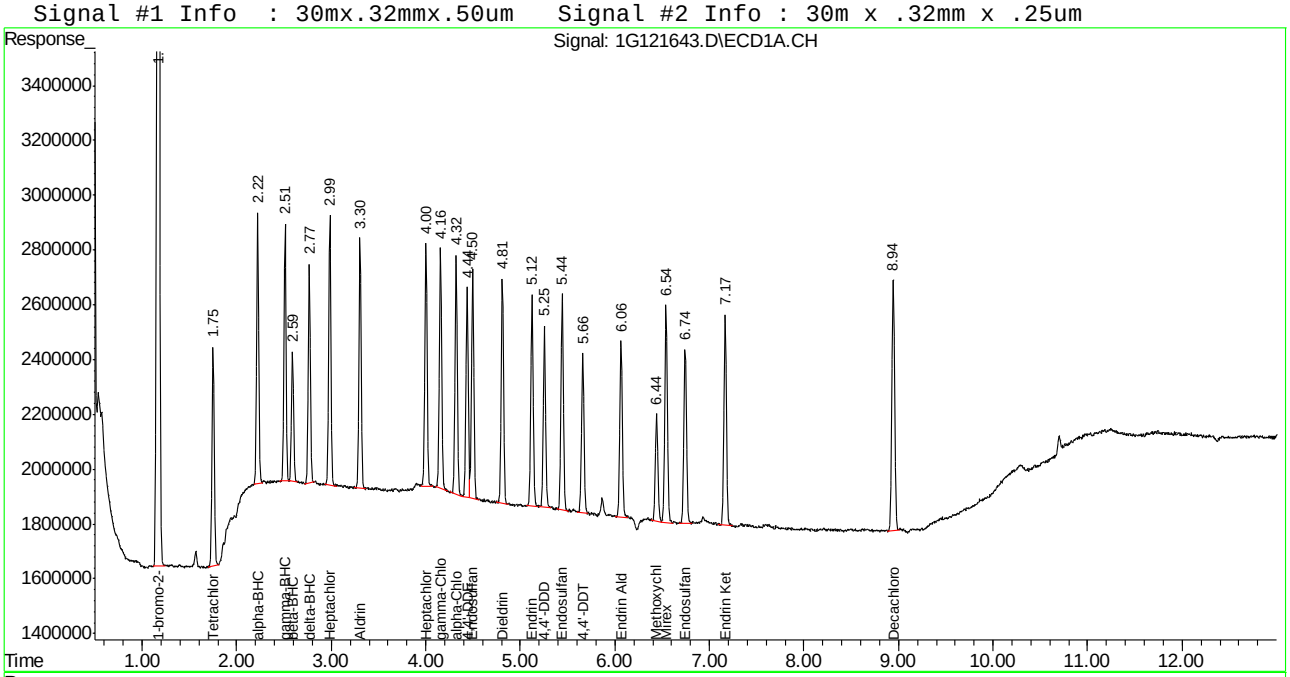
(f)=RT Delta > 1/2 Window (m)=manual int.

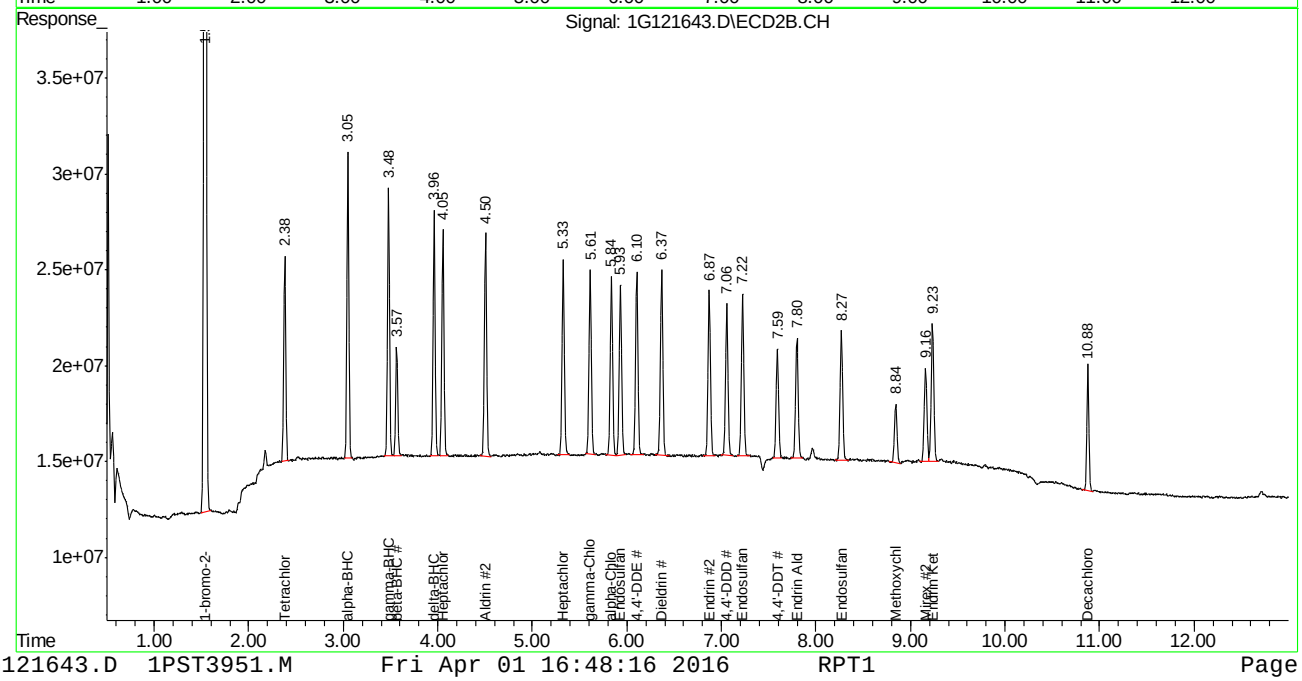
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On : 01 Apr 2016 12:05 pm Operator: dharas
Sample : ic3951-10 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

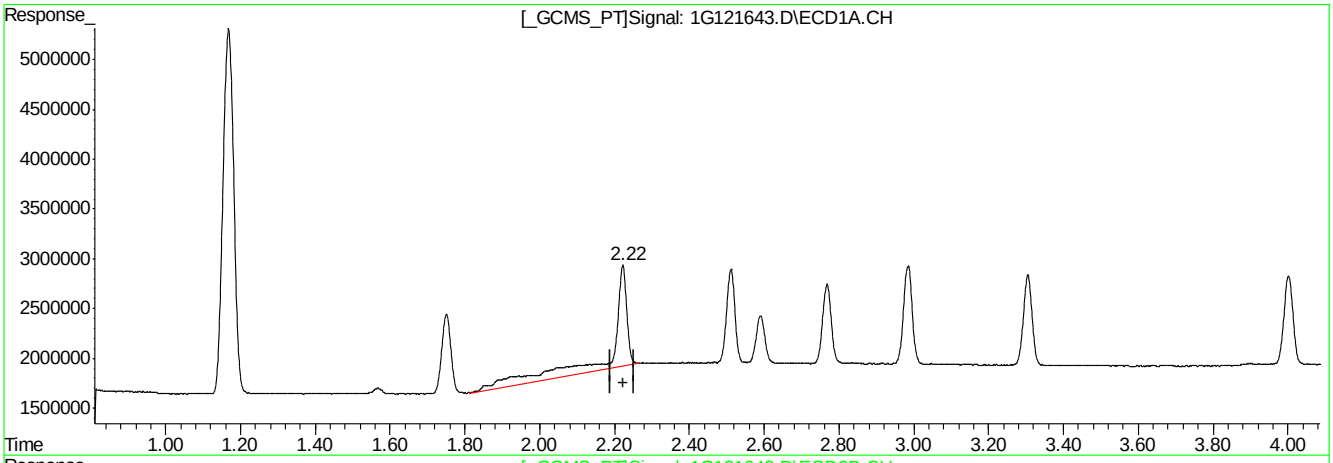
Sample Number:	G1G3951-IC3951	**Method:**	SW846 8081B
Lab FileID:	1G121643.D	**Analyst approved:**	04/01/16 16:29 Joseph Ravino
Injection Time:	04/01/16 12:05	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

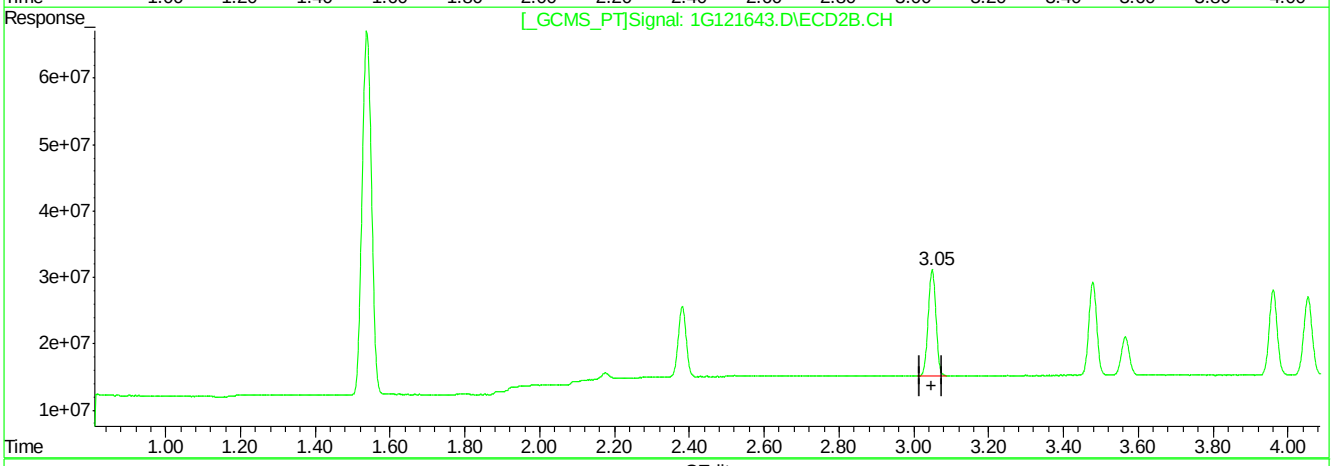
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.22	Poor instrument integration
Heptachlor epoxide	1024-57-3	1	4.00	Poor instrument integration
4,4'-DDT	50-29-3	2	7.59	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:05 pm                    Operator: dharas
Sample    : ic3951-10                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:34 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 15.894PPB

response 30988053

(3) alpha-BHC #2 (A)

3.05min 8.385PPB

response 229733944

(+) = Expected Retention Time

1G121643.D 1PST3951.M Fri Apr 01 15:35:01 2016 RPT1

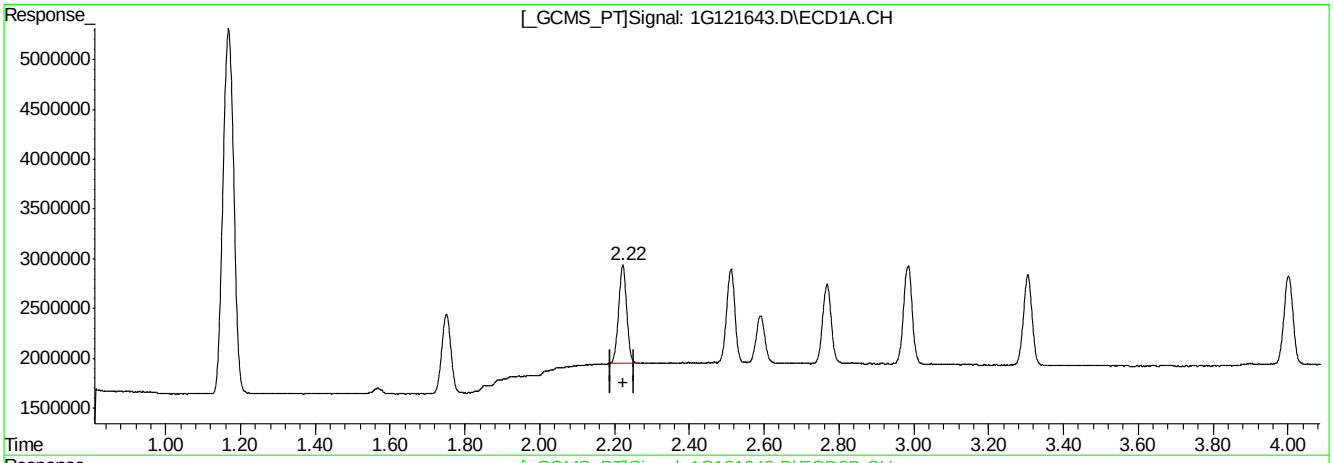
9.6.4.2

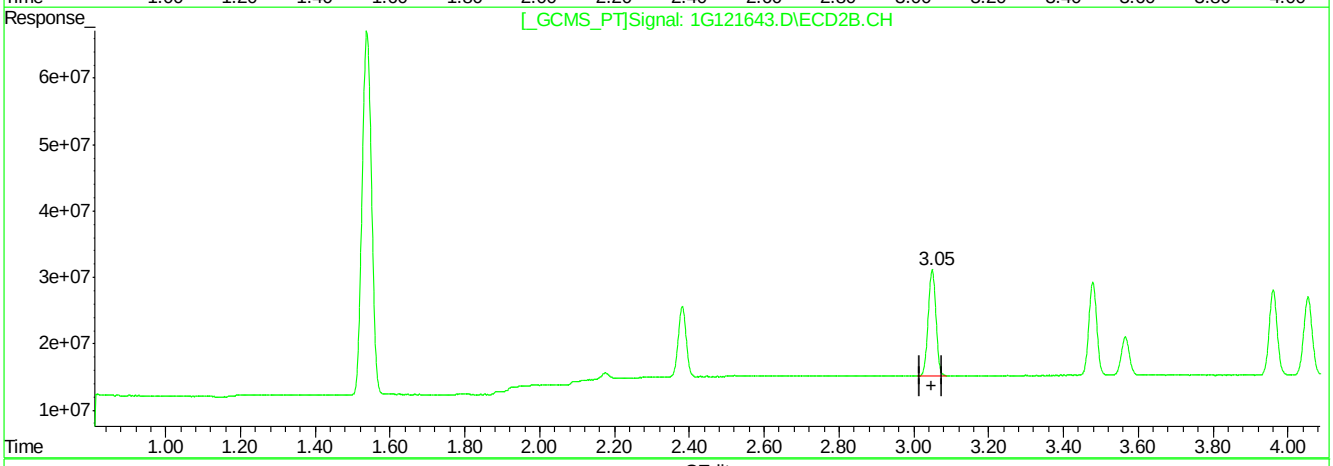
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:05 pm                    Operator: dharas
Sample    : ic3951-10                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:34 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 7.630PPB m

response 14876123

(3) alpha-BHC #2 (A)

3.05min 8.385PPB

response 229733944

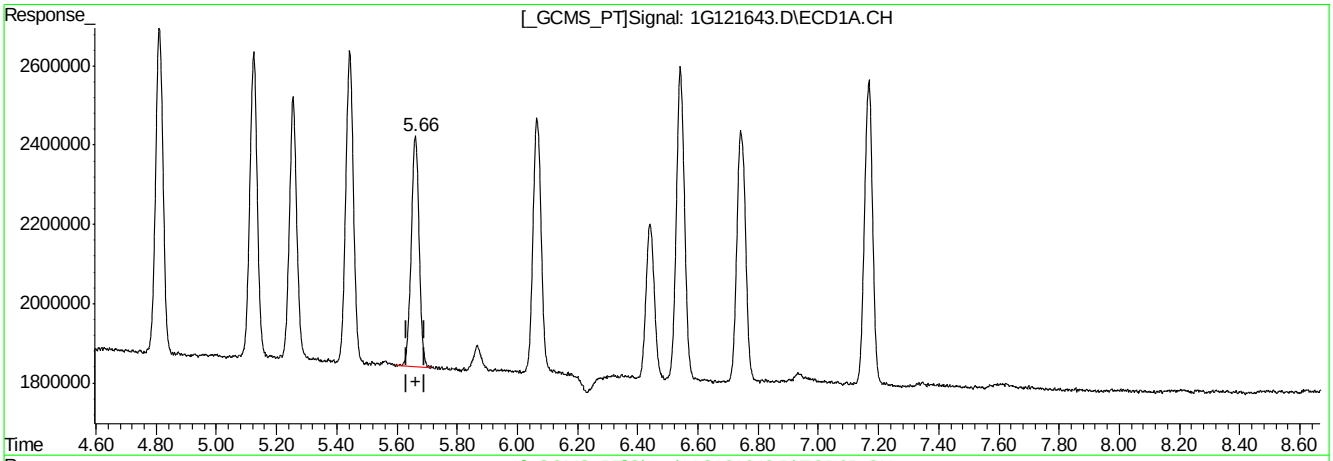
(+) = Expected Retention Time

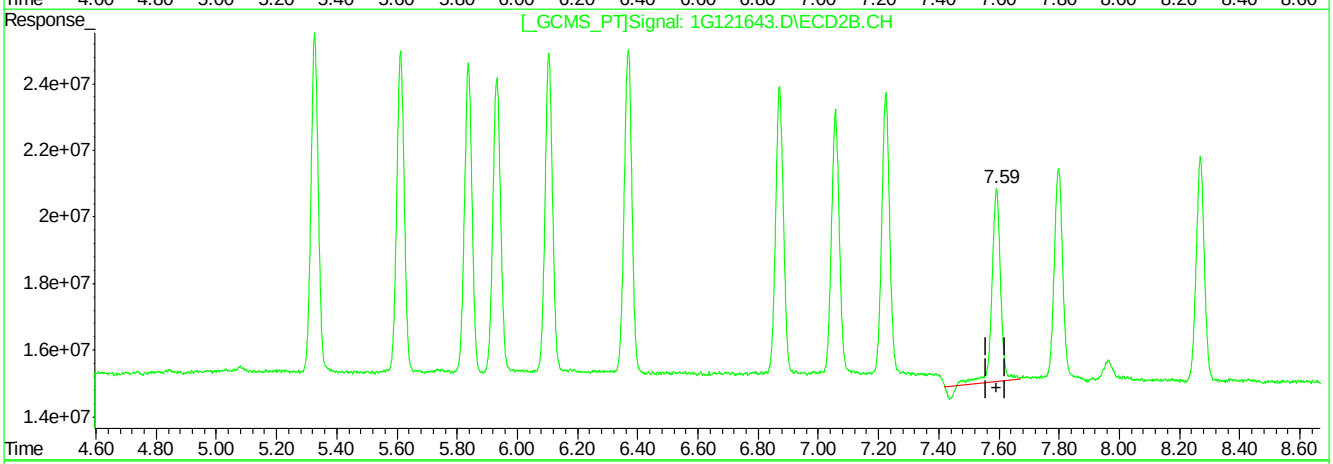
1G121643.D 1PST3951.M Fri Apr 01 15:35:08 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:05 pm                    Operator: dharas
Sample    : ic3951-10                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:34 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 8.473PPB

response 10662176

(18) 4,4'-DDT #2 (MA)

7.59min 9.880PPB

response 113739709

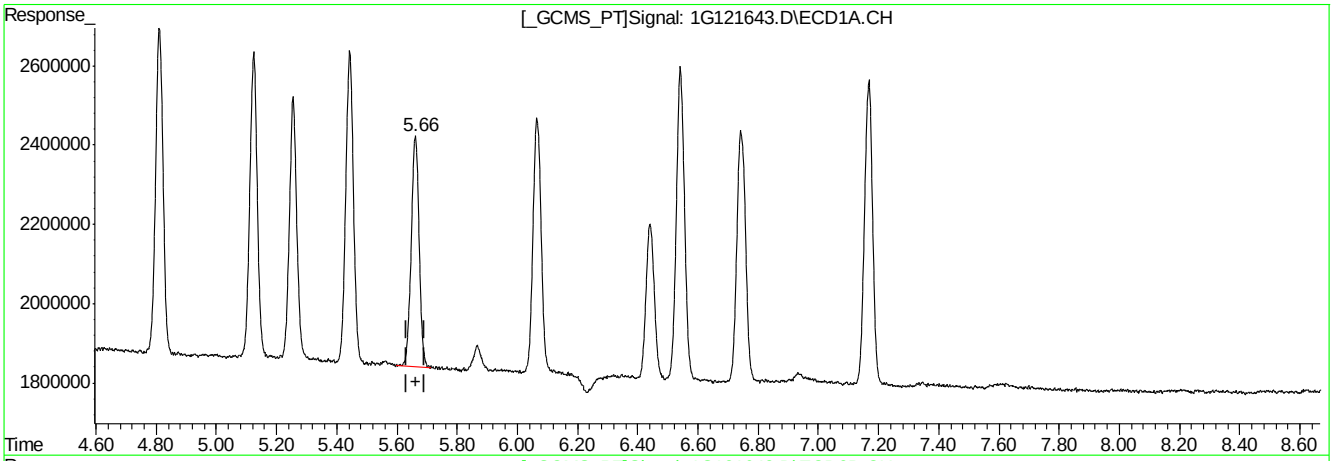
(+) = Expected Retention Time

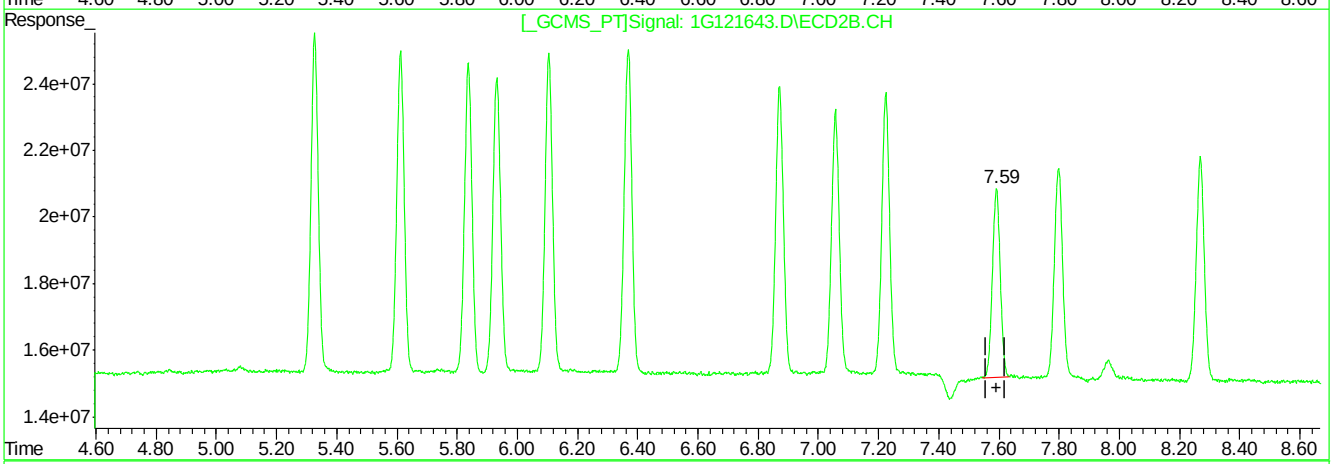
1G121643.D 1PST3951.M Fri Apr 01 15:35:18 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:05 pm                    Operator: dharas
Sample    : ic3951-10                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:34 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 8.473PPB

response 10662176

(18) 4,4'-DDT #2 (MA)

7.59min 9.000PPB m

response 103611035

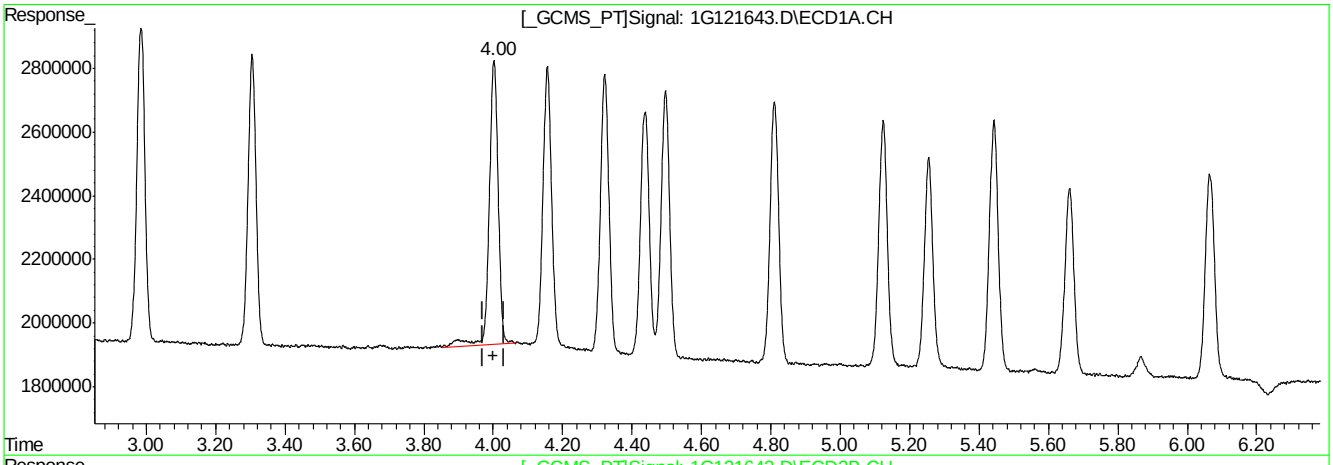
(+) = Expected Retention Time

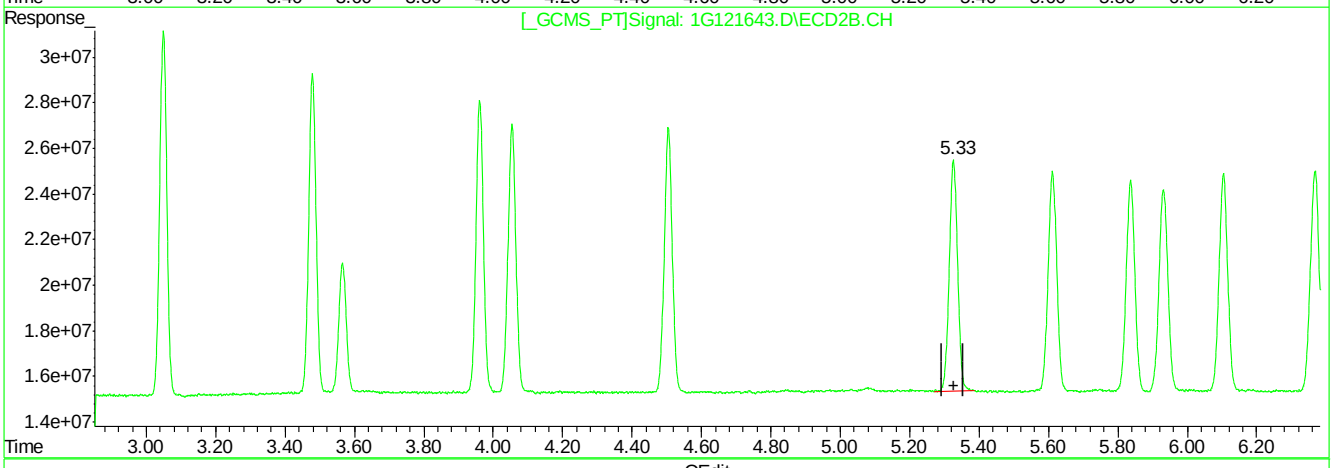
1G121643.D 1PST3951.M Fri Apr 01 15:35:26 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:05 pm                    Operator: dharas
Sample    : ic3951-10                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:35 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.00min 8.775PPB

response 16107257

(9) Heptachlor Epoxide #2 (B)

5.33min 8.524PPB

response 169516100

(+) = Expected Retention Time

1G121643.D 1PST3951.M Fri Apr 01 16:11:48 2016 RPT1

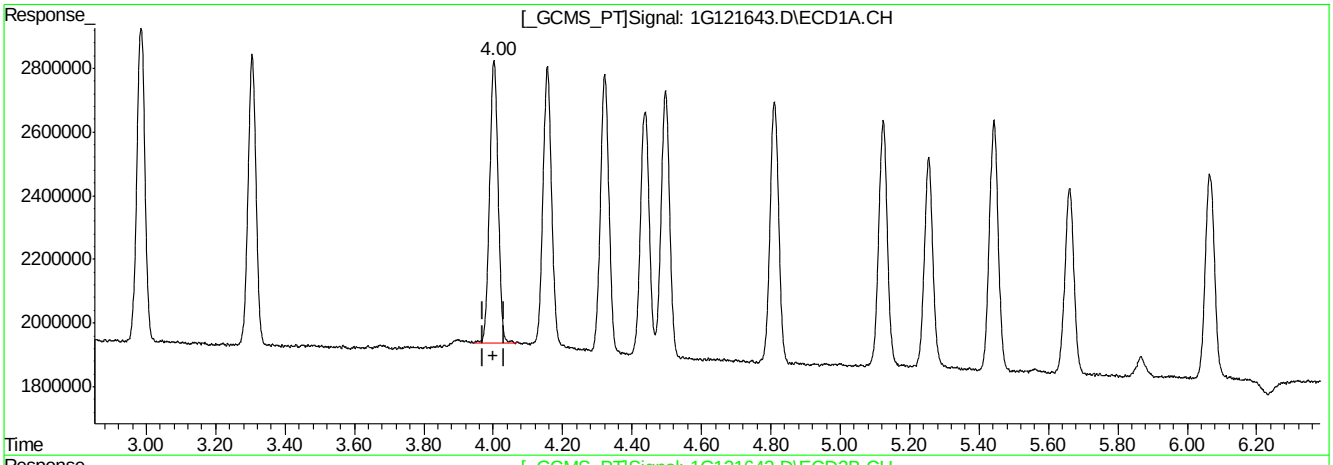
9.6.4.6

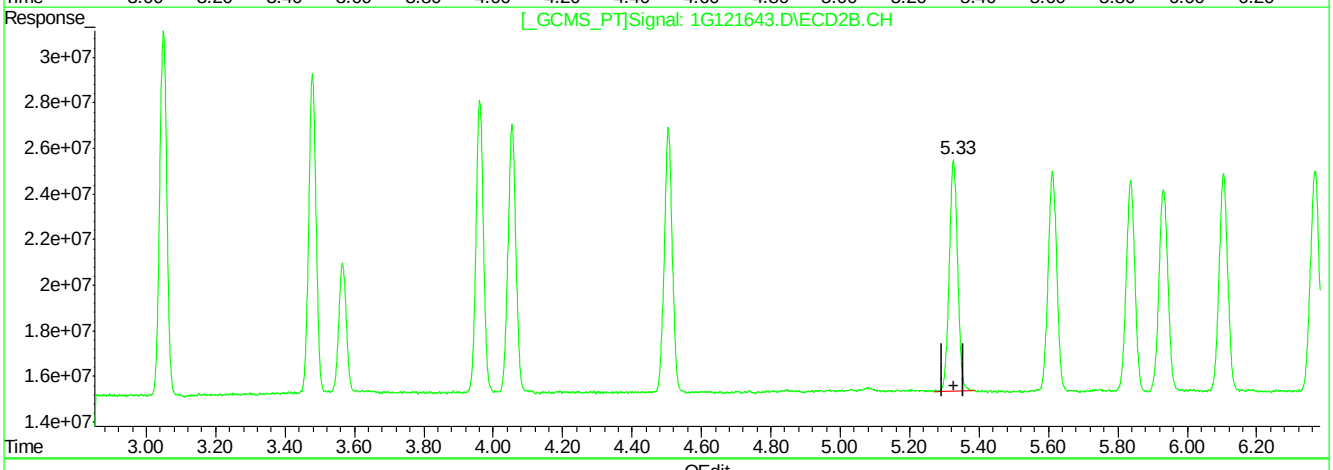
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:05 pm                    Operator: dharas
Sample    : ic3951-10                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:35 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.00min 8.286PPB m

response 15209828

(9) Heptachlor Epoxide #2 (B)

5.33min 8.524PPB

response 169516100

(+) = Expected Retention Time

1G121643.D 1PST3951.M Fri Apr 01 16:11:53 2016 RPT1

9.6.4.7

9

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121644.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121644.D\ECD2B.CH
Acq On : 01 Apr 2016 12:23 pm Operator: dharas
Sample : icc3951-25 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	69955428	920.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	32852331	360.4E6	20.546	20.401
	Spiked Amount 40.000	Range 30 - 150		Recovery =		51.36%	51.00%
24) SA	Decachlorobiphen	8.94	10.88	45488840	236.1E6	23.699	23.046
	Spiked Amount 40.000			Recovery =		59.25%	57.61%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	39352590	543.4E6	21.273	20.700
4) MA	gamma-BHC	2.51	3.48	37684911	483.9E6	21.344	20.474
5) MA	Heptachlor	2.98	4.05	40675888	432.7E6	21.333	20.712
6) B	beta-BHC	2.59	3.56	18770649	209.2E6	20.130	20.543
7) B	delta-BHC	2.77	3.96	33757754	455.8E6	20.437	19.284
8) MB	Aldrin	3.30	4.50	37466748	438.7E6	22.014	21.202
9) B	Heptachlor Epoxi	4.00	5.33	37772300	401.0E6	21.687	21.040
10) B	gamma-Chlordane	4.16	5.61	38033554	395.9E6	22.030	21.489
11) B	alpha-Chlordane	4.32	5.84	37758472	382.7E6	21.778	20.843
12) A	Endosulfan I	4.50	5.93	36039961	380.1E6	21.749	21.623
13) B	4,4'-DDE	4.44	6.10	34742643	394.7E6	23.815	21.778
14) MA	Dieldrin	4.81	6.37	36307872	411.8E6	21.988	21.416
15) MA	Endrin	5.12	6.87	33334819	367.7E6	22.359	20.709
16) A	4,4'-DDD	5.25	7.06	28070132	337.9E6	22.459	21.543
17) B	Endosulfan II	5.44	7.22	34846374	363.2E6	21.477	21.259
18) MA	4,4'-DDT	5.66	7.59	27894100	280.5E6	23.363	25.423
19) B	Endrin Aldehyde	6.06	7.80	29237681	287.3E6	21.695	22.178
20) B	Endosulfan Sulfa	6.74	8.27	31655182	310.1E6	20.757	21.285
21) A	Methoxychlor	6.44	8.84	18539236	144.2E6	21.457	24.911
22)	Mirex	6.54	9.16	35484038	239.5E6	20.977	22.379
23) B	Endrin Ketone	7.17	9.23	36632131	341.2E6	21.891	22.416

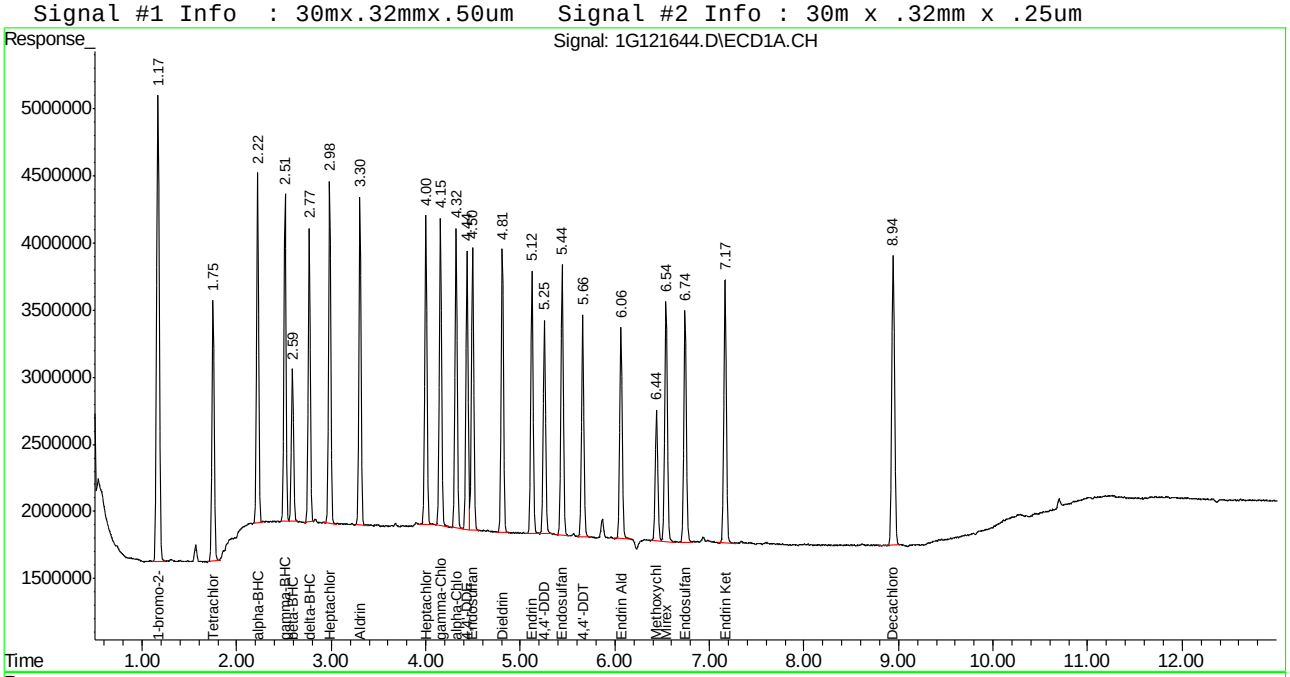
(f)=RT Delta > 1/2 Window (m)=manual int.

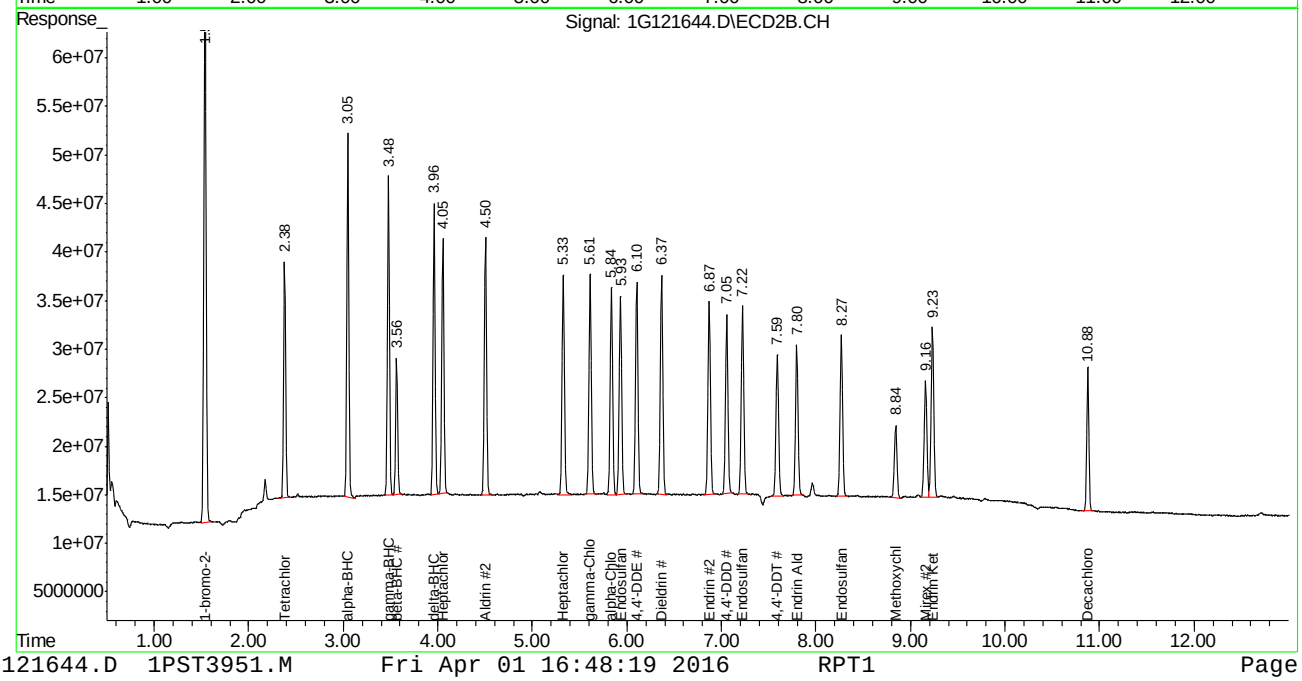
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121644.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121644.D\ECD2B.CH
Acq On : 01 Apr 2016 12:23 pm Operator: dharas
Sample : icc3951-25 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD2B.CH
Acq On : 01 Apr 2016 12:41 pm Operator: dharas
Sample : ic3951-50 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	71313742	935.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	65742791	703.3E6	40.332	39.156
	Spiked Amount 40.000	Range 30 - 150		Recovery =		100.83%	97.89%
24) SA	Decachlorobiphen	8.94	10.88	88871514	450.4E6	45.419	43.235
	Spiked Amount 40.000			Recovery =		113.55%	108.09%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	85655875	1064.3E6	45.422m	39.873
4) MA	gamma-BHC	2.51	3.48	80881694	947.5E6	44.937	39.429
5) MA	Heptachlor	2.98	4.05	84830610	850.8E6	43.644	40.051
6) B	beta-BHC	2.59	3.56	38171998	402.1E6	40.156	38.841
7) B	delta-BHC	2.77	3.96	73084557	903.0E6	43.402	37.572
8) MB	Aldrin	3.30	4.50	79340060	844.5E6	45.730	40.142
9) B	Heptachlor Epoxi	4.00	5.33	77632589	768.6E6	43.725	39.664
10) B	gamma-Chlordane	4.16	5.61	77954940	769.6E6	44.292	41.081
11) B	alpha-Chlordane	4.32	5.84	77729620	729.0E6	43.978	39.051
12) A	Endosulfan I	4.50	5.93	74546759	723.1E6	44.129	40.455
13) B	4,4'-DDE	4.44	6.10	73335021	758.5E6	49.311	41.164
14) MA	Dieldrin	4.81	6.37	76762726	793.6E6	45.602	40.590
15) MA	Endrin	5.12	6.87	69320101	703.7E6	45.610	38.976
16) A	4,4'-DDD	5.25	7.06	60019850	653.2E6	47.108	40.954
17) B	Endosulfan II	5.44	7.22	71684609	692.0E6	43.340	39.838
18) MA	4,4'-DDT	5.66	7.59	59480520	576.2E6	48.869	51.368
19) B	Endrin Aldehyde	6.07	7.80	59595046	558.6E6	43.379	42.417
20) B	Endosulfan Sulfa	6.74	8.27	64669164	592.4E6	41.597	39.989
21) A	Methoxychlor	6.44	8.84	37504007	289.0E6	42.580	49.096
22)	Mirex	6.54	9.16	69516704	461.9E6	40.313	42.455
23) B	Endrin Ketone	7.17	9.23	75464684	659.7E6	44.239	42.633

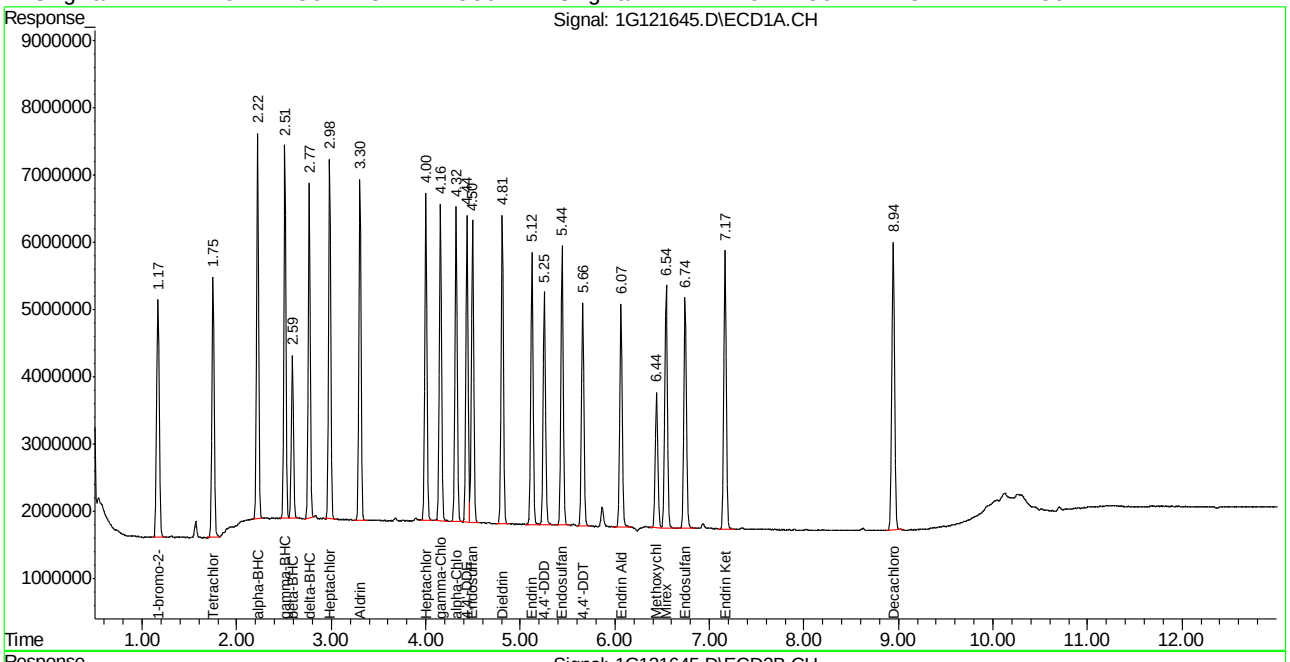
(f)=RT Delta > 1/2 Window (m)=manual int.

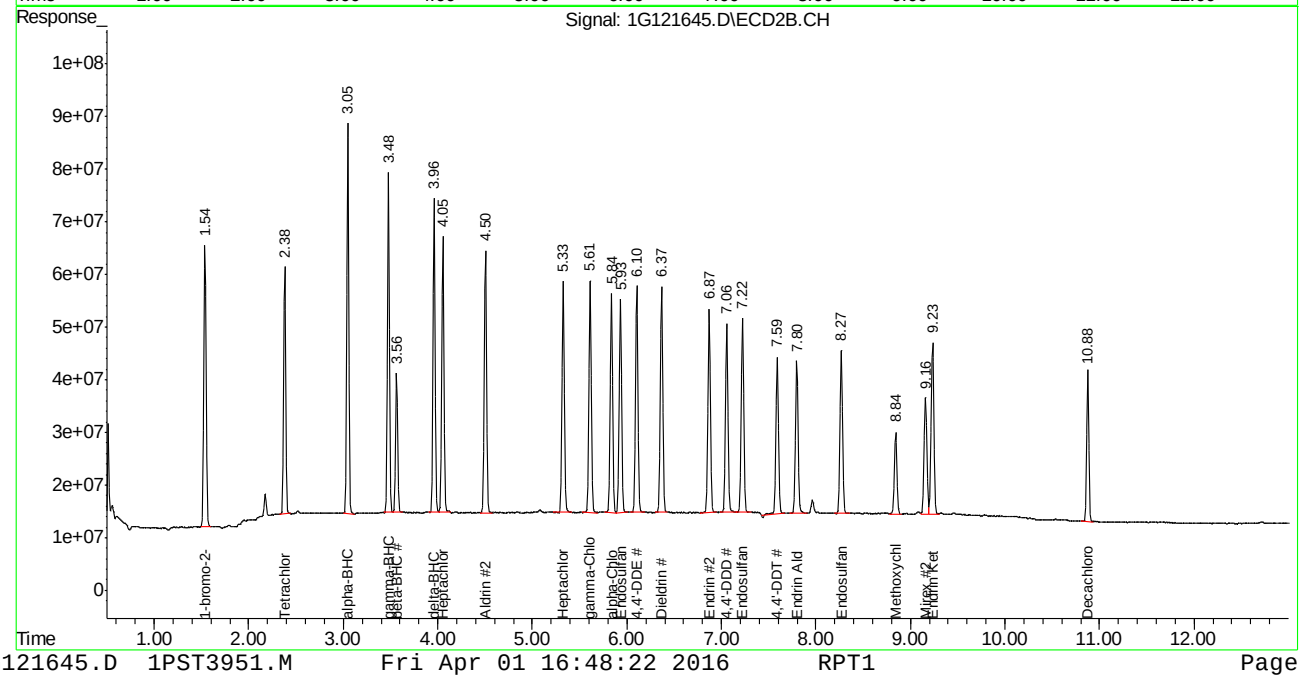
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD2B.CH
Acq On : 01 Apr 2016 12:41 pm Operator: dharas
Sample : ic3951-50 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

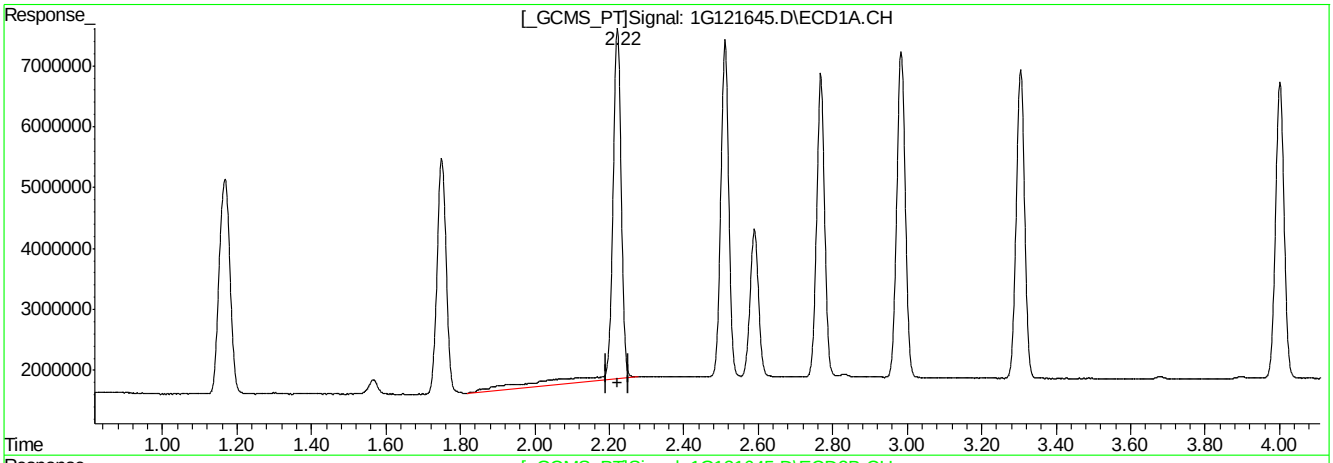
Sample Number:	G1G3951-IC3951	**Method:**	SW846 8081B
Lab FileID:	1G121645.D	**Analyst approved:**	04/01/16 16:29 Joseph Ravino
Injection Time:	04/01/16 12:41	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

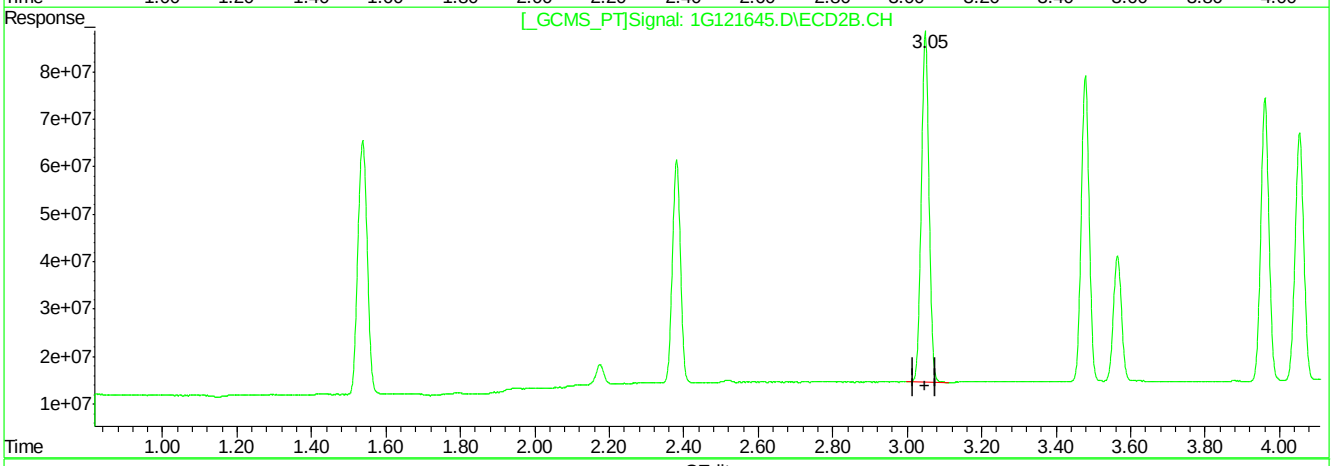
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.22	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:41 pm                    Operator: dharas
Sample    : ic3951-50                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:27 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 53.482PPB

response 100856227

(3) alpha-BHC #2 (A)

3.05min 39.873PPB

response 1064338671

(+) = Expected Retention Time

1G121645.D 1PST3951.M Fri Apr 01 15:28:12 2016 RPT1

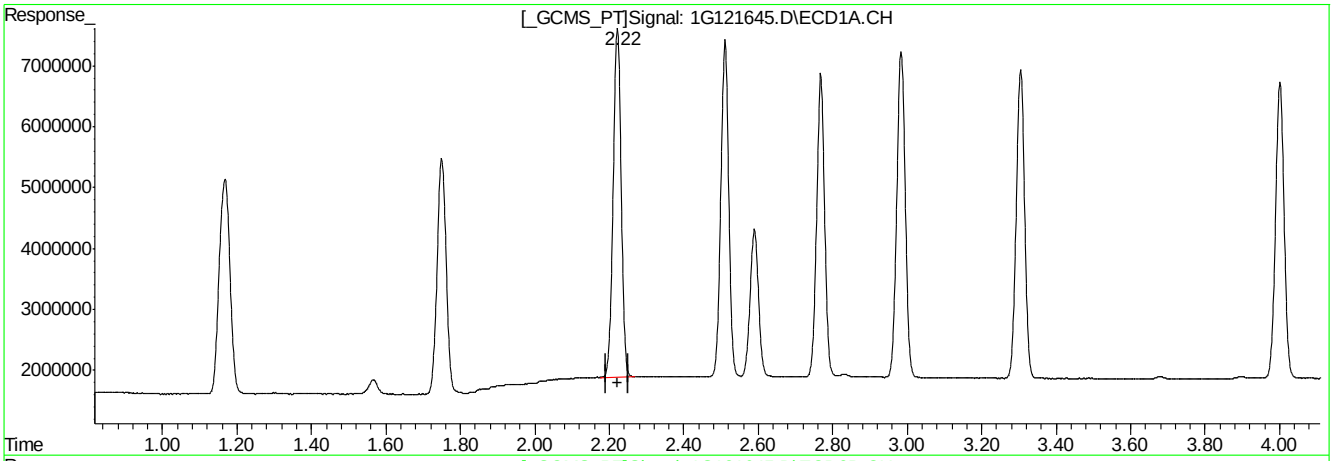
9.6.6.2

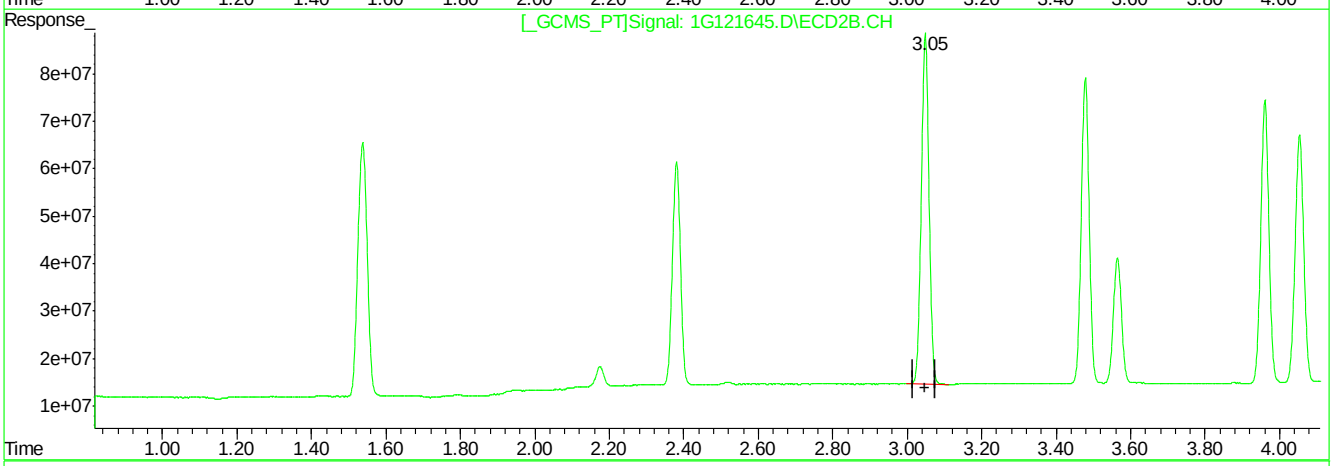
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:41 pm                    Operator: dharas
Sample    : ic3951-50                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:27 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 45.422PPB m

response 85655875

(3) alpha-BHC #2 (A)

3.05min 39.873PPB

response 1064338671

(+) = Expected Retention Time

1G121645.D 1PST3951.M Fri Apr 01 15:28:20 2016 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121646.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121646.D\ECD2B.CH
Acq On : 01 Apr 2016 12:58 pm Operator: dharas
Sample : ic3951-75 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	74592784	966.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	107.2E6	1122.4E6	62.881	60.521
Spiked Amount	40.000	Range	30 - 150	Recovery	=	157.20%#	151.30%#
24) SA	Decachlorobiphen	8.95	10.88	139.4E6	697.3E6	68.125	64.829
Spiked Amount	40.000			Recovery	=	170.31%	162.07%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	146.8E6	1676.9E6	74.399	60.844
4) MA	gamma-BHC	2.51	3.48	136.3E6	1498.1E6	72.376	60.377
5) MA	Heptachlor	2.99	4.05	140.8E6	1334.4E6	69.263	60.836
6) B	beta-BHC	2.59	3.56	61018984	620.5E6	61.368	58.043
7) B	delta-BHC	2.77	3.96	123.6E6	1432.6E6	70.171	57.731
8) MB	Aldrin	3.31	4.50	133.0E6	1316.8E6	73.286	60.623
9) B	Heptachlor Epoxi	4.00	5.33	127.7E6	1194.7E6	68.763	59.716
10) B	gamma-Chlordane	4.16	5.61	128.2E6	1189.6E6	69.630	61.503
11) B	alpha-Chlordane	4.32	5.84	127.4E6	1135.4E6	68.931	58.903
12) A	Endosulfan I	4.50	5.93	122.2E6	1117.3E6	69.170	60.542
13) B	4,4'-DDE	4.44	6.11	122.0E6	1184.3E6	78.408	62.247
14) MA	Dieldrin	4.81	6.37	127.9E6	1240.4E6	72.620	61.450
15) MA	Endrin	5.12	6.87	115.9E6	1106.3E6	72.878	59.341
16) A	4,4'-DDD	5.26	7.06	99958752	1007.4E6	75.006	61.175
17) B	Endosulfan II	5.44	7.22	117.3E6	1071.8E6	67.800	59.761
18) MA	4,4'-DDT	5.66	7.59	100.4E6	889.7E6	78.892	76.826
19) B	Endrin Aldehyde	6.07	7.80	100.1E6	850.8E6	69.677	62.565
20) B	Endosulfan Sulfa	6.75	8.27	105.0E6	923.7E6	64.564	60.395
21) A	Methoxychlor	6.44	8.84	60243507	453.8E6	65.390	74.657
22)	Mirex	6.54	9.16	108.4E6	695.3E6	60.116	61.894
23) B	Endrin Ketone	7.17	9.23	123.9E6	1025.7E6	69.449	64.194

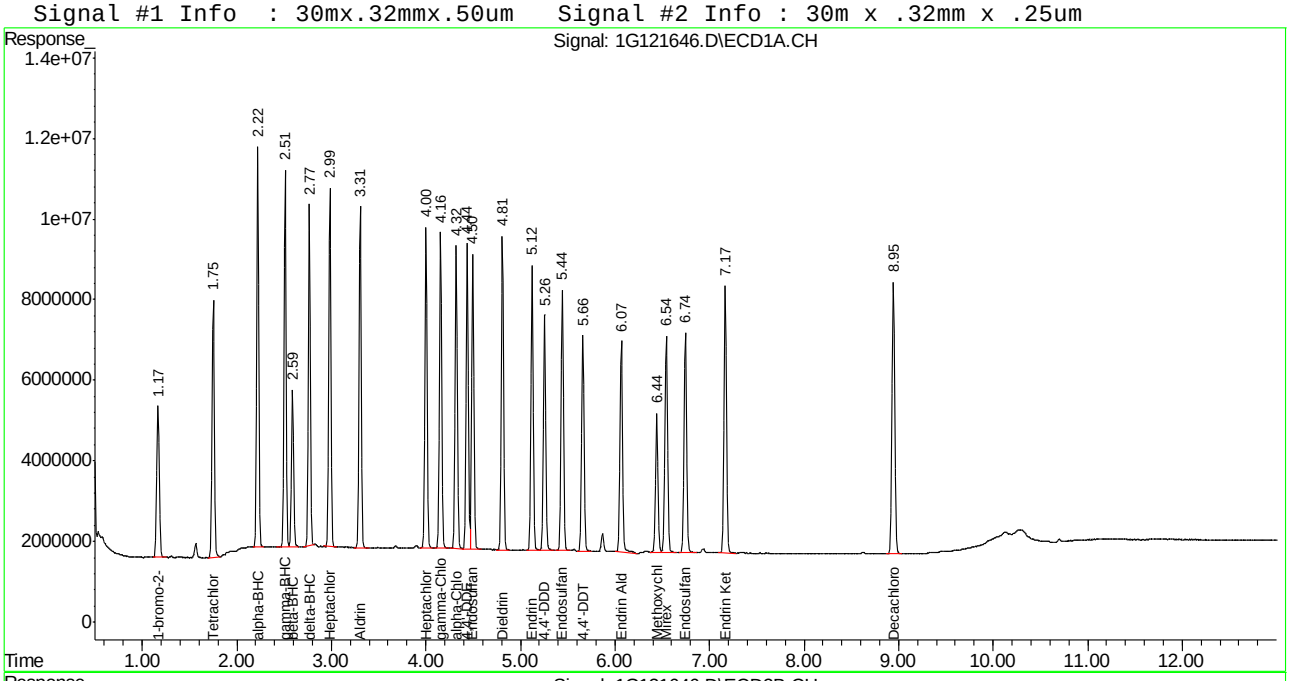
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121646.D 1PST3951.M Fri Apr 01 16:48:25 2016 RPT1 Page 1

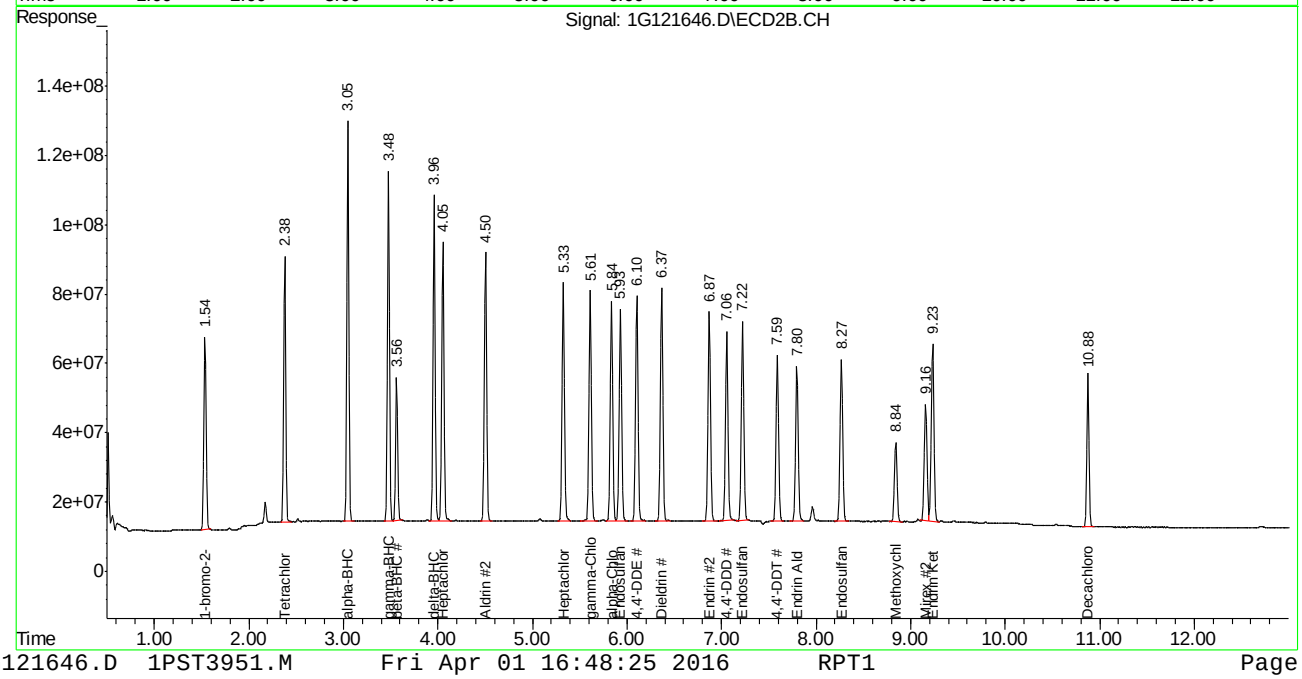
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121646.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121646.D\ECD2B.CH
Acq On : 01 Apr 2016 12:58 pm Operator: dharas
Sample : ic3951-75 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD2B.CH
Acq On : 4-1-16 01:16:33 PM Operator: dharas
Sample : ic3951-100 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	73759676	955.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	145.3E6	1496.8E6	86.197	81.585
Spiked Amount	40.000	Range	30 - 150	Recovery	=	215.49%#	203.96%#
24) SA	Decachlorobiphen	8.95	10.88	184.5E6	921.6E6	91.175	86.615
Spiked Amount	40.000			Recovery	=	227.94%	216.54%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	205.3E6	2249.0E6	105.278	82.486
4) MA	gamma-BHC	2.51	3.48	189.3E6	2006.0E6	101.695	81.724
5) MA	Heptachlor	2.98	4.05	194.1E6	1780.0E6	96.537	82.034
6) B	beta-BHC	2.59	3.57	82410447	823.6E6	83.819	77.877
7) B	delta-BHC	2.77	3.96	172.9E6	1932.4E6	99.300	78.721
8) MB	Aldrin	3.30	4.50	183.5E6	1751.6E6	102.275	81.516
9) B	Heptachlor Epoxi	4.00	5.33	174.4E6	1586.5E6	94.948	80.157
10) B	gamma-Chlordane	4.16	5.61	176.0E6	1590.1E6	96.664	83.100
11) B	alpha-Chlordane	4.32	5.84	174.6E6	1509.9E6	95.491	79.185
12) A	Endosulfan I	4.50	5.93	167.4E6	1480.9E6	95.812	81.117
13) B	4,4'-DDE	4.44	6.11	168.7E6	1572.4E6	109.644	83.541
14) MA	Dieldrin	4.81	6.37	176.9E6	1645.5E6	101.613	82.403
15) MA	Endrin	5.12	6.87	159.8E6	1472.4E6	101.657	79.839
16) A	4,4'-DDD	5.25	7.06	139.0E6	1342.3E6	105.472	82.398
17) B	Endosulfan II	5.44	7.22	159.9E6	1419.9E6	93.464	80.031
18) MA	4,4'-DDT	5.66	7.59	140.2E6	1205.3E6	111.377	105.202
19) B	Endrin Aldehyde	6.07	7.80	130.2E6	1124.4E6	91.659	83.584
20) B	Endosulfan Sulfa	6.74	8.27	142.0E6	1221.3E6	88.308	80.716
21) A	Methoxychlor	6.44	8.84	82231254	604.6E6	90.264m	100.536
22)	Mirex	6.54	9.16	143.9E6	935.4E6	80.692	84.175
23) B	Endrin Ketone	7.17	9.23	169.0E6	1368.7E6	95.779	86.594

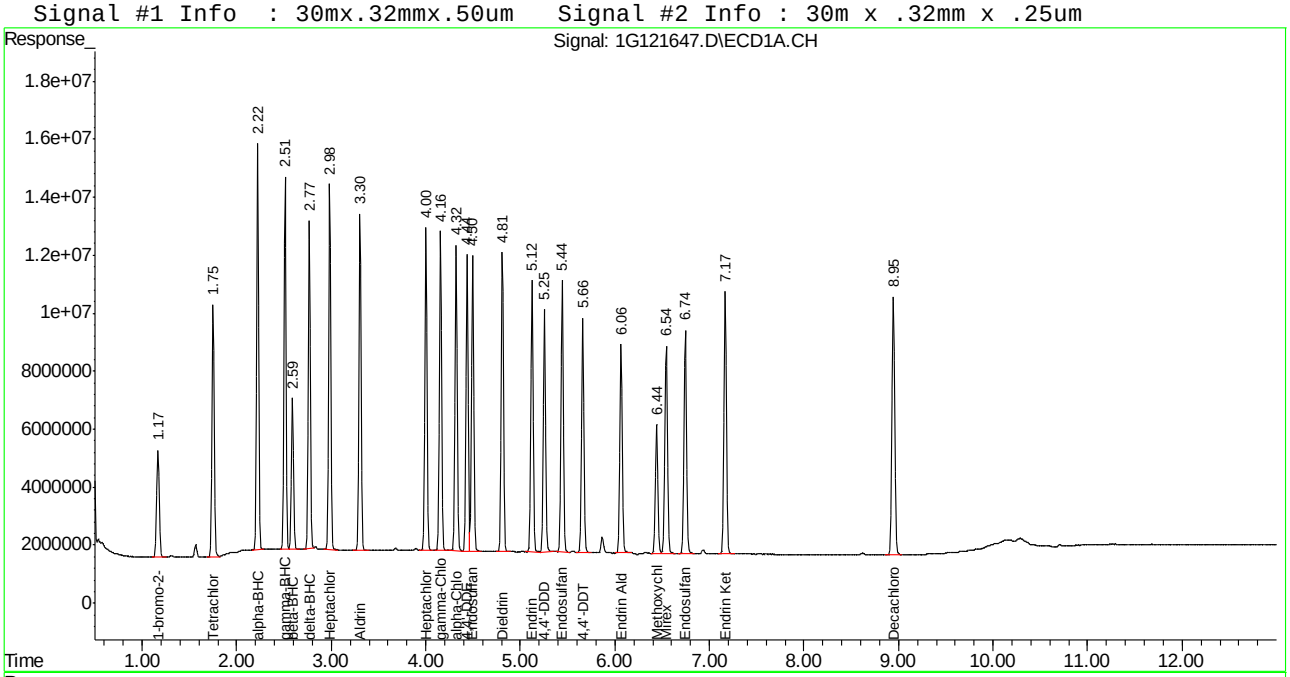
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121647.D 1PST3951.M Fri Apr 01 16:50:11 2016 RPT1 Page 1

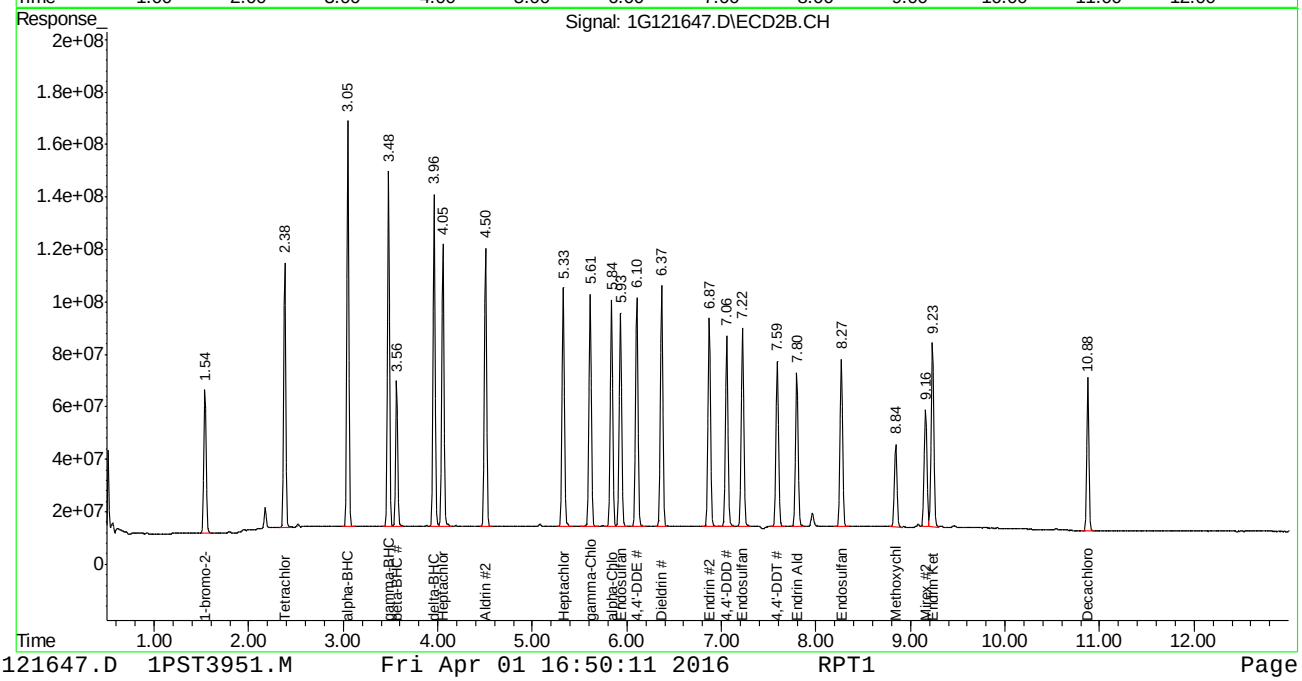
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD2B.CH
Acq On : 4-1-16 01:16:33 PM Operator: dharas
Sample : ic3951-100 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

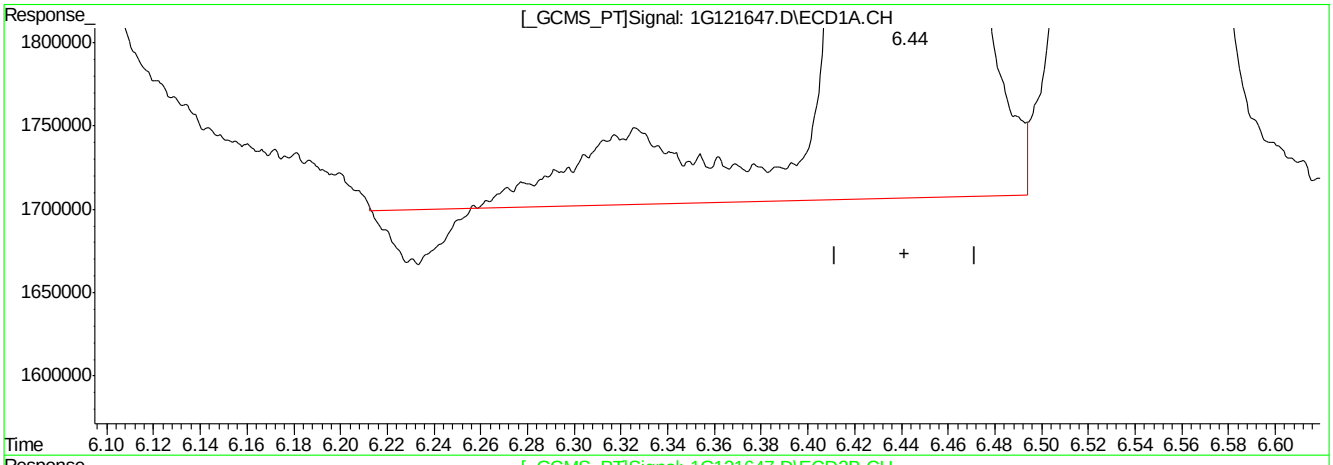
Sample Number:	G1G3951-IC3951	**Method:**	SW846 8081B
Lab FileID:	1G121647.D	**Analyst approved:**	04/01/16 16:29 Joseph Ravino
Injection Time:	04/01/16 13:16	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

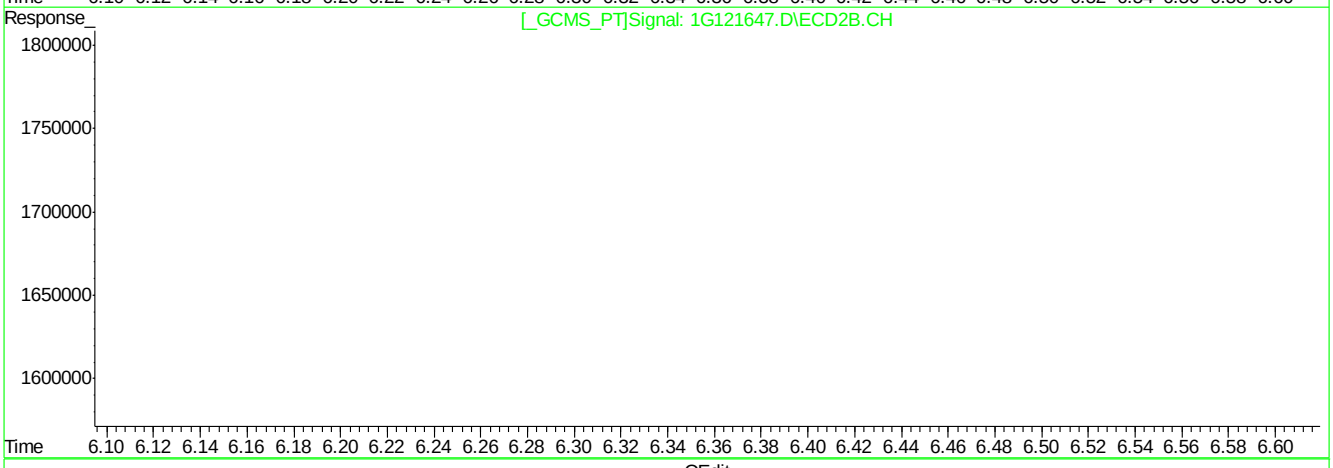
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	1	6.44	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD2B.CH
Acq On    : 4-1-16 01:16:33 PM                      Operator: dharas
Sample    : ic3951-100                              Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:32 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.44min 91.822PPB

response 83650158

(21) Methoxychlor #2 (A)

8.84min 100.536PPB

response 604557929

(+) = Expected Retention Time

1G121647.D 1PST3951.M Fri Apr 01 16:15:57 2016 RPT1

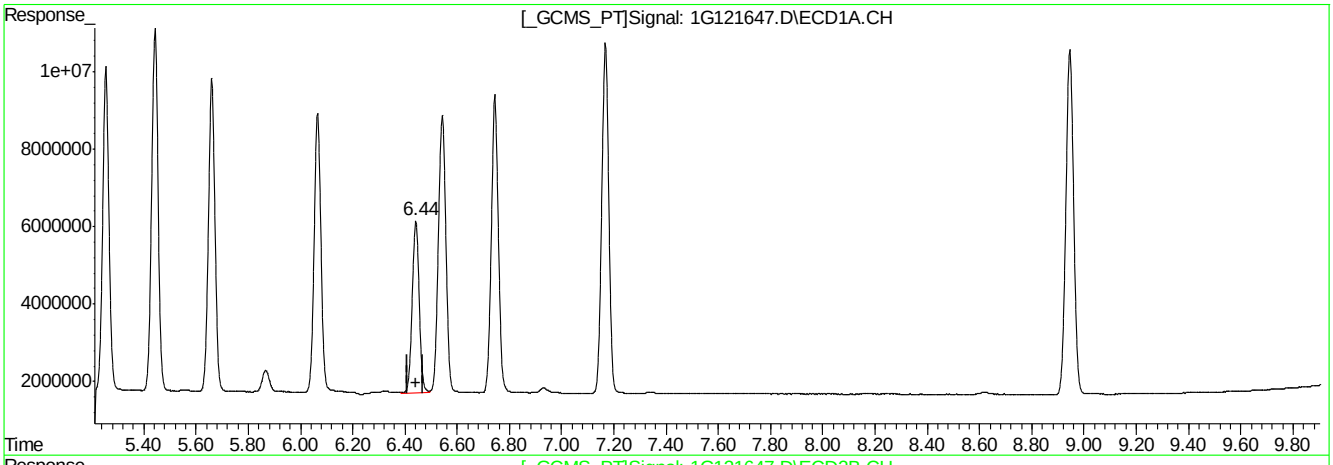
9.6.8.2

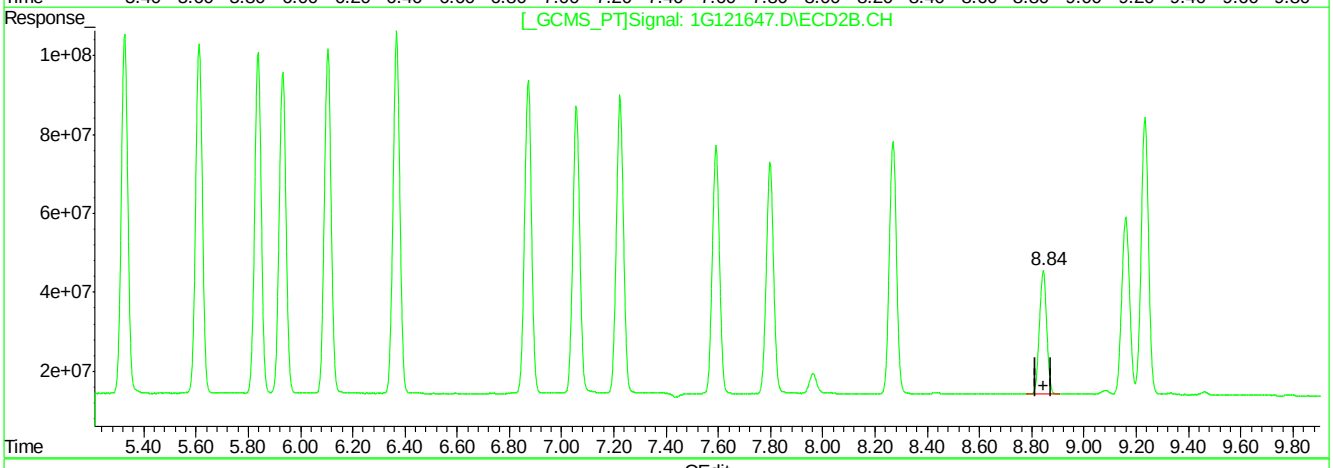
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD2B.CH
Acq On    : 4-1-16 01:16:33 PM                      Operator: dharas
Sample    : ic3951-100                              Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:32 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.44min 90.264PPB m

response 82231254

(21) Methoxychlor #2 (A)

8.84min 100.536PPB

response 604557929

(+) = Expected Retention Time

1G121647.D 1PST3951.M Fri Apr 01 16:16:03 2016 RPT1

9.6.8.3

9

Manual Integrations
APPROVED
(compounds with "m" flag)
Gwendolyn Burns
04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD2B.CH
Acq On : 4-1-16 01:34:11 PM Operator: dharas
Sample : ic3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:47 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:31:48 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
31) I	1-bromo-2-nitrob	1.17	1.54	72145095	944.6E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
32)	Chlordane {A}	2.90	3.86	23459965	277.5E6	537.310	508.595
33)	Chlordane {B}	3.45	4.70	32039209	282.3E6	572.312	521.605
34)	Chlordane {C}	4.16	5.61	107.7E6	956.4E6	585.340	526.003
35)	Chlordane {D}	4.31	5.84	169.8E6	1562.3E6	582.217	523.913m
36)	Chlordane {E}	5.34	7.30	23619002	291.3E6	552.027	581.583

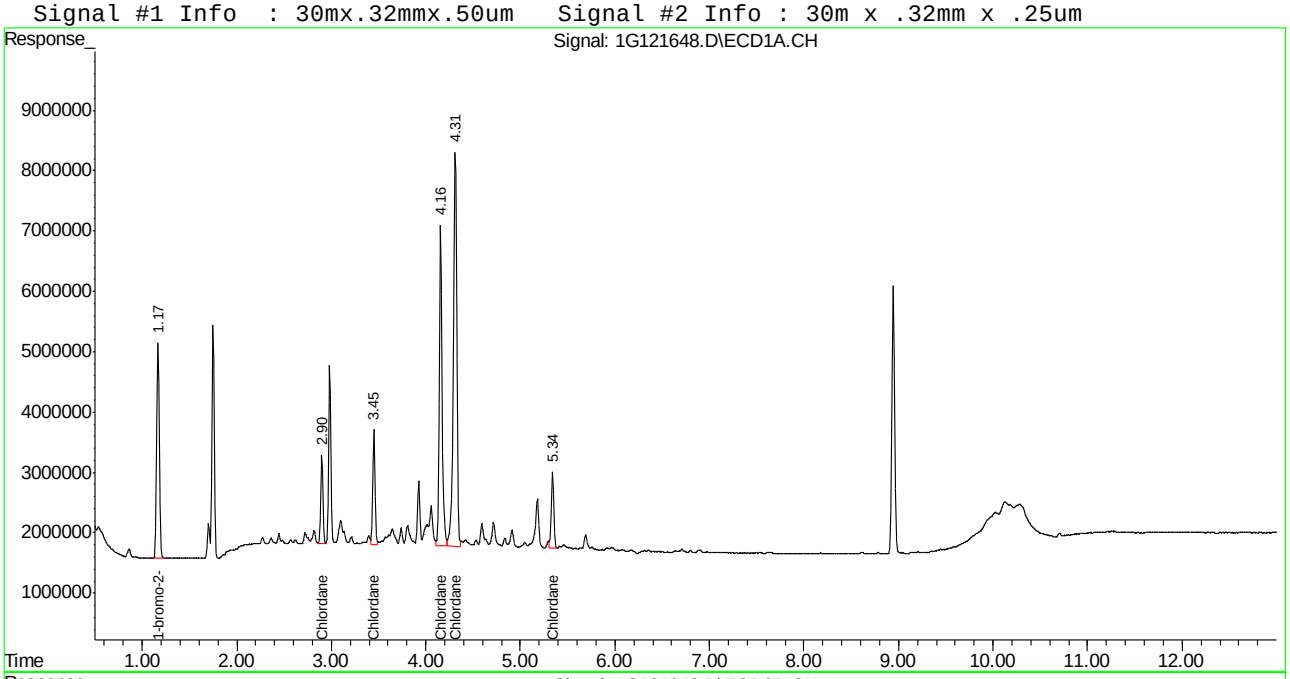
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121648.D 1PST3951.M Fri Apr 01 16:48:30 2016 RPT1 Page 1

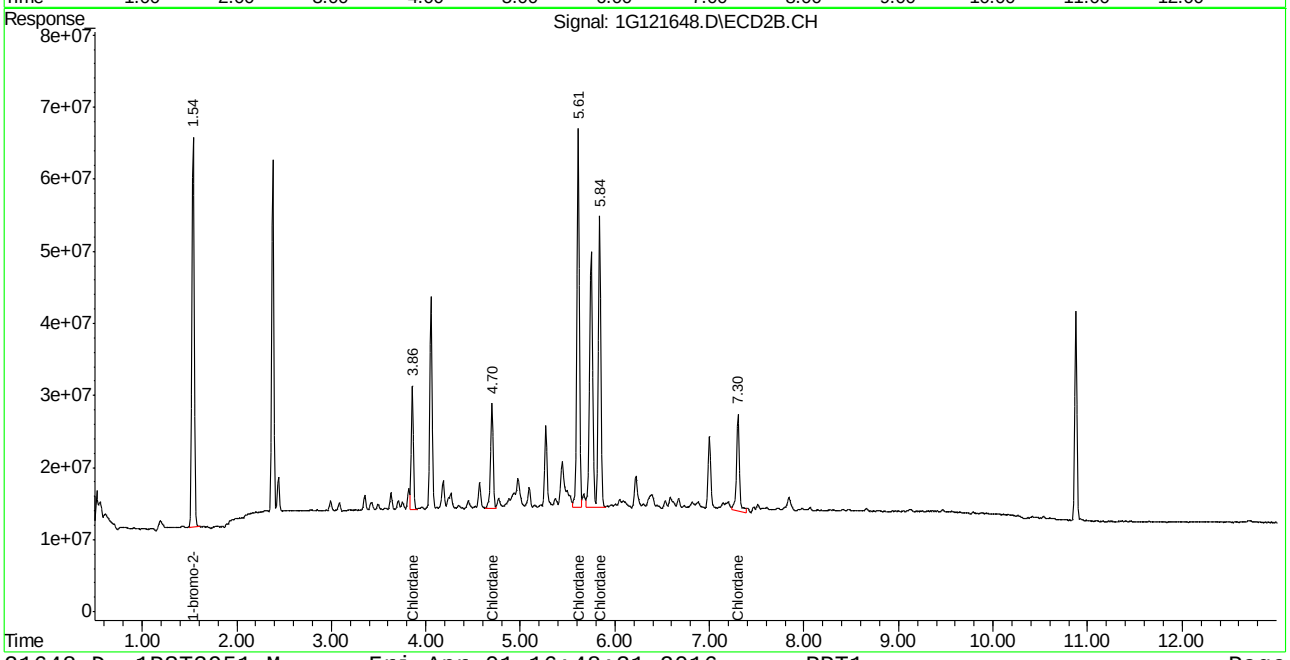
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD2B.CH
Acq On : 4-1-16 01:34:11 PM Operator: dharas
Sample : ic3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:47 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:31:48 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

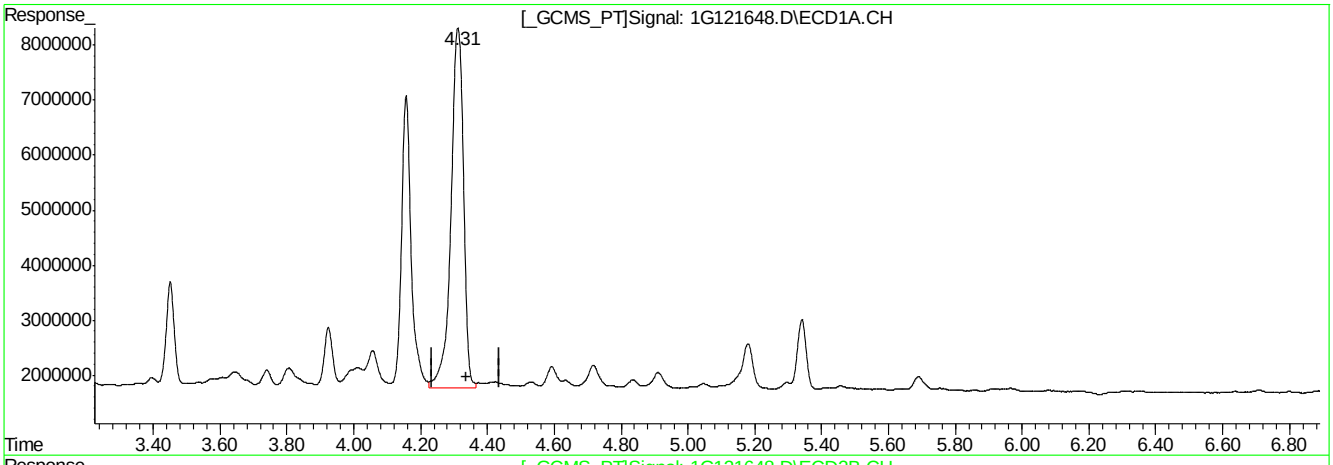
Sample Number:	G1G3951-IC3951	**Method:**	SW846 8081B
Lab FileID:	1G121648.D	**Analyst approved:**	04/01/16 16:48 Joseph Ravino
Injection Time:	04/01/16 13:34	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

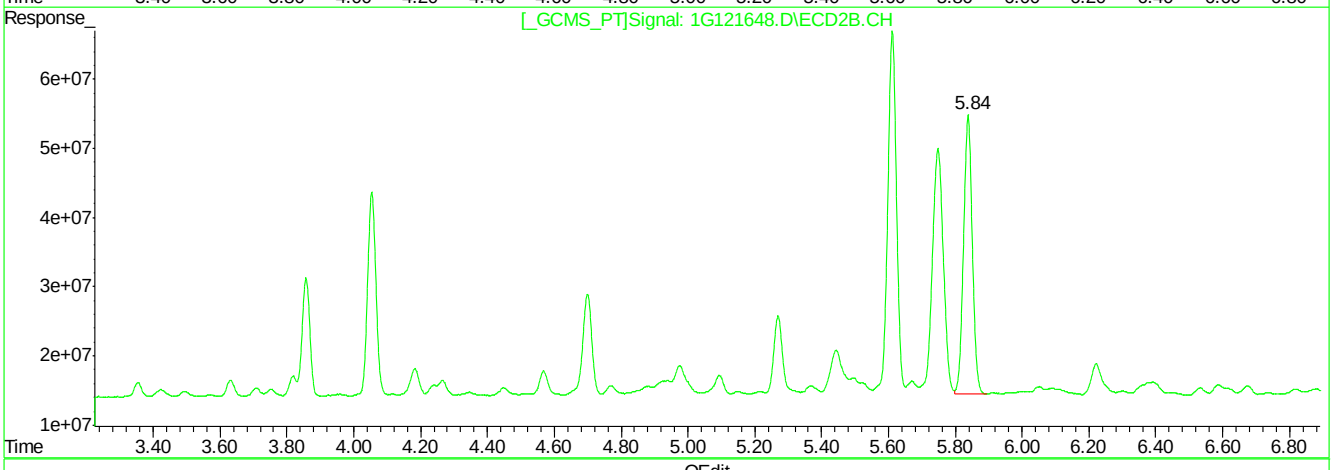
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	5.84	Split peak

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD2B.CH
Acq On    : 4-1-16 01:34:11 PM                      Operator: dharas
Sample    : ic3951-500                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:35 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:31:48 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.31min 582.217PPB

response 169785507

(35) Chlordane {D} #2

5.84min 249.697PPB

response 744607513

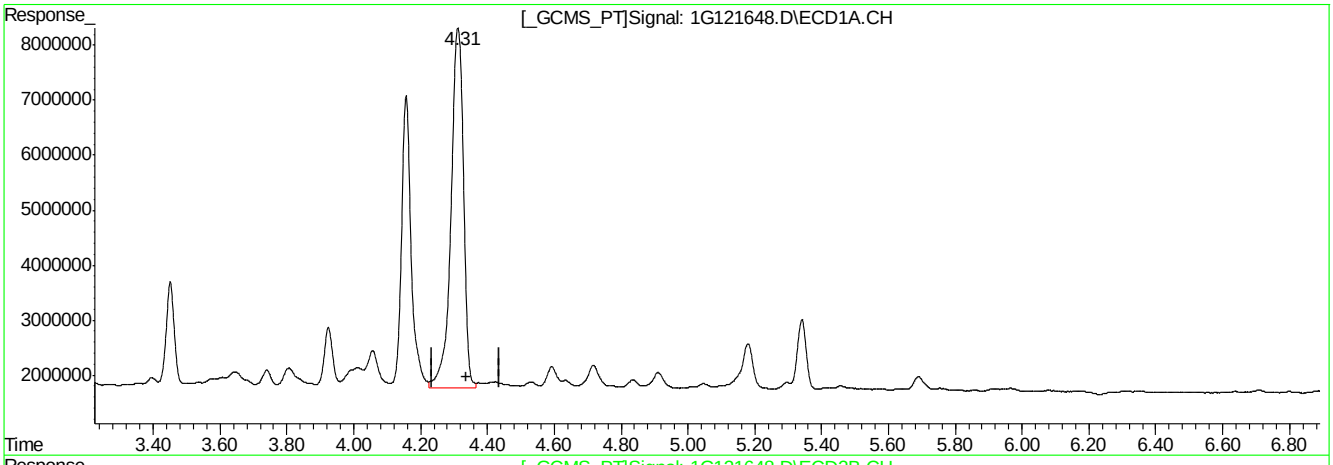
(+) = Expected Retention Time

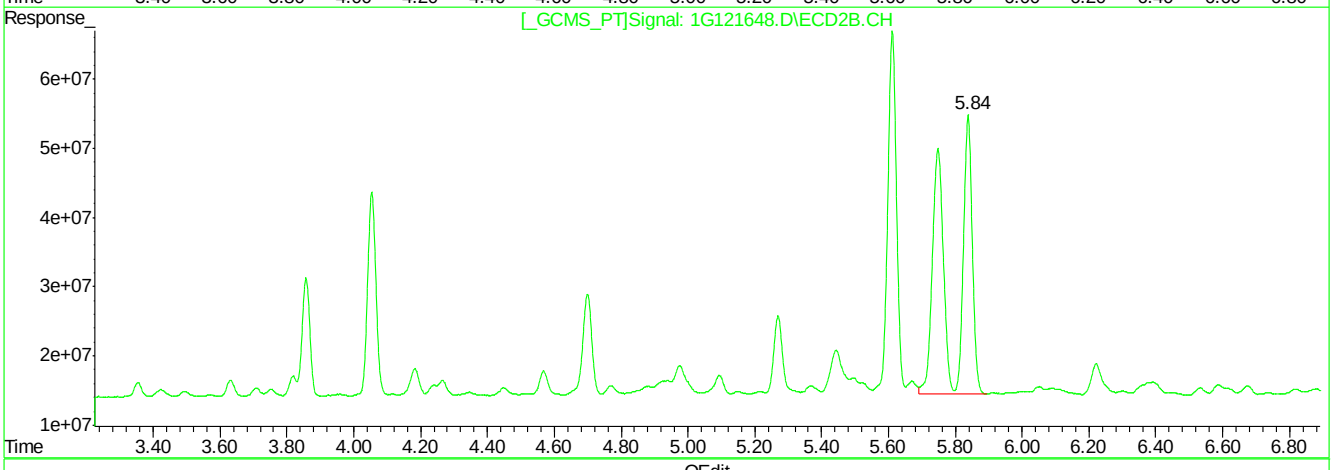
1G121648.D 1PST3951.M Fri Apr 01 16:36:03 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD2B.CH
Acq On    : 4-1-16 01:34:11 PM                      Operator: dharas
Sample    : ic3951-500                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:35 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:31:48 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.31min 582.217PPB

response 169785507

(35) Chlordane {D} #2

5.84min 523.913PPB m

response 1562335660

(+) = Expected Retention Time

1G121648.D 1PST3951.M Fri Apr 01 16:36:29 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD2B.CH
Acq On : 4-1-16 01:51:50 PM Operator: dharas
Sample : ic3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:47 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:40:27 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
25) I	1-bromo-2-nitrob	1.17	1.54	75252409	970.0E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
26) L8	Toxaphene{A}	4.82	6.33	13287839	208.7E6	500.000	500.000
27) L8	Toxaphene{B}	5.43	7.19	35335078	243.0E6	500.000	493.833
28) L8	Toxaphene{C}	5.60	7.35	26884740	463.5E6	500.000	598.181m
29) L8	Toxaphene{D}	5.94	7.80	27149226	266.8E6	393.619	500.000
30) L8	Toxaphene{E}	6.57	8.70	23968978	209.1E6	500.000	500.000

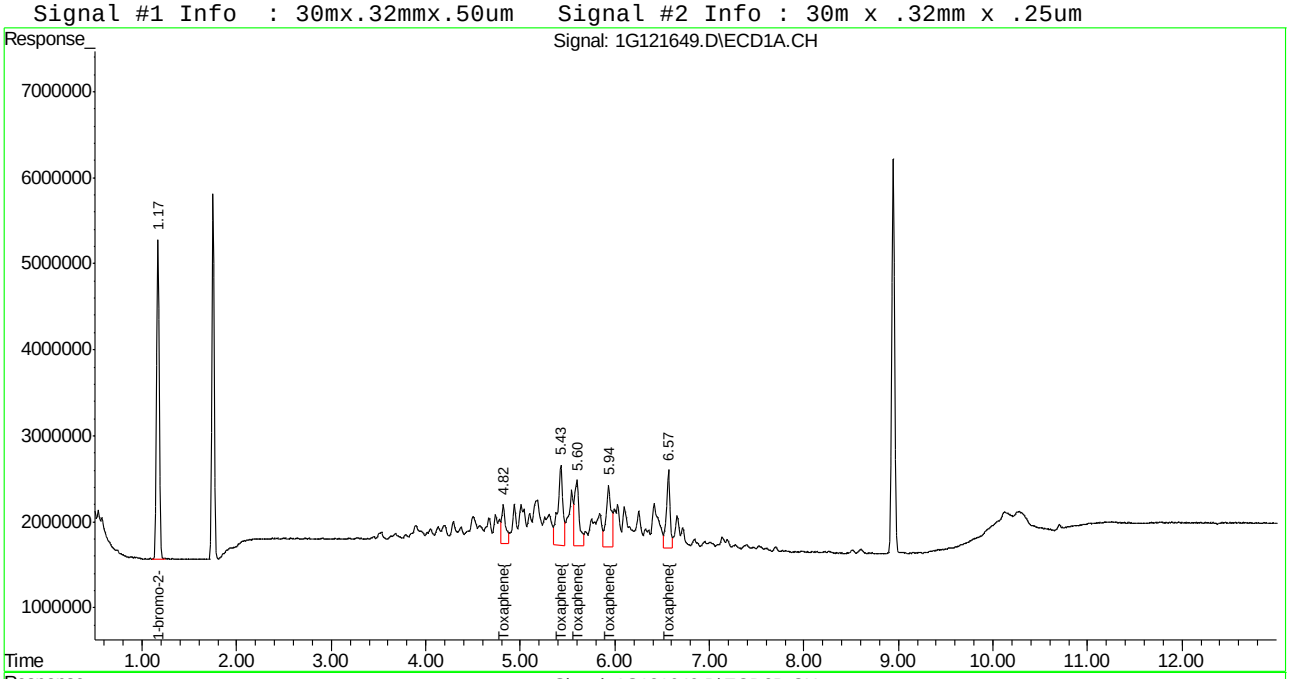
(f)=RT Delta > 1/2 Window (m)=manual int.

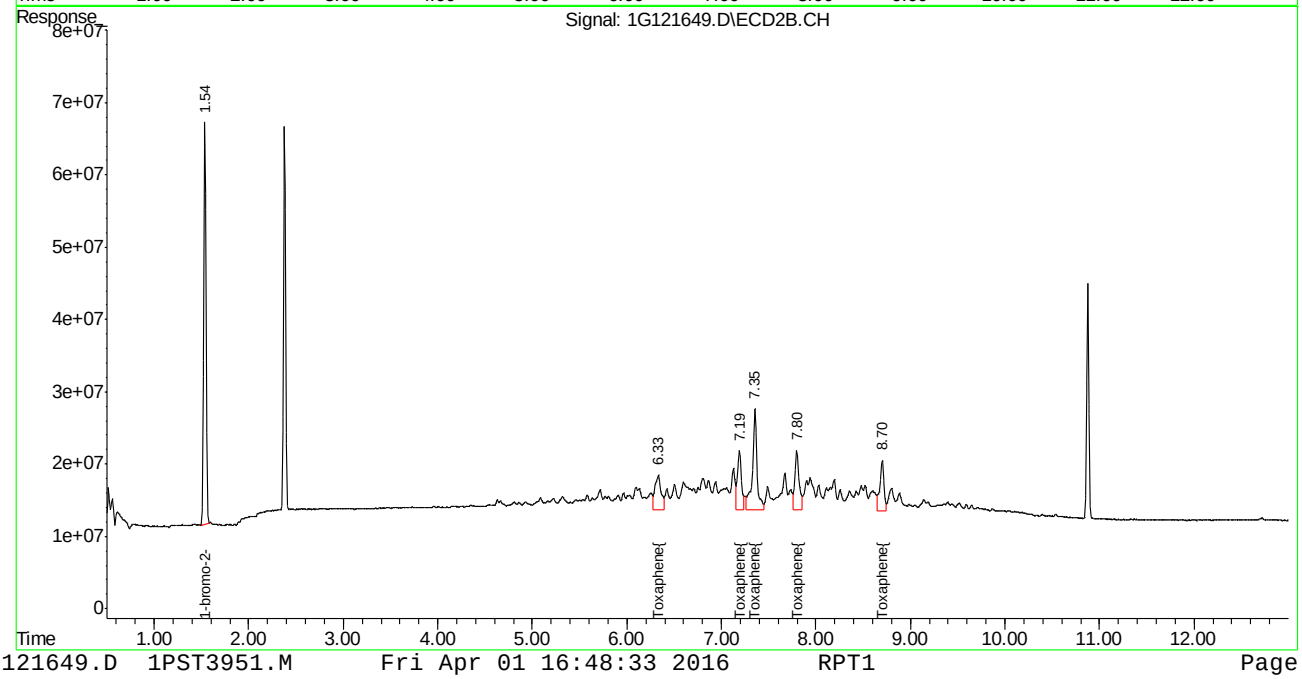
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD2B.CH
Acq On : 4-1-16 01:51:50 PM Operator: dharas
Sample : ic3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:47 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:40:27 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

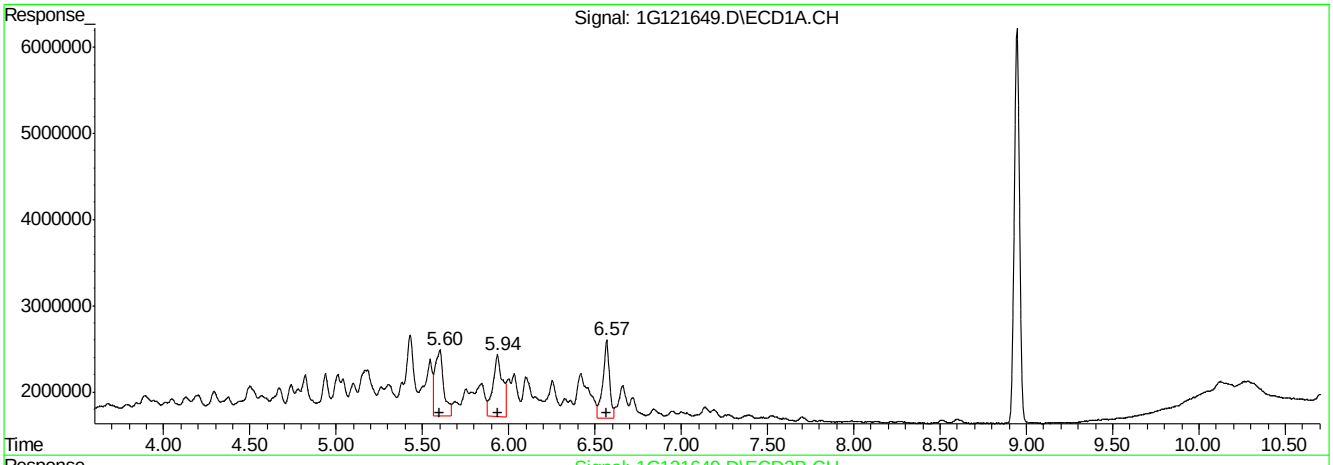
Sample Number:	G1G3951-IC3951	**Method:**	SW846 8081B
Lab FileID:	1G121649.D	**Analyst approved:**	04/01/16 16:48 Joseph Ravino
Injection Time:	04/01/16 13:51	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

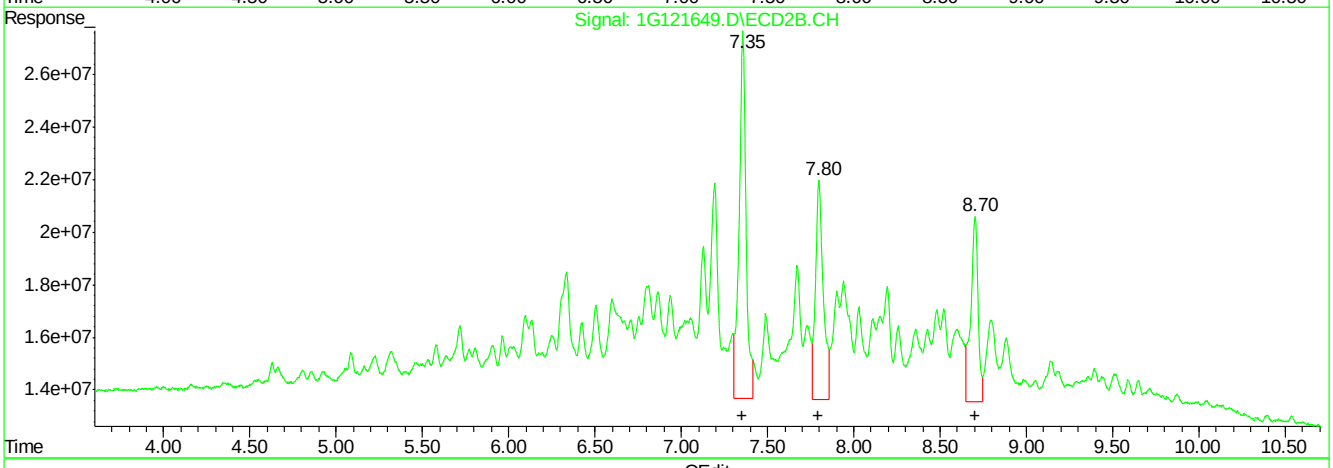
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-C		2	7.35	Split peak

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD2B.CH
Acq On : 4-1-16 01:51:50 PM Operator: dharas
Sample : ic3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:40 2016 Quant Results File: 1PST3951.RES

Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:40:27 2016
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene{C} (L8)

R.T.	Response	Conc
5.60	26884740	500.00
5.94	27149226	393.62
6.57	23968978	500.00

(28) Toxaphene{C} #2 (L8)

R.T.	Response	Conc
7.36	387397359	500.00
7.80	266809118	500.00
8.70	209087308	500.00

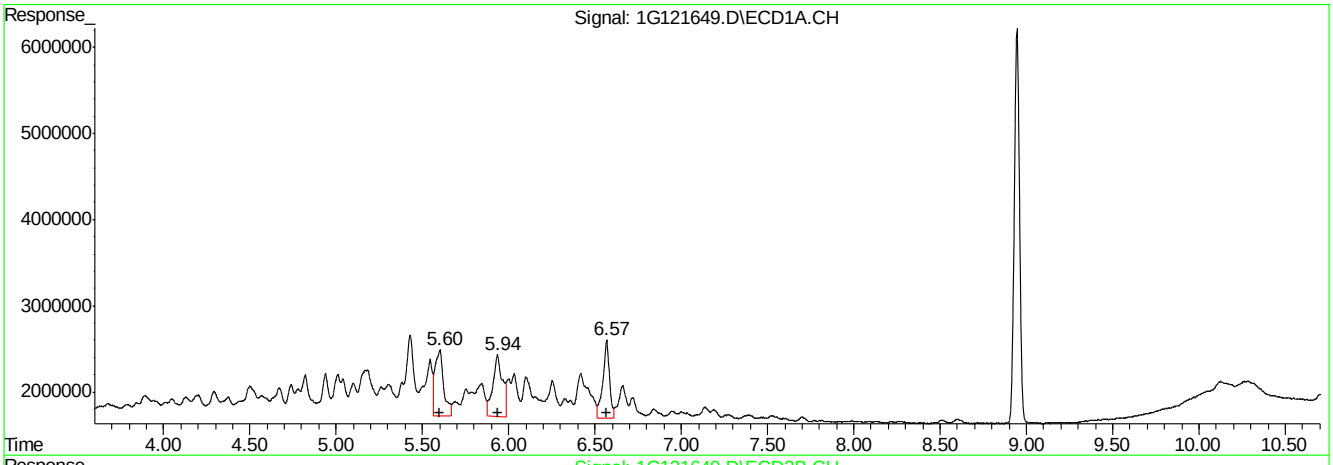
(+) = Expected Retention Time

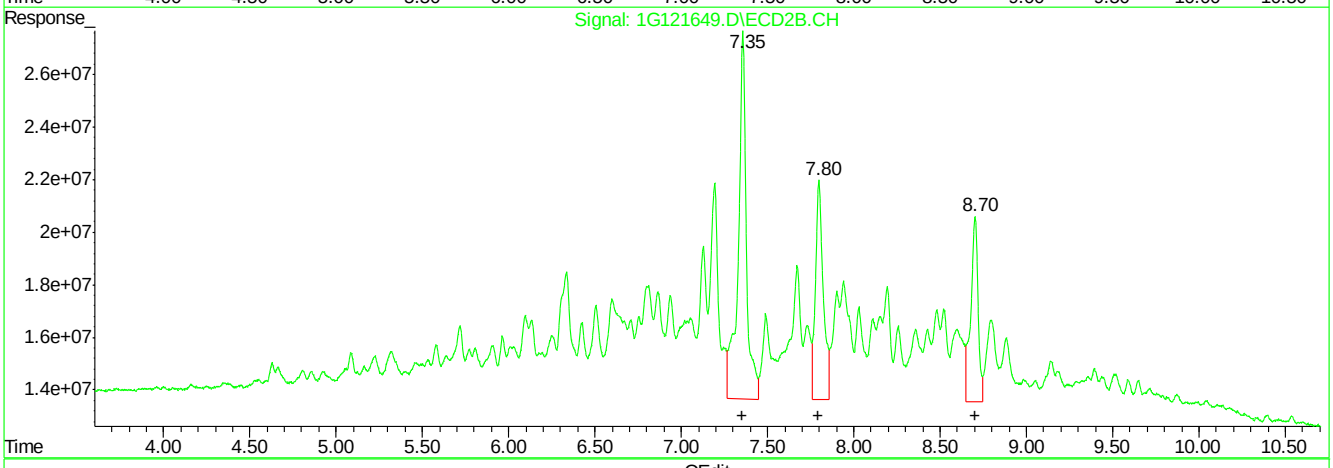
1G121649.D 1PST3951.M Fri Apr 01 16:40:53 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD2B.CH
Acq On : 4-1-16 01:51:50 PM Operator: dharas
Sample : ic3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:40 2016 Quant Results File: 1PST3951.RES

Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:40:27 2016
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene{C} (L8)

R.T.	Response	Conc
5.60	26884740	500.00
5.94	27149226	393.62
6.57	23968978	500.00

(28) Toxaphene{C} #2 (L8)

R.T.	Response	Conc
7.35	463467268	598.18
7.80	266809118	500.00
8.70	209087308	500.00

(+) = Expected Retention Time
1G121649.D 1PST3951.M Fri Apr 01 16:41:36 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD2B.CH
Acq On : 4-1-16 02:09:36 PM Operator: dharas
Sample : icv3951-25 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 17:04 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	76212731	990.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	76212731	990.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	76212731	990.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	31093641	351.8E6	21.342	22.577m
Spiked Amount	40.000 Range	30 - 150	Recovery	=		53.35%	56.44%
24) SA	Decachlorobiphen	8.94	10.88	46733072	244.3E6	23.222	23.842
Spiked Amount	40.000		Recovery	=		58.06%	59.60%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	37872577	518.4E6	21.891m	22.045
4) MA	gamma-BHC	2.51	3.48	36252006	468.5E6	21.957	22.174
5) MA	Heptachlor	2.98	4.05	39010463	422.6E6	21.998	22.249
6) B	beta-BHC	2.59	3.57	18362886	198.9E6	21.856	22.166
7) B	delta-BHC	2.77	3.96	33827132	464.4E6	23.270	23.941
8) MB	Aldrin	3.30	4.50	35904628	427.7E6	21.742	22.524
9) B	Heptachlor Epoxi	4.00	5.33	36333907	397.5E6	22.108	23.122
10) B	gamma-Chlordane	4.16	5.61	36851317	400.7E6	21.275	23.305
11) B	alpha-Chlordane	4.32	5.84	36661616	376.6E6	21.958	22.652
12) A	Endosulfan I	4.50	5.93	33936773	365.1E6	21.375	22.488
13) B	4,4'-DDE	4.44	6.10	33595223	391.1E6	22.024	22.849
14) MA	Dieldrin	4.81	6.37	35580453	412.8E6	22.136	22.710
15) MA	Endrin	5.12	6.87	32765359	369.6E6	21.791	23.435
16) A	4,4'-DDD	5.25	7.06	27085531	340.2E6	21.374	23.420
17) B	Endosulfan II	5.44	7.22	33331896	354.0E6	21.846	22.539
18) MA	4,4'-DDT	5.66	7.59	26358736	286.7E6	21.829	25.223
19) B	Endrin Aldehyde	6.07	7.80	29892100	303.3E6	23.121	24.915
20) B	Endosulfan Sulfa	6.74	8.27	30800113	306.0E6	22.214	23.147
21) A	Methoxychlor	6.44	8.84	18027934	140.9E6	22.169	23.352
23) B	Endrin Ketone	7.17	9.23	35753642	336.3E6	22.079	23.918

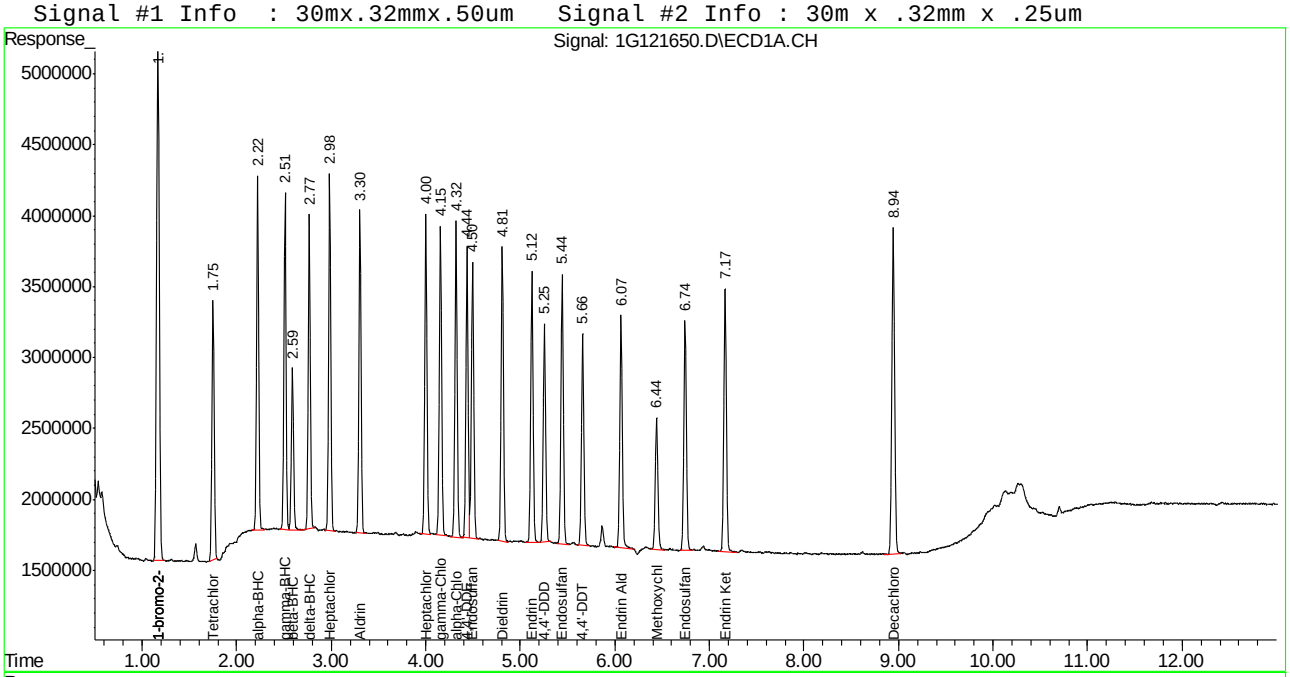
(f)=RT Delta > 1/2 Window (m)=manual int.

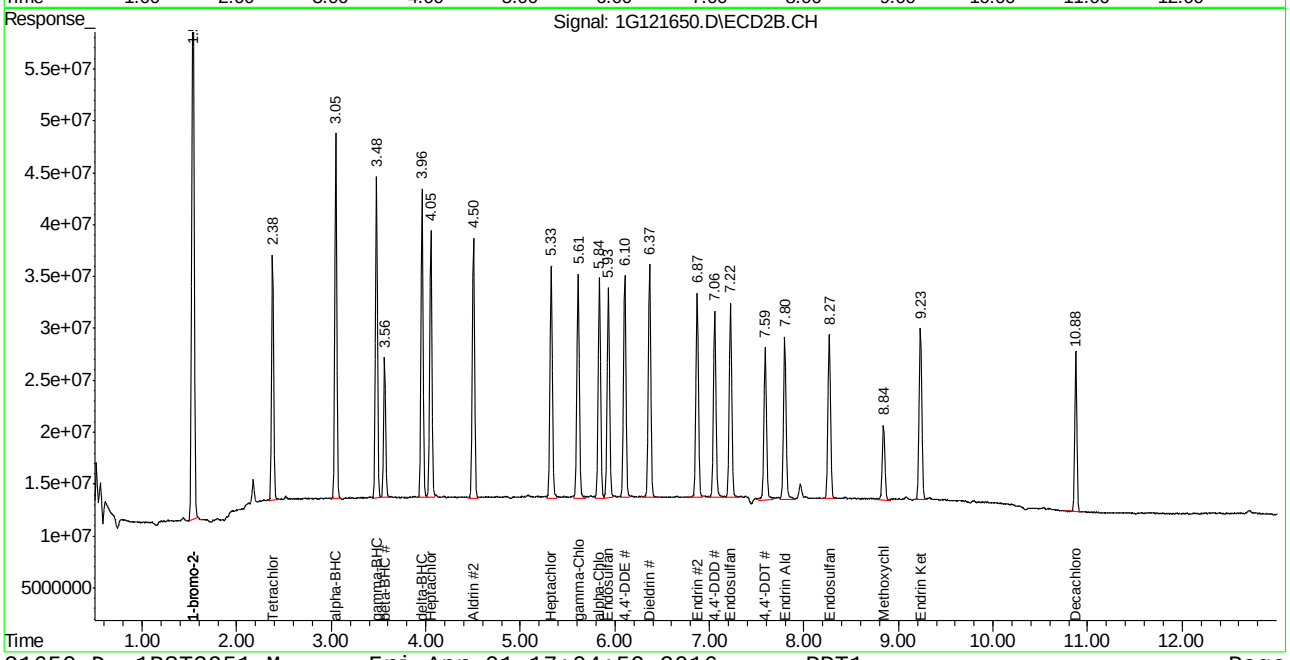
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD2B.CH
Acq On : 4-1-16 02:09:36 PM Operator: dharas
Sample : icv3951-25 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 17:04 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

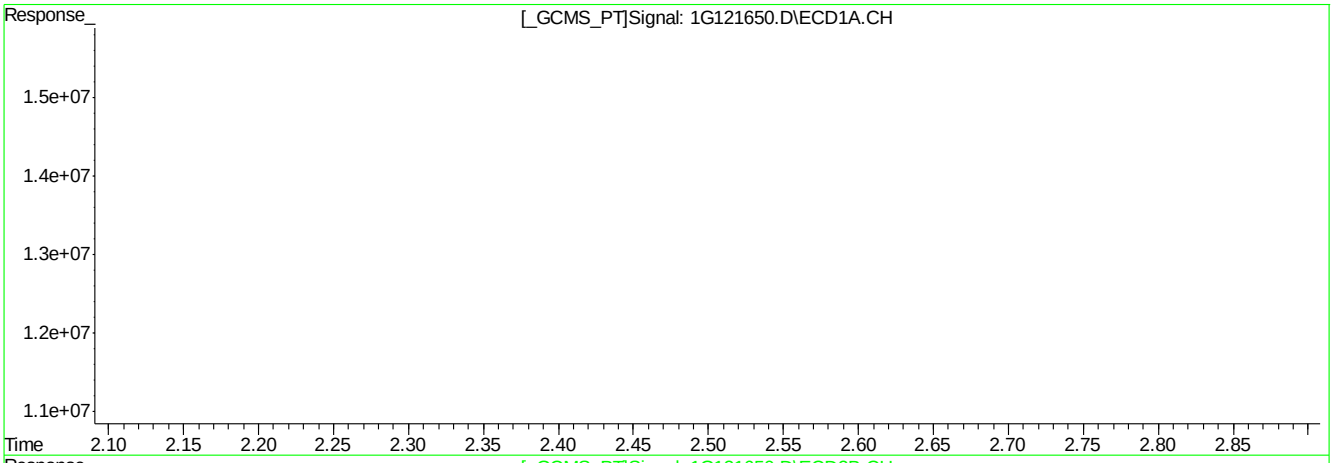
Sample Number:	G1G3951-ICV3951	**Method:**	SW846 8081B
Lab FileID:	1G121650.D	**Analyst approved:**	04/01/16 17:10 Joseph Ravino
Injection Time:	04/01/16 14:09	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

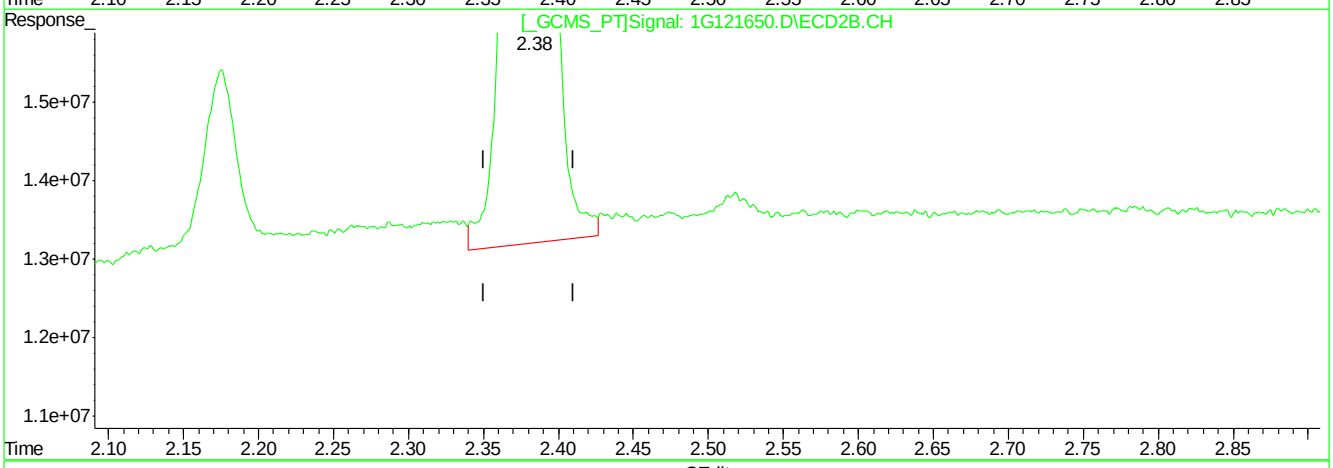
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.22	Poor instrument integration
Tetrachloro-m-xylene	877-09-8	2	2.38	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD2B.CH
Acq On    : 4-1-16 02:09:36 PM                      Operator: dharas
Sample    : icv3951-25                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 17:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 21.342PPB

response 31093641

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 23.414PPB

response 364829351

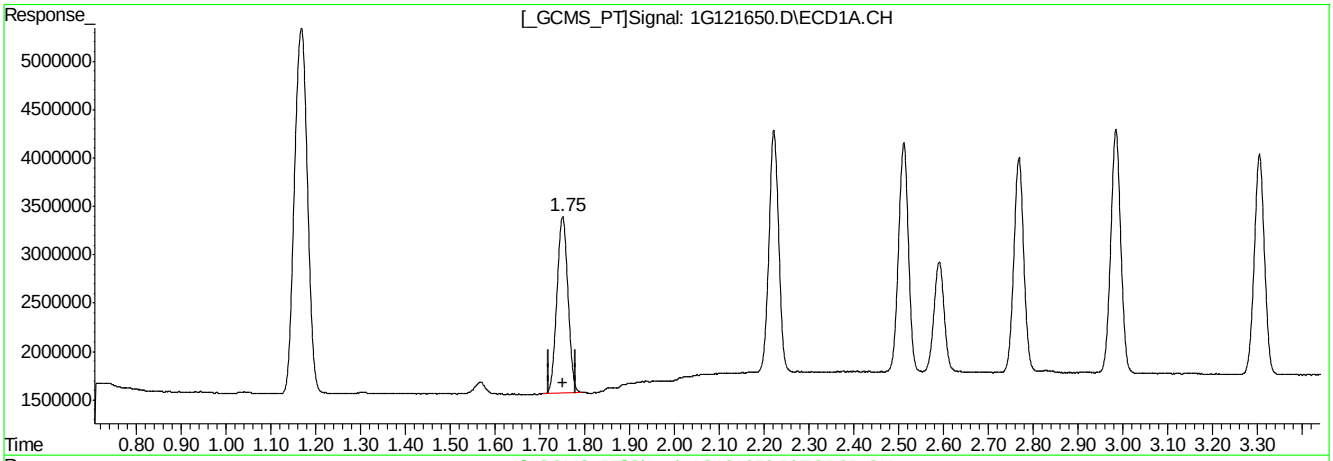
(+) = Expected Retention Time

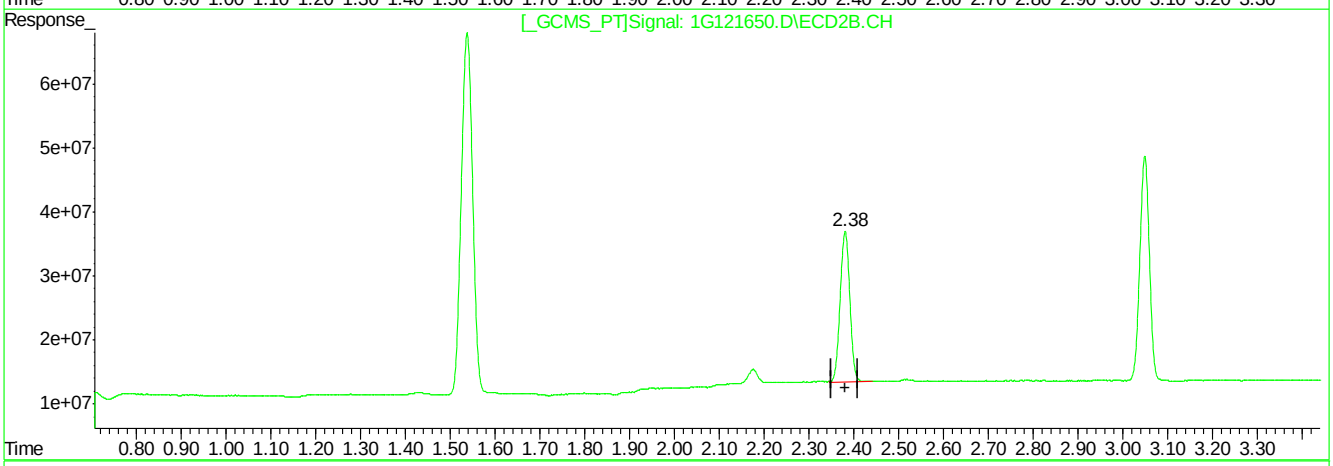
1G121650.D 1PST3951.M Fri Apr 01 17:04:18 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD2B.CH
Acq On    : 4-1-16 02:09:36 PM                      Operator: dharas
Sample    : icv3951-25                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 17:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 21.342PPB

response 31093641

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 22.577PPB m

response 351797491

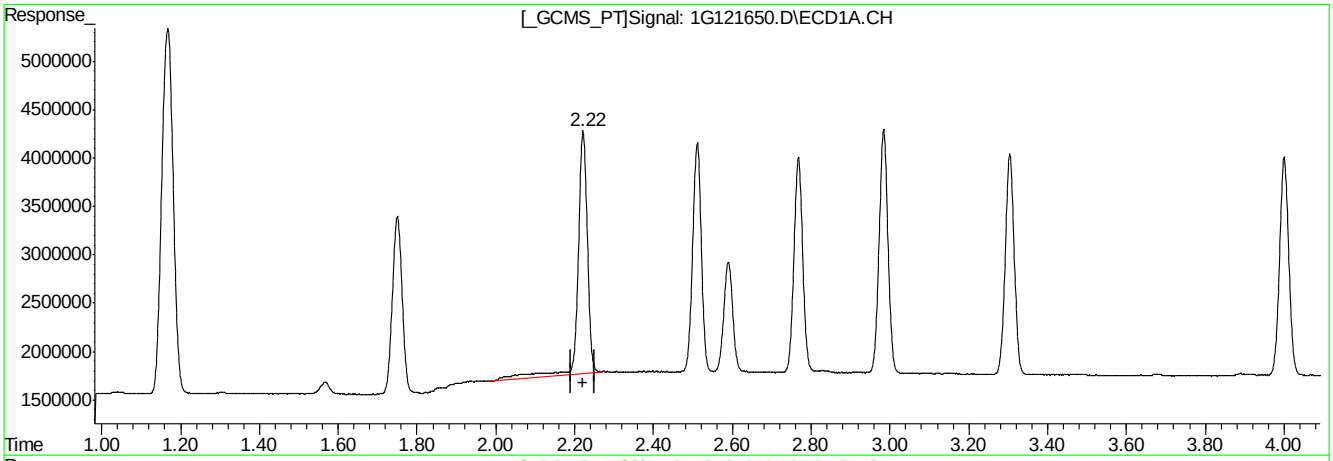
(+) = Expected Retention Time

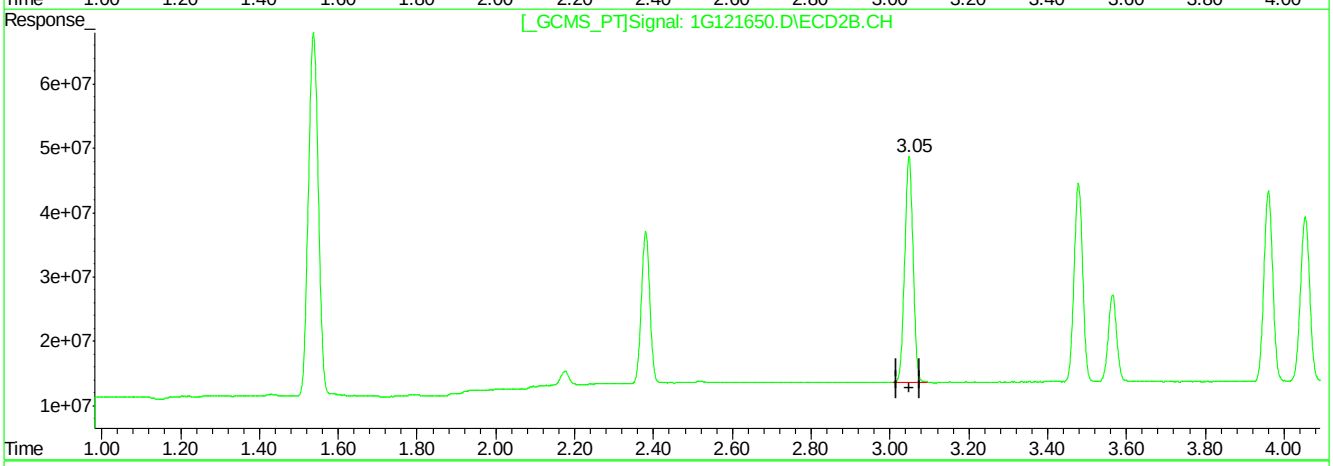
1G121650.D 1PST3951.M Fri Apr 01 17:04:24 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD2B.CH
Acq On    : 4-1-16 02:09:36 PM                      Operator: dharas
Sample    : icv3951-25                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 17:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 23.985PPB

response 41495139

(3) alpha-BHC #2 (A)

3.05min 22.045PPB

response 518359048

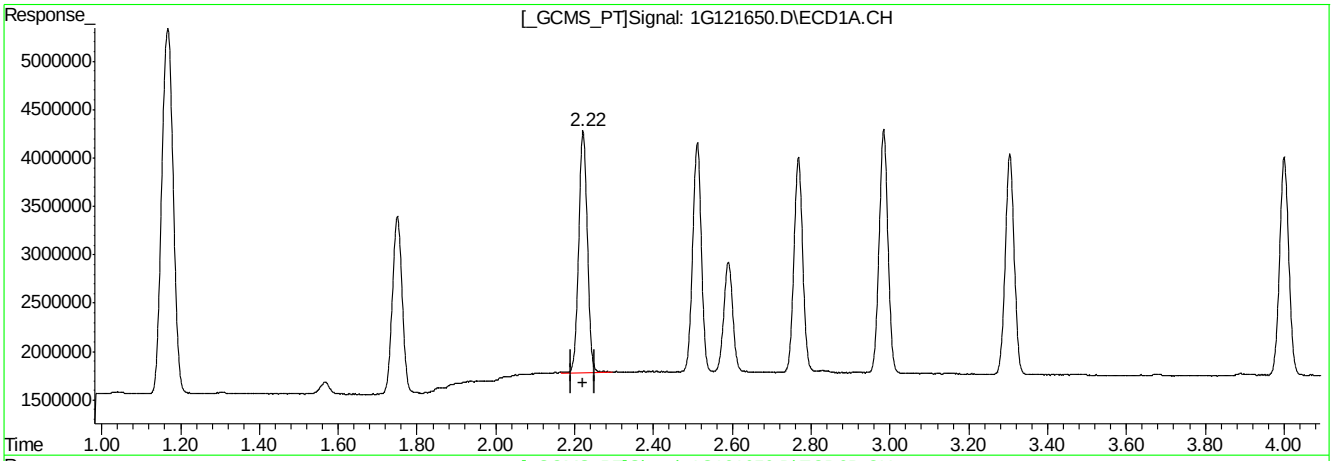
(+) = Expected Retention Time

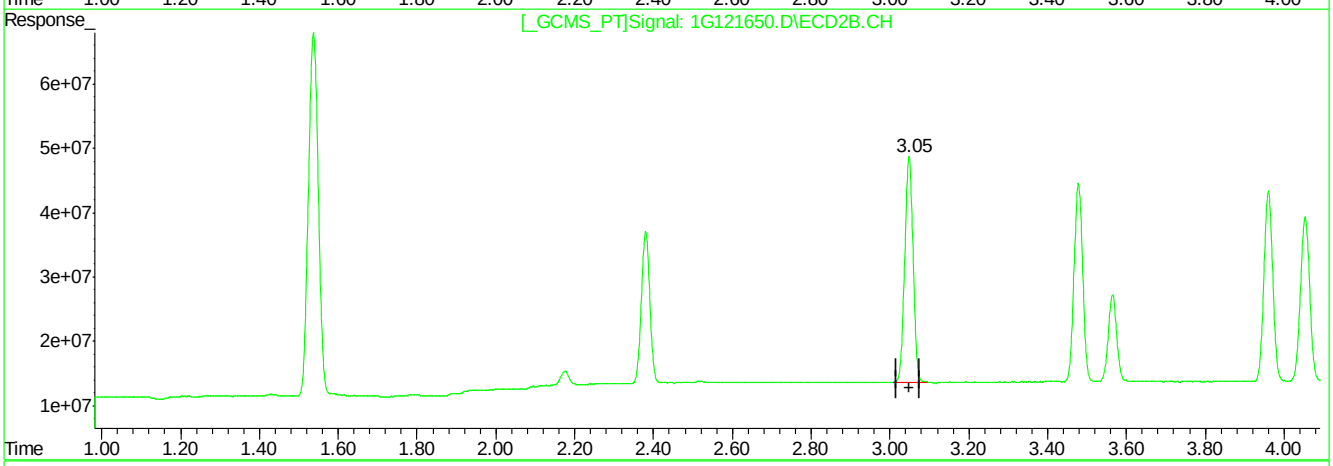
1G121650.D 1PST3951.M Fri Apr 01 17:04:28 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD2B.CH
Acq On    : 4-1-16 02:09:36 PM                      Operator: dharas
Sample    : icv3951-25                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 17:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 21.891PPB m

response 37872577

(3) alpha-BHC #2 (A)

3.05min 22.045PPB

response 518359048

(+) = Expected Retention Time

1G121650.D 1PST3951.M Fri Apr 01 17:04:32 2016 RPT1

Manual Integrations
APPROVED
(compounds with "m" flag)
Gwendolyn Burns
04/04/16 12:58

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD2B.CH
Acq On    : 4-1-16 02:27:16 PM                        Operator: dharas
Sample    : icv3951-25                                Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 17:05 2016  Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```

		Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
		Internal Standards						
1)	I	1-bromo-2-nitrob	1.17	1.54	75508646	987.1E6	50.000	50.000
25)	I	1-bromo-2-nitrob	1.17	1.54	75508646	987.1E6	50.000	50.000
31)	I	1-bromo-2-nitrob	1.17	1.54	75508646	987.1E6	50.000	50.000
		System Monitoring Compounds						
		Target Compounds						
22)		Mirex	6.54	9.16	37714315	254.5E6	24.707m	25.262

9.6.12

9

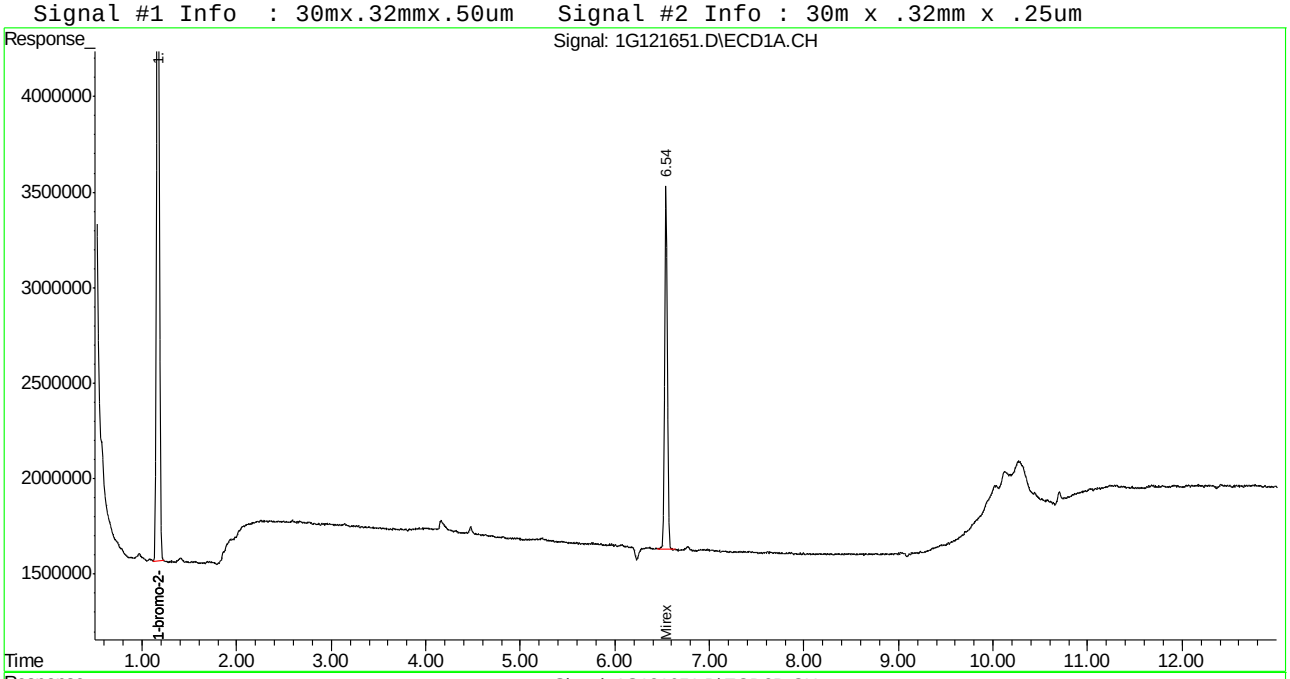
(f)=RT Delta > 1/2 Window (m)=manual int.

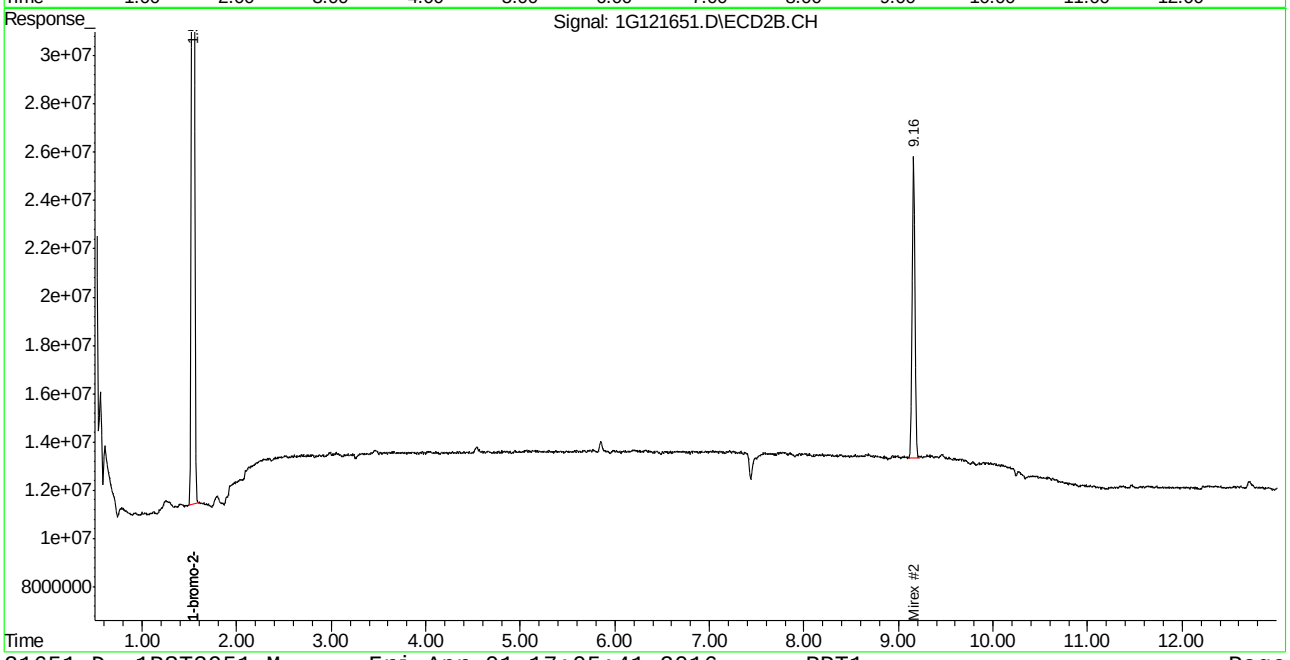
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD2B.CH
Acq On : 4-1-16 02:27:16 PM Operator: dharas
Sample : icv3951-25 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 17:05 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

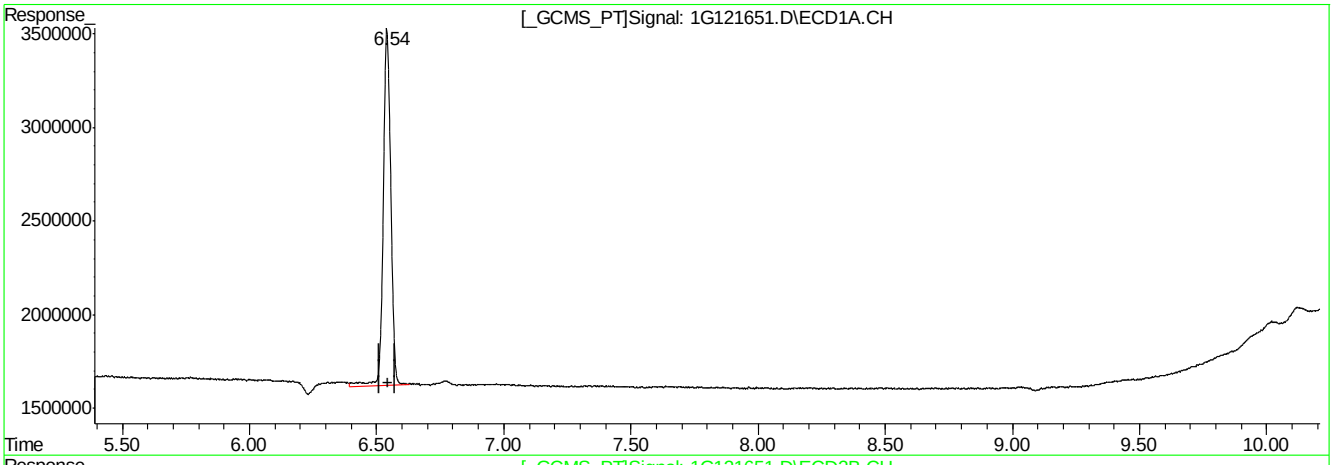
Sample Number:	G1G3951-ICV3951	**Method:**	SW846 8081B
Lab FileID:	1G121651.D	**Analyst approved:**	04/01/16 17:10 Joseph Ravino
Injection Time:	04/01/16 14:27	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

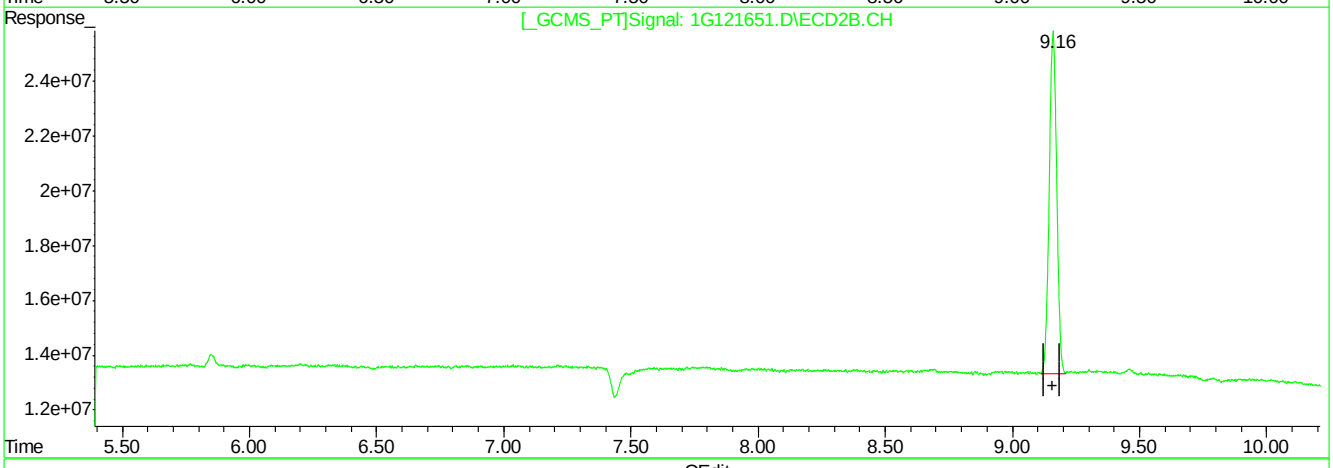
Parameter	CAS	Sig#	R.T. (min.)	Reason
Mirex	2385-85-5	1	6.54	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD2B.CH
Acq On    : 4-1-16 02:27:16 PM                      Operator: dharas
Sample    : icv3951-25                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 17:05 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(22) Mirex

6.54min 25.780PPB

response 39352871

(22) Mirex #2

9.16min 25.262PPB

response 254492810

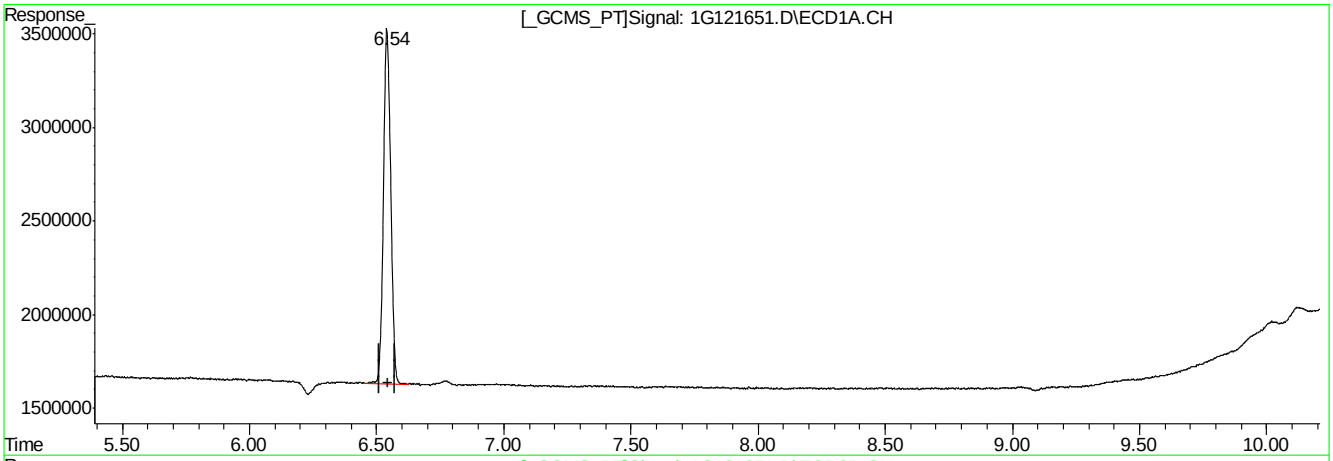
(+) = Expected Retention Time

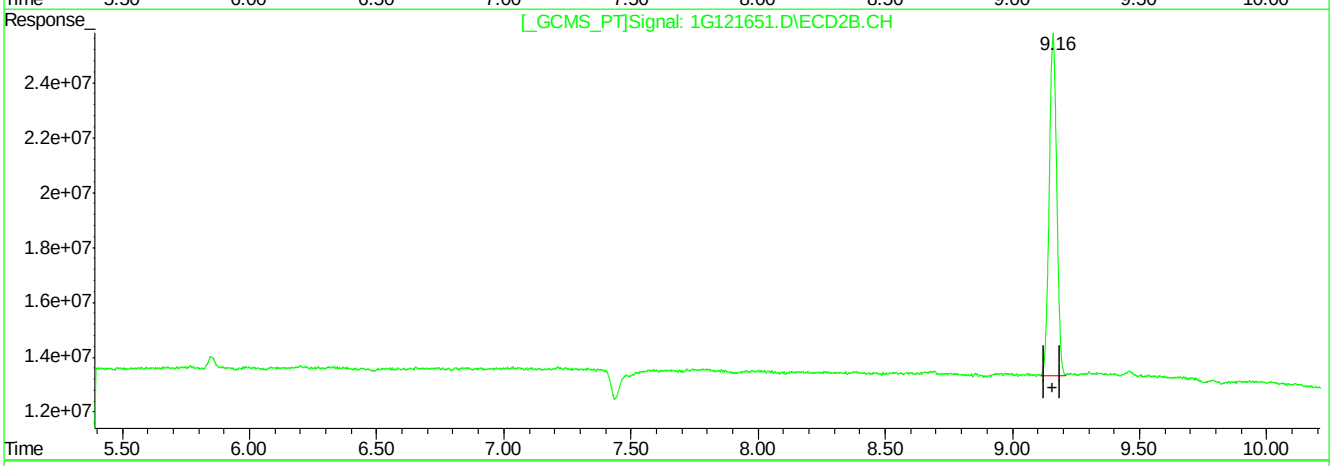
1G121651.D 1PST3951.M Fri Apr 01 17:05:30 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD2B.CH
Acq On    : 4-1-16 02:27:16 PM                      Operator: dharas
Sample    : icv3951-25                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 17:05 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(22) Mirex

6.54min 24.707PPB m

response 37714315

(22) Mirex #2

9.16min 25.262PPB

response 254492810

(+) = Expected Retention Time

1G121651.D 1PST3951.M Fri Apr 01 17:05:35 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD2B.CH
Acq On : 4-1-16 02:44:56 PM Operator: dharas
Sample : icv3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:37 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:36:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	75887273	978.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	75887273	978.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	75887273	978.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	62879124	686.8E6	43.403	44.671
Spiked Amount	40.000	Range	30 - 150	Recovery	=	108.51%	111.68%
24) SA	Decachlorobiphen	8.94	10.88	91895480	467.2E6	45.921	46.203
Spiked Amount	40.000			Recovery	=	114.80%	115.51%
	Target Compounds						
32)	Chlordane {A}	2.90	3.86	28035380	327.1E6	568.051	569.296
33)	Chlordane {B}	3.45	4.70	33180697	298.6E6	492.279	510.673
34)	Chlordane {C}	4.16	5.61	106.8E6	985.9E6	471.738	497.754
35)	Chlordane {D}	4.31	5.84	172.9E6	1639.2E6	484.101	506.584m
36)	Chlordane {E}	5.34	7.30	24598067	309.1E6	495.048	512.357

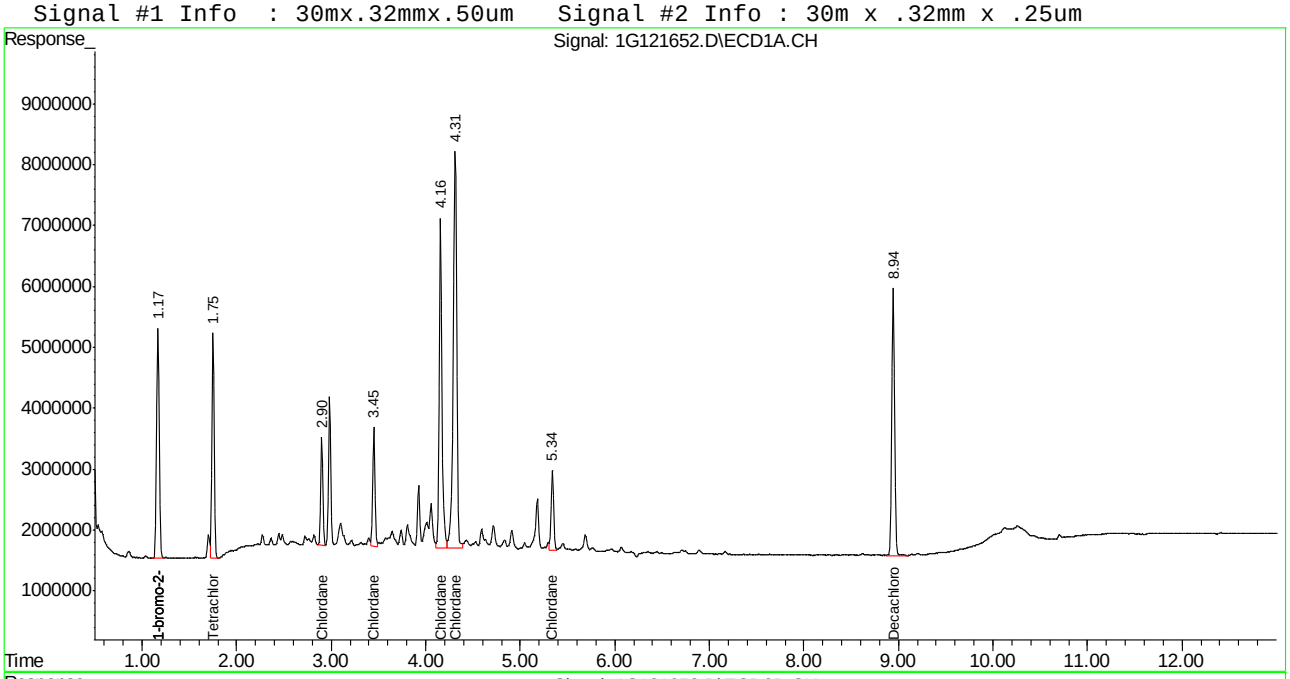
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121652.D 1PST3951.M Fri Apr 01 16:38:07 2016 RPT1 Page 1

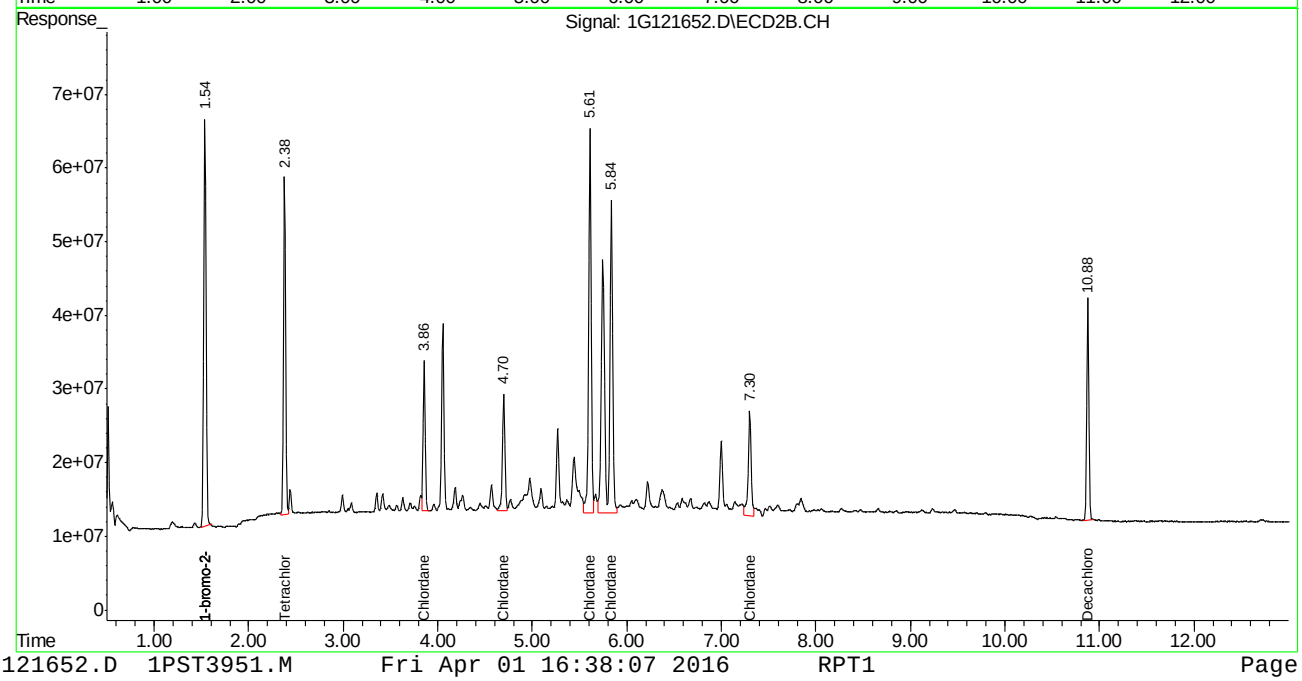
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD2B.CH
Acq On : 4-1-16 02:44:56 PM Operator: dharas
Sample : icv3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:37 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:36:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

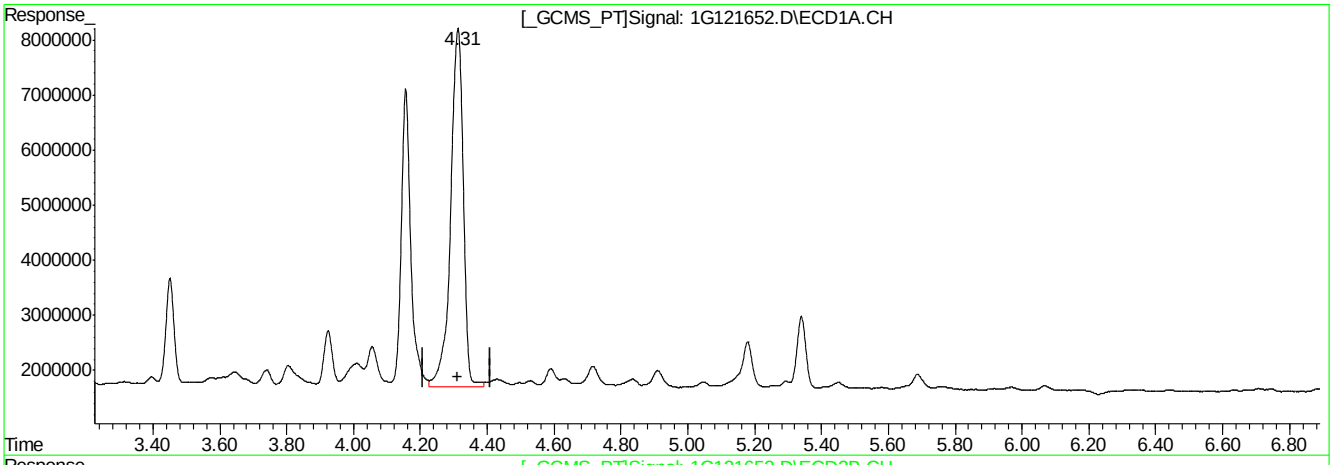
Sample Number:	G1G3951-ICV3951	**Method:**	SW846 8081B
Lab FileID:	1G121652.D	**Analyst approved:**	04/01/16 17:10 Joseph Ravino
Injection Time:	04/01/16 14:44	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

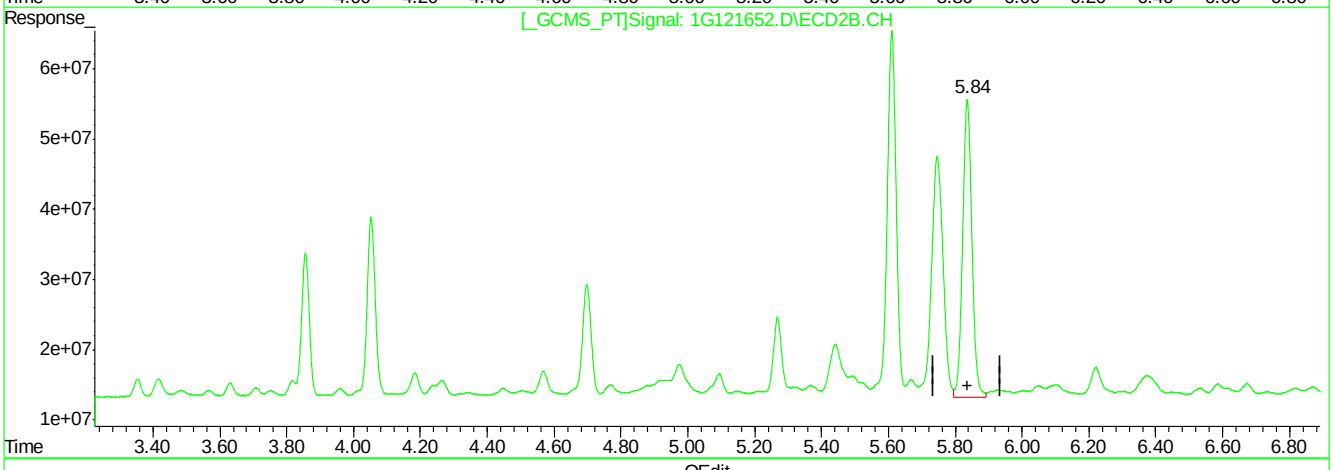
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	5.84	Split peak

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD2B.CH
Acq On    : 4-1-16 02:44:56 PM                      Operator: dharas
Sample    : icv3951-500                             Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:37 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:36:57 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.31min 484.101PPB

response 172913428

(35) Chlordane {D} #2

5.84min 252.047PPB

response 815562234

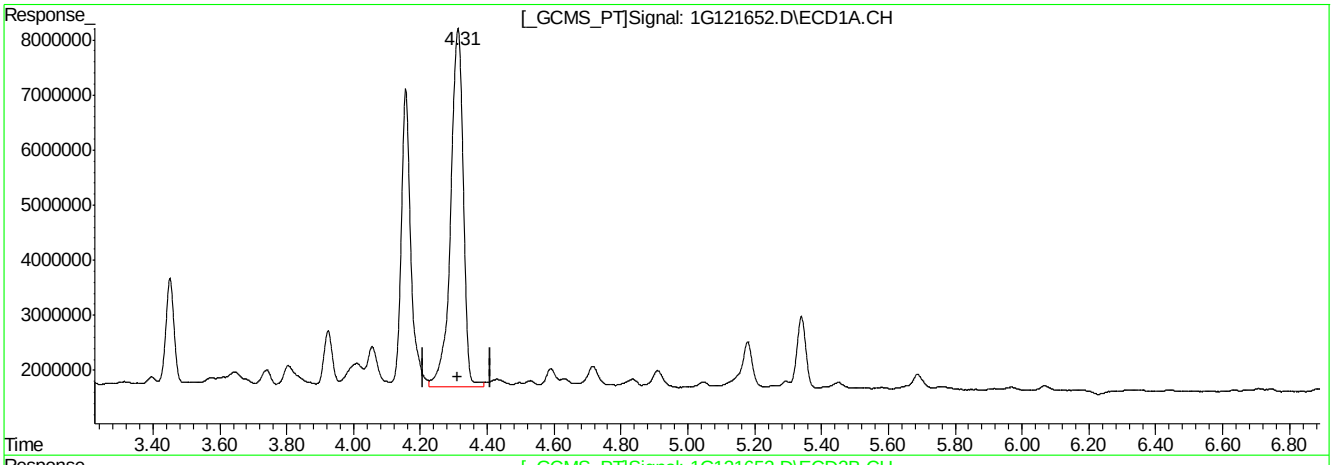
(+) = Expected Retention Time

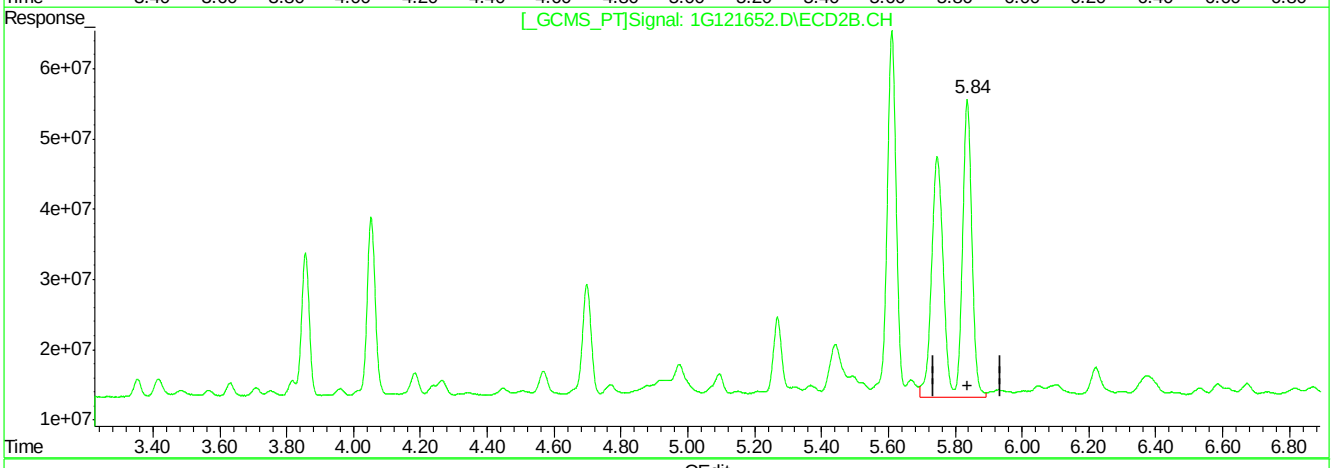
1G121652.D 1PST3951.M Fri Apr 01 16:37:46 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD2B.CH
Acq On    : 4-1-16 02:44:56 PM                      Operator: dharas
Sample    : icv3951-500                             Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:37 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:36:57 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.31min 484.101PPB

response 172913428

(35) Chlordane {D} #2

5.84min 506.584PPB m

response 1639181486

(+) = Expected Retention Time

1G121652.D 1PST3951.M Fri Apr 01 16:38:01 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD2B.CH
Acq On : 4-1-16 03:02:33 PM Operator: dharas
Sample : icv3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:46 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:44:01 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	75922584	968.5E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	75922584	968.5E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	75922584	968.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	59724960	655.6E6	41.411	43.197
Spiked Amount	40.000	Range	30 - 150	Recovery	=	103.53%	107.99%
24) SA	Decachlorobiphen	8.94	10.88	86847713	446.4E6	43.589	44.718
Spiked Amount	40.000			Recovery	=	108.97%	111.80%
	Target Compounds						
26) L8	Toxaphene{A}	4.82	6.33	12725005	207.1E6	474.595	496.977m
27) L8	Toxaphene{B}	5.43	7.19	33557712	232.7E6	470.658	479.603
28) L8	Toxaphene{C}	5.60	7.36	25093948	443.9E6	462.575m	479.572m
29) L8	Toxaphene{D}	5.93	7.80	24714518	256.7E6	451.143	481.781
30) L8	Toxaphene{E}	6.57	8.70	23040564	188.8E6	476.390	452.054

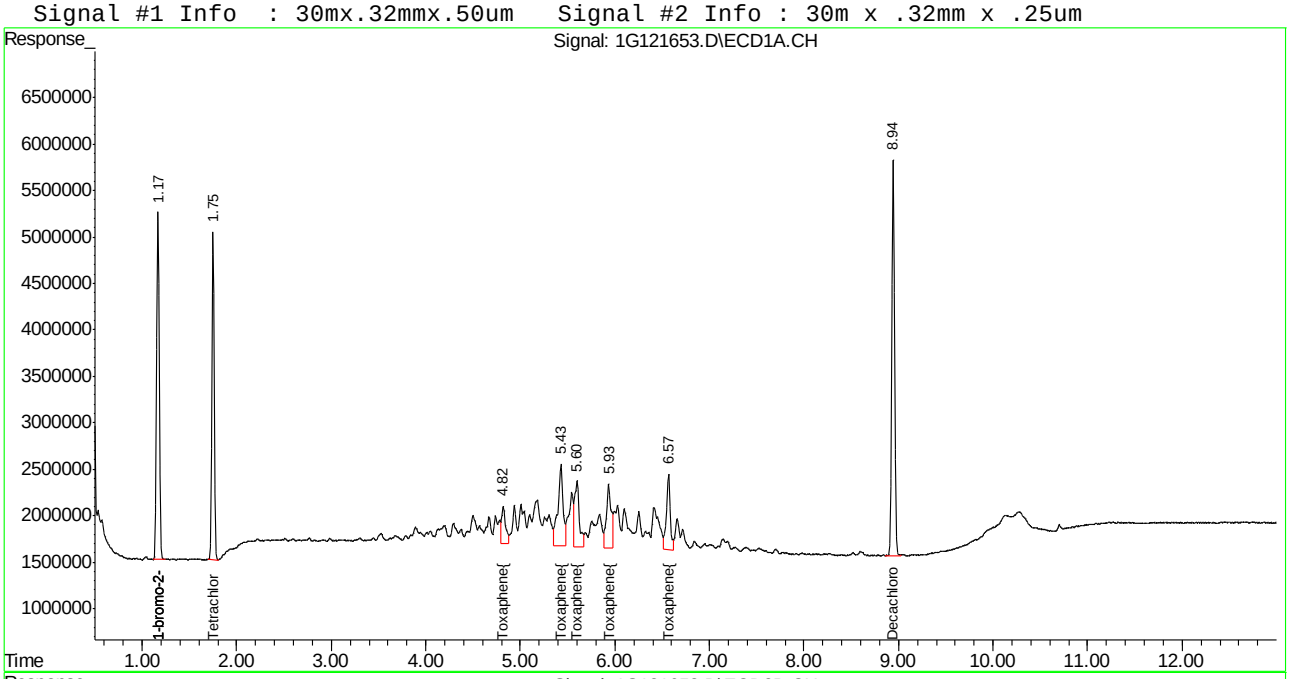
(f)=RT Delta > 1/2 Window (m)=manual int.

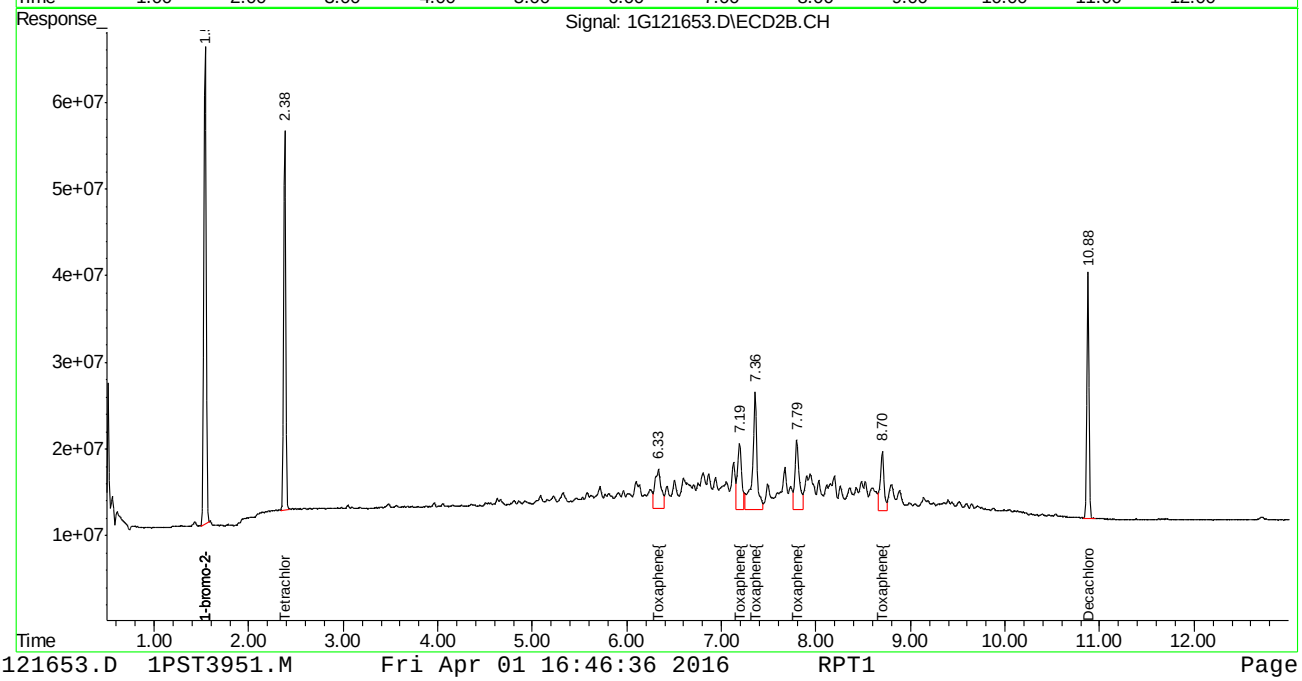
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD2B.CH
Acq On : 4-1-16 03:02:33 PM Operator: dharas
Sample : icv3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:46 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:44:01 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

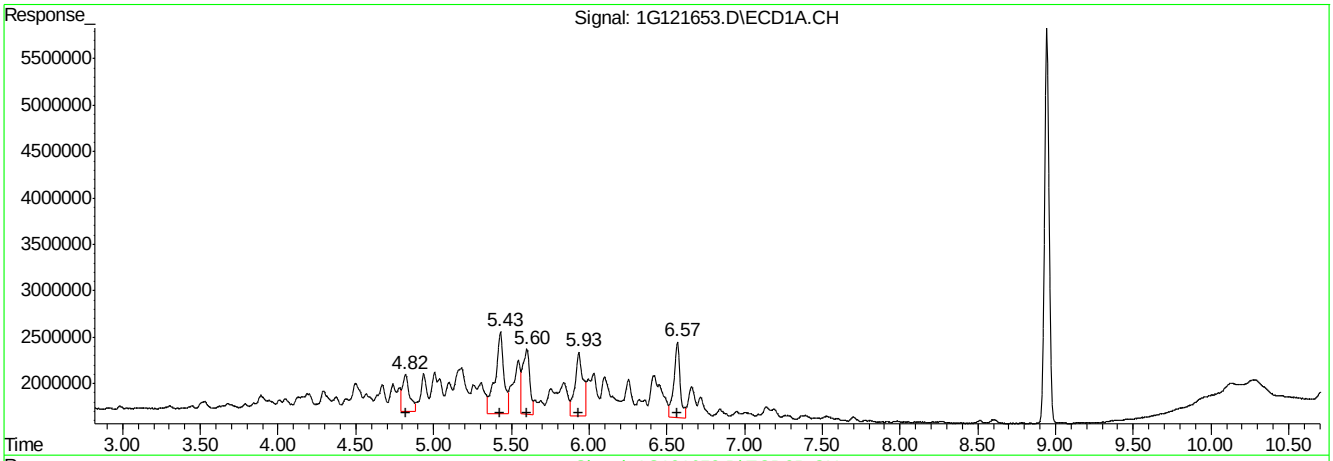
Sample Number:	G1G3951-ICV3951	**Method:**	SW846 8081B
Lab FileID:	1G121653.D	**Analyst approved:**	04/01/16 17:10 Joseph Ravino
Injection Time:	04/01/16 15:02	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

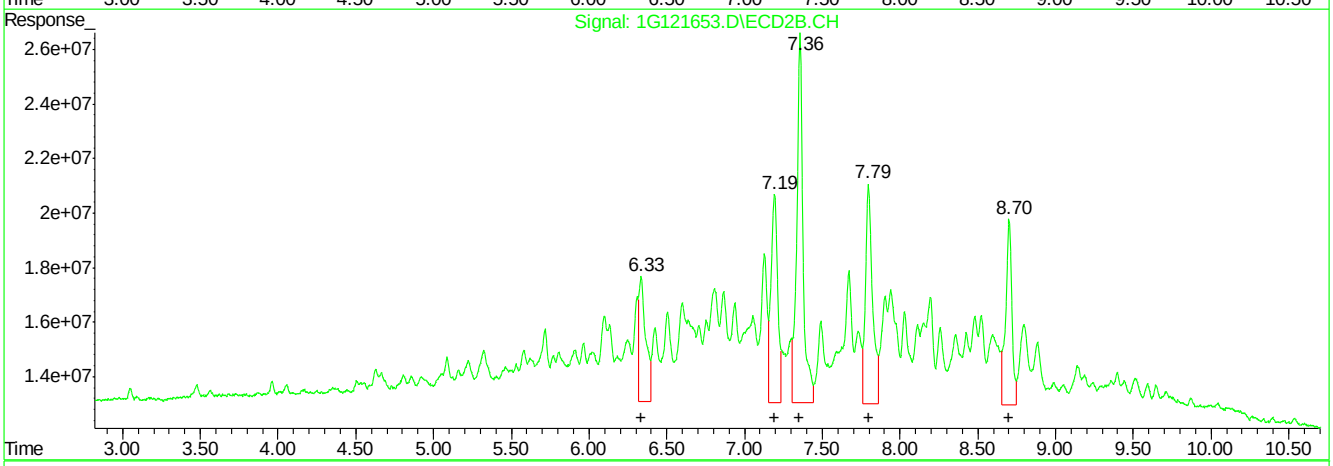
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-C		1	5.60	Split peak
Toxaphene-A		2	6.33	Split peak
Toxaphene-C		2	7.36	Split peak

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD2B.CH
Acq On    : 4-1-16 03:02:33 PM                      Operator: dharas
Sample    : icv3951-500                             Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:44 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:44:01 2016
Response via : Multiple Level Calibration
```





QEdit

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
4.82	12725005	474.59
5.43	33557712	470.66
5.60	22457778	413.98
5.93	24714518	451.14
6.57	23040564	476.39

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.33	145405014	348.90
7.19	232705693	479.60
7.36	376250782	406.51
7.80	256705805	481.78
8.70	188757181	452.05

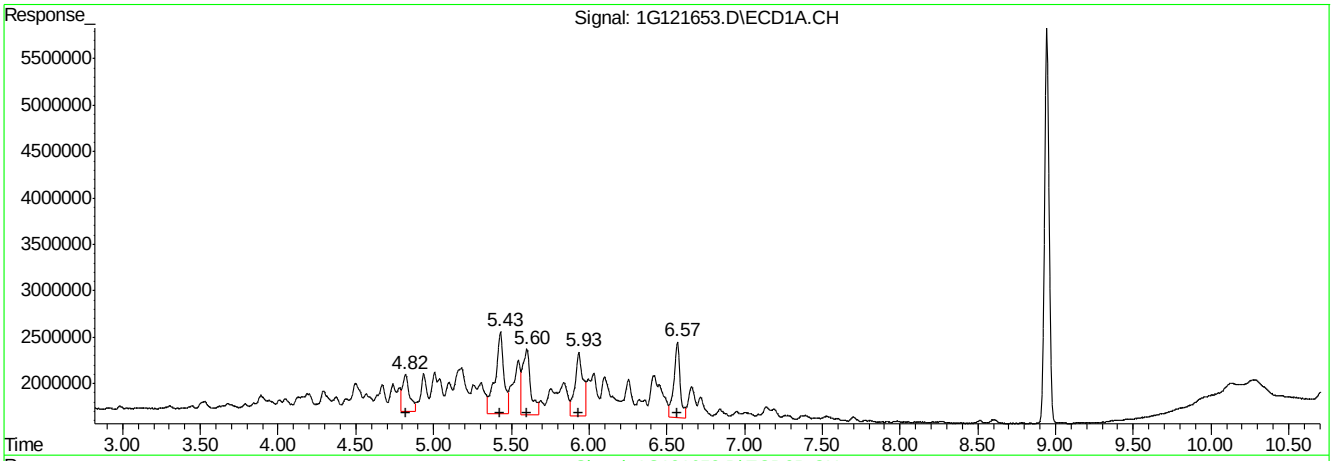
(+) = Expected Retention Time

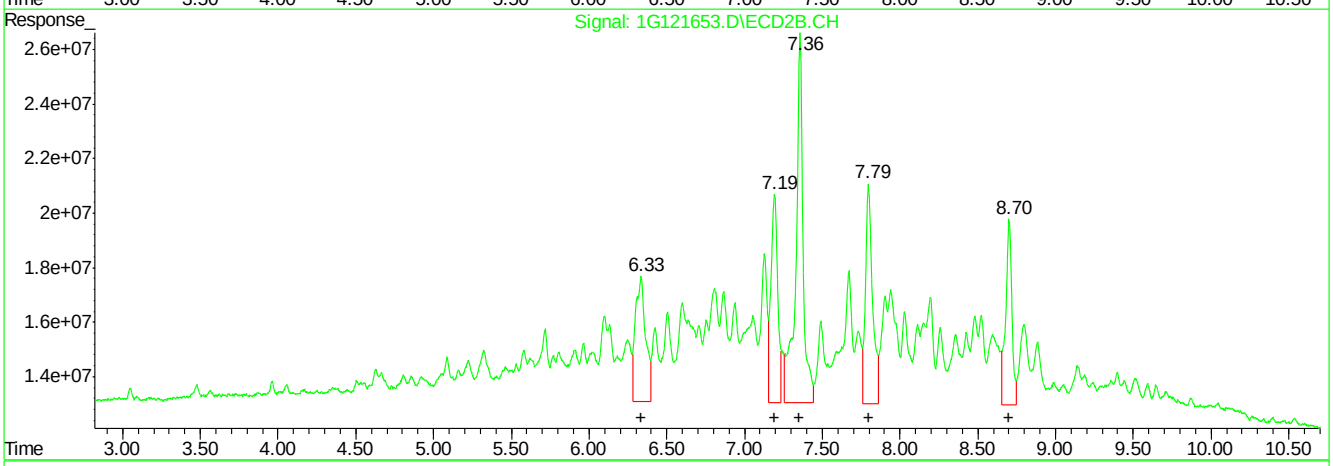
1G121653.D 1PST3951.M Fri Apr 01 16:44:47 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD2B.CH
Acq On    : 4-1-16 03:02:33 PM                      Operator: dharas
Sample    : icv3951-500                             Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:45 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:44:01 2016
Response via : Multiple Level Calibration
```





QEdit

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
4.82	12725005	474.59
5.43	33557712	470.66
5.60	25093948	462.58
5.93	24714518	451.14
6.57	23040564	476.39

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.33	207115003	496.98
7.19	232705693	479.60
7.36	443872973	479.57
7.80	256705805	481.78
8.70	188757181	452.05

(+) = Expected Retention Time

1G121653.D 1PST3951.M Fri Apr 01 16:46:24 2016 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122349.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122349.D\ECD2B.CH
Acq On : 4-21-16 09:14:32 AM Operator: brittanp
Sample : cc3951-50 Inst : GC1G
Misc : op93213,g1g3968,15.3,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 9:44 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.17	1.54	57957982	810.1E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	57957982	810.1E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	57957982	810.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	56411238	642.7E6	50.914	50.413
Spiked Amount	40.000	Range	30 - 150	Recovery	=	127.29%	126.03%
24) SA	Decachlorobiphen	8.93	10.87	82948852	300.2E6	54.199	35.810
Spiked Amount	40.000			Recovery	=	135.50%	89.53%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	77433524	998.6E6	58.856	51.912
4) MA	gamma-BHC	2.51	3.47	73337443	884.1E6	58.410	51.151
5) MA	Heptachlor	2.98	4.05	79809784	784.6E6	59.180	50.495
6) B	beta-BHC	2.59	3.56	33244574	357.1E6	52.031	48.640
7) B	delta-BHC	2.77	3.96	65012900	842.8E6	58.809	53.104
8) MB	Aldrin	3.30	4.50	74649290	784.5E6	59.442	50.505
9) B	Heptachlor Epoxi	3.99	5.32	73061843	699.6E6	58.459	49.744
10) B	gamma-Chlordane	4.15	5.61	75379595	692.3E6	57.226	49.209
11) B	alpha-Chlordane	4.31	5.83	74460422	659.5E6	58.643	48.483
12) A	Endosulfan I	4.49	5.92	73304829	656.3E6	60.715	49.412
13) B	4,4'-DDE	4.43	6.10	68553772	671.6E6	59.096	47.953
14) MA	Dieldrin	4.80	6.36	73116114	711.5E6	59.815	47.845
15) MA	Endrin	5.11	6.86	65435456	611.7E6	57.226	47.412
16) A	4,4'-DDD	5.25	7.05	55207896	569.7E6	57.288	47.936
17) B	Endosulfan II	5.43	7.22	67379001	593.3E6	58.070	46.179
18) MA	4,4'-DDT	5.65	7.58	55114896	454.8E6	60.019	48.908
19) B	Endrin Aldehyde	6.06	7.79	57728288	468.9E6	58.716	47.080
20) B	Endosulfan Sulfa	6.73	8.26	64643160	504.8E6	61.308	46.680
21) A	Methoxychlor	6.44	8.83	35008460	219.1E6	56.609	44.385
22)	Mirex	6.53	9.15	66650038	363.8E6	56.884	44.000
23) B	Endrin Ketone	7.16	9.22	75823432	548.8E6	61.572	47.708

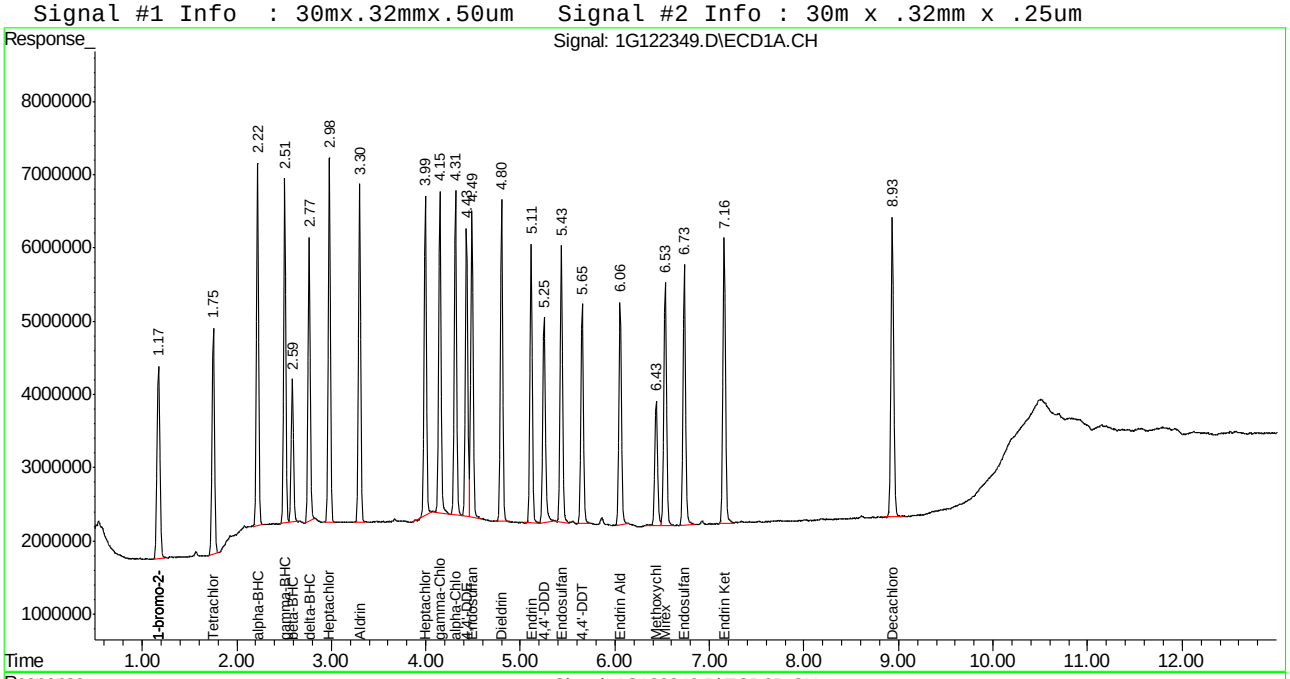
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122349.D 1PST3951.M Thu Apr 21 11:46:43 2016 RPT1 Page 1

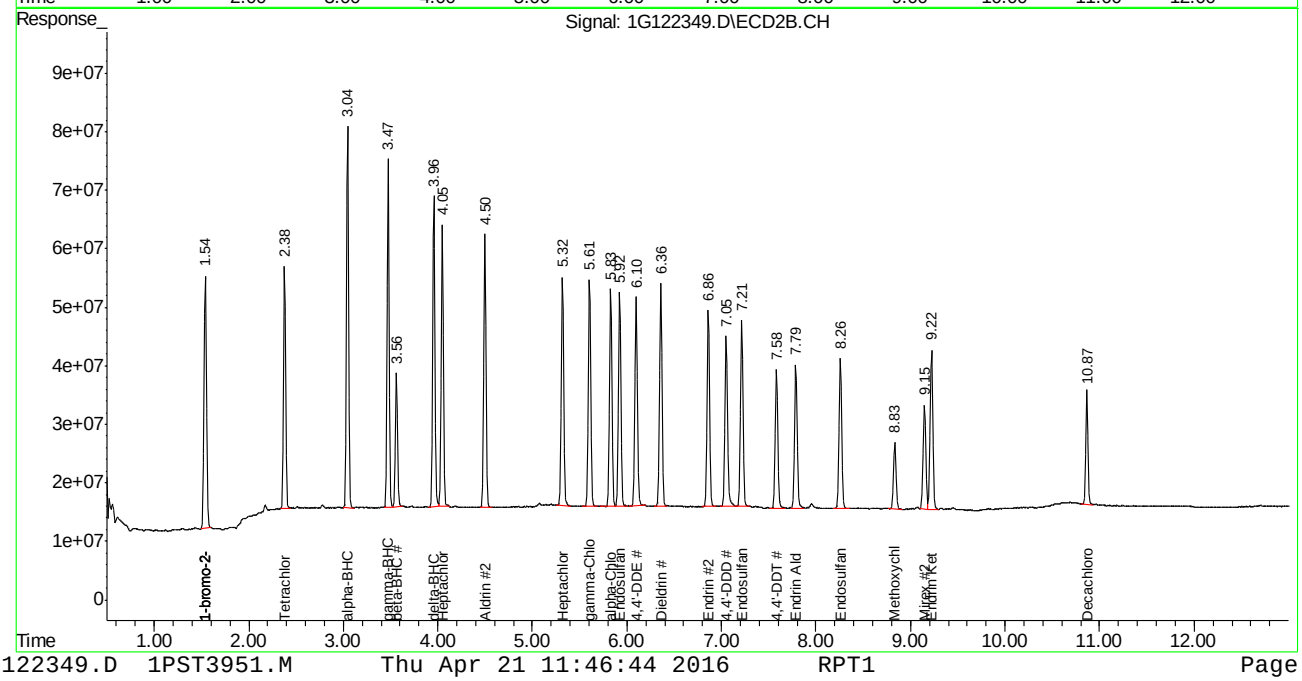
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122349.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122349.D\ECD2B.CH
Acq On : 4-21-16 09:14:32 AM Operator: brittanp
Sample : cc3951-50 Inst : GC1G
Misc : op93213,g1g3968,15.3,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 9:44 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS 1243 of 1421 ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122388.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122388.D\ECD2B.CH
Acq On : 4-21-16 06:05:53 PM Operator: dharas
Sample : cc3951-50 Inst : GC1G
Misc : op93252,g1g3968,15.4,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 18:20 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2-nitrob	1.16	1.53	57577027	807.1E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.16	1.53	57577027	807.1E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.16	1.53	57577027	807.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.74	2.37	57392789	656.9E6	52.142	51.722
Spiked Amount	40.000	Range	30 - 150	Recovery	=	130.35%	129.31%
24) SA	Decachlorobiphen	8.93	10.87	96762016	446.0E6	63.643	53.400
Spiked Amount	40.000			Recovery	=	159.11%	133.50%
	Target Compounds						
3) A	alpha-BHC	2.21	3.04	77560556	1019.4E6	59.343	53.191
4) MA	gamma-BHC	2.50	3.47	73291112	906.2E6	58.760	52.629
5) MA	Heptachlor	2.97	4.04	80221304	820.2E6	59.879	52.987
6) B	beta-BHC	2.58	3.56	32818818	387.3E6	51.705	52.947
7) B	delta-BHC	2.76	3.95	61664240	854.2E6	56.149	54.025
8) MB	Aldrin	3.29	4.49	75760109	810.5E6	60.726	52.372
9) B	Heptachlor Epoxi	3.99	5.32	74988448	732.5E6	60.397	52.282
10) B	gamma-Chlordane	4.14	5.60	74210800	714.5E6	56.711	50.976
11) B	alpha-Chlordane	4.31	5.83	74849183	686.4E6	59.339	50.652
12) A	Endosulfan I	4.48	5.92	78613845	681.7E6	65.542	51.519
13) B	4,4'-DDE	4.43	6.10	62468528	714.9E6	54.207	51.236
14) MA	Dieldrin	4.80	6.35	74312509	744.5E6	61.196	50.252
15) MA	Endrin	5.11	6.86	68456986	668.9E6	60.265	52.038
16) A	4,4'-DDD	5.26	7.05	50222240	614.8E6	52.460	51.929
17) B	Endosulfan II	5.43	7.21	67416680	658.2E6	58.487	51.421
18) MA	4,4'-DDT	5.66	7.58	51322056	470.7E6	56.258	50.812
19) B	Endrin Aldehyde	6.05	7.79	56624542	509.4E6	57.975	51.337
20) B	Endosulfan Sulfa	6.73	8.26	64719096	568.8E6	61.786	52.792
21) A	Methoxychlor	6.45	8.84	30691284	231.0E6	49.956	46.971
22)	Mirex	6.53	9.14	71697305	430.9E6	61.596	52.315
23) B	Endrin Ketone	7.16	9.22	71649983	592.0E6	58.568	51.658

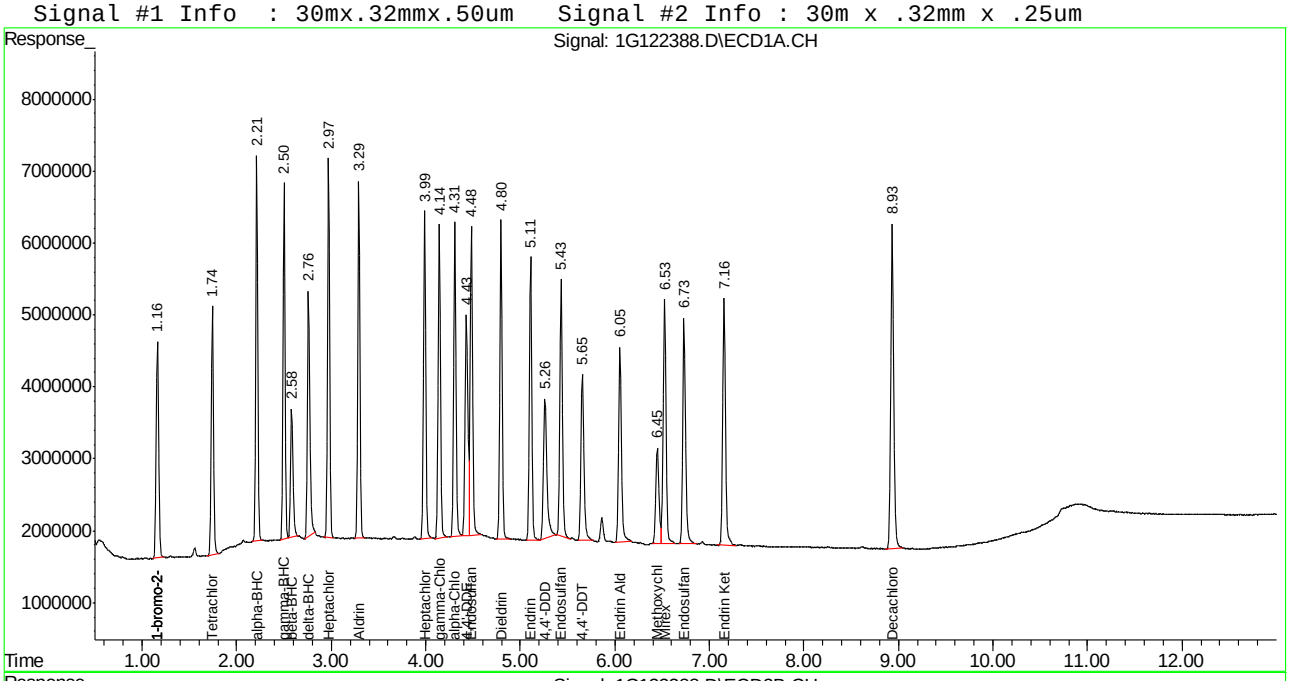
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122388.D 1PST3951.M Thu Apr 21 18:20:47 2016 RPT1 Page 1

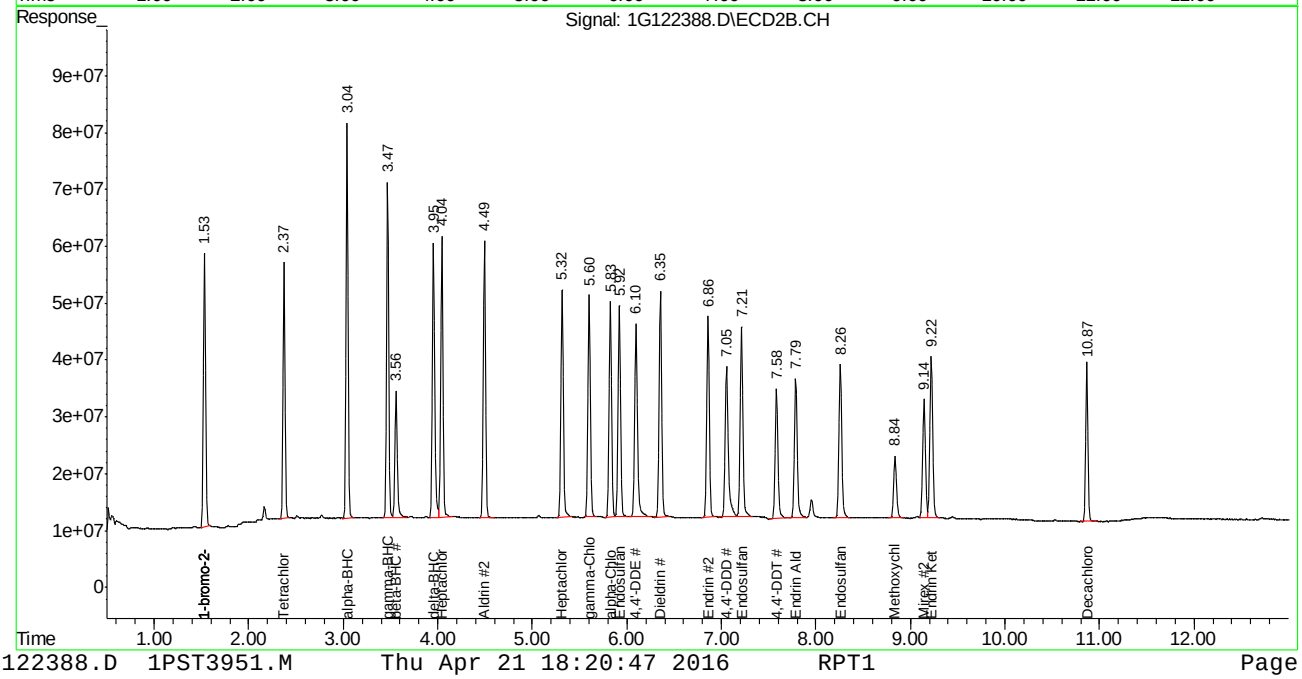
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3968\1G122388.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3968\1G122388.D\ECD2B.CH
Acq On : 4-21-16 06:05:53 PM Operator: dharas
Sample : cc3951-50 Inst : GC1G
Misc : op93252,g1g3968,15.4,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 21 18:20 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC18649

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

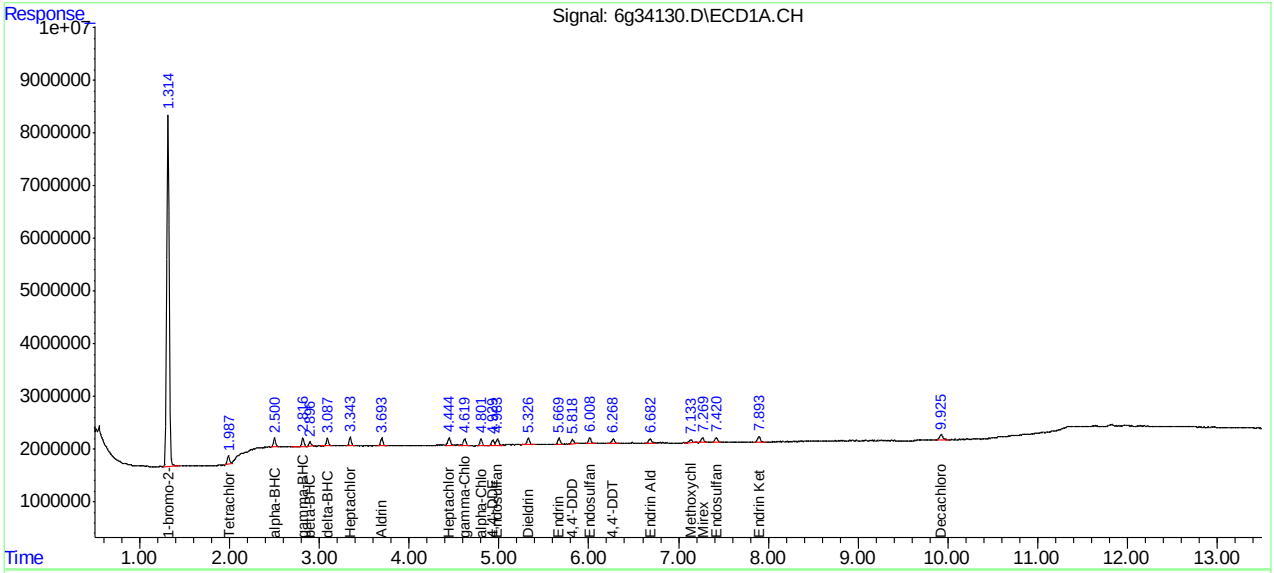
SGS ACCUTEST JC18649

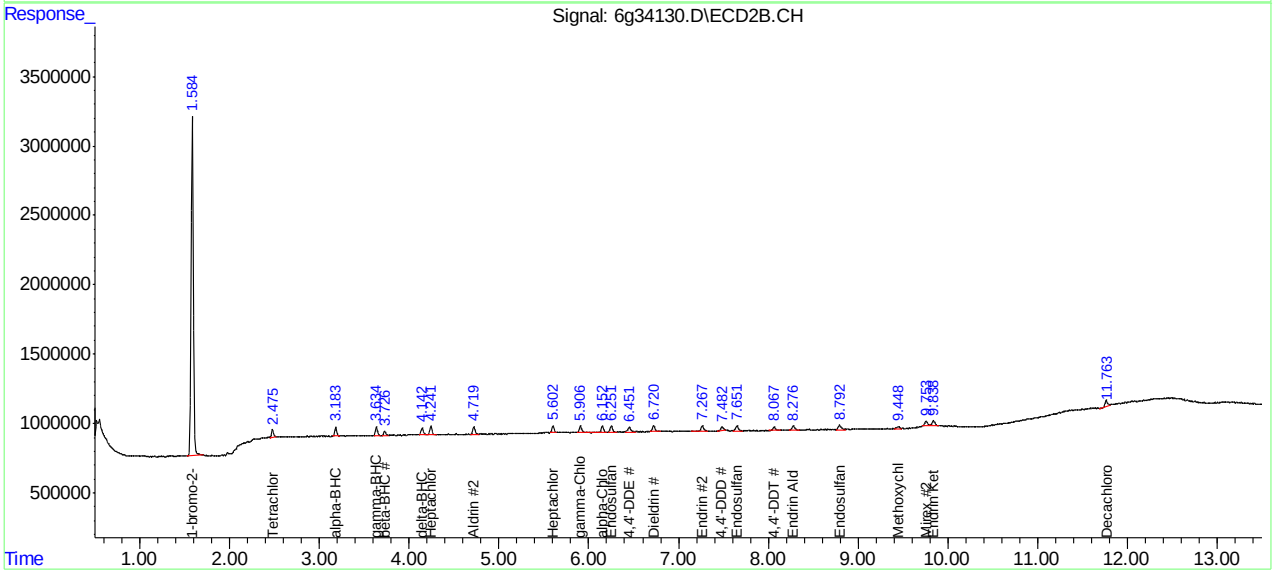
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:17:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34130.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 15:49	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

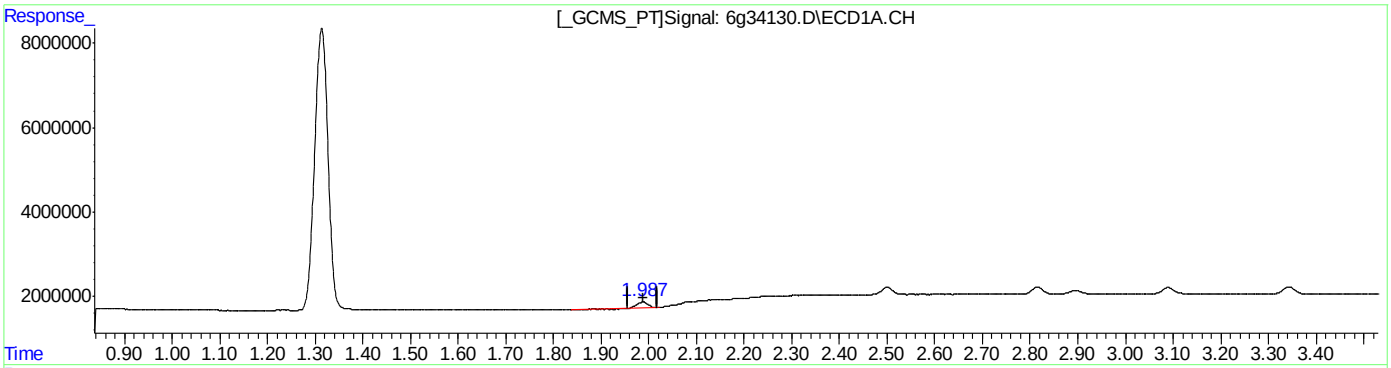
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.99	Poor instrument integration
Tetrachloro-m-xylene	877-09-8	2	2.48	Poor instrument integration
alpha-BHC	319-84-6	1	2.50	Poor instrument integration
beta-BHC	319-85-7	1	2.90	Poor instrument integration
beta-BHC	319-85-7	2	3.73	Poor instrument integration
Heptachlor epoxide	1024-57-3	2	5.60	Poor instrument integration
Methoxychlor	72-43-5	2	9.45	Poor instrument integration
Mirex	2385-85-5	2	9.75	Poor instrument integration
Endrin ketone	53494-70-5	2	9.84	Poor instrument integration

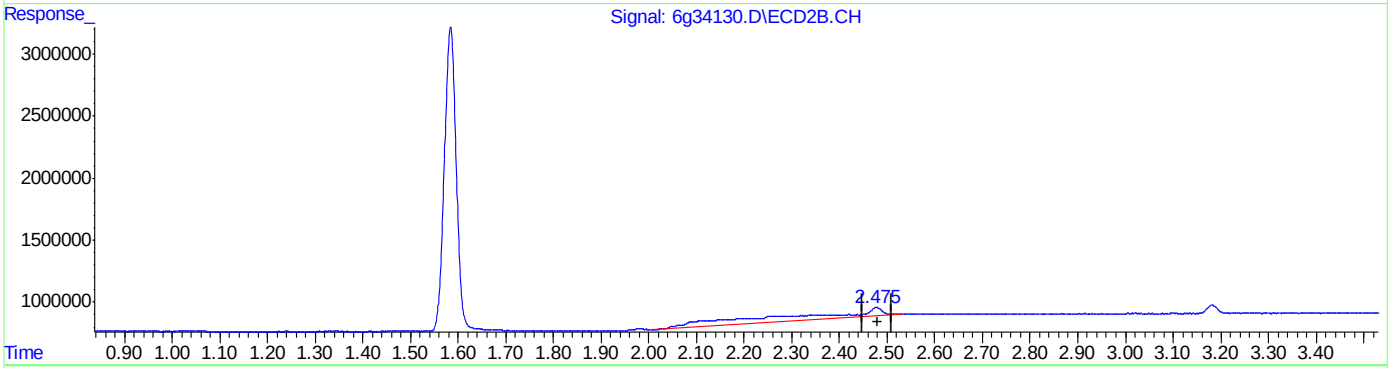
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
1.987min 0.787PPB
response 1813361

(2) Tetrachloro-m-xylene #2 (SAB)
2.477min 12.157PPB
response 9572770

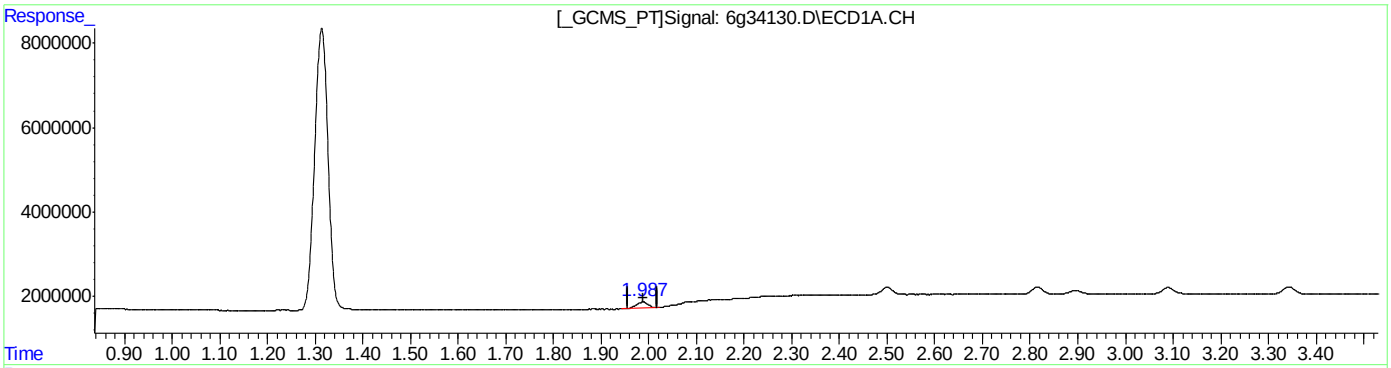
(+) = Expected Retention Time

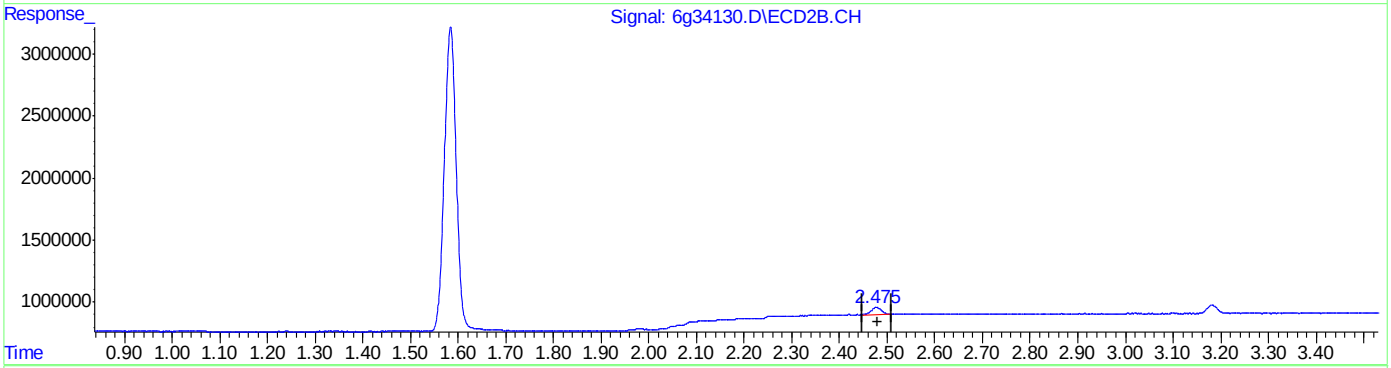
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
1.987min 1.118PPB m
response 2576583

(2) Tetrachloro-m-xylene #2 (SAB)
2.475min 1.051PPB m
response 827902

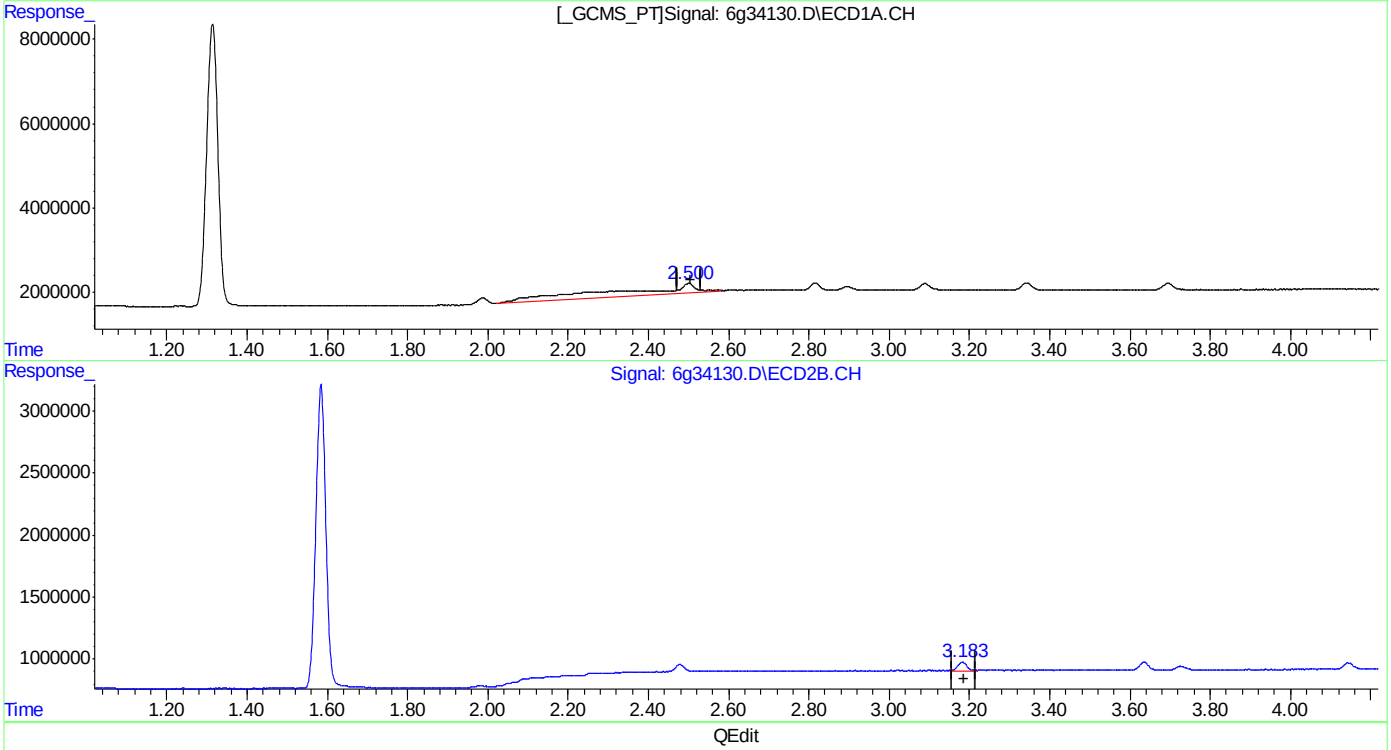
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(3) alpha-BHC (A)
2.501min 11.218PPB
response 32431486

(3) alpha-BHC #2 (A)
3.182min 1.076PPB
response 1037508

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:52:32 2016

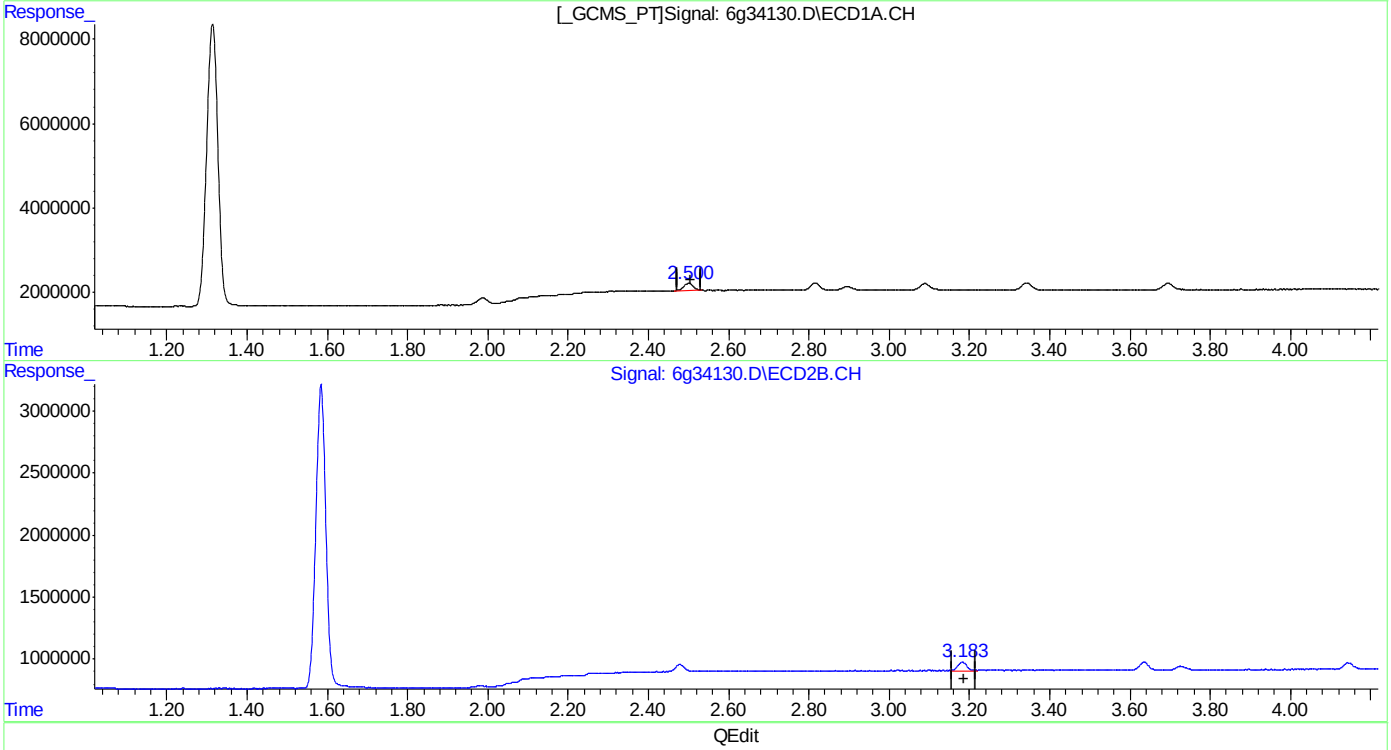
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(3) alpha-BHC (A)
2.500min 0.967PPB m
response 2794596

(3) alpha-BHC #2 (A)
3.182min 1.076PPB
response 1037508

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:52:43 2016

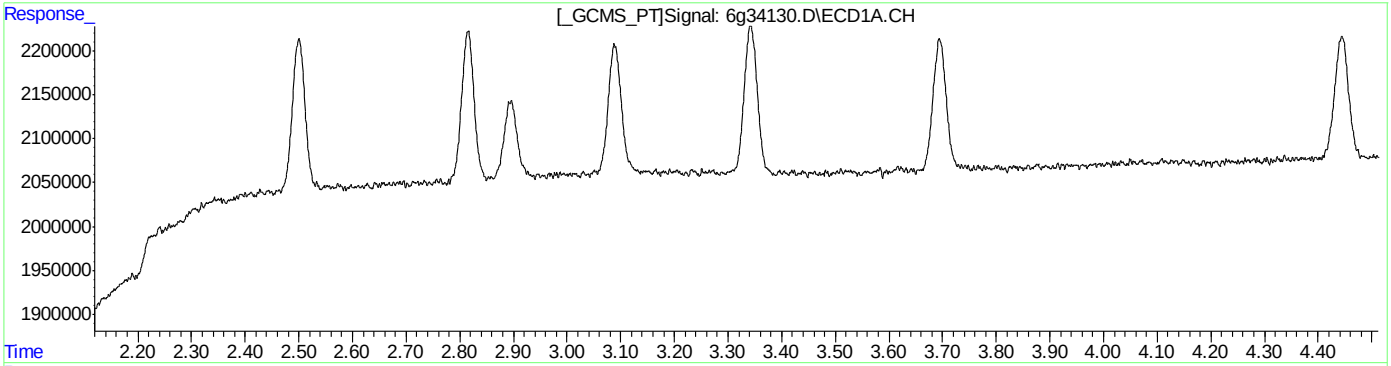
SGS ACCUTEST JC18649

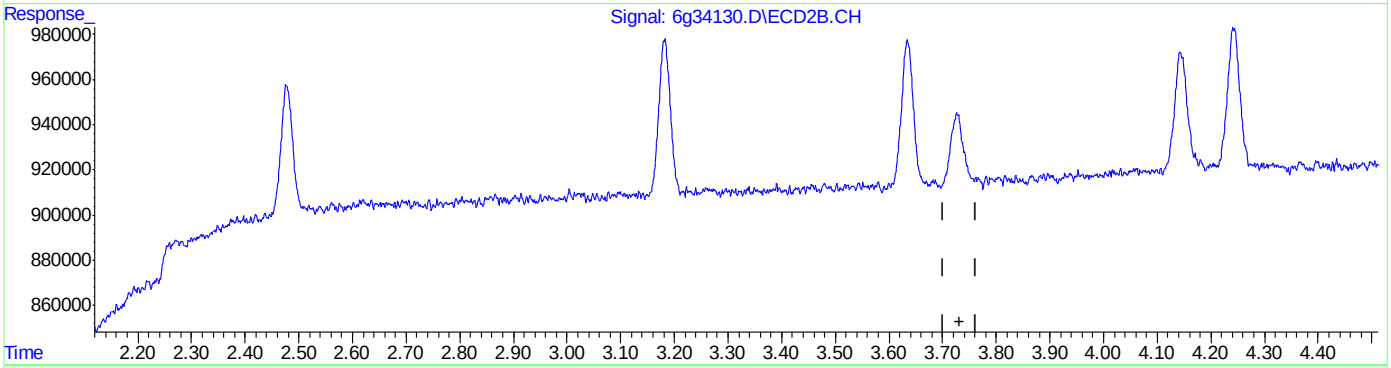
Quantitation Report (Qedit)

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

(6) beta-BHC (B)
0.000min 0.000PPB
response 0

(6) beta-BHC #2 (B)
0.000min 0.000PPB
response 0

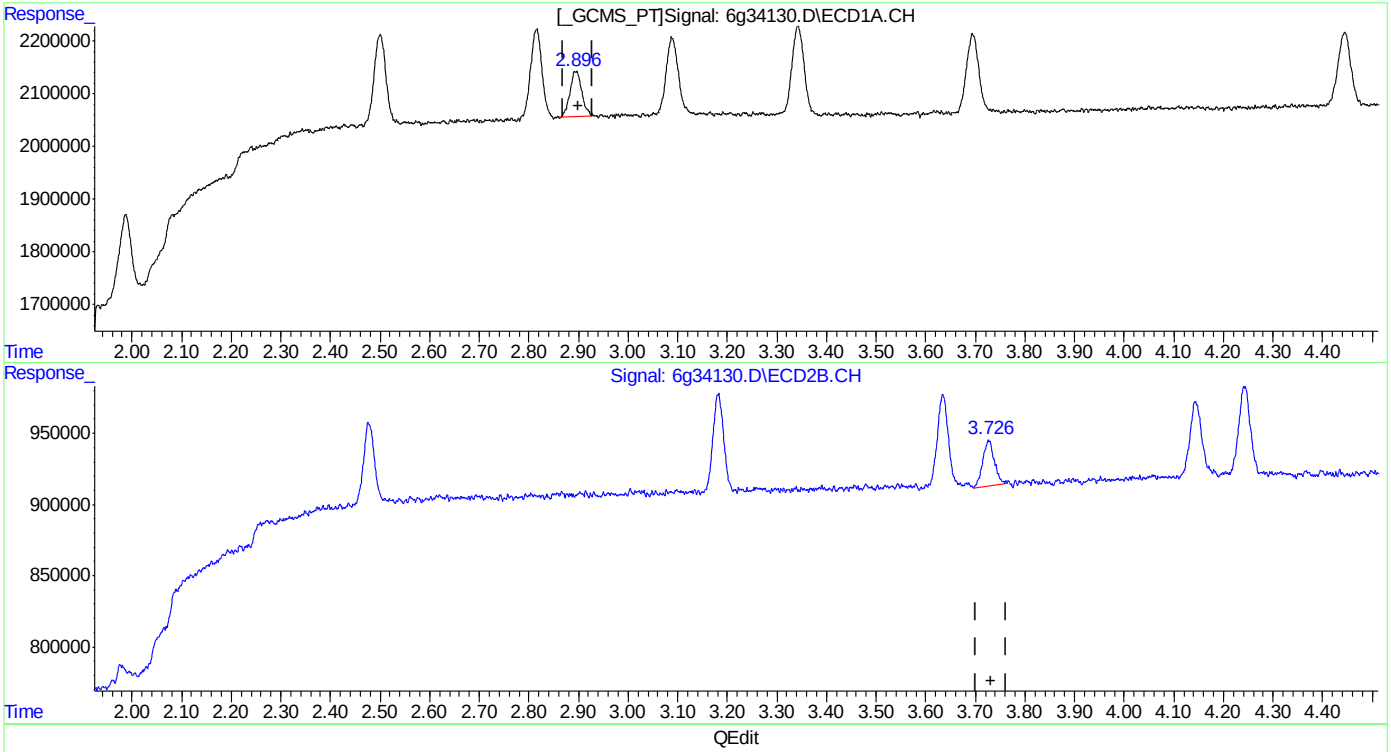
(+) = Expected Retention Time

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
6PST987.M Mon Apr 18 10:53:05 2016

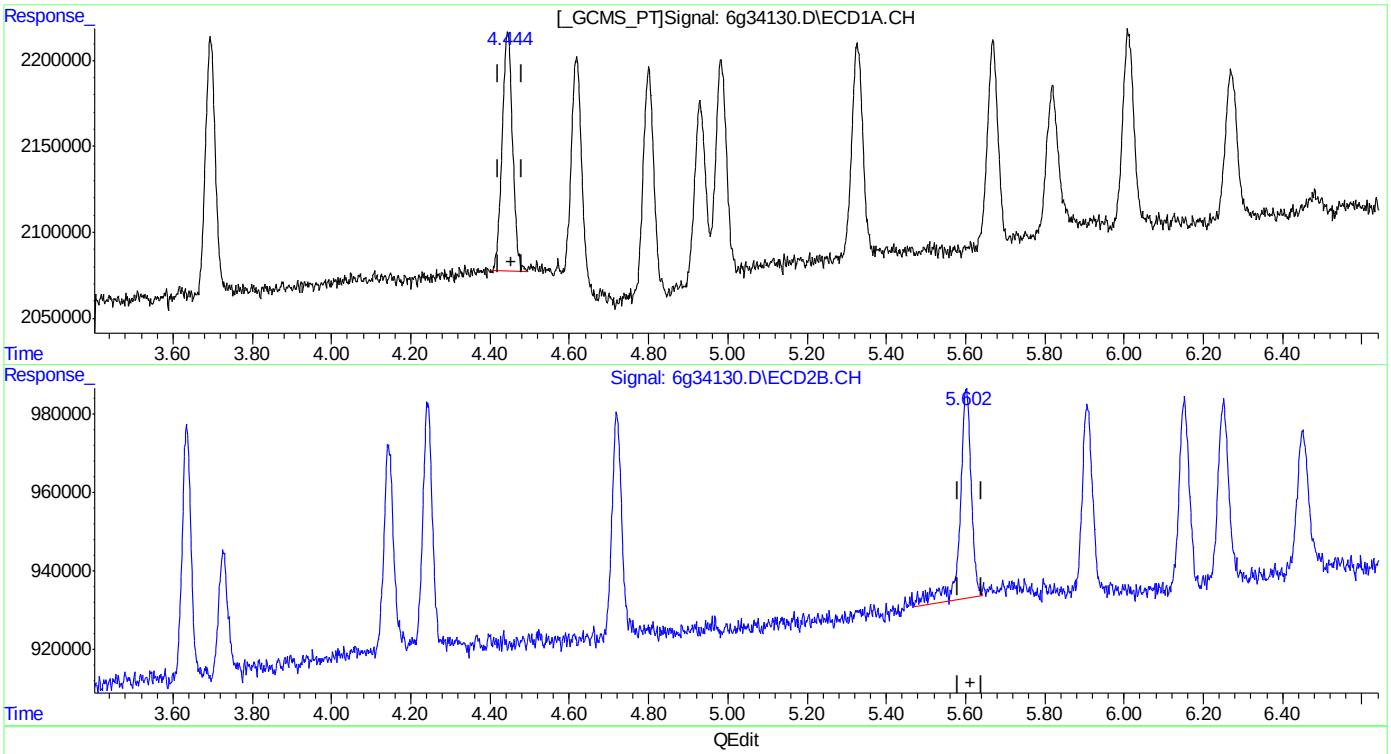
SGS ACCUTEST JC18649

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

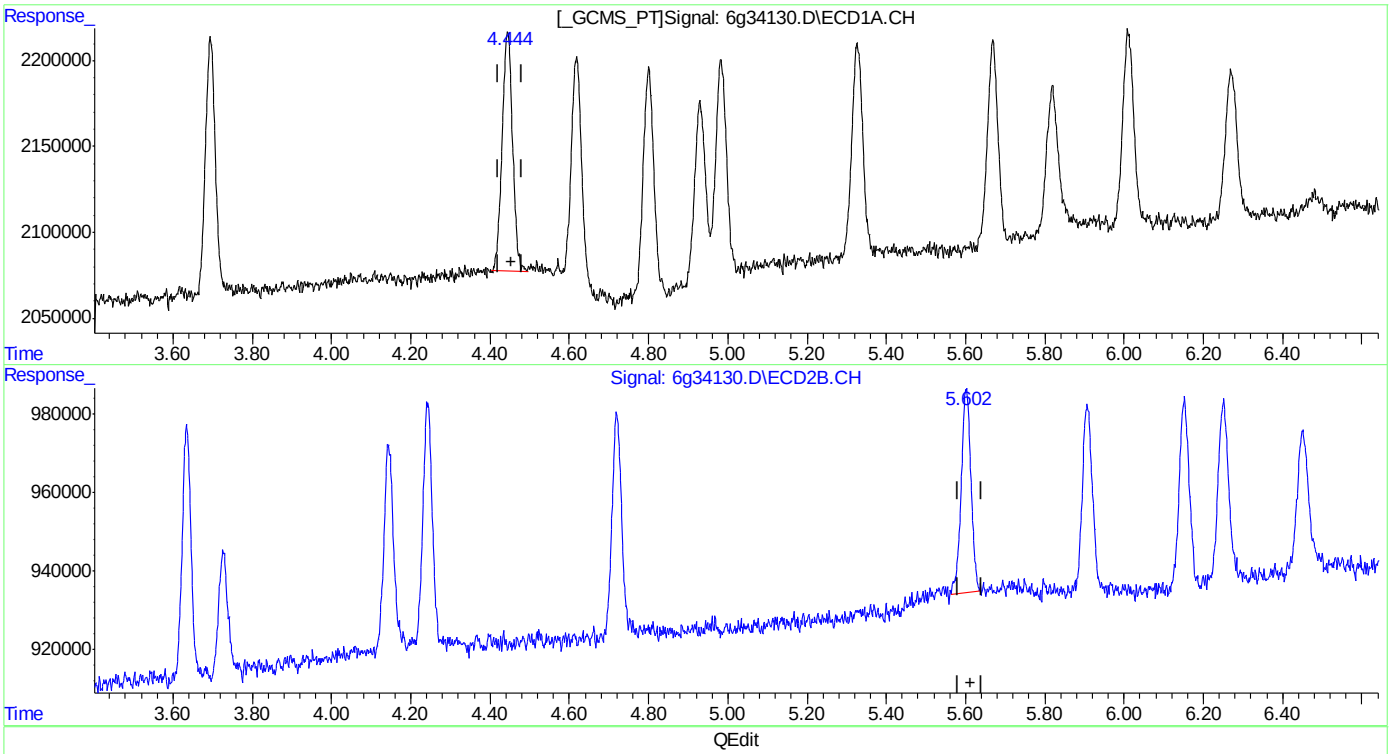
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(9) Heptachlor Epoxide (B)
4.445min 1.079PPB
response 2533344

(9) Heptachlor Epoxide #2 (B)
5.602min 1.139PPB m
response 891848

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:53:20 2016

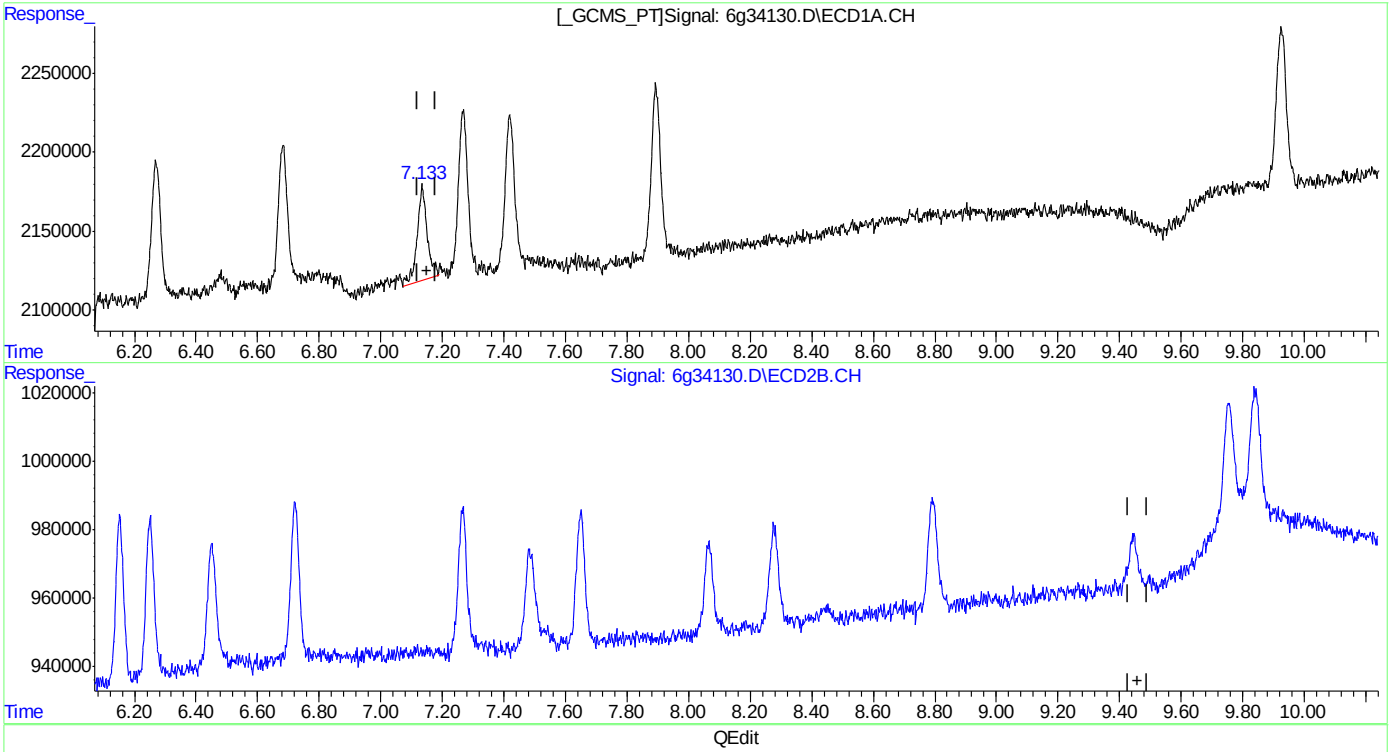
SGS ACCUTEST JC18649

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

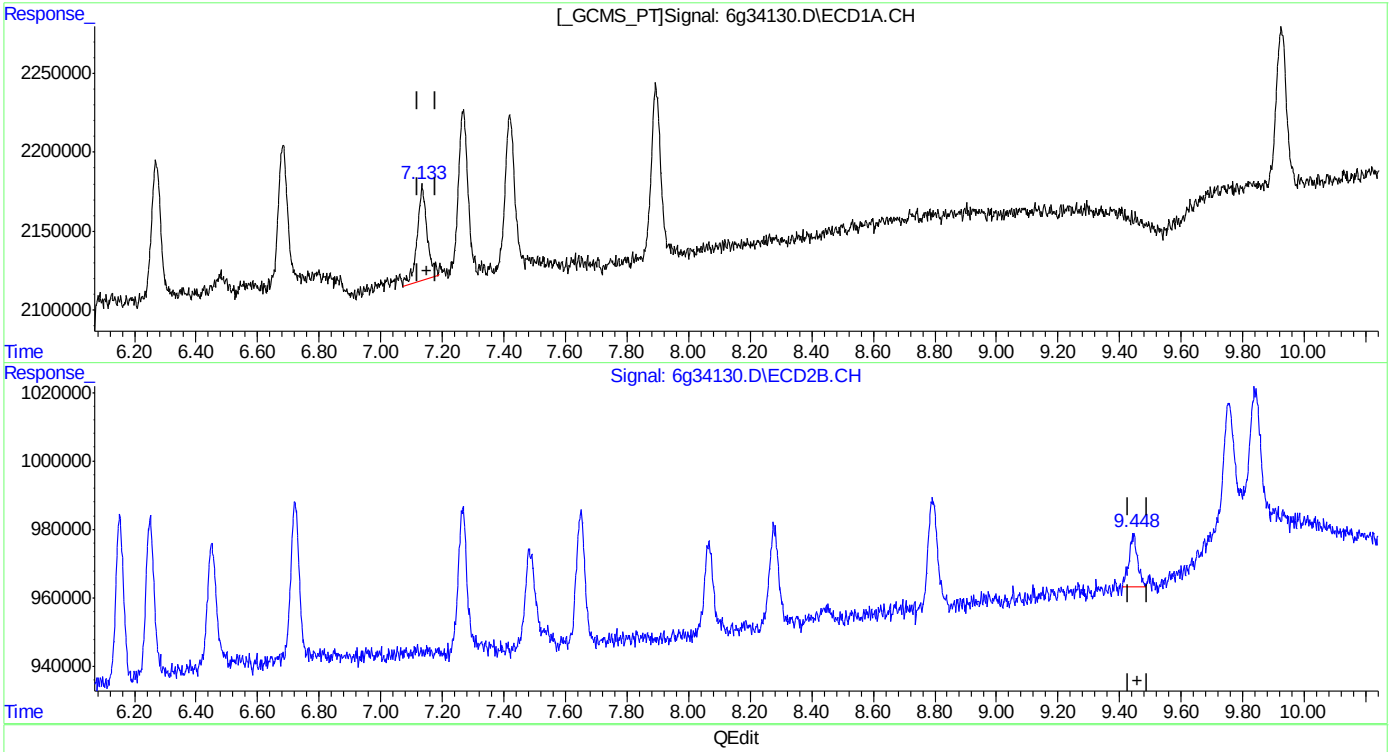
SGS ACCUTEST JC18649

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

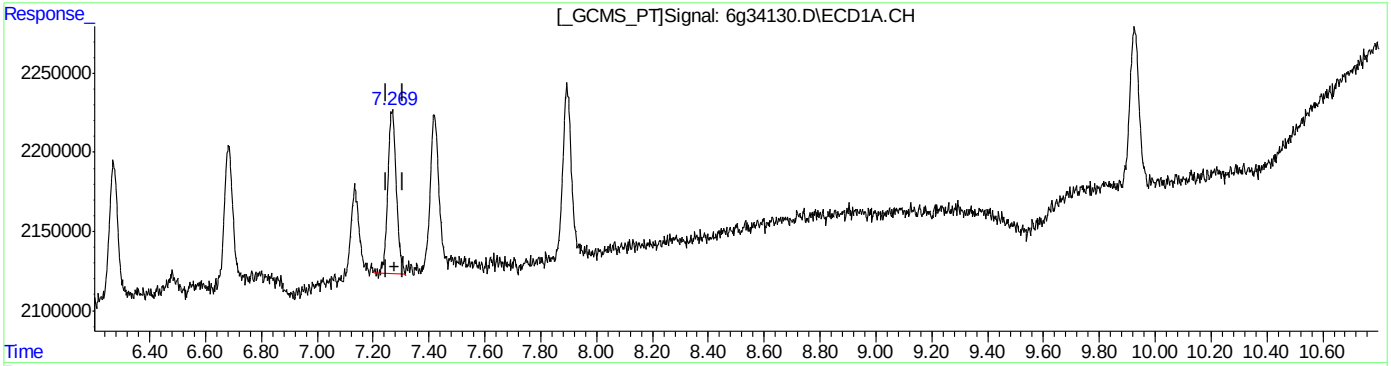
SGS ACCUTEST JC18649

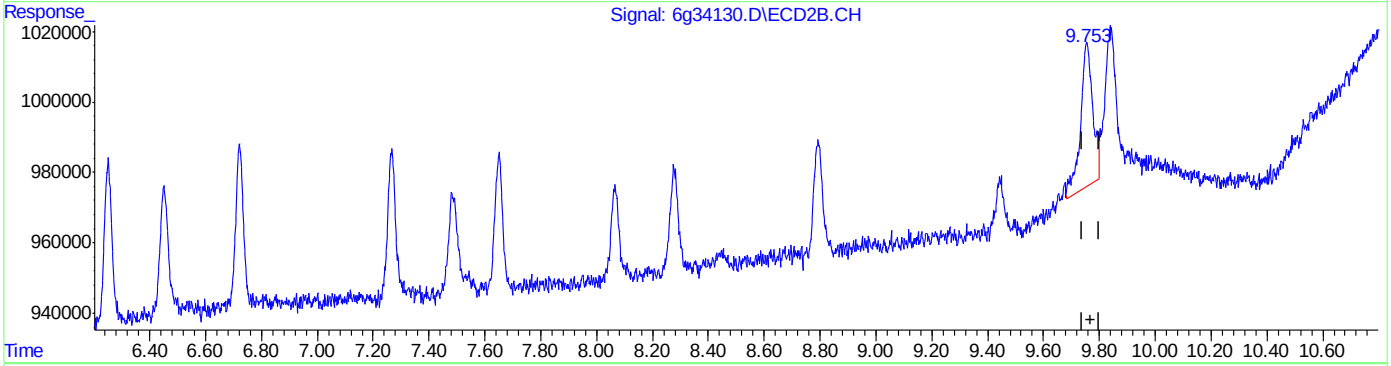
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(22) Mirex
7.268min 1.112PPB
response 2186568

(22) Mirex #2
9.754min 2.103PPB
response 1253259

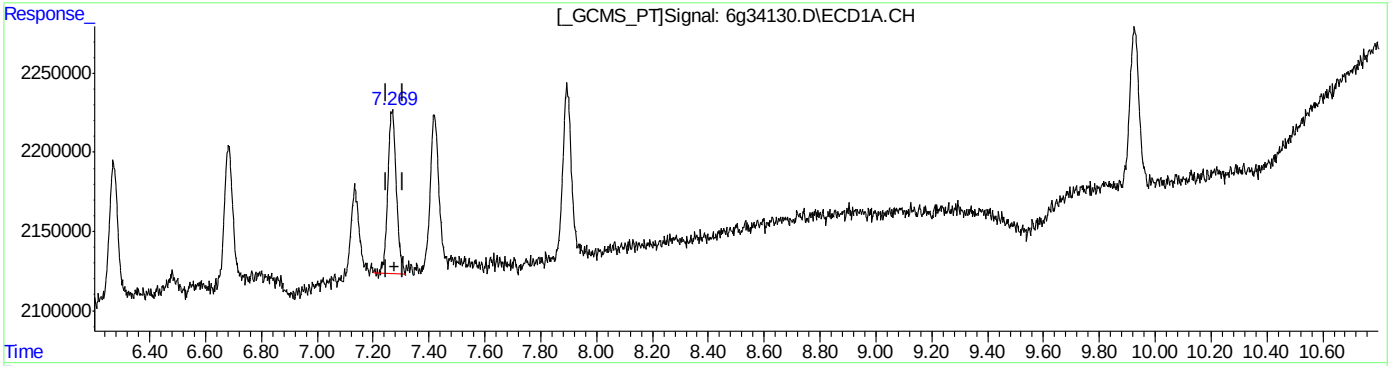
(+) = Expected Retention Time

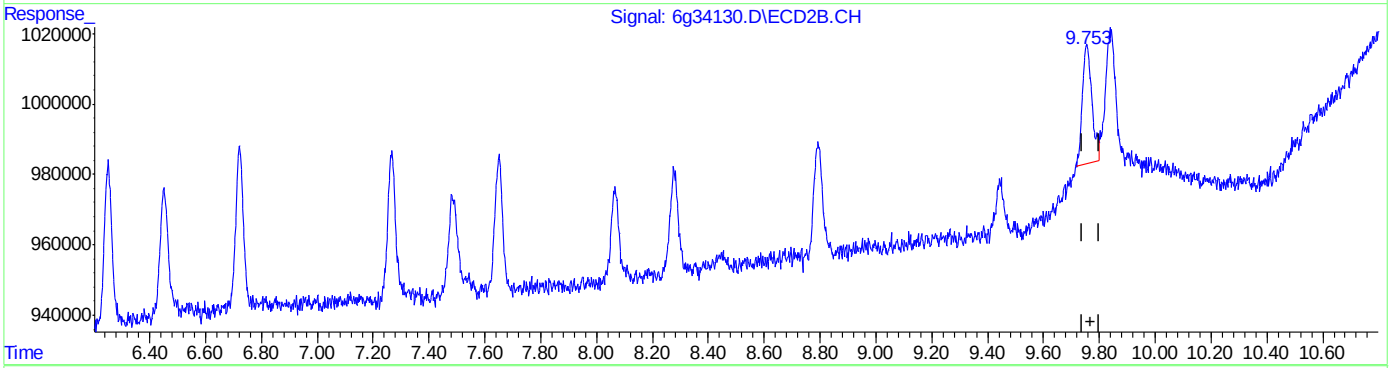
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(22) Mirex
7.268min 1.112PPB
response 2186568

(22) Mirex #2
9.753min 1.361PPB m
response 811332

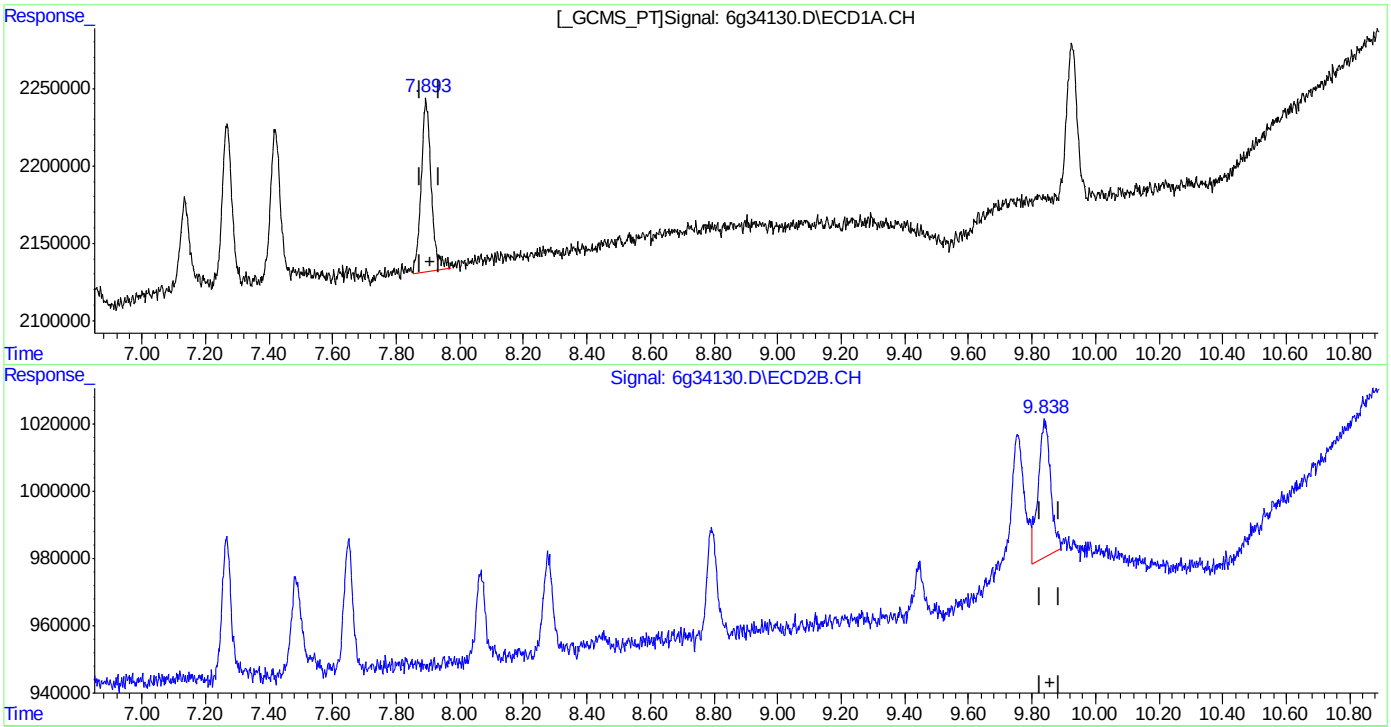
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:54:08 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(23) Endrin Ketone (B)
7.893min 1.257PPB
response 2459754

(23) Endrin Ketone #2 (B)
9.844min 1.769PPB
response 1111083

(+) = Expected Retention Time

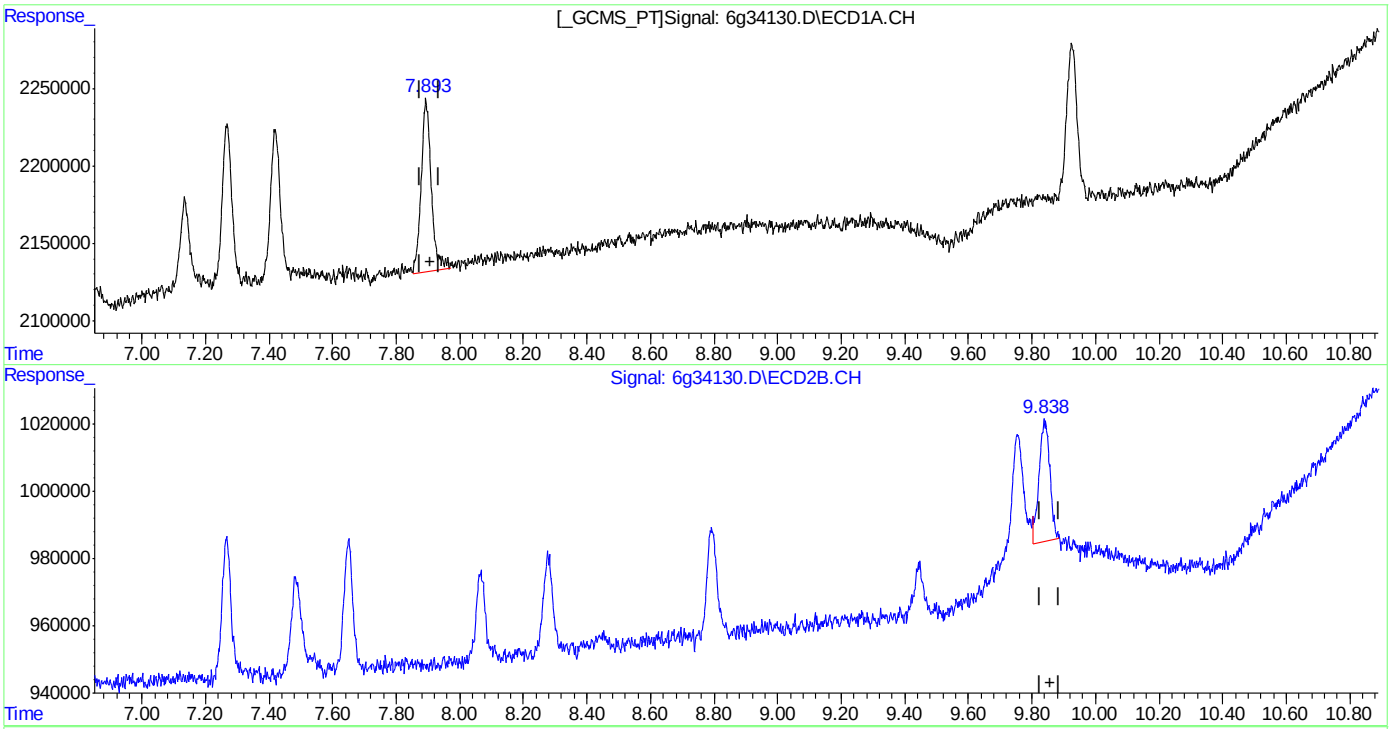
SGS ACCUTEST JC18649

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 JC18649

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.314	1.585	138.6E6	45170280	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.988	2.479	5101788	1738576	2.082	2.083
Spiked Amount		40.000	Range	30 - 150	Recovery	= 5.21%#	5.21%#
24) SAB	Decachlor...	9.926	11.763	4607200	1403506	2.107	2.277m
Spiked Amount		40.000			Recovery	= 5.27%	5.69%
	Target Compounds						
3) A	alpha-BHC	2.500	3.183	5774894	2058064	1.879	2.013
4) MA	gamma-BHC	2.816	3.636	5554647	1999405	1.950	2.116
5) MA	Heptachlor	3.344	4.243	5832418	2063856	2.092	2.260
6) B	beta-BHC	2.896	3.726	3076723	981586	2.186m	2.096m
7) B	delta-BHC	3.090	4.145	4966804	1849032	1.950	2.177
8) MB	Aldrin	3.695	4.721	5278516	1881659	2.008	2.125
9) B	Heptachlo...	4.445	5.603	5114038	1885907	2.050	2.272
10) B	gamma-Chl...	4.619	5.909	5065834	1833515	1.978	2.260
11) B	alpha-Chl...	4.802	6.153	5102906	1756720	2.028	2.161
12) A	Endosulfan I	4.983	6.253	5137112	1702104	2.001	2.148
13) B	4,4'-DDE	4.931	6.452	4058606	1526131	2.104	2.090
14) MA	Dieldrin	5.327	6.724	4928360	1784737	2.022	2.198
15) MA	Endrin	5.670	7.266	4499665	1631535	2.037	2.274
16) A	4,4'-DDD	5.819	7.486	3497822	1276576	2.084	1.907
17) B	Endosulfa...	6.010	7.650	4442758	1574127	2.007	2.122
18) MA	4,4'-DDT	6.270	8.067	3705960	1175821	2.093	2.648 #
19) B	Endrin Al...	6.683	8.279	3577534	1247912	2.000	2.091
20) B	Endosulfa...	7.423	8.793	3981880	1446528	2.091	2.323
21) A	Methoxychlor	7.137	9.443f	2283360	614080	2.273	2.615m
22)	Mirex	7.269	9.755f	4245275	1416035	2.031	2.241
23) B	Endrin Ke...	7.896	9.843	4563666	1657293	2.194	2.490

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.6.18

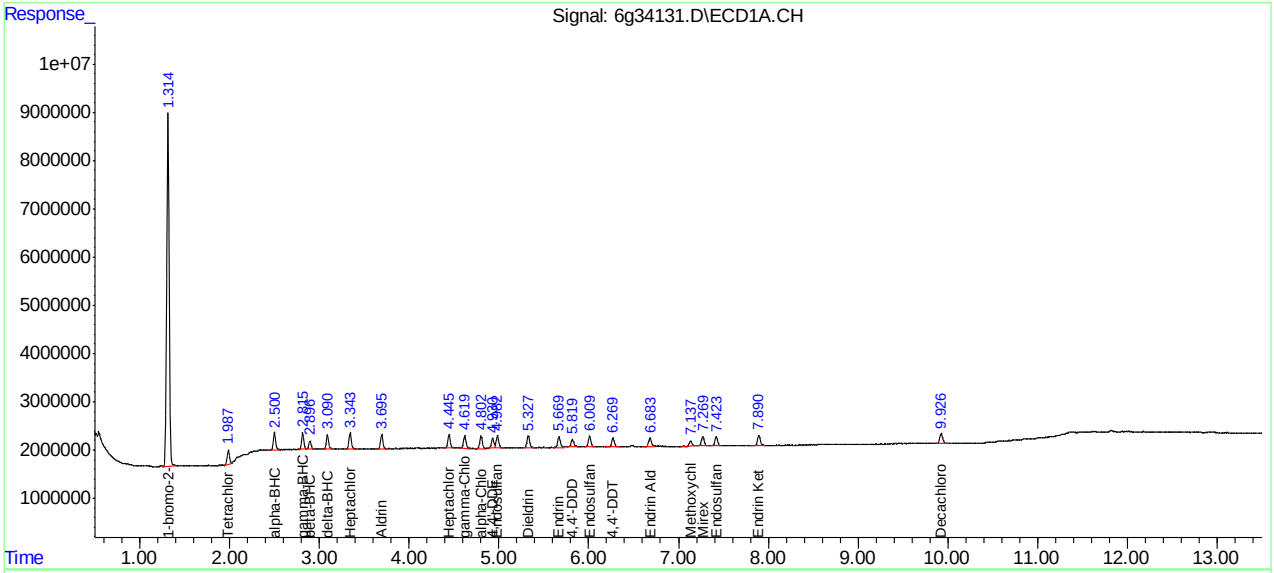
9

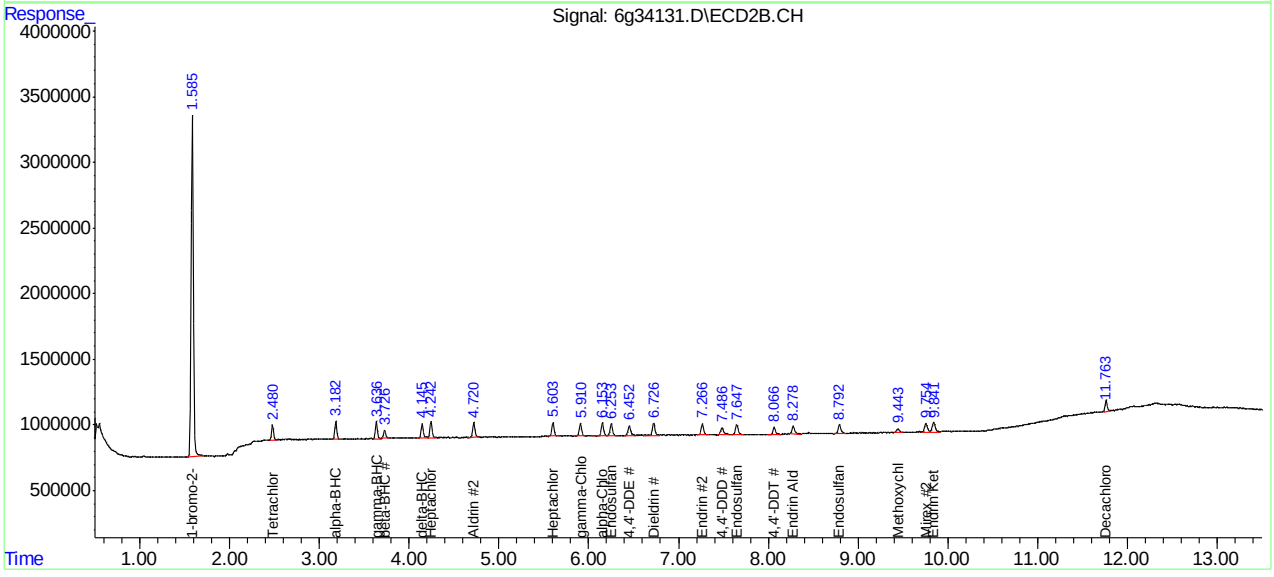
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC18649

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

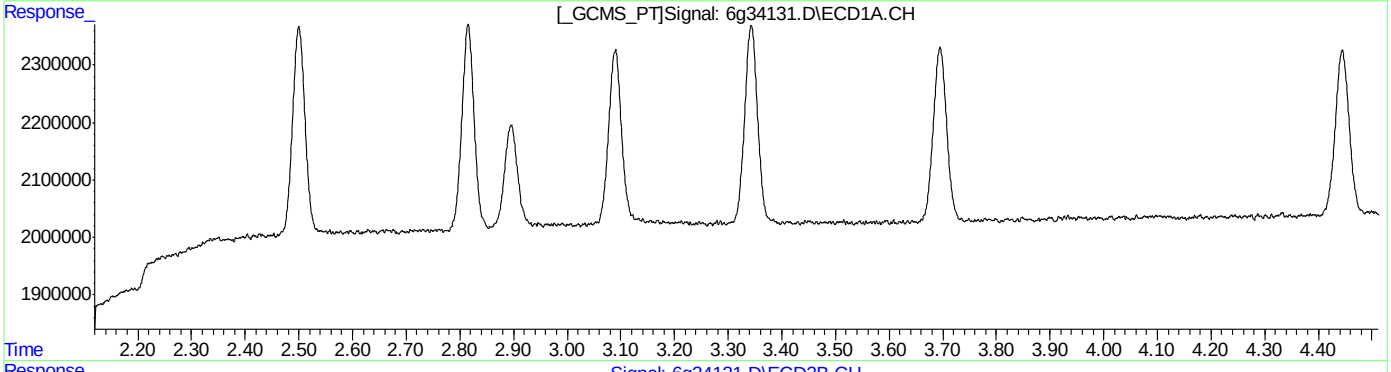
Parameter	CAS	Sig#	R.T. (min.)	Reason
beta-BHC	319-85-7	1	2.90	Poor instrument integration
beta-BHC	319-85-7	2	3.73	Poor instrument integration
Methoxychlor	72-43-5	2	9.44	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.76	Poor instrument integration

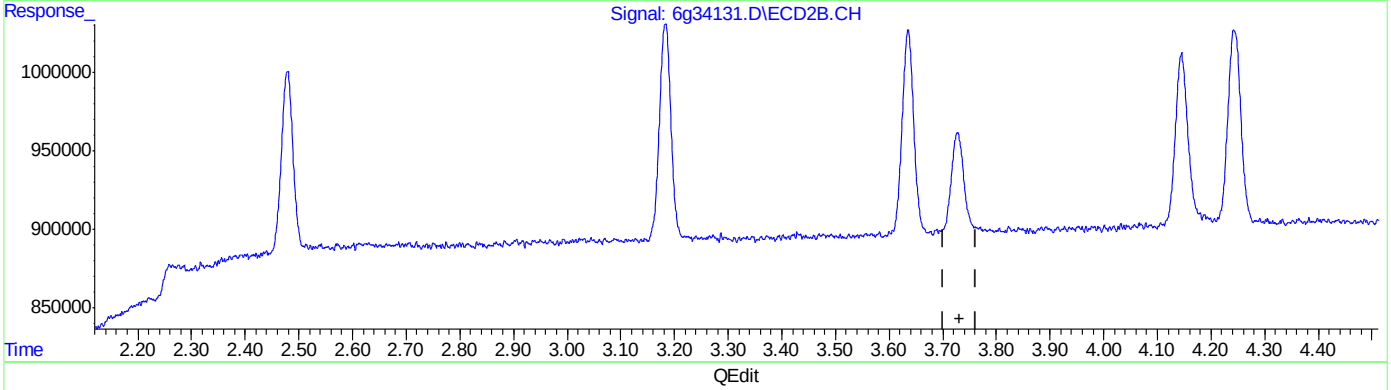
Quantitation Report (Qedit)

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

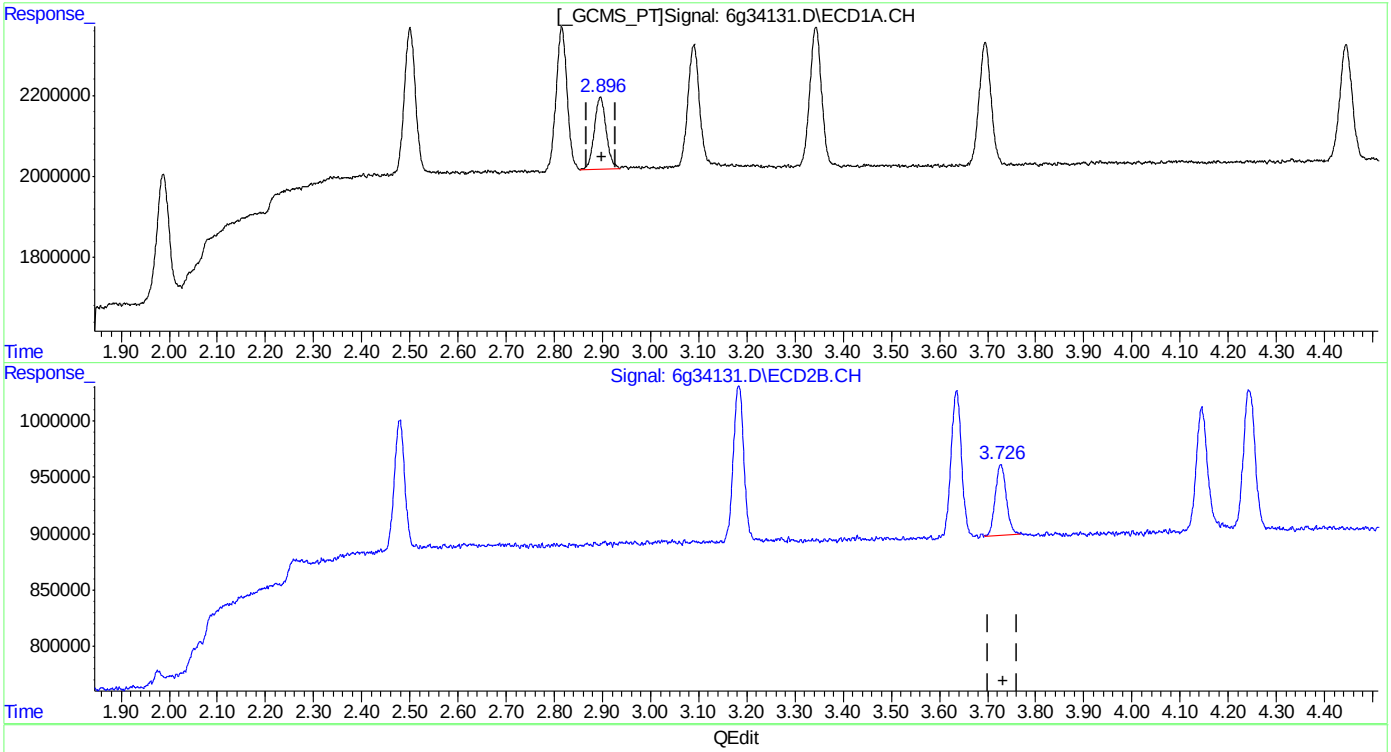
(+) = Expected Retention Time

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

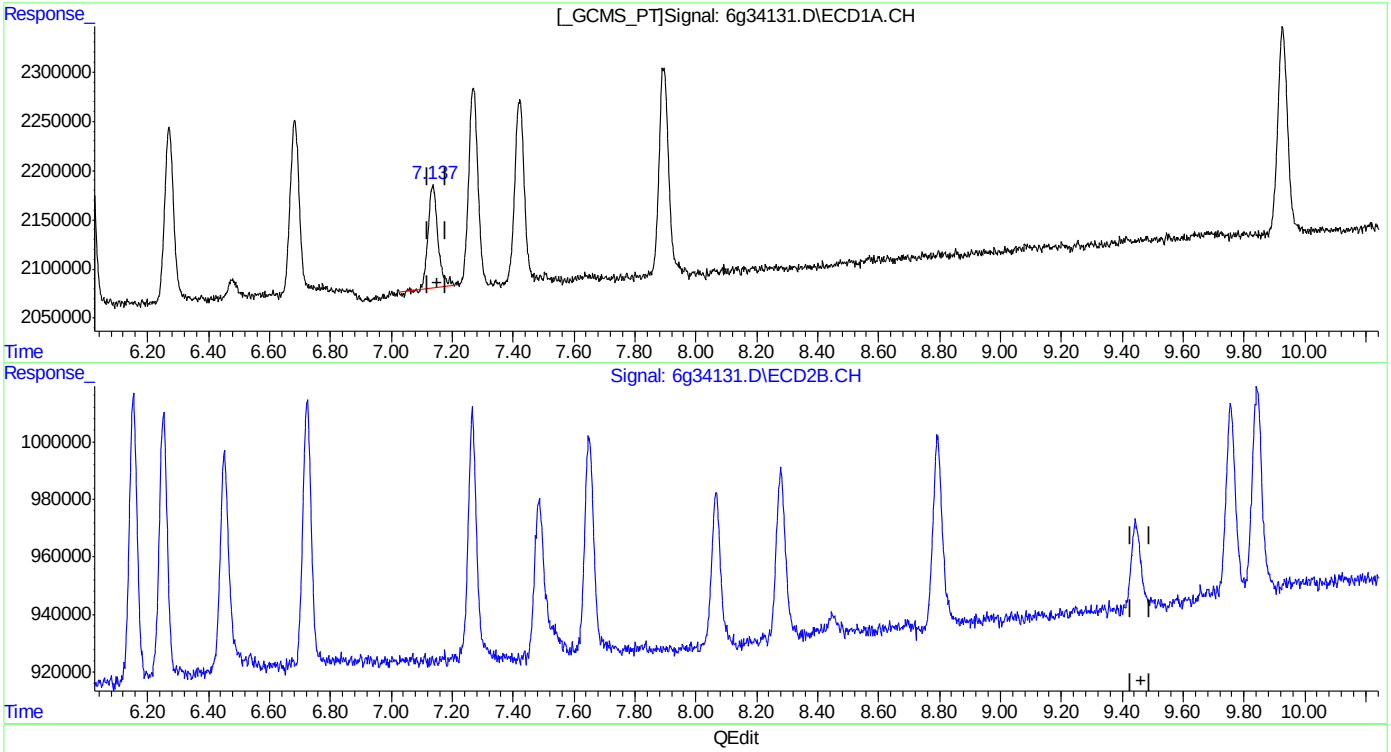
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.137min 2.273PPB
response 2283360

(21) Methoxychlor #2 (A)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:42:14 2016

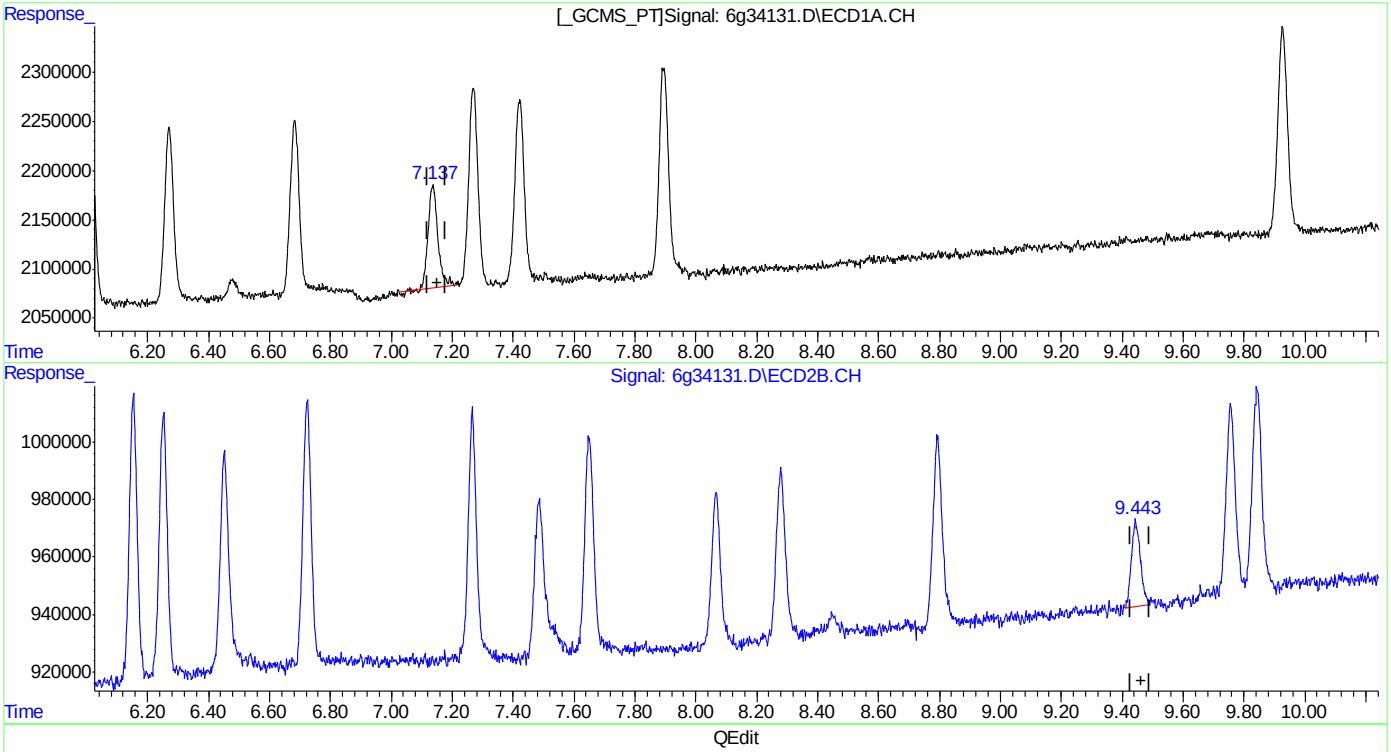
SGS ACCUTEST JC18649

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

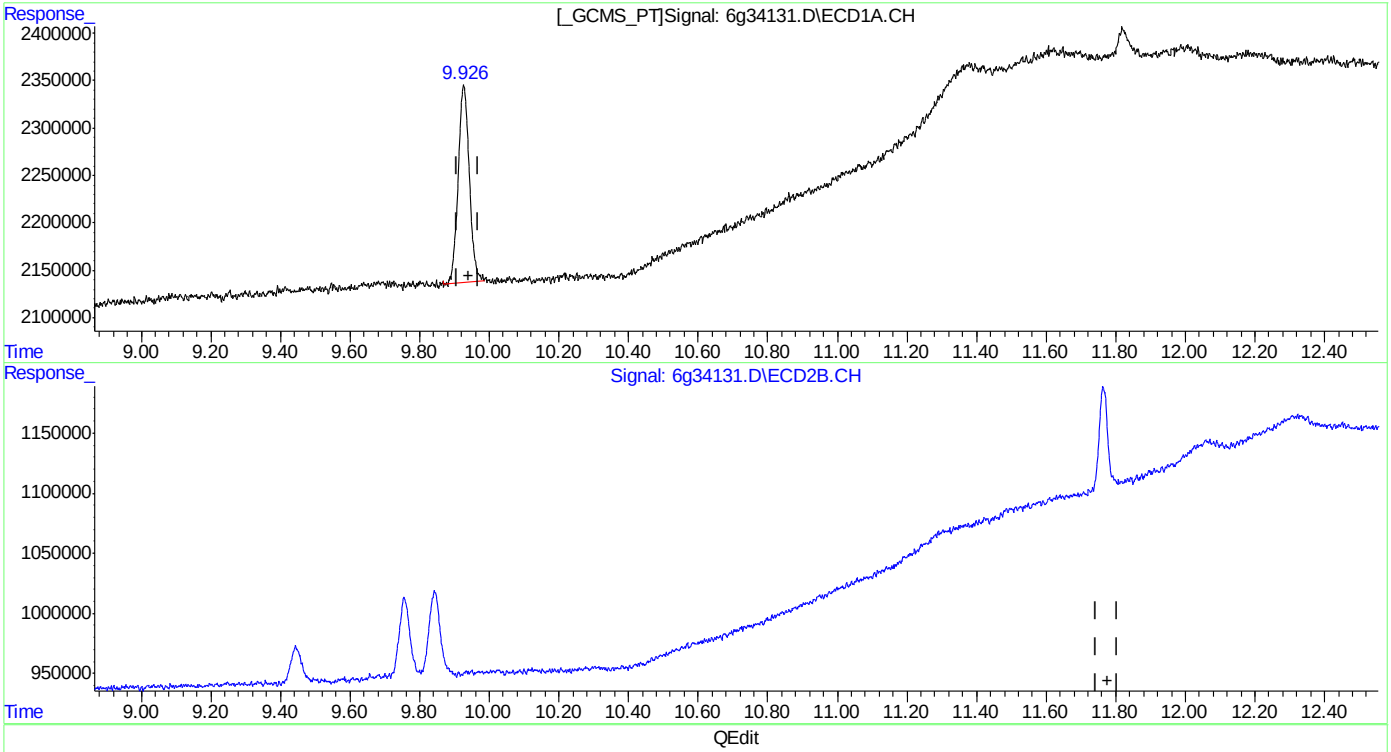
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(24) Decachlorobiphenyl (SAB)
9.926min 2.107PPB
response 4607200

(24) Decachlorobiphenyl #2 (SAB)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:42:27 2016

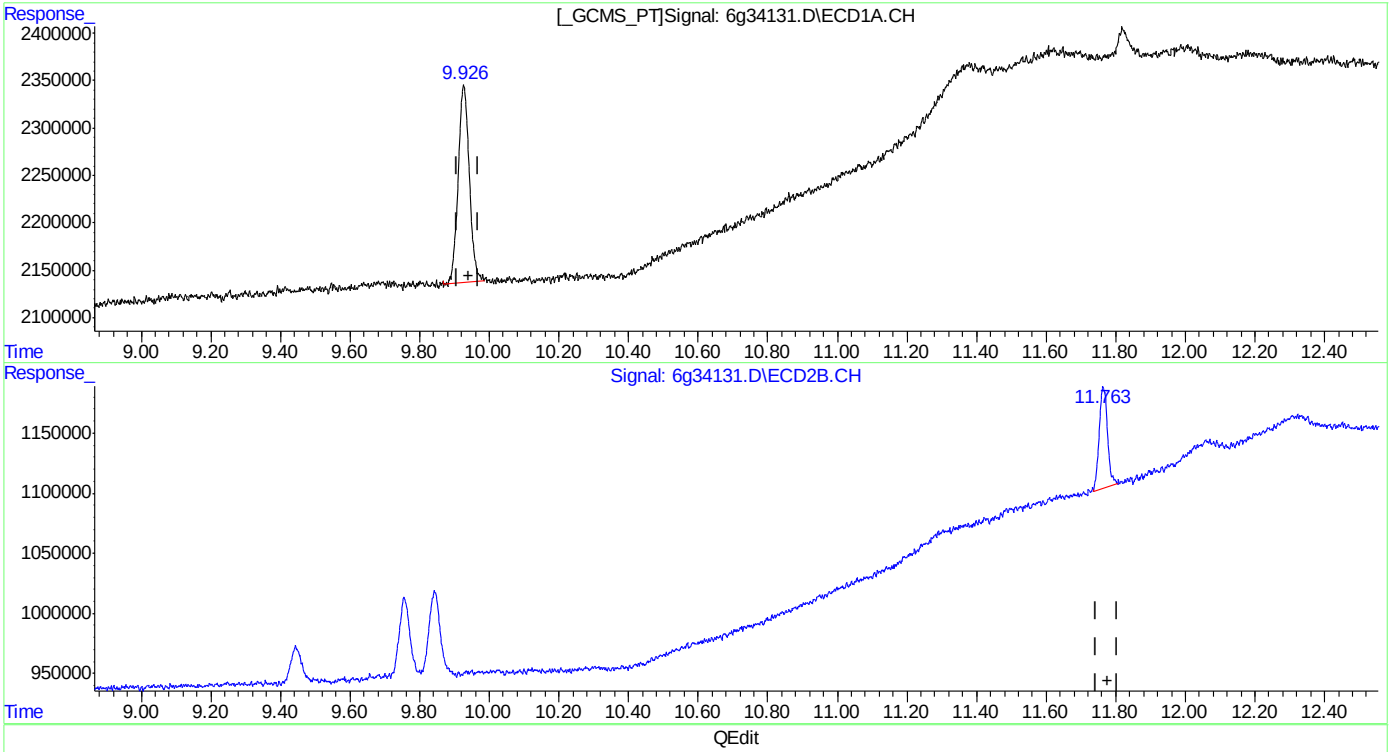
SGS ACCUTEST JC18649

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
6PST987.M Mon Apr 18 10:42:34 2016

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:22 pm
Operator : dharas
Sample : ic987-5
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.314	1.585	141.2E6	45861524	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.988	2.478	12604959	4212366	5.051	4.970
Spiked Amount		40.000	Range	30 - 150	Recovery	= 12.63%#	12.43%#
24) SAB	Decachlor...	9.926	11.768	11331892	2647512	5.088	4.230m
Spiked Amount		40.000			Recovery	= 12.72%	10.58%
	Target Compounds						
3) A	alpha-BHC	2.501	3.183	14648824	5063872	4.680	4.878
4) MA	gamma-BHC	2.817	3.636	14067221	4844724	4.849	5.049
5) MA	Heptachlor	3.344	4.244	14577088	4888164	5.133	5.273
6) B	beta-BHC	2.896	3.728	7714959	2480528	5.381	5.217
7) B	delta-BHC	3.091	4.146	12751854	4306125	4.916	4.995
8) MB	Aldrin	3.697	4.722	13106990	4722588	4.895	5.254
9) B	Heptachlo...	4.446	5.603	12828644	4363078	5.049	5.176
10) B	gamma-Chl...	4.620	5.909	12654624	4270104	4.851	5.184
11) B	alpha-Chl...	4.802	6.154	12678021	4336659	4.947	5.255
12) A	Endosulfan I	4.985	6.252	12389510	4144533	4.737	5.151
13) B	4,4'-DDE	4.932	6.454	10073925	3476449	5.127	4.690
14) MA	Dieldrin	5.330	6.723	12016085	4266739	4.839	5.175
15) MA	Endrin	5.672	7.267	11105455	4047985	4.936	5.556
16) A	4,4'-DDD	5.820	7.486	8487607	3302013	4.964	4.858
17) B	Endosulfa...	6.012	7.651	10976603	3743835	4.867	4.972
18) MA	4,4'-DDT	6.270	8.066	9215147	2757576	5.110	6.117
19) B	Endrin Al...	6.684	8.279	9058405	2994191	4.970	4.940
20) B	Endosulfa...	7.422	8.795	9637621	3219291	4.970	5.093
21) A	Methoxychlor	7.137	9.445f	5612130	1635835	5.483	6.860m#
22)	Mirex	7.270	9.757	10560608	3364693	4.960	5.244
23) B	Endrin Ke...	7.895	9.840f	11298895	3852585	5.333	5.700

SemiQuant Compounds - Not Calibrated on this Instrument

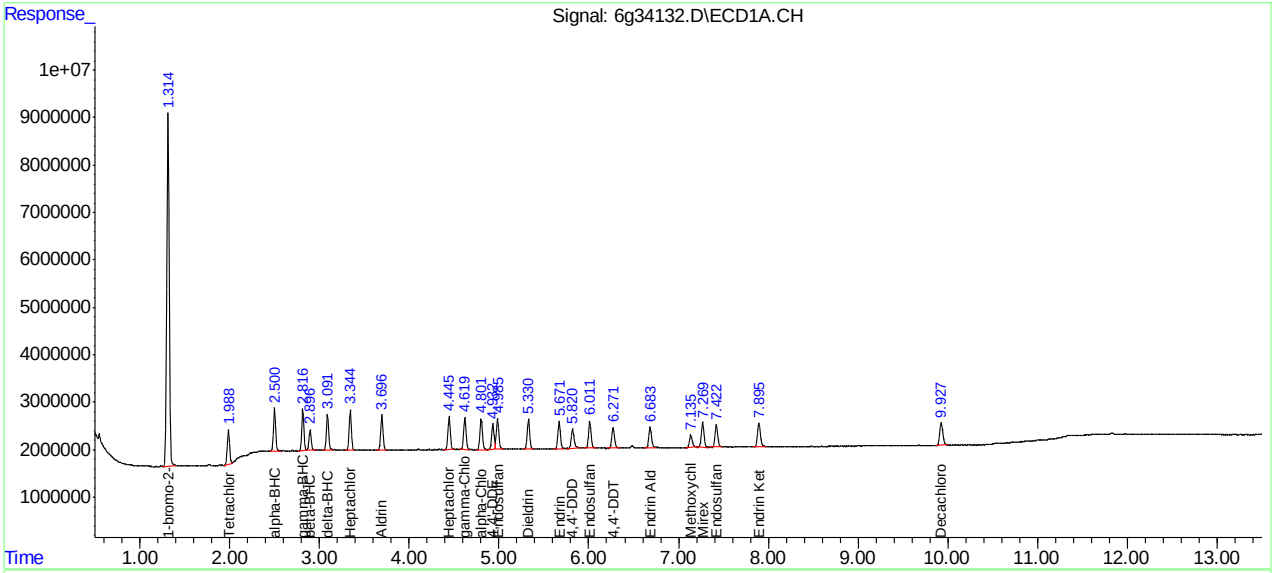
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

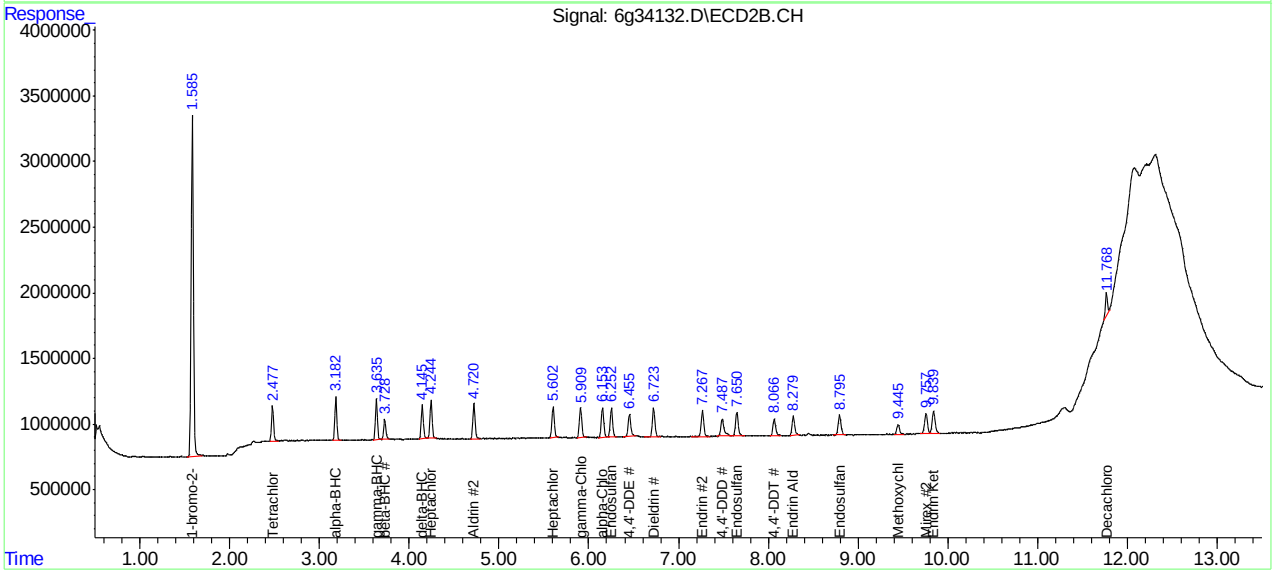
Quantitation Report (QT Reviewed)

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 JC18649

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

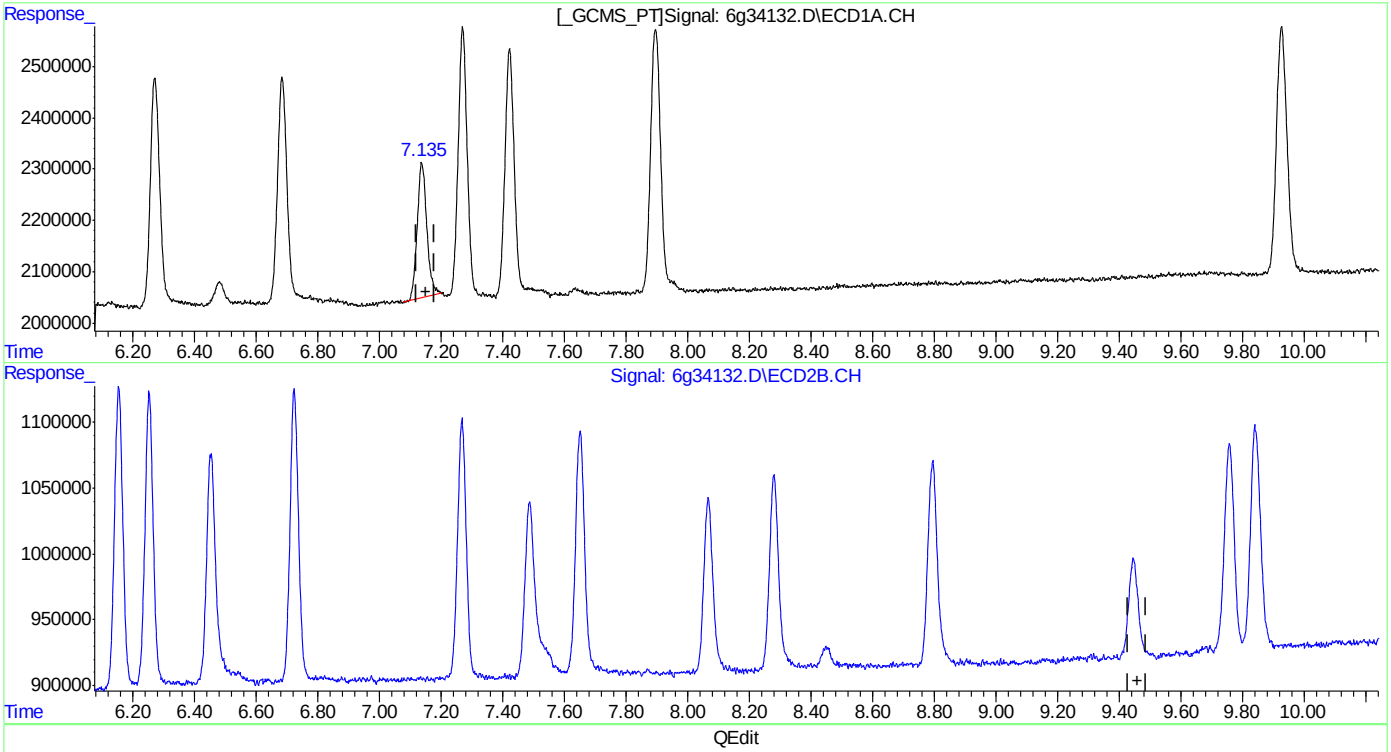
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	2	9.44	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.77	Poor instrument integration

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

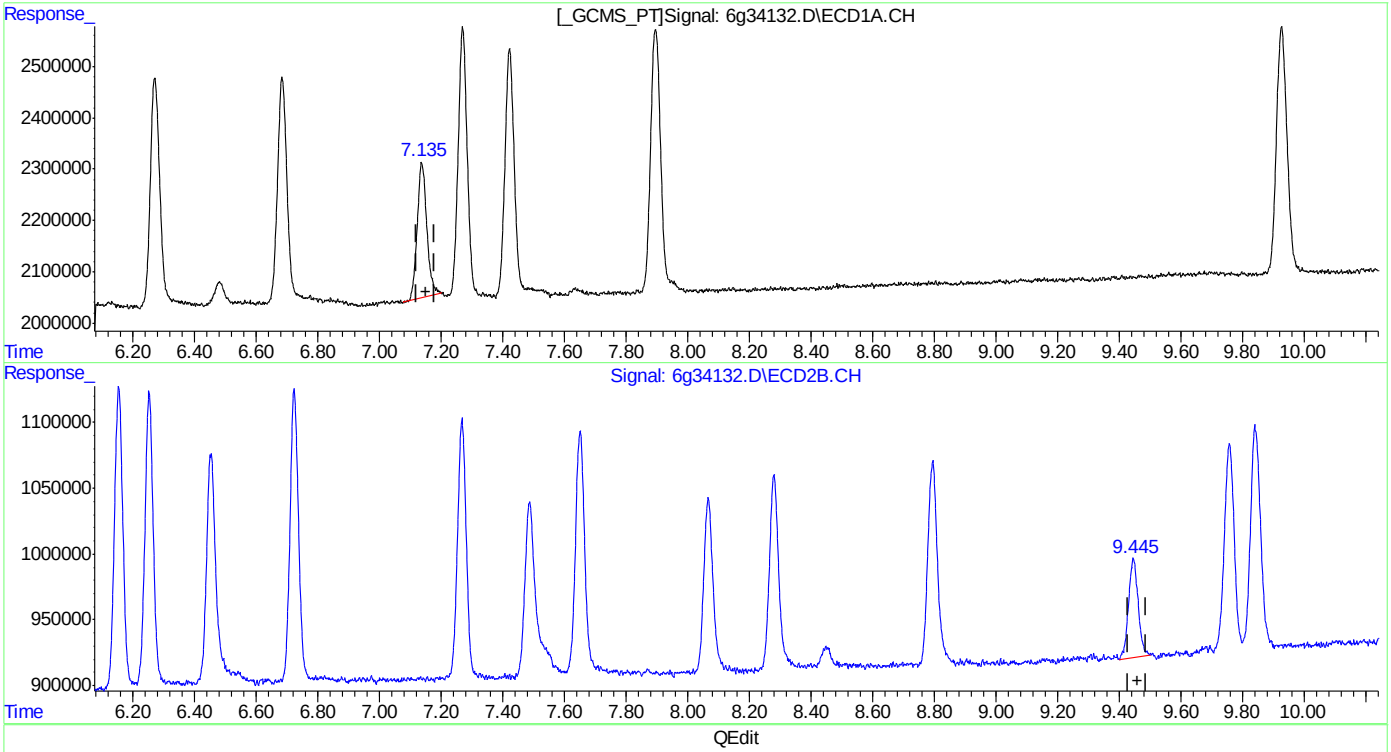
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:22 pm
Operator : dharas
Sample : ic987-5
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:36:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.137min 5.483PPB
response 5612130

(21) Methoxychlor #2 (A)
9.445min 6.860PPB m
response 1635835

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:36:56 2016

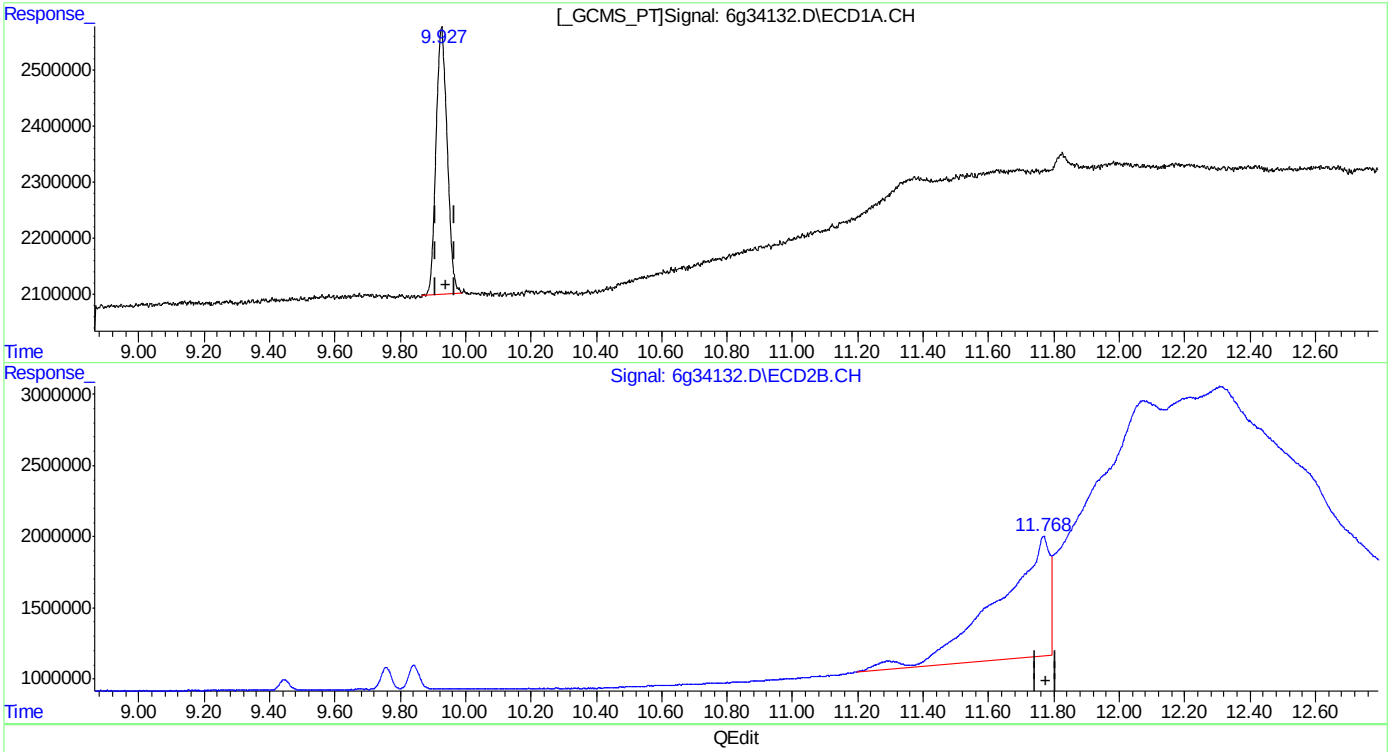
SGS ACCUTEST JC18649

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

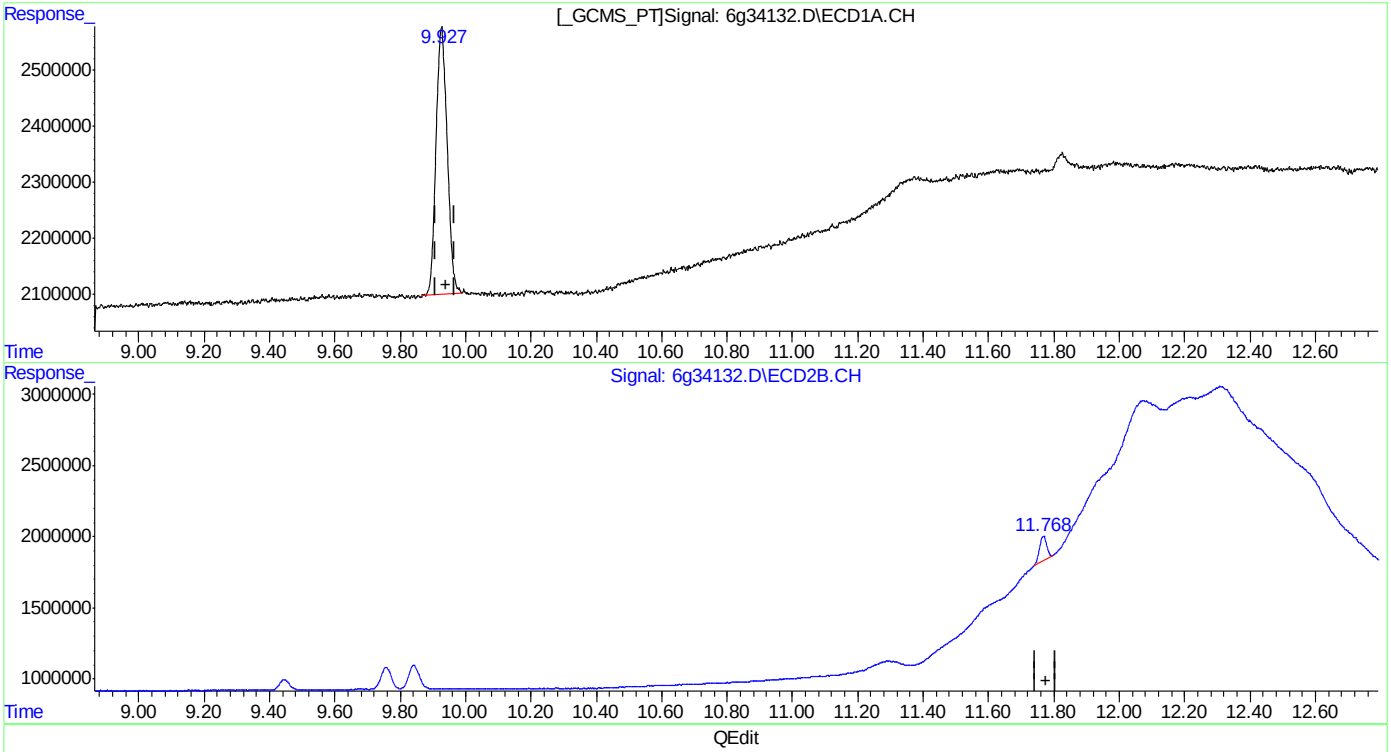
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:22 pm
Operator : dharas
Sample : ic987-5
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:36:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(24) Decachlorobiphenyl (SAB)
9.926min 5.088PPB
response 11331892

(24) Decachlorobiphenyl #2 (SAB)
11.768min 4.230PPB m
response 2647512

(+) = Expected Retention Time

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.

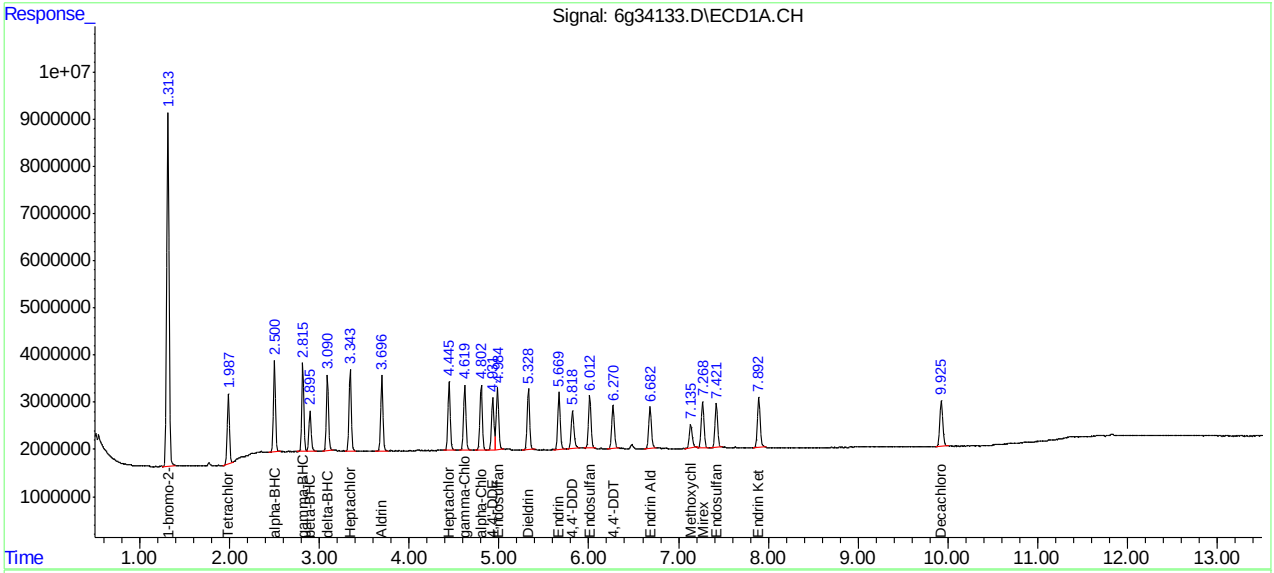
SGS ACCUTEST JC18649

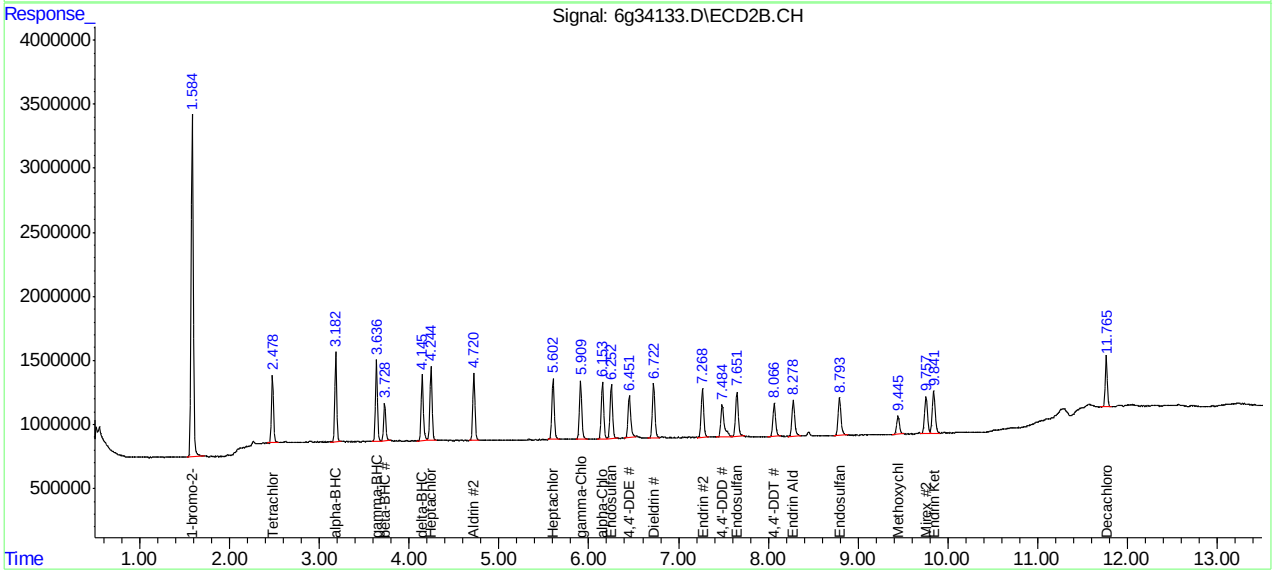
Quantitation Report (QT Reviewed)

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 JC18649

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34134.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:55 pm
Operator : dharas
Sample : icc987-25
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.315	1.585	144.2E6	47033284	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.988	2.479	63645253	20425732	24.970	23.499
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 62.42%	58.75%
24) SAB	Decachlor...	9.927	11.764	55812131	15912280	24.536	24.791
	Spiked Amount	40.000			Recovery	= 61.34%	61.98%
	Target Compounds						
3) A	alpha-BHC	2.501	3.183	84593859	26723168	26.461	25.101
4) MA	gamma-BHC	2.816	3.635	78582131	24936233	26.519	25.343
5) MA	Heptachlor	3.344	4.244	77647336	24523131	26.770	25.793
6) B	beta-BHC	2.895	3.728	38087675	11976851	26.007	24.561
7) B	delta-BHC	3.090	4.145	74464379	23208614	28.106	26.248
8) MB	Aldrin	3.696	4.721	71712233	23088257	26.222	25.047
9) B	Heptachlo...	4.445	5.603	67188984	21873984	25.889	25.305
10) B	gamma-Chl...	4.619	5.909	67637552	21033552	25.387	24.900
11) B	alpha-Chl...	4.801	6.153	67145569	20973298	25.652	24.780
12) A	Endosulfan I	4.984	6.252	65821217	20159813	24.640	24.433
13) B	4,4'-DDE	4.930	6.451	55200055	16712128	27.505	21.983
14) MA	Dieldrin	5.328	6.723	65244285	20507457	25.727	24.253
15) MA	Endrin	5.669	7.266	59357359	18498356	25.831	24.757
16) A	4,4'-DDD	5.819	7.485	45641463	16010720	26.137	22.966
17) B	Endosulfa...	6.010	7.649	57239557	18057776	24.851	23.383
18) MA	4,4'-DDT	6.269	8.066	50891758	14037689	27.629	30.363
19) B	Endrin Al...	6.682	8.279	47230230	14927948	25.373	24.018
20) B	Endosulfa...	7.419	8.793	50672464	15893200	25.582	24.517
21) A	Methoxychlor	7.135f	9.444f	31258519	8030389	29.903	32.838
22)	Mirex	7.268	9.756	52645396	15470703	24.209	23.512
23) B	Endrin Ke...	7.893	9.841f	61681398	18563884	28.503	26.782

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

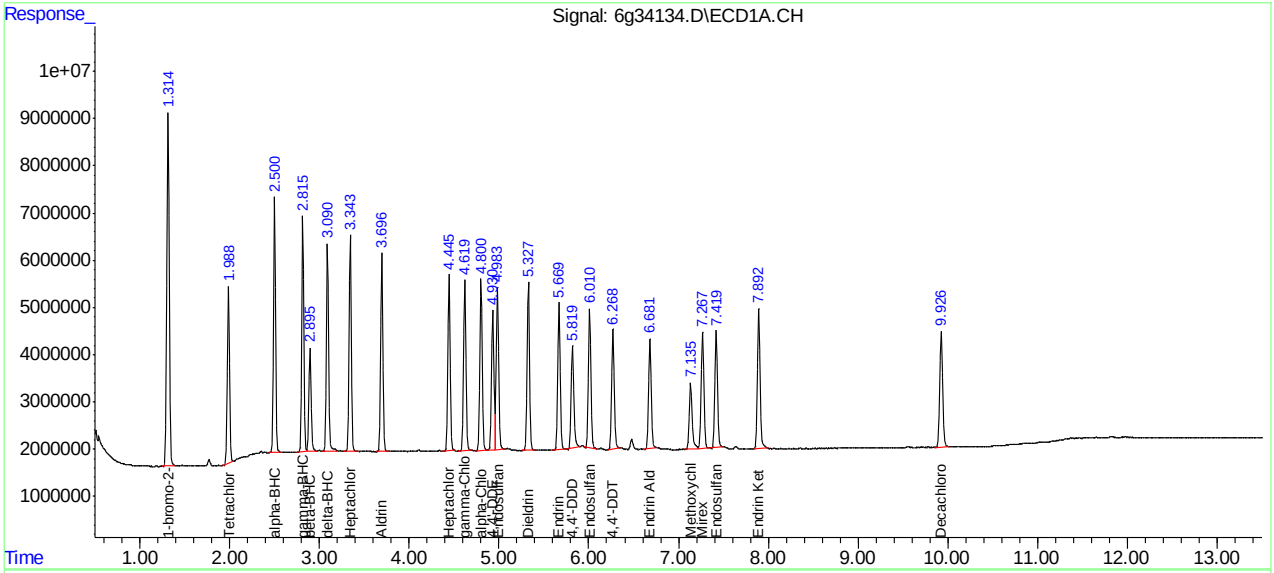
SGS ACCUTEST JC18649

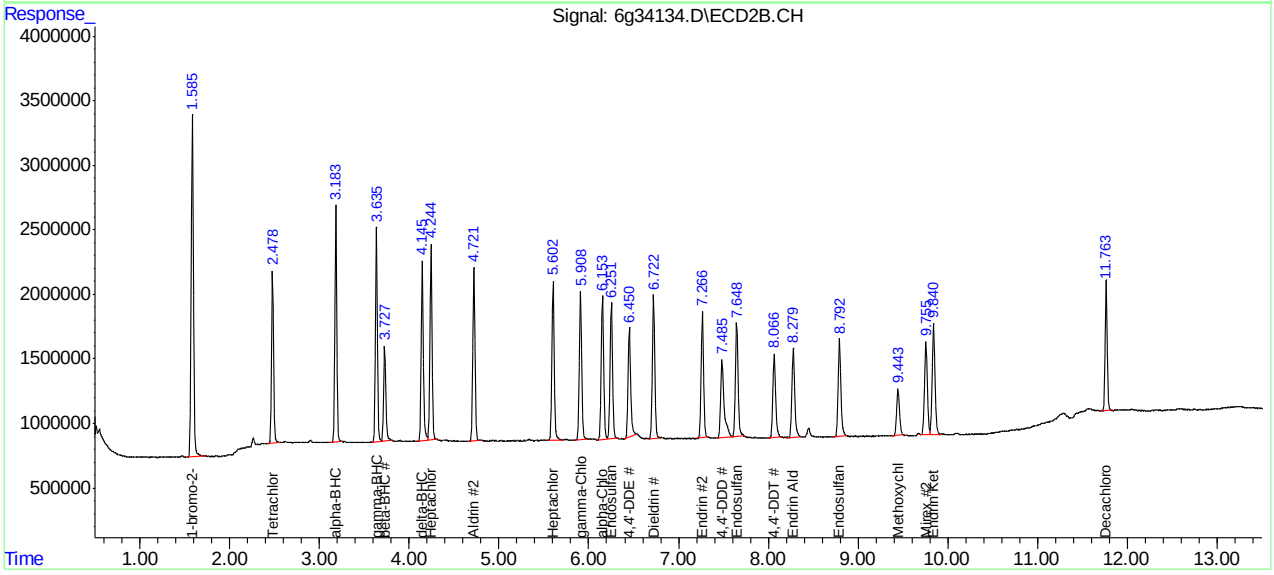
Quantitation Report (QT Reviewed)

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

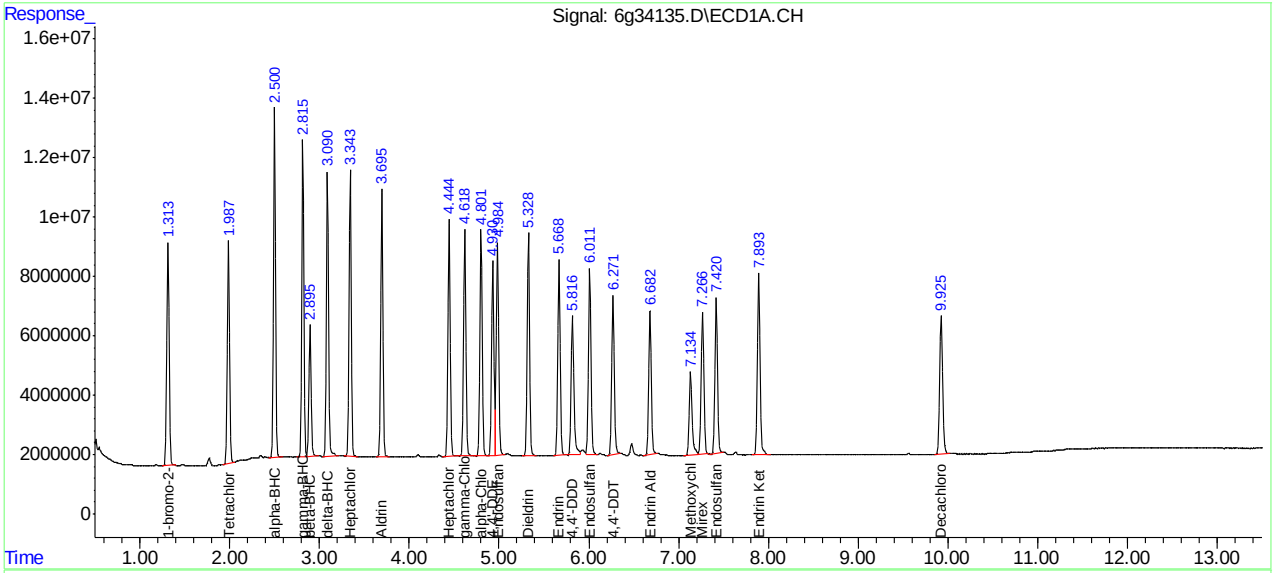
SGS ACCUTEST JC18649

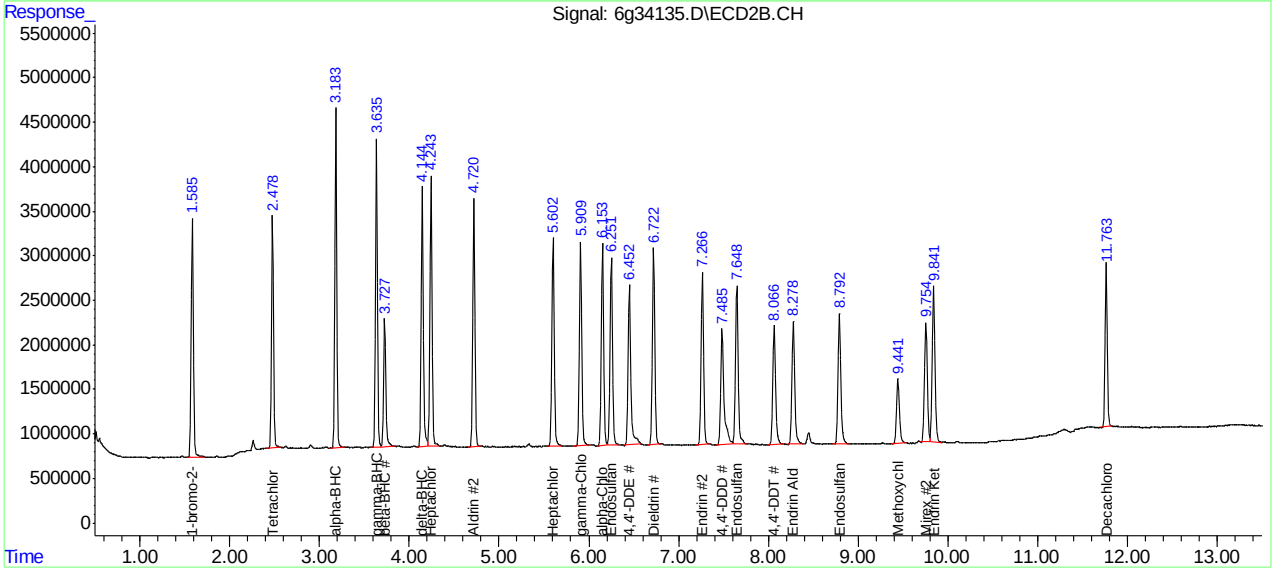
Quantitation Report (QT Reviewed)

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

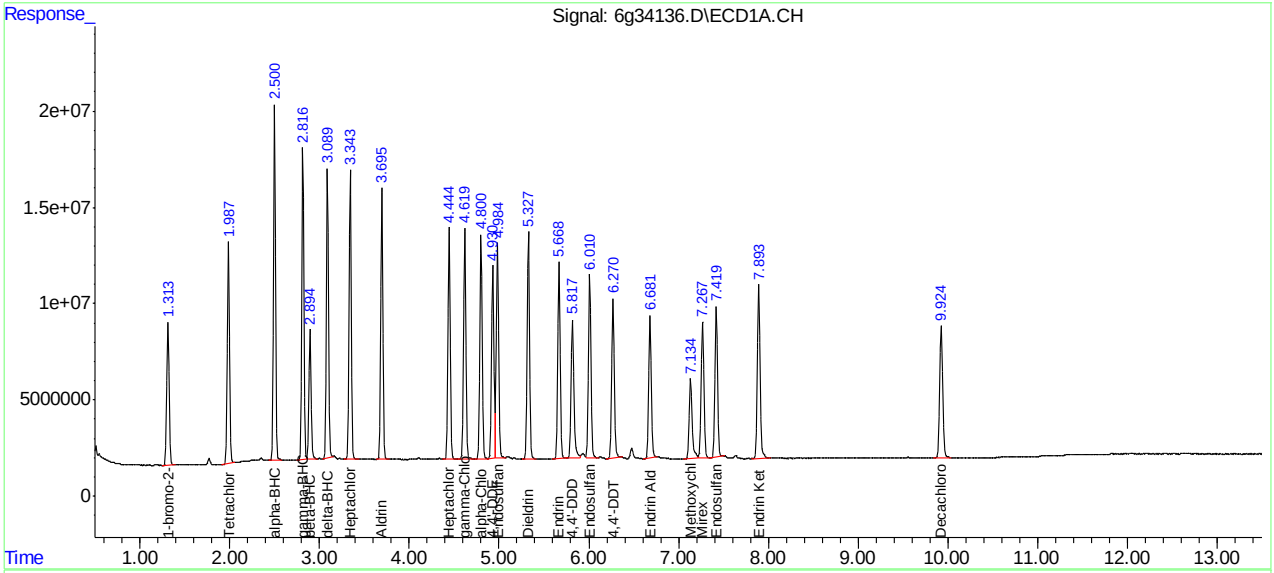
9

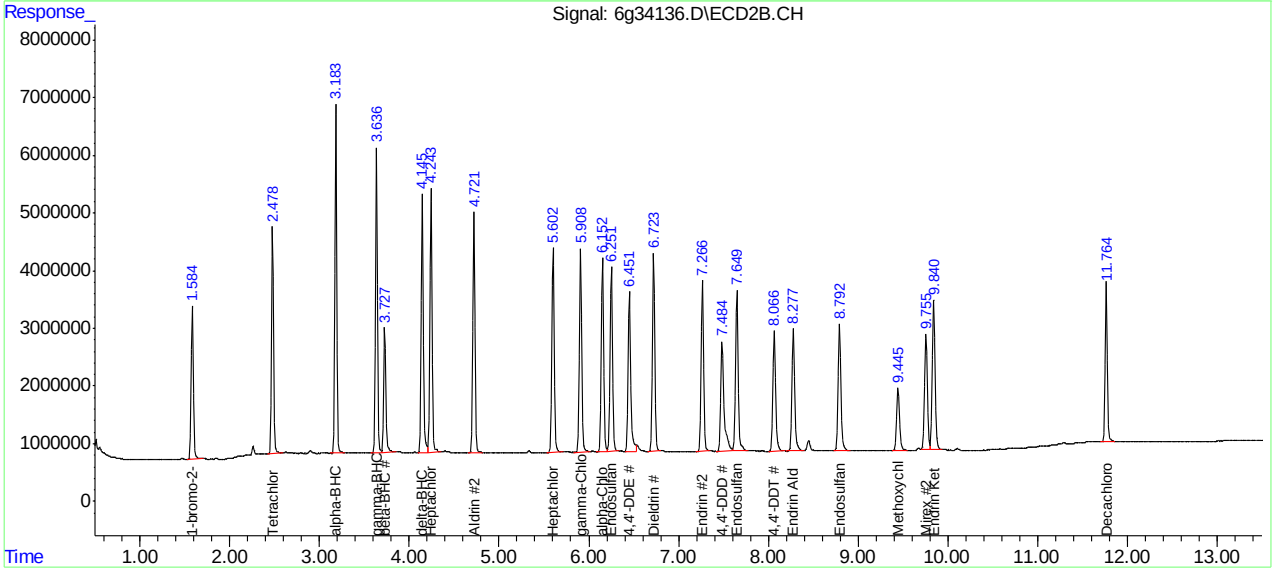
Quantitation Report (QT Reviewed)

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 JC18649

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

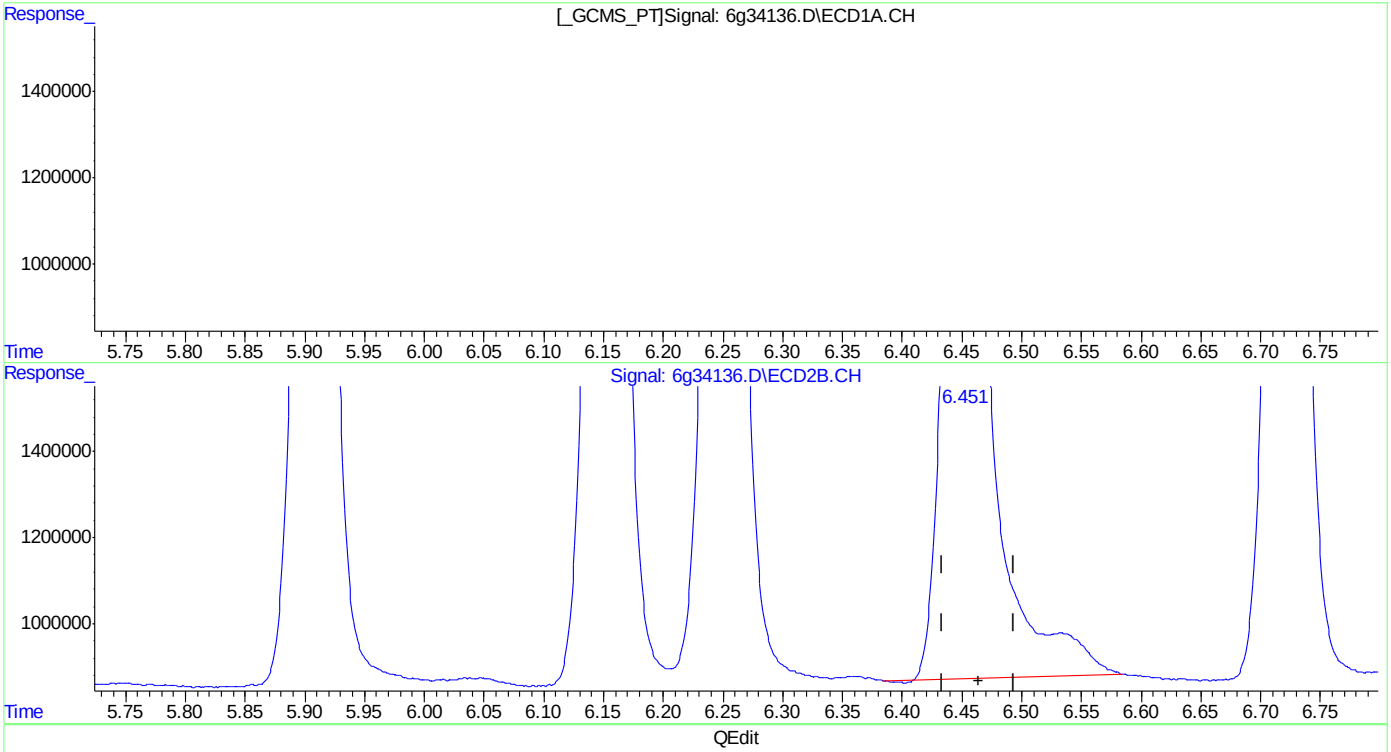
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration

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

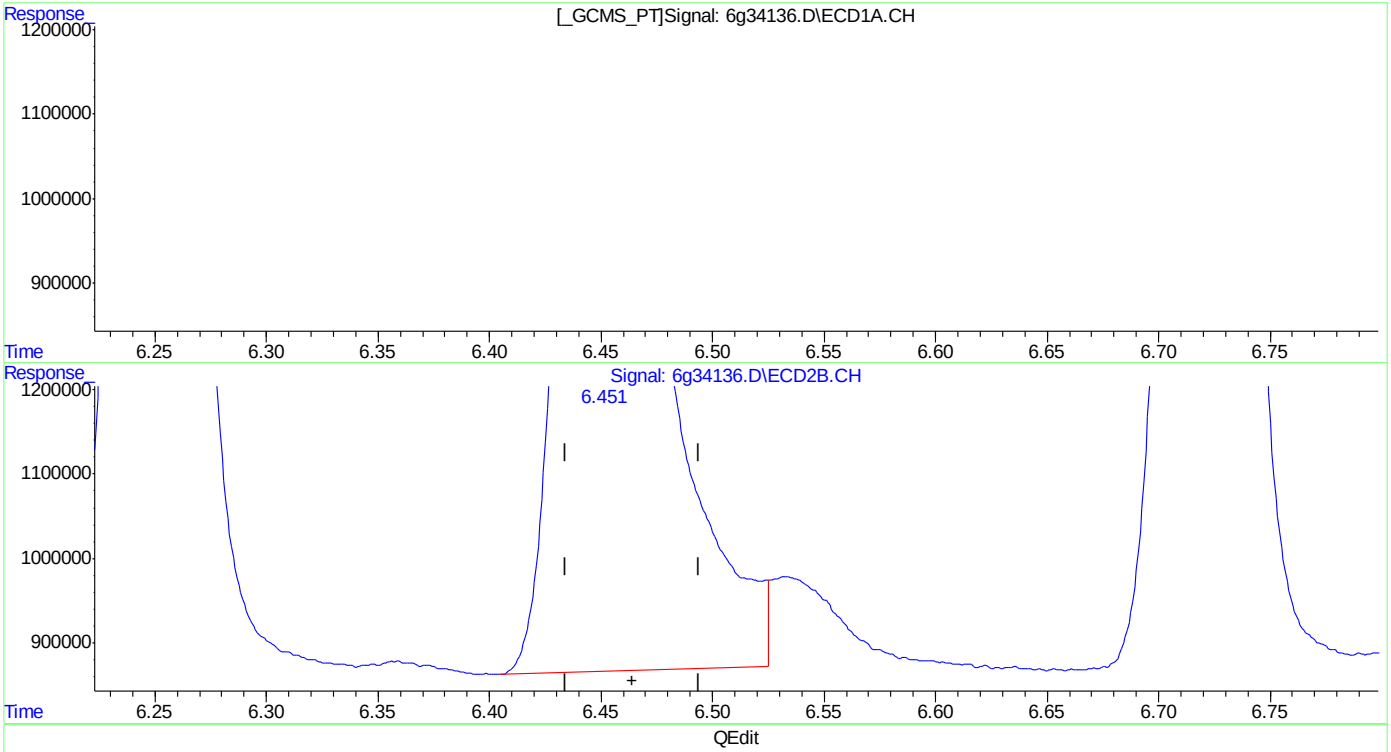
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:25:21 2016

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



(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

SGS ACCUTEST JC18649

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

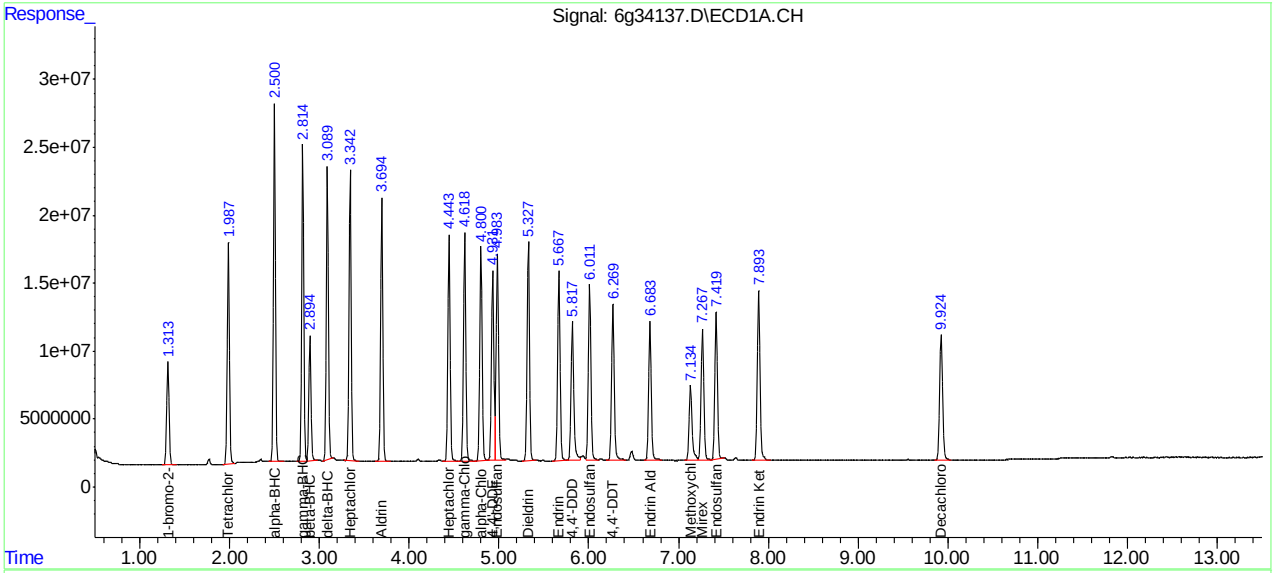
SGS ACCUTEST JC18649

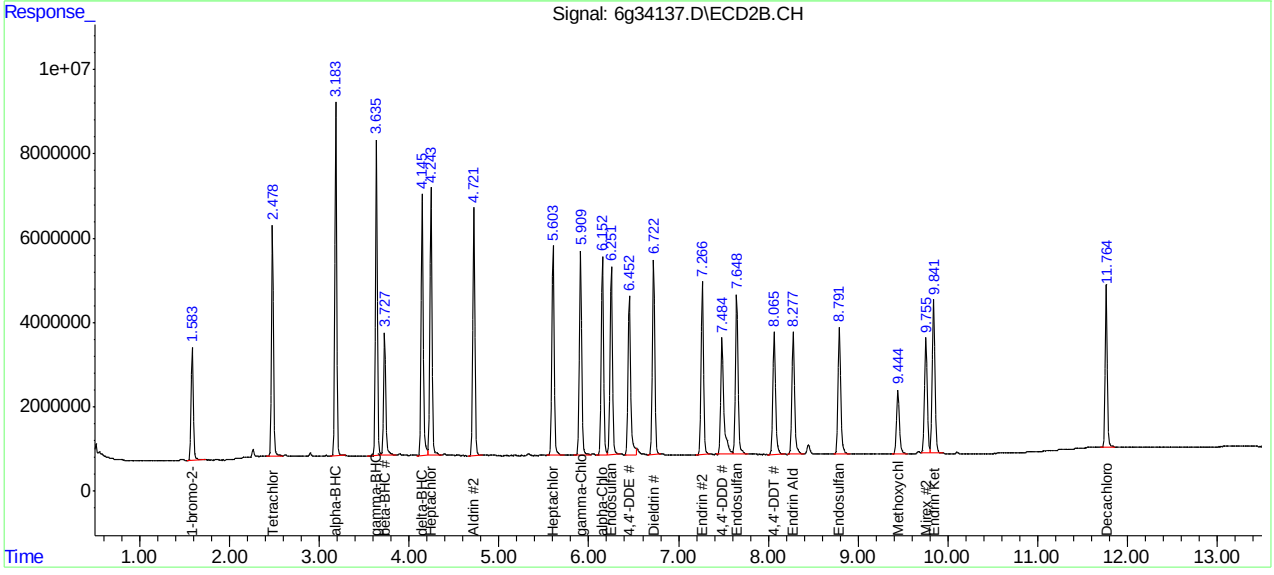
Quantitation Report (QT Reviewed)

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 JC18649

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

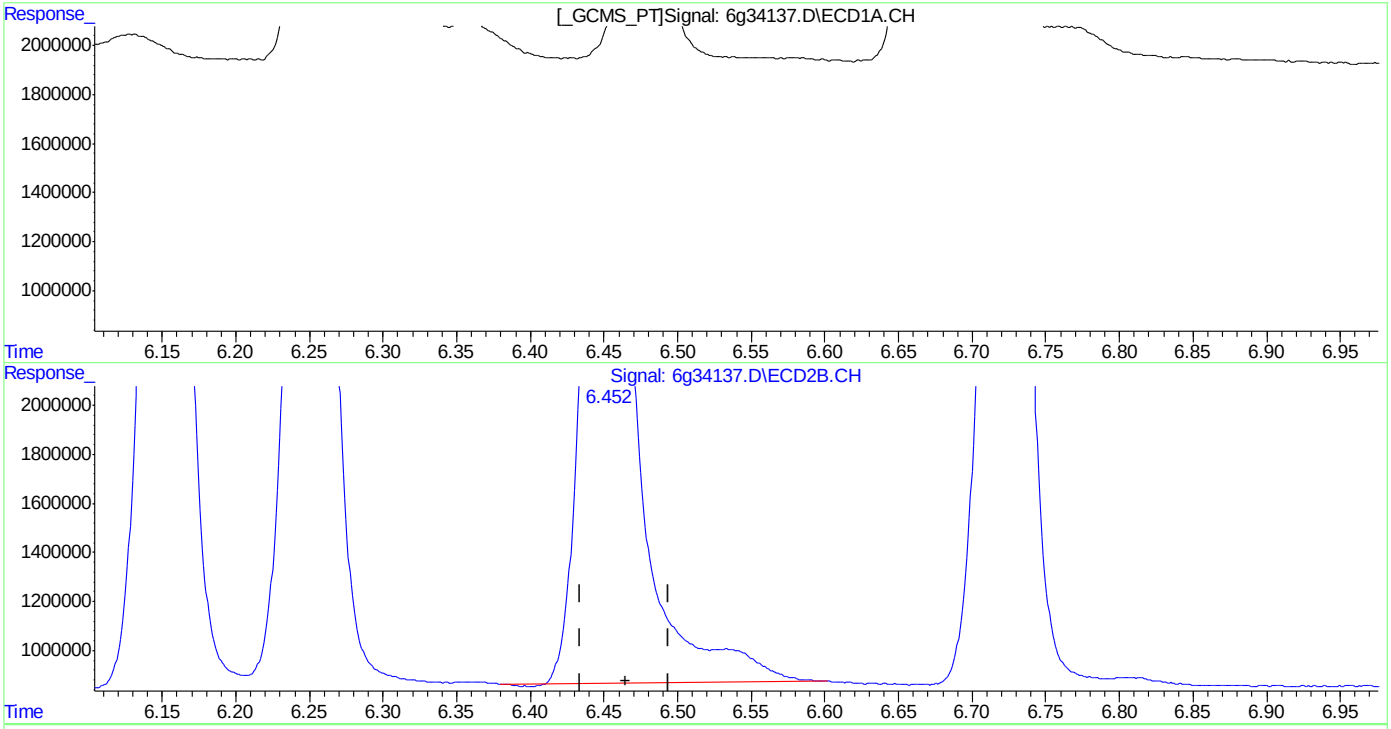
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration

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

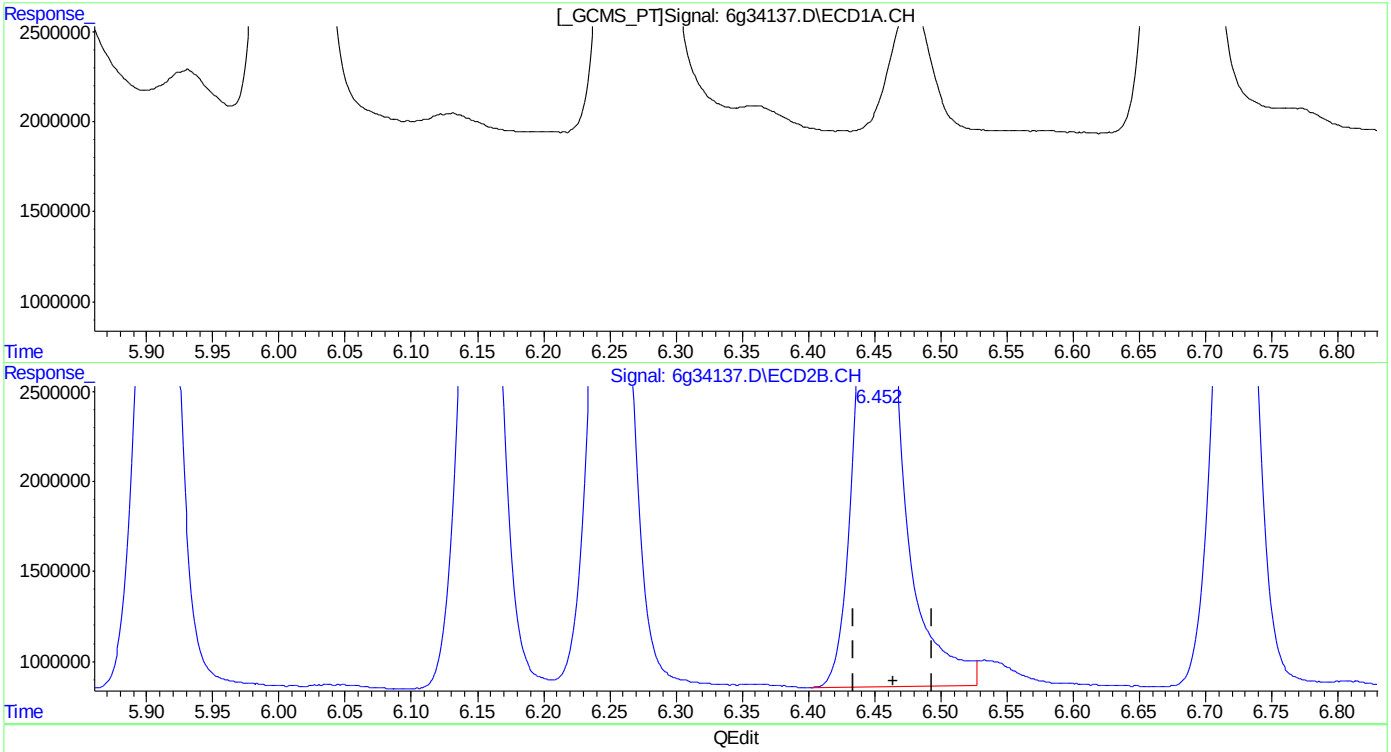
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34137.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:44 pm
Operator : dharas
Sample : ic987-100
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:25:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(13) 4,4'-DDE (B)
4.931min 128.766PPB
response 258364552

(13) 4,4'-DDE #2 (B)
6.452min 101.535PPB m
response 77237419

(+) = Expected Retention Time

SGS ACCUTEST JC18649

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.

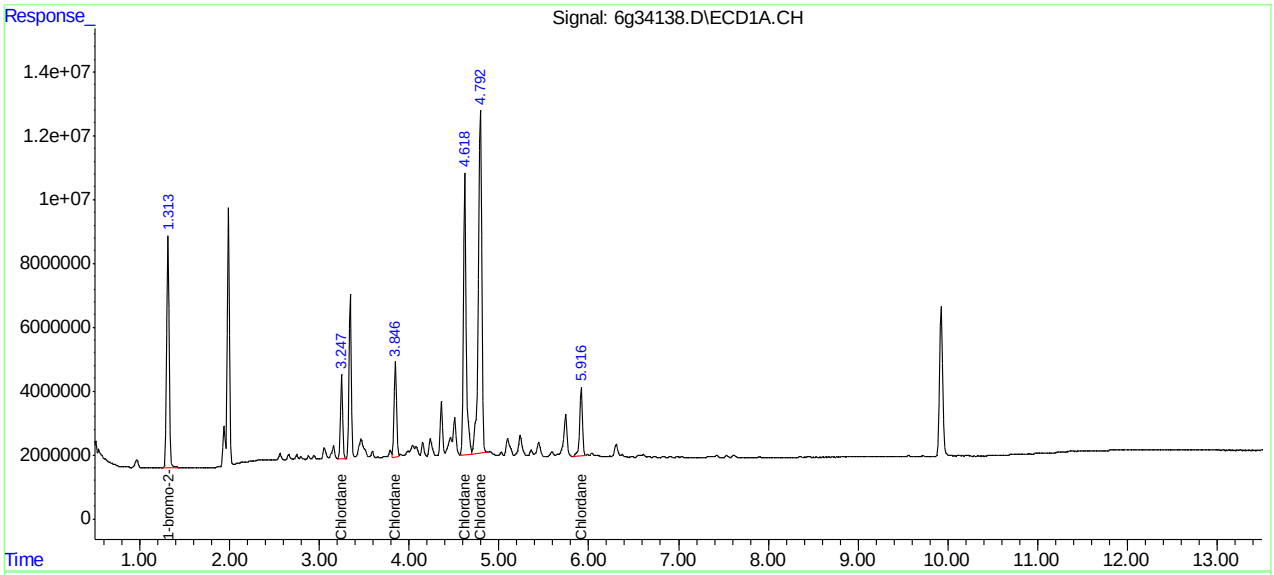
9.6.25
9

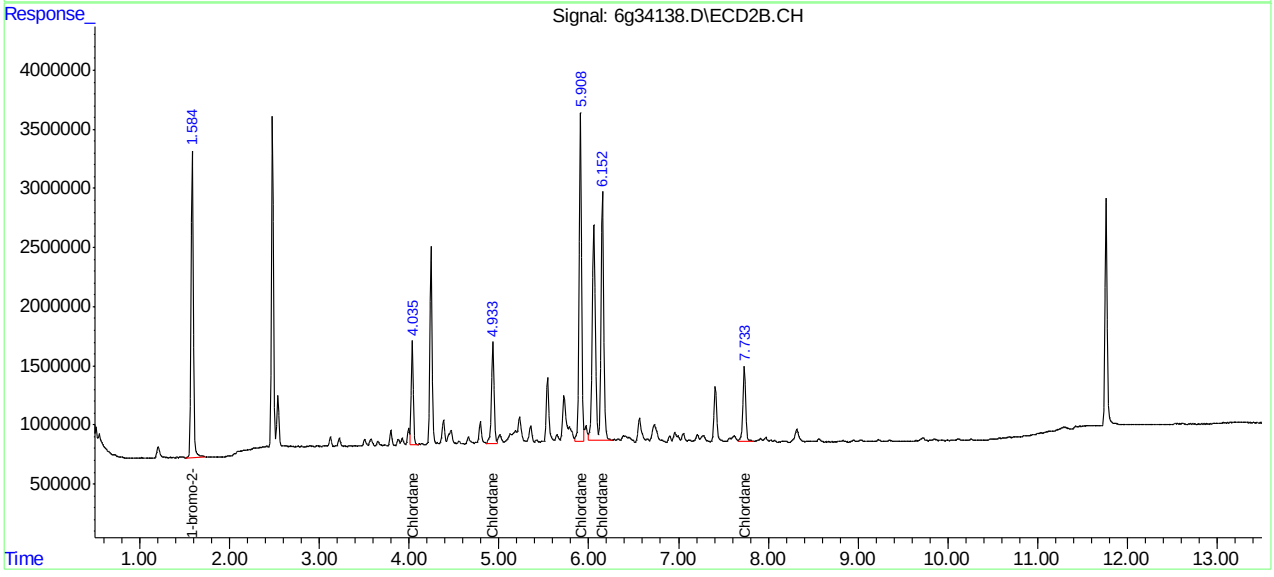
Quantitation Report (QT Reviewed)

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

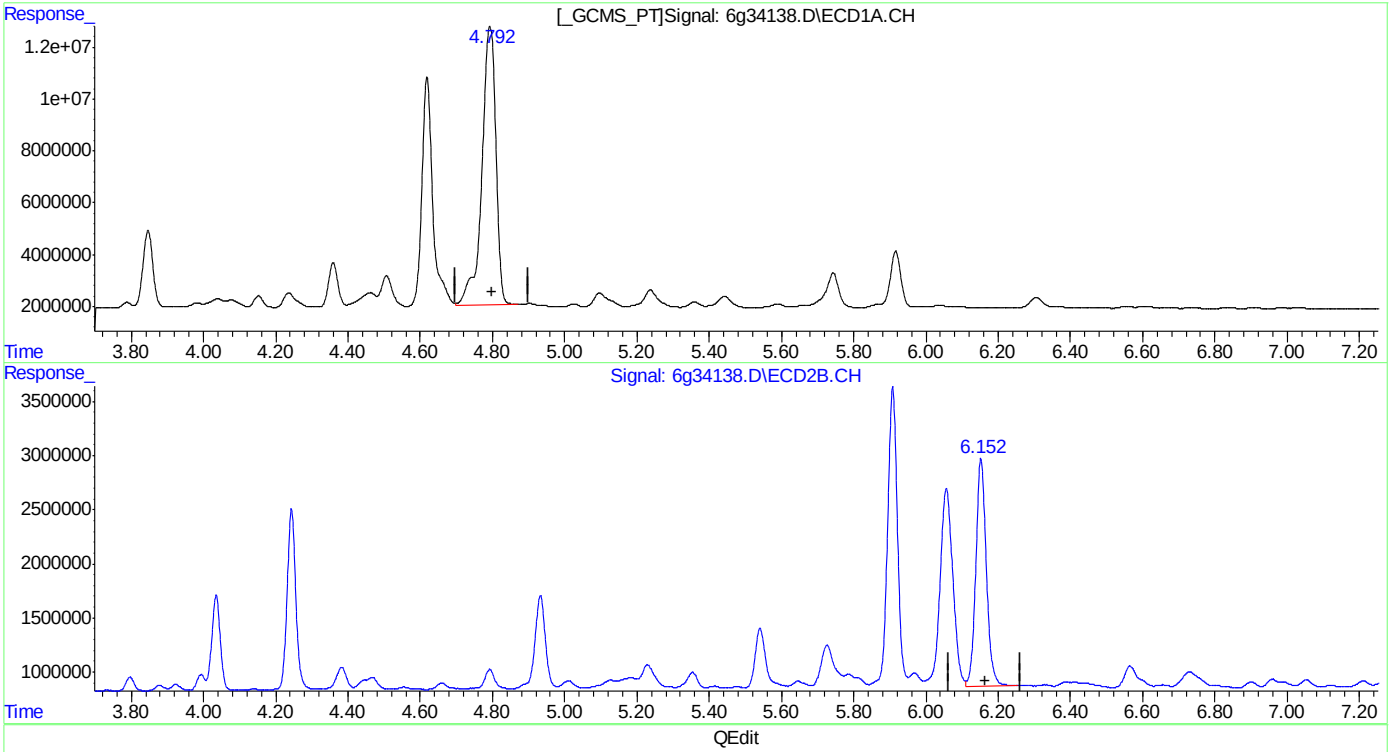
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.15	Poor instrument integration

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



(35) Chlordane {D}
4.793min 519.746PPB
response 290776008

(35) Chlordane {D} #2
6.152min 267.305PPB
response 42534341

(+) = Expected Retention Time

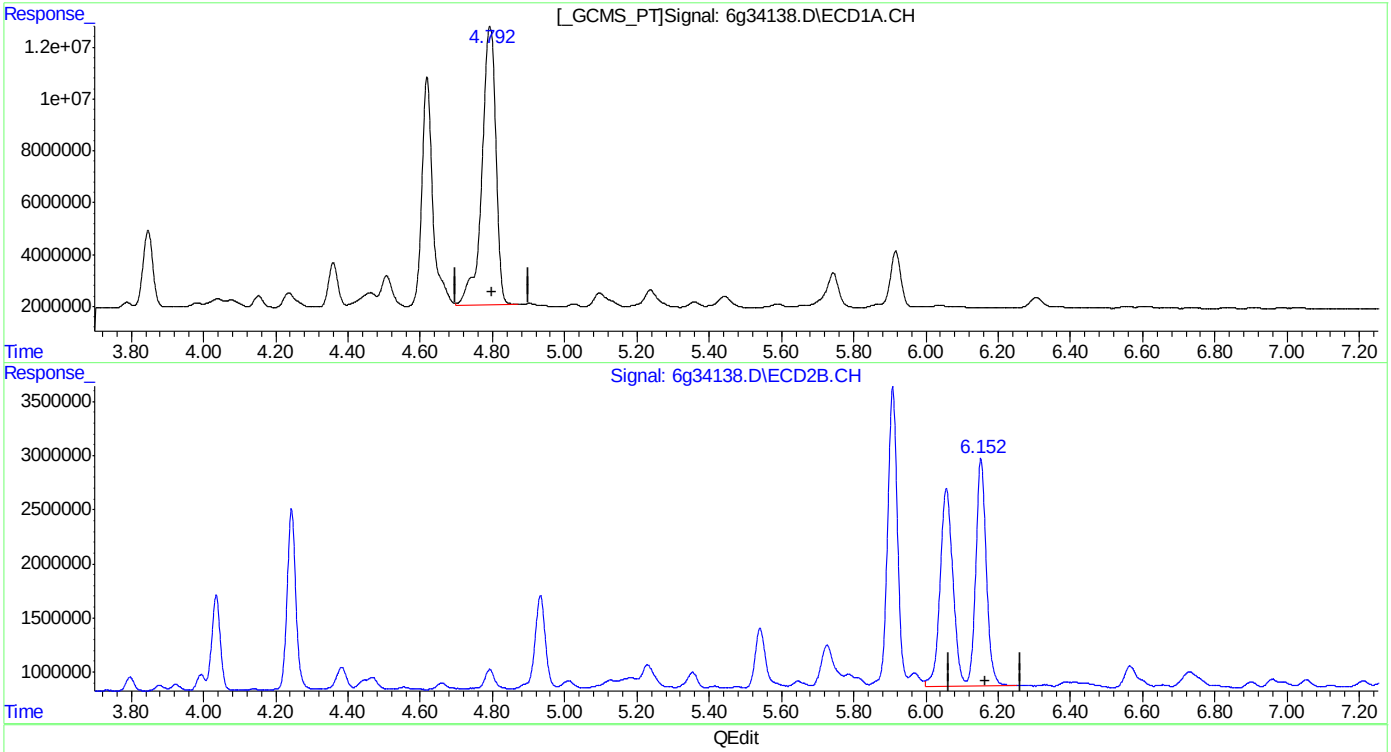
SGS ACCUTEST JC18649

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34138.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:00 pm
Operator : dharas
Sample : ic987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:57:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(35) Chlordane {D}
4.793min 519.746PPB
response 290776008

(35) Chlordane {D} #2
6.152min 550.227PPB m
response 87553858

(+) = Expected Retention Time

SGS ACCUTEST JC18649

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							

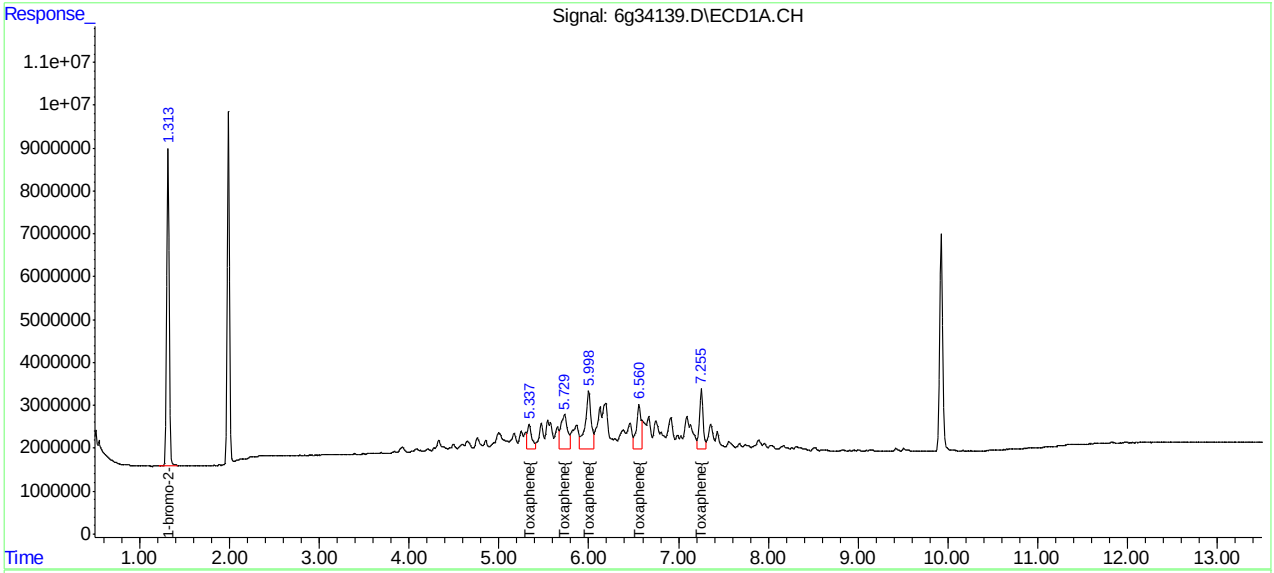
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

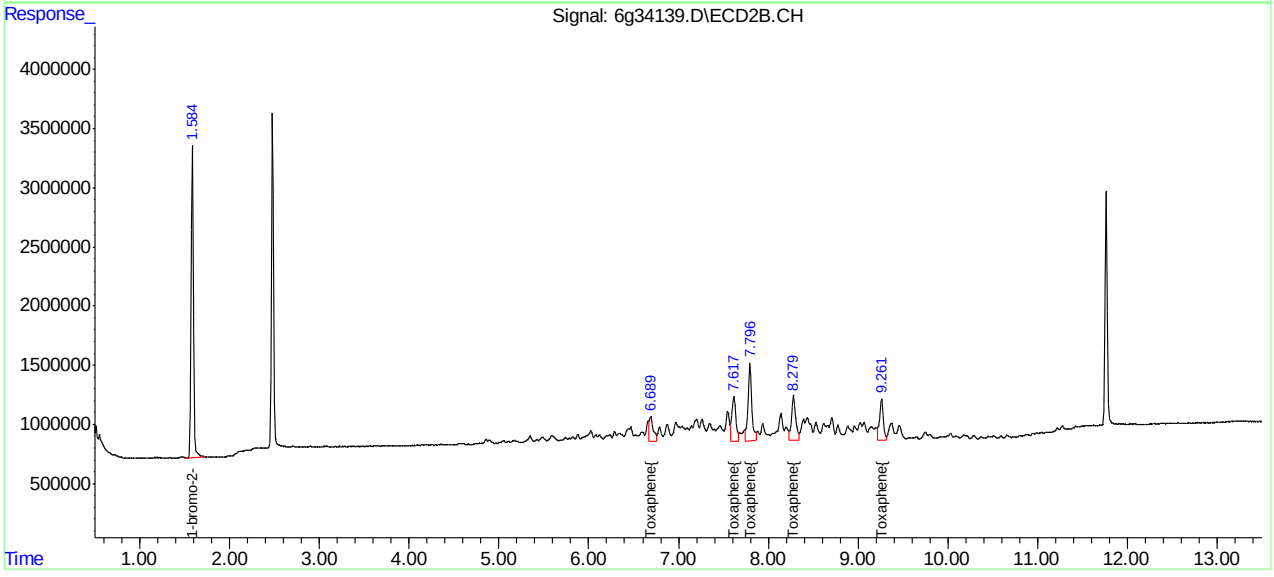
Quantitation Report (QT Reviewed)

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

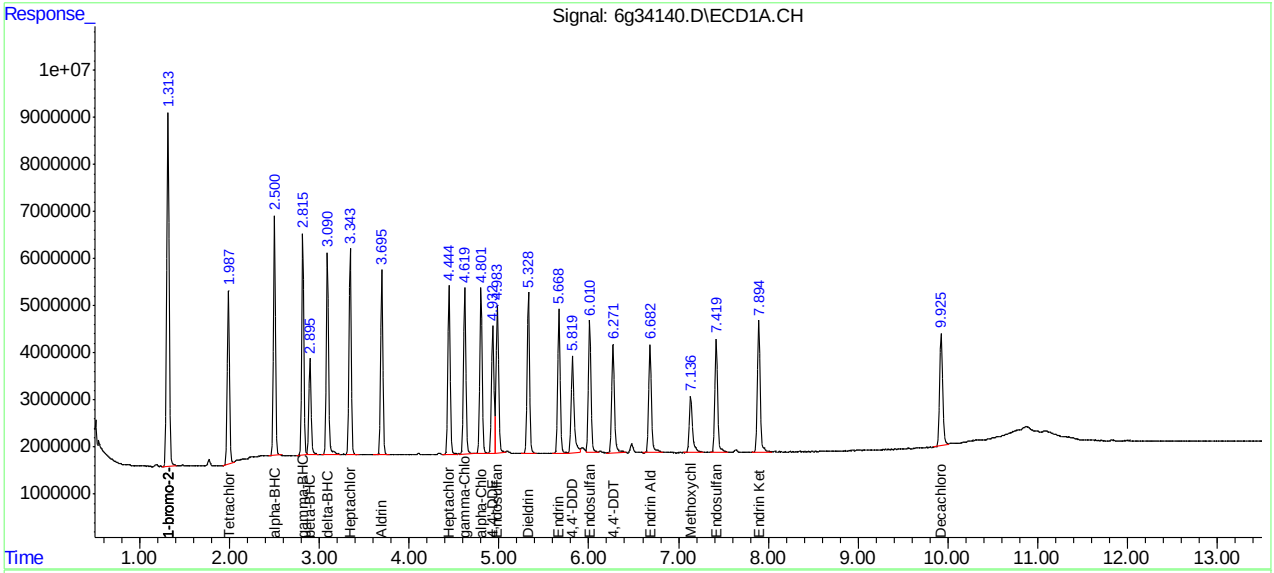
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

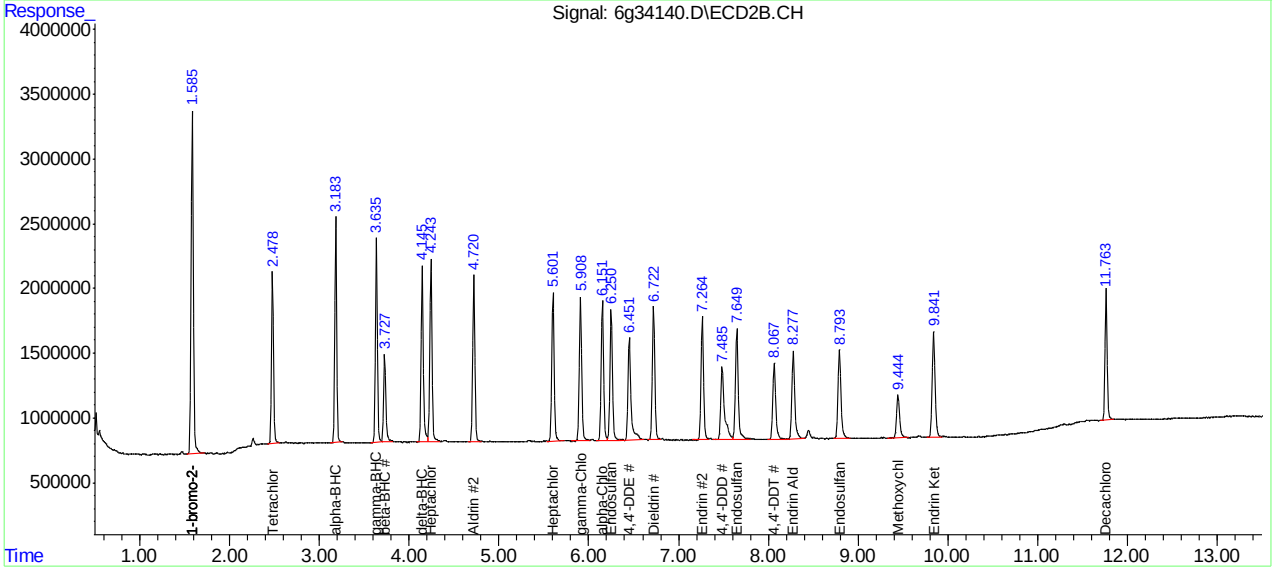
Quantitation Report (QT Reviewed)

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

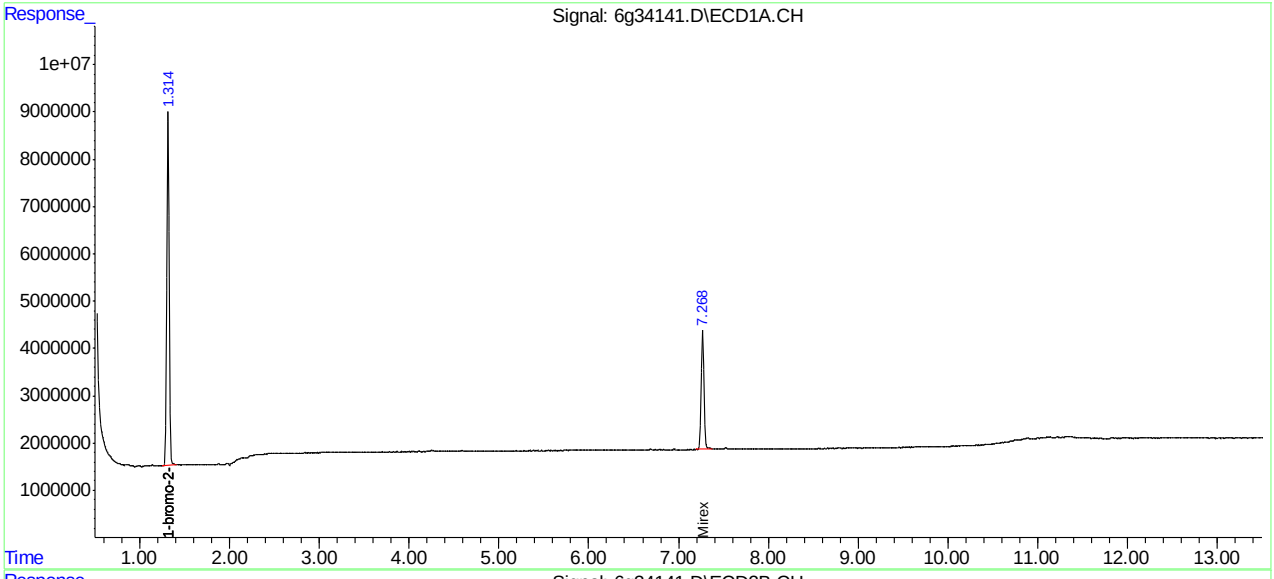
SGS ACCUTEST JC18649

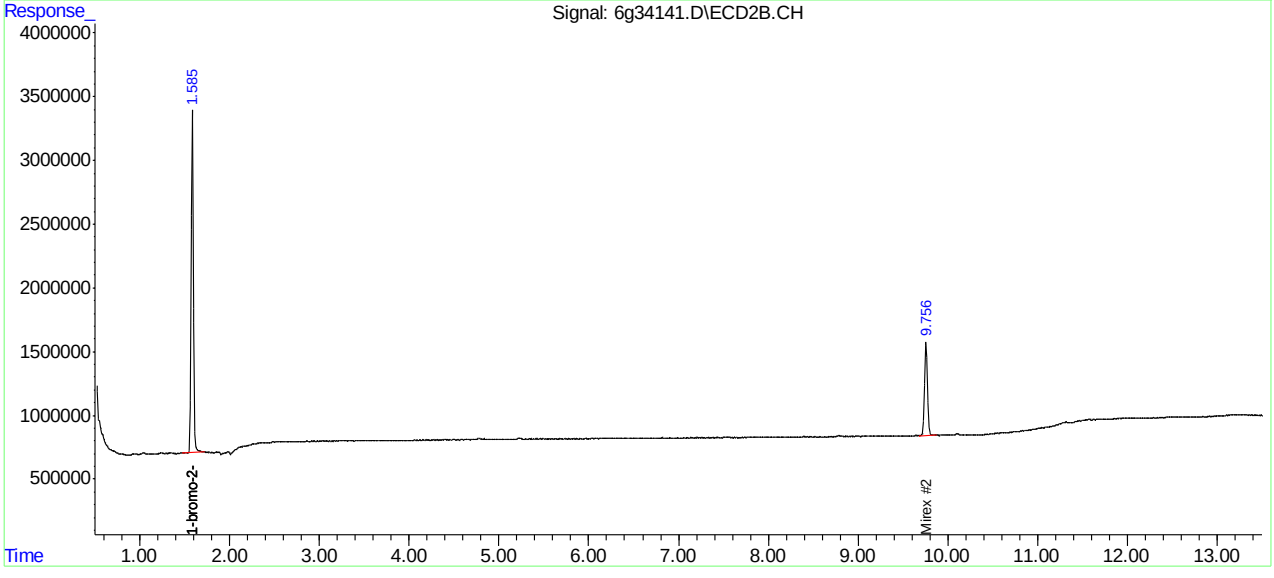
Quantitation Report (QT Reviewed)

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

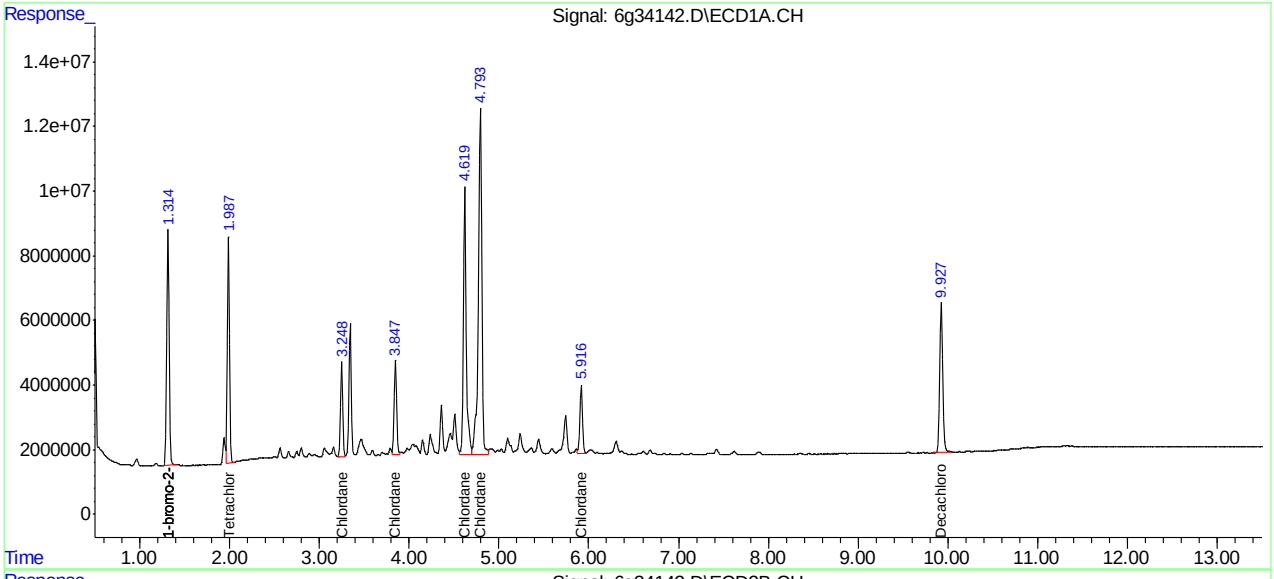
SGS ACCUTEST JC18649

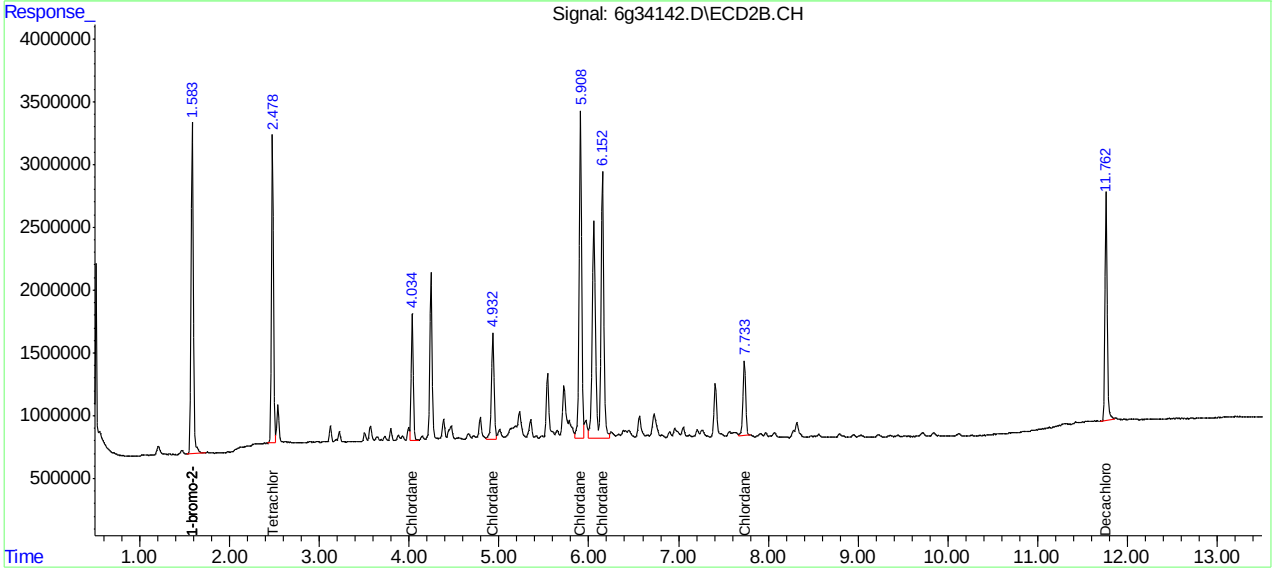
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:06 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:37:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G6G987-ICV987	**Method:**	SW846 8081B
Lab FileID:	6G34142.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 19:06	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

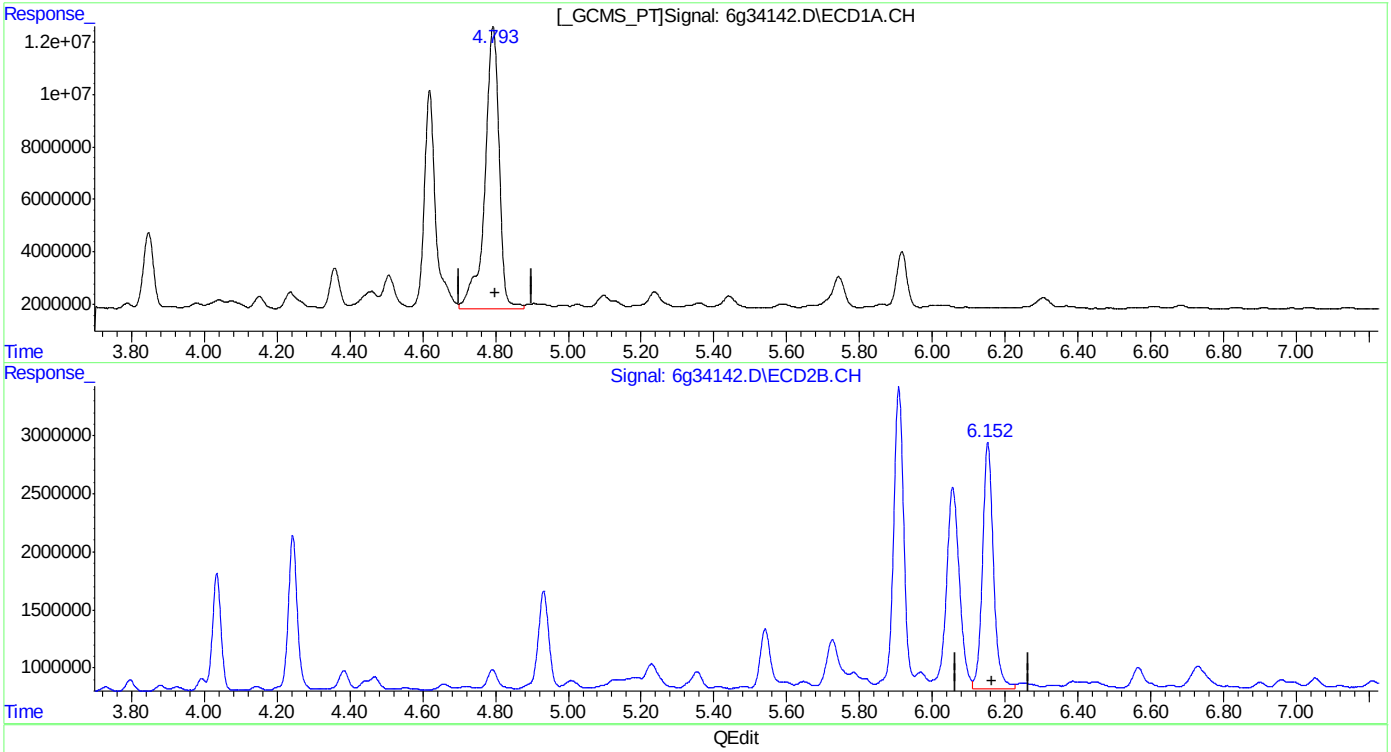
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.15	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:06 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:36:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(35) Chlordane {D}
4.793min 507.996PPB
response 291002130

(35) Chlordane {D} #2
6.152min 250.802PPB
response 44256937

(+) = Expected Retention Time

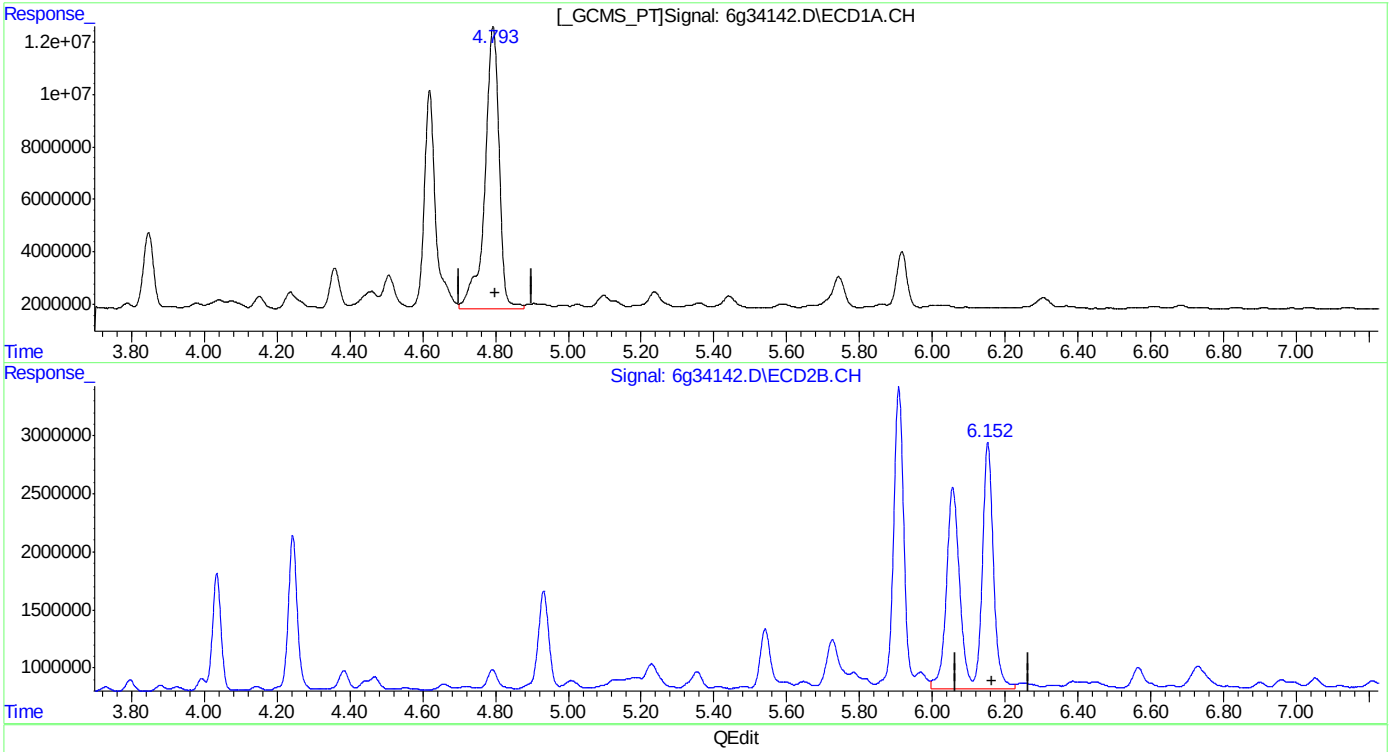
SGS ACCUTEST JC18649

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
6PST987.M Mon Apr 18 11:37:14 2016

SGS ACCUTEST JC18649

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.

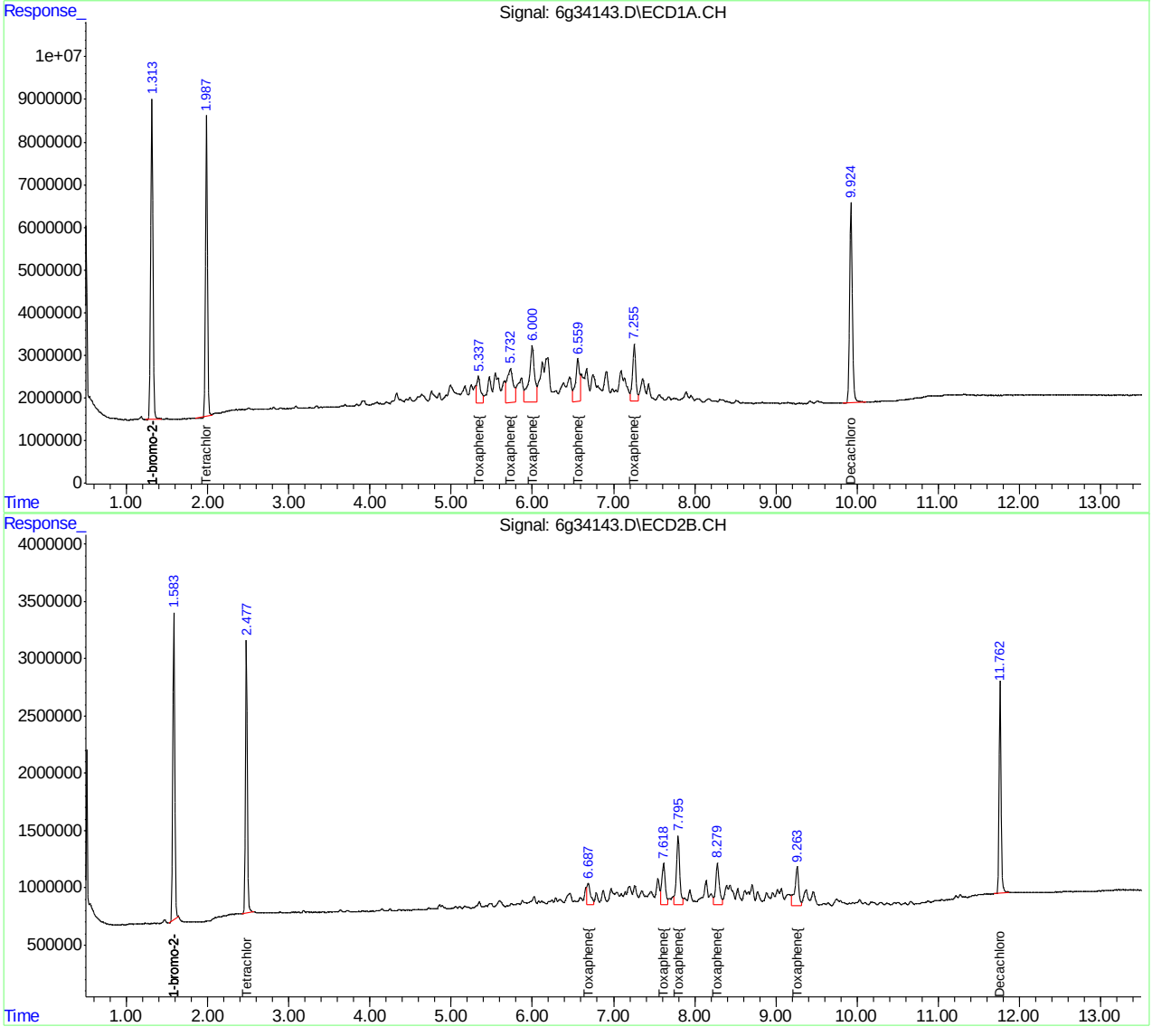
9.6.30
9

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 JC18649

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

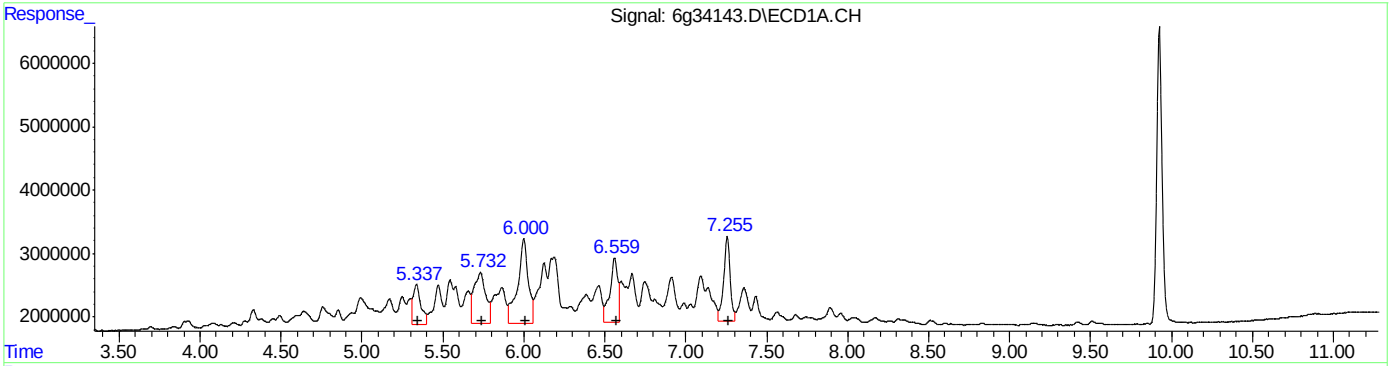
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-A		2	6.69	Poor instrument integration

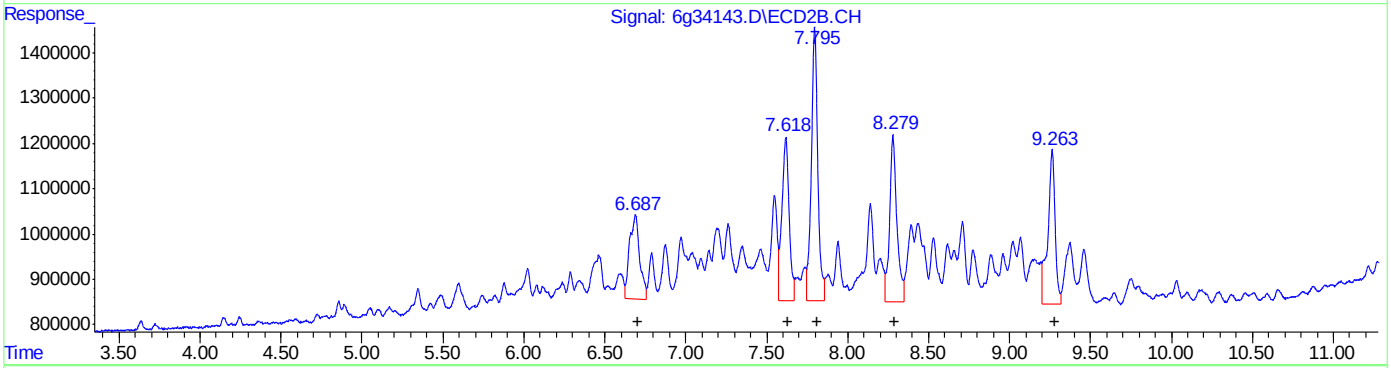
Quantitation Report (Qedit)

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

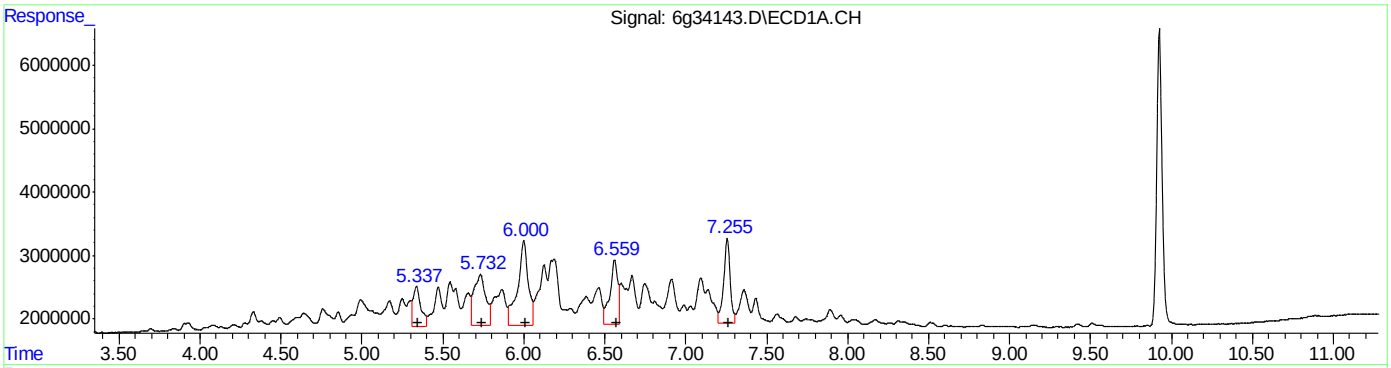
(+) = Expected Retention Time

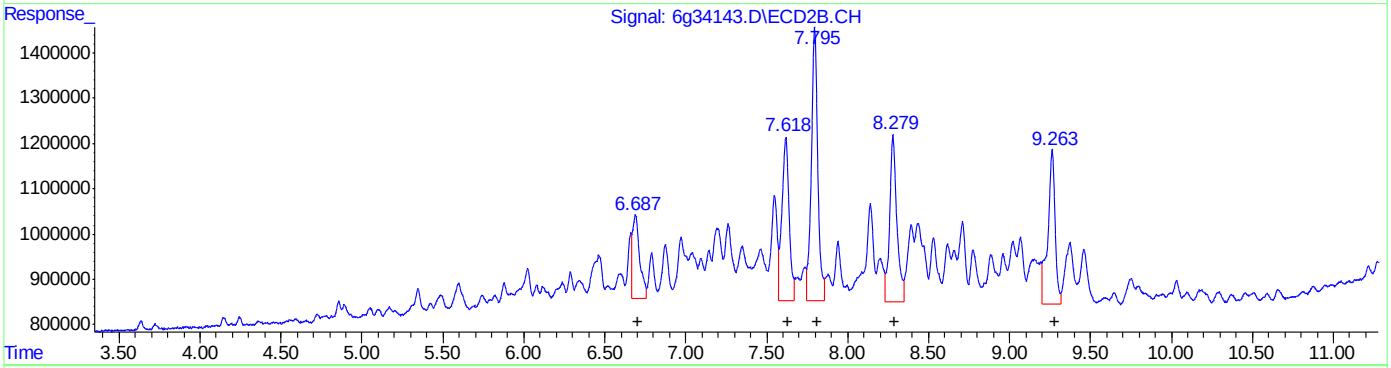
Quantitation Report (Qedit)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34372.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 10:07 am
Operator : brittanp
Sample : cc987-25
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:32:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.303	1.574	135.9E6	49841087	50.000	50.000
25) I	1-bromo-2...	1.303	1.574	135.9E6	49841087	50.000	50.000
31) I	1-bromo-2...	1.303	1.574	135.9E6	49841087	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.980	2.471	62387224	22492536	25.038	24.978
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 62.59%	62.45%
24)	SAB Decachlor...	9.919f	11.763	51711179	15362483	23.867	22.690
	Spiked Amount	40.000			Recovery	= 59.67%	56.73%
	Target Compounds						
3) A	alpha-BHC	2.494	3.176	83176354	29569422	25.894	25.205
4) MA	gamma-BHC	2.810	3.628	76812951	27433841	25.685	24.975
5) MA	Heptachlor	3.338	4.235f	75321517	25836457	25.091	23.274
6) B	beta-BHC	2.890	3.720	36663582	12927992	24.976	24.157
7) B	delta-BHC	3.084	4.138	70513270	25404043	25.300	24.818
8) MB	Aldrin	3.690	4.713f	69593444	24719448	25.101	23.947
9) B	Heptachlo...	4.439	5.593f	65001744	22770557	25.041	23.667
10) B	gamma-Chl...	4.614	5.899f	63196403	22153188	24.193	23.554
11) B	alpha-Chl...	4.796	6.143f	63205632	22069551	24.379	23.619
12) A	Endosulfan I	4.979	6.242f	61741988	21349907	24.123	23.519
13) B	4,4'-DDE	4.925	6.442f	53912697	19879752	25.095	24.672
14) MA	Dieldrin	5.322f	6.713f	62725134	21670952	24.786	23.371
15) MA	Endrin	5.664	7.256f	57743160	19535158	25.152	23.188
16) A	4,4'-DDD	5.812f	7.475f	46196560	17306435	25.435	24.888
17) B	Endosulfa...	6.004f	7.639f	55912468	19736434	24.685	23.952
18) MA	4,4'-DDT	6.264f	8.056f	48975421	14820841	24.791	23.482
19) B	Endrin Al...	6.674f	8.268f	45479137	15506049	24.634	23.210
20) B	Endosulfa...	7.411f	8.782f	50404382	16721582	25.339	23.061
21) A	Methoxychlor	7.127f	9.432f	29927211	8383091	25.275	24.105
22)	Mirex	7.262f	9.744f	49728560	15931710	24.519	22.314
23) B	Endrin Ke...	7.885f	9.830f	57800753	18986081	24.435	22.401

SemiQuant Compounds - Not Calibrated on this Instrument

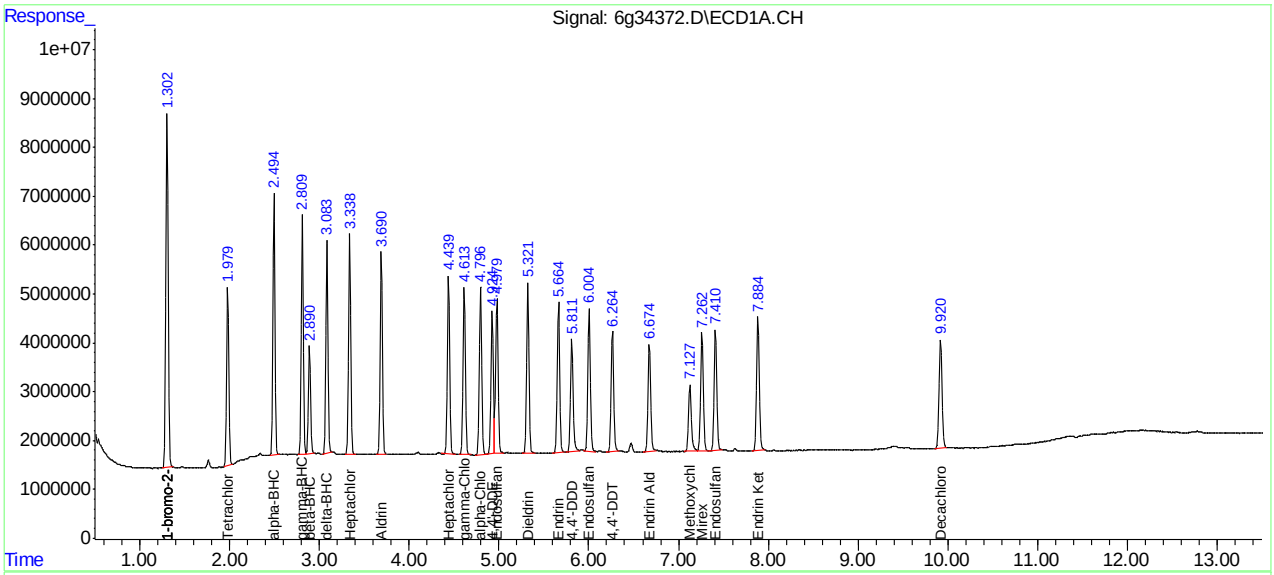
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

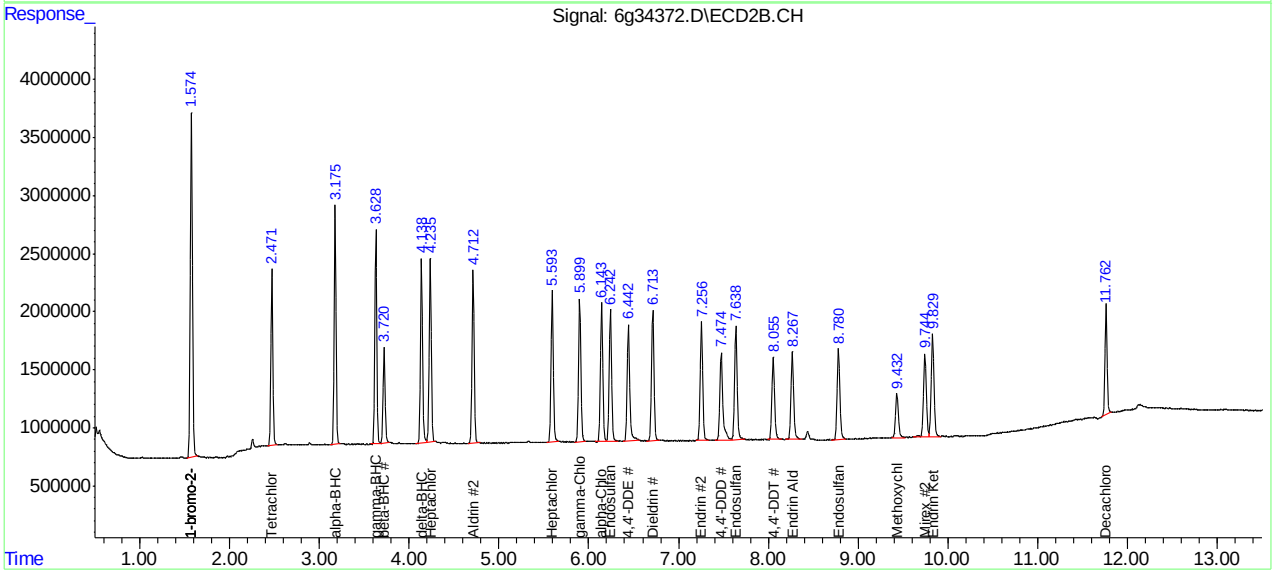
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34372.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 10:07 am
Operator : brittanp
Sample : cc987-25
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:32:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34394.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:32 pm
Operator : dharas
Sample : cc987-50
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:48:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.305	1.577	139.4E6	48002185	50.000	50.000
25) I	1-bromo-2...	1.305	1.577	139.4E6	48002185	50.000	50.000
31) I	1-bromo-2...	1.305	1.577	139.4E6	48002185	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.981	2.472	125.3E6	41415648	49.065	47.755
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 122.66%	119.39%
24)	SAB Decachlor...	9.917f	11.760f	106.6E6	30408318	47.986	46.634
	Spiked Amount	40.000			Recovery	= 119.96%	116.59%
	Target Compounds						
3) A	alpha-BHC	2.495	3.176	179.9E6	56704422	54.635	50.186
4) MA	gamma-BHC	2.810	3.628	163.8E6	51536077	53.429	48.715
5) MA	Heptachlor	3.337	4.236f	160.0E6	48058223	51.993	44.950
6) B	beta-BHC	2.889	3.721	73418859	23677630	48.789	45.938
7) B	delta-BHC	3.084	4.137	155.6E6	48494561	54.456	49.190
8) MB	Aldrin	3.689	4.713f	150.2E6	45998255	52.834	46.268
9) B	Heptachlo...	4.437f	5.592f	137.7E6	42263133	51.750	45.610
10) B	gamma-Chl...	4.611	5.899f	138.3E6	41452800	51.633	45.762
11) B	alpha-Chl...	4.793	6.143f	135.9E6	41430273	51.129	46.037
12) A	Endosulfan I	4.976f	6.242f	134.2E6	40055803	51.150	45.815
13) B	4,4'-DDE	4.923f	6.441f	118.0E6	37851764	53.587	48.776
14) MA	Dieldrin	5.320f	6.713f	136.1E6	41373257	52.454	46.329
15) MA	Endrin	5.660f	7.255f	124.4E6	37405644	52.868	46.100
16) A	4,4'-DDD	5.811f	7.473f	100.9E6	33837108	54.183	50.525
17) B	Endosulfa...	6.002f	7.639f	120.5E6	38183194	51.879	48.115
18) MA	4,4'-DDT	6.262f	8.054f	106.1E6	28729234	52.388	47.262
19) B	Endrin Al...	6.673f	8.266f	96761245	30594946	51.127	47.550
20) B	Endosulfa...	7.409f	8.782f	106.6E6	32955944	52.268	47.191
21) A	Methoxychlor	7.125f	9.433f	61949665	15966359	51.037	47.670
22)	Mirex	7.260f	9.743f	101.8E6	30299893	48.958	44.065
23) B	Endrin Ke...	7.884f	9.829f	131.7E6	39742894	54.322	48.689

SemiQuant Compounds - Not Calibrated on this Instrument

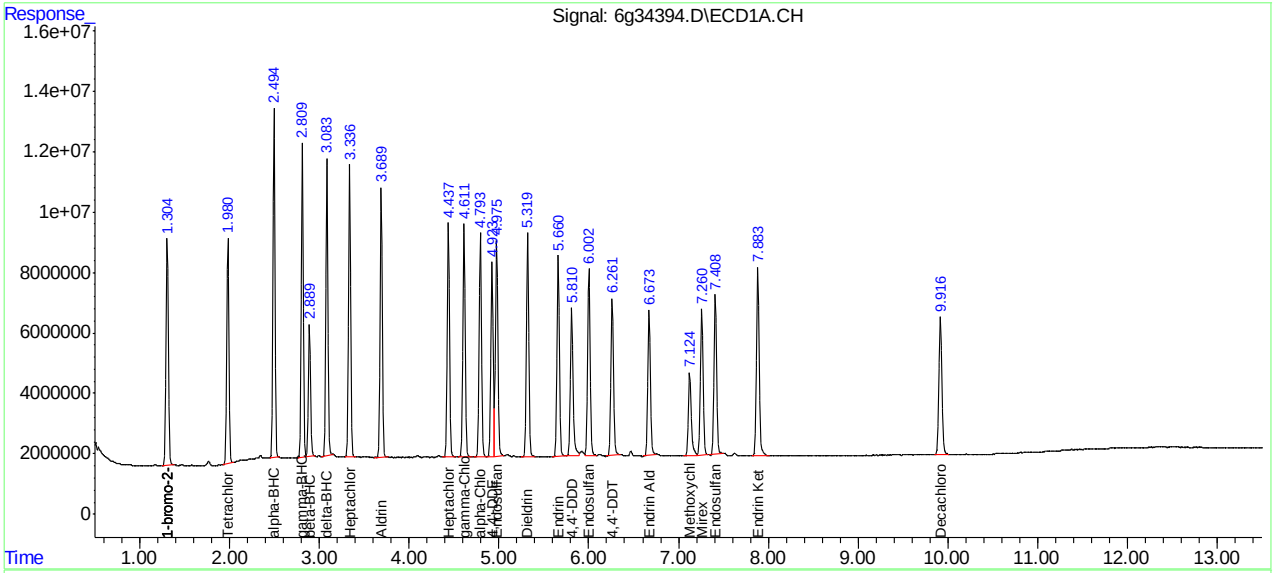
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

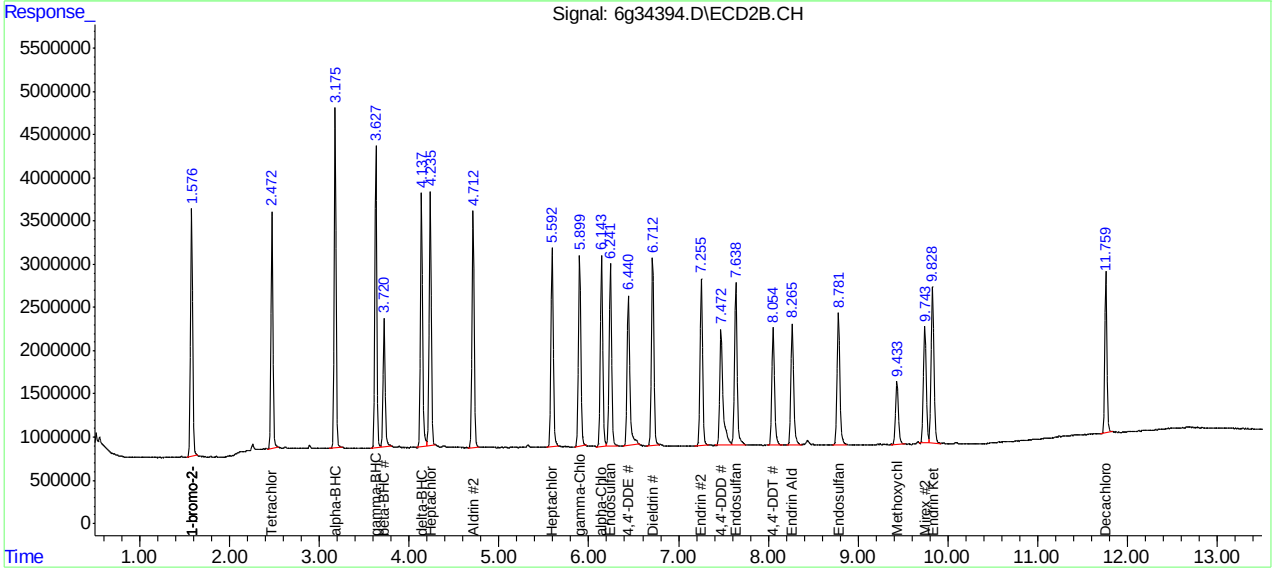
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34394.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:32 pm
Operator : dharas
Sample : cc987-50
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:48:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/27/16 07:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34403.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 8:00 pm
Operator : dharas
Sample : cc987-25
Misc : op93251,g6g995,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 26 06:38:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.304	1.576	152.0E6	52770040	50.000	50.000
25) I	1-bromo-2...	1.304	1.576	152.0E6	52770040	50.000	50.000
31) I	1-bromo-2...	1.304	1.576	152.0E6	52770040	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.981	2.471	69316602	23994350	24.885	25.167
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 62.21%	62.92%
24)	SAB Decachlor...	9.919f	11.759f	61305441	17689929	25.311	24.678
	Spiked Amount	40.000			Recovery	= 63.28%	61.70%
	Target Compounds						
3) A	alpha-BHC	2.494	3.176	93734040	31776950	26.104	25.583
4) MA	gamma-BHC	2.810	3.628	86822915	29376721	25.972	25.260
5) MA	Heptachlor	3.337	4.236f	86498102	28287412	25.776	24.067
6) B	beta-BHC	2.890	3.721	40829884	13794782	24.881	24.346
7) B	delta-BHC	3.084	4.138	81201410	27534167	26.063	25.406
8) MB	Aldrin	3.690	4.712f	80740567	27279168	26.051	24.960
9) B	Heptachlo...	4.438	5.594f	75509312	25574254	26.022	25.106
10) B	gamma-Chl...	4.613	5.899f	76069118	24847339	26.050	24.952
11) B	alpha-Chl...	4.795	6.143f	75982368	24971912	26.217	25.242
12) A	Endosulfan I	4.977	6.242f	75051459	24150411	26.232	25.127
13) B	4,4'-DDE	4.925	6.442f	61198841	22217123	25.483	26.043
14) MA	Dieldrin	5.320f	6.713f	73883178	24344172	26.116	24.797
15) MA	Endrin	5.662f	7.256f	66500056	21430910	25.913	24.026
16) A	4,4'-DDD	5.812f	7.475f	51111033	19719809	25.174	26.785
17) B	Endosulfa...	6.003f	7.638f	64941556	22624535	25.648	25.933
18) MA	4,4'-DDT	6.263f	8.056f	55292724	16149469	25.037	24.167
19) B	Endrin Al...	6.675f	8.267f	54089518	18210208	26.209	25.745
20) B	Endosulfa...	7.411f	8.782f	59302256	19453776	26.669	25.340
21) A	Methoxychlor	7.130f	9.434f	33959042	9027790	25.656	24.518
22)	Mirex	7.262f	9.743f	59799083	18579513	26.376	24.579m
23) B	Endrin Ke...	7.887f	9.829f	74096742	23339601	28.021	26.010

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.6.33

9

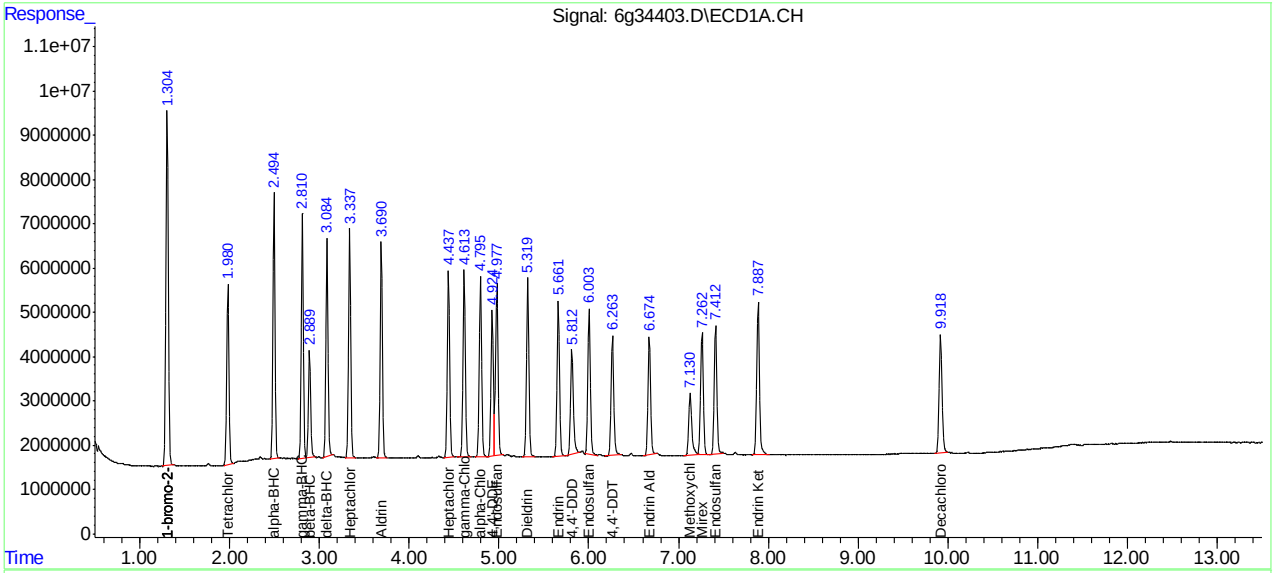
SGS ACCUTEST JC18649

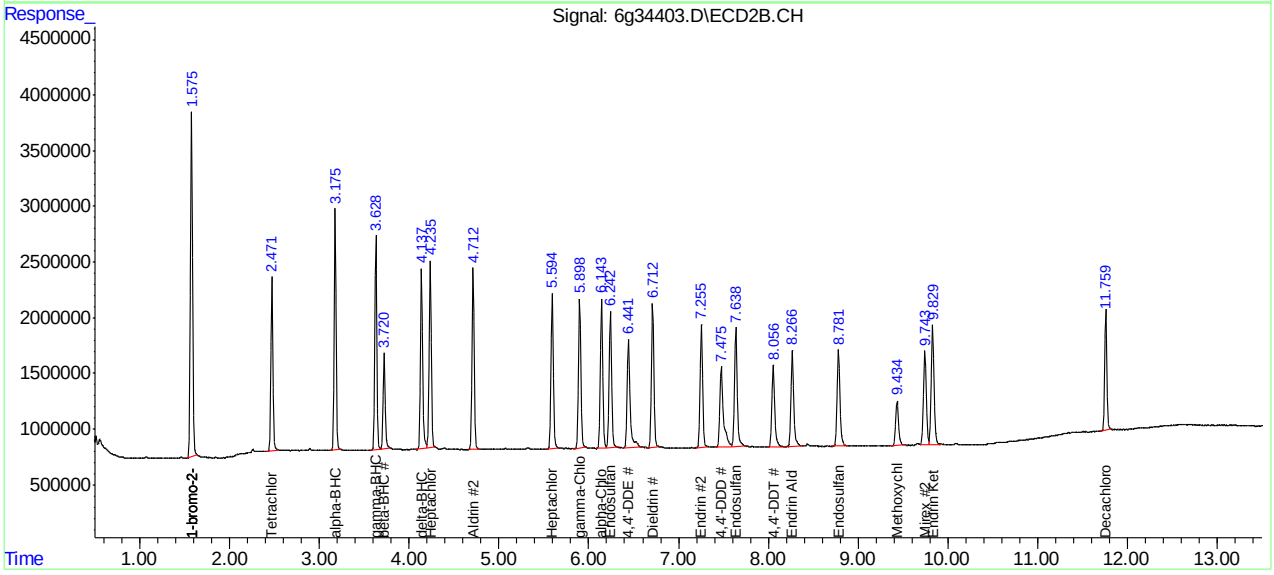
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34403.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 8:00 pm
Operator : dharas
Sample : cc987-25
Misc : op93251,g6g995,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 26 06:38:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G6G995-CC987	**Method:**	EPA 608
Lab FileID:	6G34403.D	**Analyst approved:**	04/26/16 12:26 Brittany Piercy
Injection Time:	04/25/16 20:00	**Supervisor approved:**	04/27/16 07:07 Gwendolyn Burns

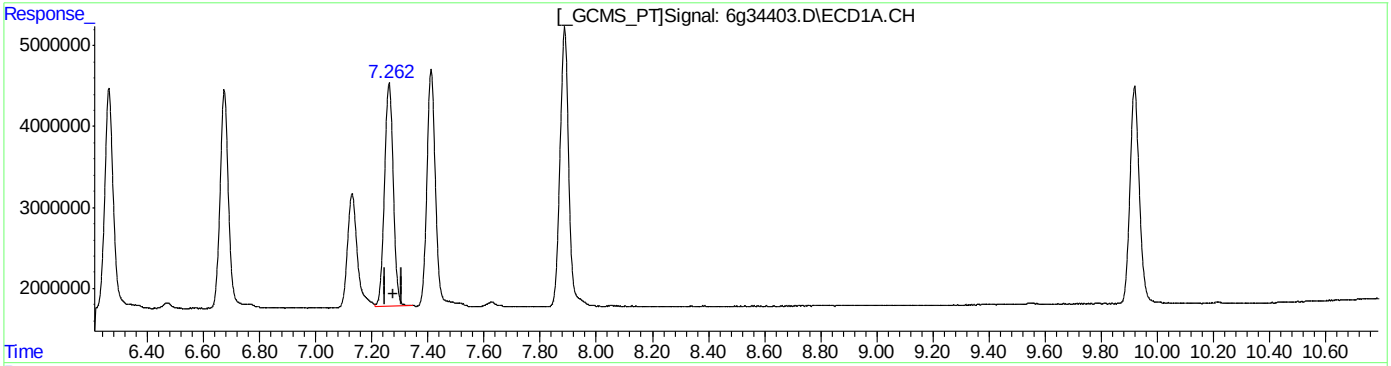
Parameter	CAS	Sig#	R.T. (min.)	Reason
Mirex	2385-85-5	2	9.74	Poor instrument integration

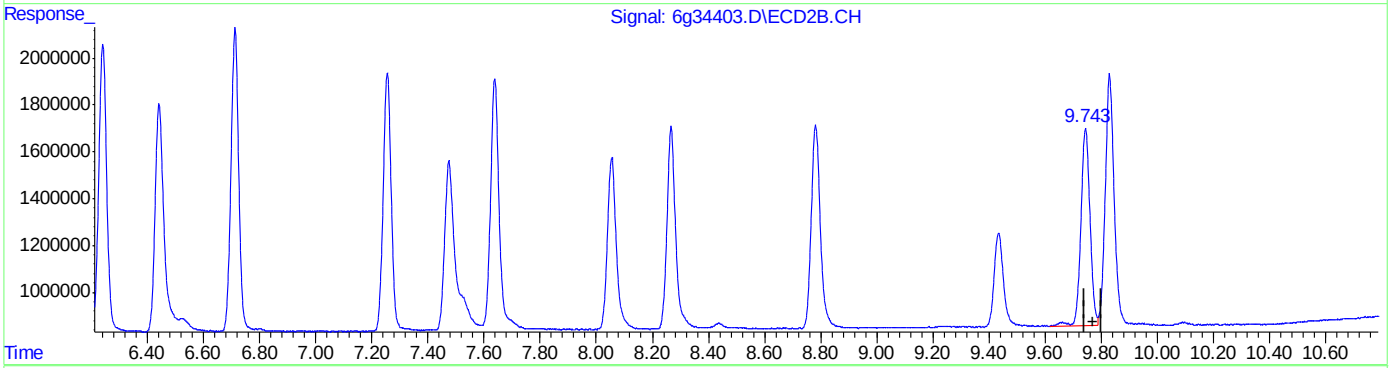
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34403.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 8:00 pm
Operator : dharas
Sample : cc987-25
Misc : op93251,g6g995,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 20:13:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(22) Mirex
7.262min 26.376PPB
response 59799083

(22) Mirex #2
9.744min 25.060PPB
response 18943451

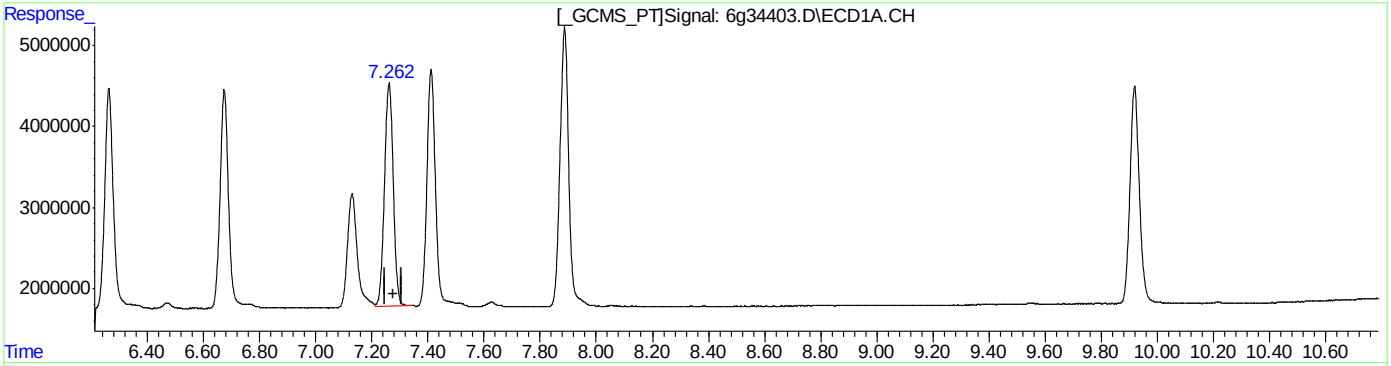
(+) = Expected Retention Time

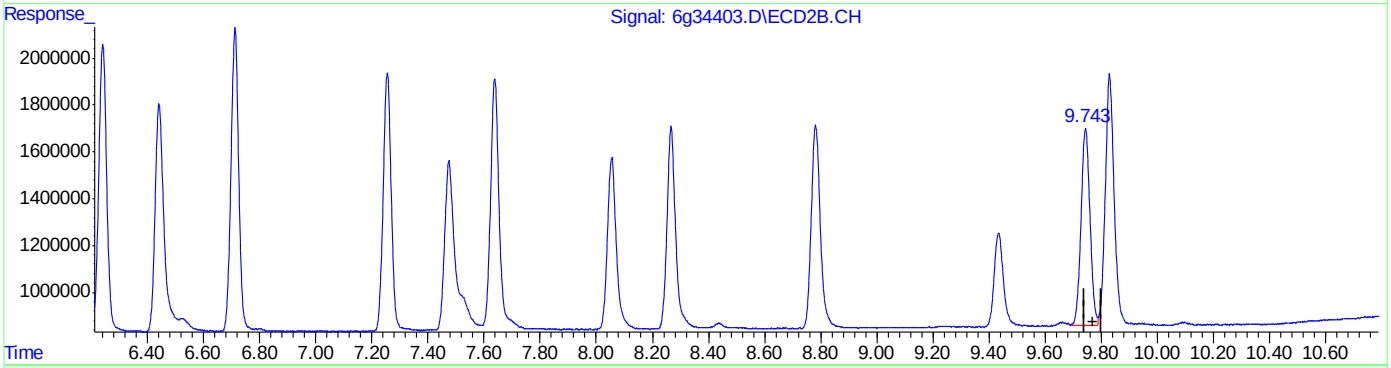
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34403.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 8:00 pm
Operator : dharas
Sample : cc987-25
Misc : op93251,g6g995,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 20:13:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(22) Mirex
7.262min 26.376PPB
response 59799083

(22) Mirex #2
9.743min 24.579PPB m
response 18579513

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\996\
Data File : 6g34416.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 26 Apr 2016 7:53 am
Operator : brittanp
Sample : cc987-50
Misc : op93322,g6g996,16.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 26 08:43:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.332f	1.599f	147.6E6	50087239	50.000	50.000
25) I	1-bromo-2...	1.332f	1.599	147.6E6	50087239	50.000	50.000
31) I	1-bromo-2...	1.332	1.599	147.6E6	50087239	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.999	2.486	130.0E6	42527165	48.063	46.995
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 120.16%	117.49%
24) SAB	Decachlor...	9.916f	11.757f	107.5E6	30724322	45.685	45.157
	Spiked Amount	40.000			Recovery	= 114.21%	112.89%
	Target Compounds						
3) A	alpha-BHC	2.508	3.185	185.3E6	58190073	53.139	49.357
4) MA	gamma-BHC	2.821	3.635	169.5E6	53234037	52.194	48.225
5) MA	Heptachlor	3.346	4.241	155.7E6	49370567	47.774	44.255
6) B	beta-BHC	2.901	3.728	78029958	24910153	48.960	46.317
7) B	delta-BHC	3.094	4.143	157.0E6	51600251	51.899	50.161
8) MB	Aldrin	3.697	4.717	147.2E6	45864192	48.894	44.213
9) B	Heptachlo...	4.442	5.596f	134.0E6	42219453	47.566	43.666
10) B	gamma-Chl...	4.617	5.901f	127.2E6	41020772	44.849	43.400
11) B	alpha-Chl...	4.798	6.146f	129.4E6	40771923	45.975	43.420
12) A	Endosulfan I	4.981	6.244f	128.7E6	39483305	46.310	43.280
13) B	4,4'-DDE	4.927	6.444f	115.2E6	37919819	49.401	46.830
14) MA	Dieldrin	5.323	6.714f	132.8E6	40744355	48.349	43.725
15) MA	Endrin	5.665	7.256f	123.9E6	37905616	49.720	44.772
16) A	4,4'-DDD	5.812f	7.475f	97264275	32903200	49.326	47.085
17) B	Endosulfa...	6.006	7.639f	118.9E6	37721759	48.352	45.555
18) MA	4,4'-DDT	6.265f	8.055f	109.5E6	31214536	51.074	49.213
19) B	Endrin Al...	6.675f	8.267f	99810221	30700500	49.796	45.728
20) B	Endosulfa...	7.411f	8.781f	109.4E6	33697461	50.637	46.244
21) A	Methoxychlor	7.125f	9.432f	63979325	17806288	49.769	50.950
22)	Mirex	7.262f	9.743f	99279558	30112962	45.088	41.970
23) B	Endrin Ke...	7.885f	9.828f	134.9E6	40947598	52.511	48.076

SemiQuant Compounds - Not Calibrated on this Instrument

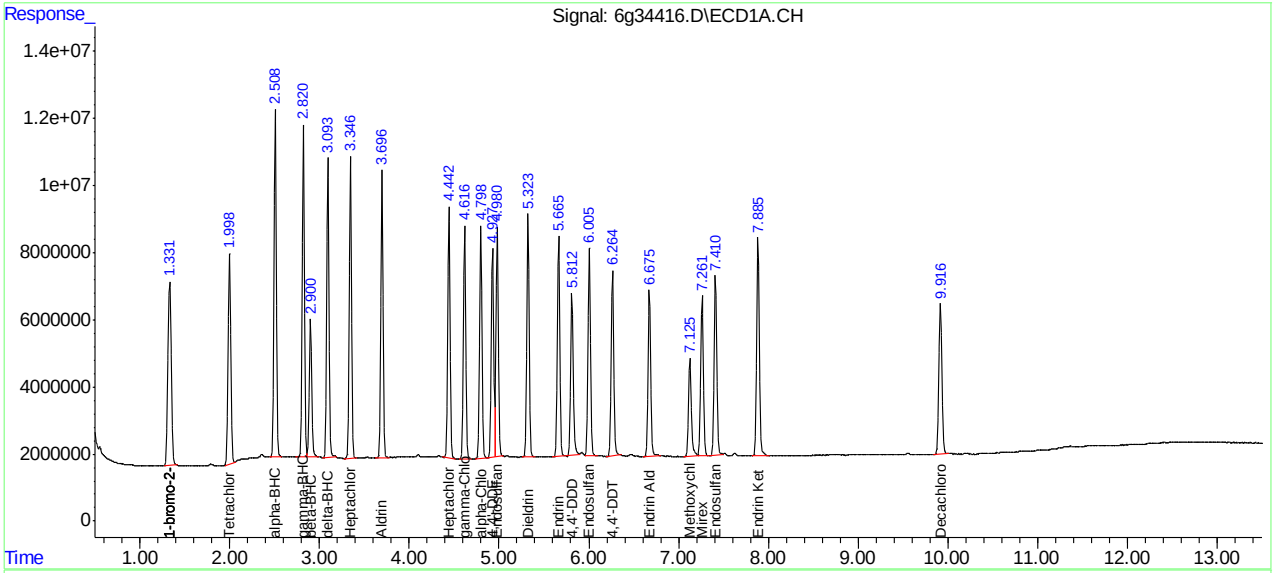
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

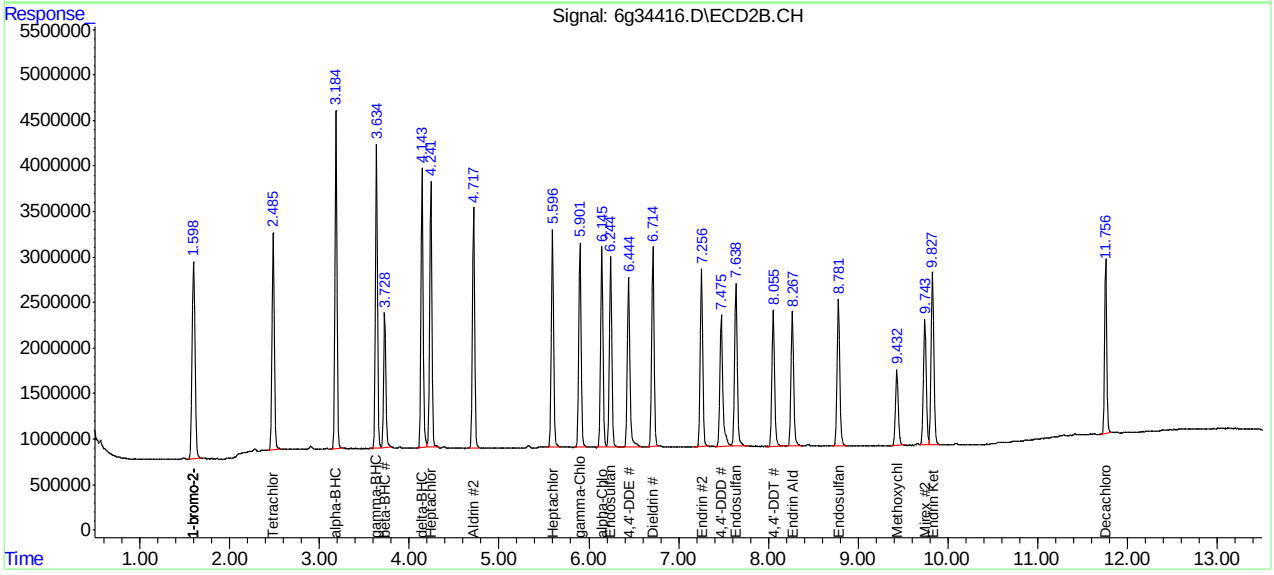
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\996\
Data File : 6g34416.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 26 Apr 2016 7:53 am
Operator : brittanp
Sample : cc987-50
Misc : op93322,g6g996,16.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 26 08:43:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G 3951

Print Analyst Name: Dhara Saparia

Analyst Signature: [signature]

Date: 04/01/2016

Columns: 2DCLPR / 2DCLPD

Method 508.1, 608

Initial Cal. Method 1PST 3951

Injection Volume: 1.0 µL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV161m-61	Pest ISTD	5 ppm
-74	PCM	10-250 ppb
-87	IB	20 ppb
-108B	Pest mix	50
-108A	Pest mix	25
157198	Hexane (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: JR Date: 4/6/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	1d121638	blk				1			/	ok	
	639	IB				2			/	ok	
	640	IC3951-1				3			/	ok	SV151108-70A 1ppb
	641	-2				4			/	ok	-70B 2
	642	-5				5			/	ok	-70C 5
	643	-10				6			/	ok	-70D 10
	644	IC3951-25				7			/	ok	SV161m4-108B 25
	645	IC3951-50				8			/	ok	-108A 50
	646	-75				9			/	ok	SV151108-70E 75
	~~647~~ 646	-100				10			/	ok	-70F 100
	~~648~~ 647	-500		CHL		11	20		/	ok	SV161m4-20 (10 ppm)
	649 ~~648~~	-500		TOX		12	20		/	ok	-21 (10 ppm)
DRAFT	650 ~~649~~	IC3951-25		Pest		13	10		/	ok	SV151m4-95 ~~SV151156h-95~~ (250 ppb) DRAFT
	651 ~~650~~	-25		mirex		14	10			ok	OP151156h-137 (250 ppb)
	652 ~~651~~	-500		CHL		15			/	ok	SV161m4-96 (500 ppb)
	653 ~~652~~	-500		TOX		16			/	ok	-97 (500 ppb)
											JR 4/1/16

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G3968

Print Analyst Name: Brittany Pierce

Date: 04/21/2016

Analyst Signature: B.P.

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV161874-135	Pest ISTD	5ppm
-79	Pem	10-350ppb
-148B	Pest Mix	25 ppb
-148A	"	50 "
-87	I.B.	20 "
157194	Hexane (Fisher)	—

Columns: ZBCLPI / ZBCLPII

Method 8081 / 608

Initial Cal. Method 1PST3951

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: JK **Date:** 4/22/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	IG 122348	ddt			W	1				OK	
	349	CC3951-~~25~~ 50 BP 4/21/16				~~2~~ 4	BP 4/21/16			OK	Various ↑ 1st DCB ↓ 2nd
	350	I.B.				3				OK	
	351	OP93104-MB1	93104-1	8081 SPLP	W	5				OK	
	352	-BS1				6				OK	
	353	-LB22				7				OK	
	354	OP93237-MB1	93237-1	8081 TCL	W	8				OK	
	355	-BS1				9				OK	
R	356	OP93201-BCD		8081 TCL	W	10				OK	DCB ↑ 1st confirmation
	357	JC18524-3A	93104-3	8081 SPLP		11				OK	
	358	-7A		Dieldrin		12				OK	
	359	-8A				13				OK	
	360	JC18649-1	93237-1	8081 TCL	W	14				OK	
	361	-2				15				OK	
	362	-4				16				OK	
	363	-5				17				OK	
	364	OP93237-MS				18				OK	
	365	-MSD				19				OK	
	366	ddt				1				OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

9.7.2 9

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G 3968

Print Analyst Name: Dhara Saparia

Analyst Signature:

Date: 04/21/16

Columns: 2BCLP1 / 2BCLP2

Method 8081

Initial Cal. Method 1PST3951

Injection Volume: 1.0uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV16474-115	Pest IRTD	5 PPM
-74	PEM	10-250 PPB
-87	DB	20 PPB
-1MA	Pest mix	25
-1MB	L	50
157190	Hexane (Fisher)	-

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4/22/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	12122367	CC3951-25				2			✓	NC	DCB ↑ 1st
	368	DB				3				Not using	
	369	OP93252-MB1	93252	8081 TCL	S	5		✓	✓	OK	
	370	-BS1				6		✓	✓	OK	
	371	JC17961-1				7			✓	Not using	need TBA
	372	-2				8				Not using	need TBA
	373	-3				9		✓	✓	OK	
	374	-4				10		✓	✓	OK	
	375	OP93252-MS				11		✓	✓	OK	
	376	-MSD				12		✓	✓	OK	
	377	JC17956-1R		SL		13		✓	✓	OK	
	378	JC17960-20		TCL		14		✓	✓	OK	
	379	-30				15		✓	✓	OK	
	380	-35				16				Not using	need TBA
	381	-40				17		✓	✓	OK	
	382	-45				18		✓	✓	OK	
	383	-52				19		✓	✓	OK	
	384	-59				20		✓	✓	OK	
	385	-63				21		✓	✓	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

9.7.2 9

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: 01G3968

Print Analyst Name: Dhara Suparia

Date: 4/21/16

Analyst Signature:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
161724-135	Pest IRTD	5 ppm
-74	PCM	10-250 ppb
-81	IB	20 ppb
-164A	Pest mix	25
-1177		50
157194	Hexane (Fisher)	-

Columns: 2DCLPI / 2DCLPII

Method 8081

Initial Cal. Method 1PST3951

Injection Volume: 1.0uL

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 4/22/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	12122386	JC18691-1	93252	8081	S	22				OK	Y. solid
	387	Pest spike	161712573			23	10			OK	Run before seq. 12122369
	388	CC3951-50				4				OK	Run before seq. 12122387
	389	IB				3				OK	

BP 4/22/16

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G 987

Print Analyst Name: Dhara Saparia

Date: 04/14/16

Analyst Signature: [signature]

Columns: 2BCLPD / 2DCLPD

Method 8081, 608

Initial Cal. Method G PST 987

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.
161574-1147	pest mix 1st	25 PPb
-1148		50
-1149		1
-1150		2
-1151		5
-1152		10
-1153		75
-1154		100

Standard Data

Lot #	Description	Conc.
SV161174-05	Pest IRTD	5 PPm
-79	PCBs	10-250 PPb
-87	IB	20 PPb
-20	Chlordane 1st	10 PPm
-21	Toxaphene 1st	10 PPm
-95	Pest mix 2nd source	250 PPb
-96	Chlordane 2nd	500 PPb
-97	Toxaphene 2nd	500 PPb
157194	Hexane Blk	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4/19/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	G234128	dblk				1				OK	
	129	IB				2				OK	
	130	IC 987-1	1st source	Pest mix		3				OK	
	131	-2				4				OK	
	132	-5				5				OK	
	133	-10				6				OK	
	134	ICC 987-25				7				OK	
	135	IC 987-50				8				OK	
	136	-75				9				OK	
	137	-100				10				OK	
	138	-500		CHL		11	20			OK	
	139	-500		Tox		12	20			OK	
	140	ICV 987-25	Pest			13	10			OK	
	141	-25	mirex			14	10			OK	OP15256437 - 250 PPb (mirex
	142	-500	CHL			15				OK	
	143	-500	Tox			16				OK	

BP 4/17/16

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G995

Print Analyst Name: Brittany Piercy

Date: 04/25/2016

Analyst Signature: B.P.

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
CV168874-125	Pest ISTD	5ppm
-79	PEM	10-250ppb
-148B	Pest Mix	~~25~~ 50 ppb
-148A	"	~~25~~ 50 "
-87	I.B.	20 "
157194	Hexane (Fisher)	—

Columns: ZBCLPI / ZBCLPII

Method 8081/608

Initial Cal. Method 6PST987

Injection Volume: 1µL

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: JR **Date:** 4/28/

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	69 343 71A	ddt			W	1				OK	
	372	CC987-25				2				OK	
	373	I.B.				3				OK	
	374	OP93282-MB1	93282-1	8081 TCL	W	5				OK	
	375	-BS1				6				OK	
	376	OP93322-MB1	93322-1	8081 PPL/TCL	S	7				OK	
	377	-BS1				8				OK	
	378	OP93282-BSD	93282-1			9				OK	
	379	JC18670-12		TCL		10				OK	
	380	JC18715-7				11				OK	
	381	OP93322-MS	93322-1			12				OK	
	382	-MSD				13				OK	
	383	JC18771-1				14				OK	
	384	-10				15				OK	
	385	JC18776-1				16				OK	
	386	JC18834-1				17				OK	
	387	-10				18				OK	
	388	-16				19				OK	
	389	-21				20				OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

9.7.4 9

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G995

Print Analyst Name: Brittany Piercy

Analyst Signature: B.P.

Date: 04/25/2016

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV161874-B5	Pest ISTD	5 ppm
-79	Pem	10-250 ppb
-148B	Pest Mix	~~25~~ 50 ppb
-148A		~~50~~ 25
-87	I.B.	20
157194	Hexane (Fisher)	—

Columns: ZBCLPI / ZBCLPII

Method 8081/608

Initial Cal. Method 6PST987

Injection Volume: 1µl

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] **Date:** 4/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	69 34390	JC18834-27	93322-1	8081 TCL/PPL	S	21				OK	
	391	JC18835-1				22				OK	
	392	-9				23				OK	
	393	ddt				1				OK	
	394	CC987-50				4				OK	
	395	IB				3				OK	
	396	08 93251-MB1	93251	~~8081~~ 608	W	5				OK	
	397	-BS1				6				OK	
	398	JC18592-1		PPL		7				OK	
	400	JC18617-3		S2		9				OK	
	399	JC18617-5		↓		8				OK	
	401	08 93251-MS				10				OK	
	402	-MSD				11				OK	
	403	CC987-25				2				OK	
	404	IB				3				OK	
	405	JC18781-5	93322	8081 TCL	S	12			2nd	OK	DCB ↑ 2nd
	406	JC18516-2				13				OK	
	407	-3				14				OK	
	408	JC18649-3				15				OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

9.7.4 9

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G 995

Print Analyst Name: Dhara Saporia

Date: 04/25/16

Analyst Signature: [signature]

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
5/1617-105	Pest DTD	5 PPM
-74	PEM	10-250 PPB
-87	DB	20 PPB
-140A	Pest Mix	25
-140B		50
157140	Hexane (Fisher)	-
160863	BP 4/26/16	

Columns: 20CLP I / 20CLP II

Method 8081

Initial Cal. Method GPST 987

Injection Volume: 1.0 uL

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6B3h409	JC18795-1	93322	8081 TCL	S	16				OK	
	h10	-2				17				OK	
	h11	-3				18				OK	
	h12	-4				19				OK	
	h13	-5				20				OK	
	h14	-6				21				OK	

BP 4/26/16

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

9.7.4

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SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G996

Print Analyst Name: Brittany Percy

Analyst Signature: BP

Date: 04/26/2016

Columns: ZBCLPI / ZBCLPII

Method 8081 / 608

Initial Cal. Method 6PST987

Injection Volume: 1µl

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SM16874135	Pest ISTD	5ppm
-79	Pem	10-250ppb
~~-480~~	Pest Mix	25
~~-480~~	I	50
-87	I.B.	20
1608863	Hexane (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] **Date:** 4/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	69 34415	ddt			W	1				OK	
	416	cc 987-50				4				OK	
	417	I.B.				3				OK	
	418	OP93358-MB1	93358-1	8081 TCL	W	5				OK	
	419	-BS1				6				OK	
	420	-BSD				7				OK	
	421	OP81198-MB1N	81198-1	8081	S	8				OK	MDL's
	422	JC13380-39	93358-1	8081 TCL	W	9				OK	
	423	-40				10				OK	
	424	OP81198-BS1N	81198-1	8081	S	11				OK	
	425	-BS2N				12				OK	
	426	-BS3N				13				OK	
	427	-BS4N				14				OK	
	428	ddt			W	1				OK	
	429	cc987-25				2				OK	
	430	I.B.				3				OK	
	431	OP92989-BS1	92989	8081	S	5				OK	
	432	OP93363-MD1	93363	608	W	6				OK	
	433	-BS1				7				OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

9.7.5 9

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G 996

Print Analyst Name: Dhara Saparia

Analyst Signature: [signature]

Date: 04/26/16

Columns: 2nd PCB / 2nd pesticide

Method 8081, 608

Initial Cal. Method G8S 987

Injection Volume: 1.0 ul

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV6171115	Pest IS/SD	5 PPM
-79	PEM	10-250 PPB
-87	TB	20 PPB
-1111	Pest mix	25
-1111	↓	50 ↓
160863	Methoxychlor	-

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6G32434	OP93363-MS	93363	608 PPB	W	8				OK	
	435	-MSD				9				OK	
	436	JC18851-1				10				OK	
	437	JC18871-1				11				OK	
	438	JC18922-1				12				OK	RR 1.5 for DBTD
	439	CC 987-50				4				OK	
	440	IB				3				OK	
	441	JC18922-1				13	5			OK	CFI
	442	CC987-25				2				OK	
	443	IB				3				OK	

BP 4/27/16

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

LOGBOOK ID: 6-1690

Pest/PCB Extraction Log - Aqueous

Date Started: 4/20/16 Time Started: 1100
Date Finished: 4/20/16 Time Finished: 11:00pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓
Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH # GC 93237 RACK# PCB 14 Post 2 (RF 4/20)

Extracted by:	GM
Concentrated by:	GM
Vialed by:	GM
Relinquished by:	
Accepted by:	
Supervisor Review:	4/20/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	pH	Sample Description	Sample Volume (mL)	Final Extract Color	Final Extract Vol(mL)	GPC	Copper	H2SO4	Florisil	Comments
MB1	Pest			DI H2O	300	clear	2		✓			
BS1	LV1			DI H2O	300	clear	2		✓			
JC18649-1 MS	1	3		yellow	150	clear	2		✓			
-1 MSD	1	3		yellow	150	clear	2		✓			
BS												
MS												
MSD												
1 JC18649-1	Pest	4		yellow	300	clear	2		✓			
2 -2	LV1	4		yellow	300	clear	2		✓			
3 -4		3		yellow	300	clear	2		✓			
4 -5		4		yellow	300	clear	2		✓			
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

1 day TAT

Comments:

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 op	16171261	400	0.2

WITNESS SIGN: RF SPIKE SIGN: GM

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	Op16171257O	250ppb	0.2
PCB			

WITNESS SIGN: RF SPIKE SIGN: GM

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	159148	Fisch	3/15
HEXANE			

REAGENT	LOT #	BRAND
Sodium Sulfate	158489	Fisher
Glass Wool	032005-1	Lab
Filter Paper		
Copper op	16171261	Alfa
Florisil		
1:1 Sulfuric Acid		
Chlorine Strips		

SPECIAL PROCESSING INSTRUCTIONS
Rx Reason:
Spiking:
Weights/Volumes:
Required MS/MSD:
Final Volume:
Other:

SGS ACCUTEST INC.
Form: OP021A-06
Rev Date: 1/13/16

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LOGBOOK ID: 6-1721

Pest / PCB Extraction Log - Soils

Date Started: 4/23/16 Time Started: 1:45pm
Date Finished: 4/23/16 Time Finished: 4:45pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 ✓ Sonication SW3550C ____
Waste Dilution SW3580A ____ Soxhlet SW3540 ____

BATCH # GC 93322 RACK# GE-500

Weighed/Extracted by: SG
Concentrated by: RG SG
Vialed by: SG/MA
Relinquished by:
Accepted by:
Supervisor Review: 4/25/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Wet Wt. (g) Oil (g) Liq (mL)	Decant Y	Decant N	Microwave ID	Final Extract Color	Final Extract Vol (mL)	Extract Cleanup H2SO4	Florisil	Cu	GPC	Comment
MB1	Pest		sand	15.0		/	5	Clear	10		/	/		
BS1			sand	15.0		/	5	Clear	10		/	/		
JC18834-10 MS		1	soil	16.0		/	5	Clear	10		/	/		
MSD		1	soil	15.7		/	5	Clear	10		/	/		
BS														
MS														
MSD														
01 JC18771-1	Pest	1	soil	15.7		/	5	L Yellow	10		/	/		
02 -10		1	soil	15.4		/	5	Clear	10		/	/		
03 JC18776-1		1	soil	16.5		/	5		10		/	/		
04 JC18834-1		1	soil	15.5		/	5	Clear	10		/	/		
05 -10		1	soil	15.4		/	5	Clear	10		/	/		
06 -16		1	soil	15.0		/	5	Clear	10		/	/		
07 -21		1	soil	16.4		/	5	Clear	10		/	/		
08 -27		1	soil	15.4		/	5	Clear	10		/	/		
09 JC18835-1		1	crush rock	16.9		/	5	Clear	10		/	/		
10 -9		1	crush rock	15.0		/	5	Clear	10		/	/		
11 JC18781-5		1	soil	15.4		/	5	Yellow	10		/	/		
12 JC18516-2		1	sand	16.1		/	5	Clear	10		/	/		
13 -3		1	soil	15.2		/	5	Clear	10		/	/		
14 JC18649-3		1	soil	15.3		/	5	Clear	10		/	/		
15 JC18715-1		1	soil	15.0		/	5	Yellow	10		/	/		
16 -2		1	soil	16.2		/	5	L Yellow	10		/	/		
17 -3		1	soil	15.2		/	5	L Yellow	10		/	/		
18 -4		1	soil	15.0		/	5	Clear	10		/	/		
19 -5		1	soil	15.9		/	5	Clear	10		/	/		
20 -6		1	Mud	16.0		/	5	Clear	10		/	/		

3dTAT

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)	2,3,4	65	N/A	N/A	OK
Buchi Chiller	B2,B3,B4	11	N/A	N/A	OK
Waterbath (70-80°C)					
Waterbath Chiller (GPM)					
NEVAP (32-38°C, LPM)					
Balance	B4L6	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	16171275	400	1

WITNESS SIGN: RG SPIKE SIGN: SG

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	1ppb 16171251B	2.50ppb	1
PCB			

WITNESS SIGN: RG SPIKE SIGN: SG

SOLVENT	LOT #	BRAND	AMT (mL)
2:1 HEXANE/ ACETONE	157194 / 158571	Fisher / Fisher	30
1:1 METH CHLOR/ ACETONE			
HEXANE			

REAGENT	LOT #	BRAND
HYDROMATRIX	6294128	Agilent
SODIUM SULFATE	158459	Fisher
FILTER PAPER	9026294	Fisher
FLORISIL	S213-057	Phenomenex
1:1 SULFURIC ACID		
COPPER	DD1617128	Aldrich

MATRIX	LOT #	BRAND
SAND	66A160131A	Fisher

SGS ACCUTEST INC.
Form: OP018A-05
Rev Date: 11/20/15

Prep Log OP93322 page 1 of 1
SGS ACCUTEST JC18649
1338 of 1421
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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: JC18649
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: JC18649-3 **Analyzed:** 23-APR-16 by KP **Method:** SM2540 G-97
ClientID: RA13(5-6)

Wet Weight (Total)	36.24	g
Tare Weight	29.18	g
Dry Weight (Total)	34.9	g
Solids, Percent	81	%

Misc. Forms

Custody Documents and Other Forms

(SGS Accutest Southeast)

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle

CHAIN OF CUSTODY

SGS ACCUTEST

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

FL

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job: JC18649

Client / Reporting Information

Company Name: SGS Accu test
Street Address: 2235 Route 130
City: Dayton State: NJ Zip: 08810
Project Contact: tammym E-mail: tammym@accutest.com
Phone #: 732-329-0200 Fax #:
Sampler(s) Name(s): 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)

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
1A	RA14-GWD		4/18/16	12:00:00 PM	TT	AQ	3	3								X
2A	RA14D-GWD		4/18/16	12:00:00 PM	TT	AQ	3	3								X
3	RA13(5-6)		4/18/16	2:00:00 PM	NR	SO	1					1				X
4A	RA13-GWS		4/18/16	5:15:00 PM	TT	AQ	3	3								X
5A	RA13-GWD		4/19/16	12:30:00 PM	TT	AQ	3	3								X

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

LAB USE ONLY

Turnaround Time (Business days)

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 4/27/2016

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other FULT1

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

Comments / Special Instructions

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

Relinquished by Sampler	Date Time	Received By:	Relinquished By:	Date Time:	Received By:
1	1700 4/25/16	1 FX	2 FX		2 4/26/16 0100
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 723 [ ] Intact [ ] Not intact	Preserved where applicable [ ]	On Ice [ ] Cooler Temp. 4.6

11.1 11

JC18649: Chain of Custody
Page 1 of 3
SGS Accutest Southeast

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: JC18649 CLIENT: ALNJ PROJECT: BMSMC

DATE/TIME RECEIVED: 4/26/16 900 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 5633 9349 1124

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.2
- [ ] OBSERVED TEMPS: 4.4
- [ ] CORRECTED TEMPS: 4.6 (USED FOR LIMS)

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [x] TRIP BLANK NOT PROVIDED
- [x] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [x] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [x] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#
  {APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM 5-GRAM

NUMBER OF 5035 FIELD KITS ?

NUMBER OF LAB FILTERED METALS ?

TEST STRIP LOT#s pH 0-3 230315 pH 10-12 219813A OTHER (specify)

SUMMARY OF COMMENTS: Received (1) vial for samples #1-2, 4-5.

TECHNICIAN SIGNATURE/DATE 4/26/16 REVIEWER SIGNATURE/DATE 4/26/16

NF 11/15 RECEIPTLOG040416.xls

11.1 11

ORIGIN ID:ZRPA (732) 329-0200
SAMPLE MGT.
SGS ACCUTEST
2235 US HIGHWAY 130

DAYTON, NJ 08810
UNITED STATES US

SHIP DATE: 25APR16
ACTWGT: 17.5 LB
CAD: 0743430/CAFE2912

BILL SENDER

TO SAMPLE MANAGEMENT
SGS ACCUTEST SOUTHEAST
4405 VINELAND ROAD
SUITE C-15
ORLANDO FL 32811
(407) 425-6700
REF: JC18649 JC18516

FedEx Express

TRK# 0201 5633 9349 1124

TUE - 26 APR 10:30A
PRIORITY OVERNIGHT

XH TIXA

32811
FL-US MCO

11.1

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JC18649: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Accutest New Jersey

Job No: JC18649

AMANYWP: BMSMC, Building 5 Area, PR
Project No: AMANYWP22704

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC18649-3 RA13(5-6)	Collected: 18-APR-16 14:00 By: NR		Received: 20-APR-16 By: JC			
JC18649-3	SW846 8015C MOD	27-APR-16 09:46	SH			D8015LMA
JC18649-1A RA14-GWD	Collected: 18-APR-16 12:00 By: TT		Received: 20-APR-16 By: JC			
JC18649-1A	SW846 8015C	26-APR-16 17:21	SH			D8015LMA
JC18649-2A RA14D-GWD	Collected: 18-APR-16 12:00 By: TT		Received: 20-APR-16 By: JC			
JC18649-2A	SW846 8015C	26-APR-16 17:40	SH			D8015LMA
JC18649-4A RA13-GWS	Collected: 18-APR-16 17:15 By: TT		Received: 20-APR-16 By: JC			
JC18649-4A	SW846 8015C	26-APR-16 17:59	SH			D8015LMA
JC18649-5A RA13-GWD	Collected: 19-APR-16 12:30 By: TT		Received: 20-APR-16 By: JC			
JC18649-5A	SW846 8015C	26-APR-16 18:18	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: JC18649
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY2768-MB	XY064035.D	1	04/26/16	SH	n/a	n/a	GXY2768

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC18649-1A, JC18649-2A, JC18649-4A, JC18649-5A

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

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	92%	73-123%

Method Blank Summary

Job Number: JC18649
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY2770-MB	XY064055.D	1	04/27/16	SH	n/a	n/a	GXY2770

The QC reported here applies to the following samples: **Method:** SW846 8015C MOD

JC18649-3

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

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	114%	69-121%

Blank Spike Summary

Job Number: JC18649
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY2768-BS	XY064034.D	1	04/26/16	SH	n/a	n/a	GXY2768

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC18649-1A, JC18649-2A, JC18649-4A, JC18649-5A

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
64-17-5	Ethanol	100	85.1	85	73-120
78-83-1	Isobutyl Alcohol	100	79.8	80	67-116
67-63-0	Isopropyl Alcohol	100	80.8	81	69-118
71-23-8	n-Propyl Alcohol	100	78.2	78	71-119
71-36-3	n-Butyl Alcohol	100	80.9	81	69-119
67-56-1	Methanol	100	80.2	80	70-118

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	79%	73-123%

12.2.1

12

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18649
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY2770-BS	XY064054.D	1	04/27/16	SH	n/a	n/a	GXY2770

The QC reported here applies to the following samples: **Method:** SW846 8015C MOD

JC18649-3

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
64-17-5	Ethanol	200	169	85	80-117
78-83-1	Isobutyl Alcohol	200	159	80	72-117
67-63-0	Isopropyl Alcohol	200	160	80	75-116
71-23-8	n-Propyl Alcohol	200	163	82	78-116
71-36-3	n-Butyl Alcohol	200	161	81	74-115
67-56-1	Methanol	200	158	79	77-116

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	79%	69-121%

12.2.2

12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18649
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC18516-4AMS	XY064042.D	1	04/26/16	SH	n/a	n/a	GXY2768
JC18516-4AMSD	XY064043.D	1	04/26/16	SH	n/a	n/a	GXY2768
JC18516-4A	XY064037.D	1	04/26/16	SH	n/a	n/a	GXY2768

The QC reported here applies to the following samples: **Method:** SW846 8015C

JC18649-1A, JC18649-2A, JC18649-4A, JC18649-5A

CAS No.	Compound	JC18516-4A mg/l	Q	Spike mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
64-17-5	Ethanol	ND		100	91.4	91	100	98.8	99	8	73-120/16
78-83-1	Isobutyl Alcohol	ND		100	89.8	90	100	98.2	98	9	67-116/17
67-63-0	Isopropyl Alcohol	ND		100	94.4	94	100	104	104	10	69-118/17
71-23-8	n-Propyl Alcohol	ND		100	92.3	92	100	101	101	9	71-119/17
71-36-3	n-Butyl Alcohol	ND		100	91.2	91	100	99.8	100	9	69-119/17
67-56-1	Methanol	ND		100	90.0	90	100	97.0	97	7	70-118/17

CAS No.	Surrogate Recoveries	MS	MSD	JC18516-4A	Limits
111-27-3	Hexanol	90%	98%	111%	73-123%

12.3.1

12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18649
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC18516-2AMS	XY064059.D	1	04/27/16	SH	n/a	n/a	GXY2770
JC18516-2AMSD	XY064060.D	1	04/27/16	SH	n/a	n/a	GXY2770
JC18516-2A [a]	XY064056.D	1	04/27/16	SH	n/a	n/a	GXY2770

The QC reported here applies to the following samples: **Method:** SW846 8015C MOD

JC18649-3

CAS No.	Compound	JC18516-2A mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
64-17-5	Ethanol	ND		268	282	105	268	268	100	5	80-117/13
78-83-1	Isobutyl Alcohol	ND		268	270	101	268	257	96	5	72-117/14
67-63-0	Isopropyl Alcohol	ND		268	285	106	268	272	101	5	75-116/15
71-23-8	n-Propyl Alcohol	ND		268	281	105	268	268	100	5	78-116/13
71-36-3	n-Butyl Alcohol	ND		268	277	103	268	262	98	6	74-115/13
67-56-1	Methanol	ND		268	276	103	268	263	98	5	77-116/13

CAS No.	Surrogate Recoveries	MS	MSD	JC18516-2A	Limits
111-27-3	Hexanol	101%	95%	119%	69-121%

(a) Sample was received in a bulk container but was not preserved within 48 hours of sampling.

12.3.2

12

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: JC18649
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]
JC18649-1A	XY064038.D	86
JC18649-2A	XY064039.D	82
JC18649-4A	XY064040.D	99
JC18649-5A	XY064041.D	96
GXY2768-BS	XY064034.D	79
GXY2768-MB	XY064035.D	92
JC18516-4AMS	XY064042.D	90
JC18516-4AMSD	XY064043.D	98

Surrogate Compounds	Recovery Limits
S1 = Hexanol	73-123%

(a) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: JC18649
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]
JC18649-3	XY064058.D	134* [b]
GXY2770-BS	XY064054.D	79
GXY2770-MB	XY064055.D	114
JC18516-2AMS	XY064059.D	101
JC18516-2AMSD	XY064060.D	95

Surrogate Compounds	Recovery Limits
S1 = Hexanol	69-121%

(a) Recovery from GC signal #1
(b) Outside control limits; however, sample is ND.

GC Surrogate Retention Time Summary

Job Number: JC18649
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Check Std:	GXY2768-CC2768	**Injection Date:**	04/26/16
Lab File ID:	XY064033.D	**Injection Time:**	15:45
Instrument ID:	GCXY	**Method:**	SW846 8015C

	S1 [a] **RT**
Check Std	11.68

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GXY2768-BS	XY064034.D	04/26/16	16:04	11.68
GXY2768-MB	XY064035.D	04/26/16	16:24	11.68
ZZZZZZ	XY064036.D	04/26/16	16:43	11.68
JC18516-4A	XY064037.D	04/26/16	17:02	11.68
JC18649-1A	XY064038.D	04/26/16	17:21	11.68
JC18649-2A	XY064039.D	04/26/16	17:40	11.68
JC18649-4A	XY064040.D	04/26/16	17:59	11.68
JC18649-5A	XY064041.D	04/26/16	18:18	11.68
JC18516-4AMS	XY064042.D	04/26/16	18:38	11.68
JC18516-4AMSD	XY064043.D	04/26/16	18:57	11.69
GXY2768-ECC2768	XY064044.D	04/26/16	19:16	11.69

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

12.5.1

12

GC Surrogate Retention Time Summary

Job Number: JC18649
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Check Std:	GXY2770-CC2768	**Injection Date:**	04/27/16
Lab File ID:	XY064053.D	**Injection Time:**	08:10
Instrument ID:	GCXY	**Method:**	SW846 8015C MOD

	S1 [a] **RT**
Check Std	11.63

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GXY2770-BS	XY064054.D	04/27/16	08:29	11.65
GXY2770-MB	XY064055.D	04/27/16	08:48	11.67
JC18516-2A	XY064056.D	04/27/16	09:07	11.69
ZZZZZZ	XY064057.D	04/27/16	09:27	11.69
JC18649-3	XY064058.D	04/27/16	09:46	11.70
JC18516-2AMS	XY064059.D	04/27/16	10:44	11.70
JC18516-2AMSD	XY064060.D	04/27/16	11:24	11.70
GXY2770-ECC276X	XY064061.D	04/27/16	11:43	11.71

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

12.5.2

12

Initial Calibration Summary

Job Number: JC18649
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2768-ICC2768
Lab FileID: XY064027.D

Response Factor Report VOA5

Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration

Calibration Files
1 =XY064024.D 2 =XY064025.D 3 =XY064026.D 4 =XY064027.D
5 =XY064028.D 6 =XY064029.D 7 =XY064030.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) Methanol	5.952	4.620	4.367	4.137	5.112	5.142	3.640	4.710 E3	16.19
2) Isopropyl alcohol	7.330	6.129	6.285	5.530	7.576	7.430	4.755	6.434 E3	16.61
3) Ethanol	7.752	6.964	7.194	7.254	8.265	8.025	6.686	7.449 E3	7.77
4) n-Propyl alcohol	9.448	7.897	8.340	7.881	9.878	9.599	7.051	8.585 E3	12.43
5) Isobutyl alcohol	1.060	0.936	0.982	0.905	1.149	1.093	0.816	0.992 E4	11.75
6) n-Butyl alcohol	1.046	0.883	0.910	0.861	1.091	1.051	0.775	0.945 E4	12.49
7) 2-Ethoxyethanol	6.047	4.913	4.786	4.884	5.618	5.832	4.448	5.218 E3	11.63
8)S Hexanol	1.063	0.829	1.070	0.850	1.108	1.036	0.788	0.963 E4	13.98

(#) = Out of Range

D8015.M Wed Apr 27 10:50:20 2016

Initial Calibration Verification

Job Number: JC18649
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2768-ICV2768
Lab FileID: XY064032.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\042616\XY064032.D          Vial: 9
Acq On    : 26 Apr 2016   3:26 pm                   Operator: StevenH
Sample    : icv2768-4                               Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methanol	100.000	84.068	15.9	96	0.00	1.52- 2.12
2	Isopropyl alcohol	100.000	87.031	13.0	101	0.02	1.72- 2.32
3	Ethanol	100.000	85.261	14.7	88	0.00	1.87- 2.47
4	n-Propyl alcohol	100.000	85.429	14.6	93	0.00	3.49- 4.09
5	Isobutyl alcohol	100.000	83.122	16.9	91	0.04	4.87- 5.47
6	n-Butyl alcohol	100.000	84.312	15.7	93	0.02	6.54- 7.14
7	2-Ethoxyethanol	100.000	91.422	8.6	98	0.00	8.84- 9.44
8 S	Hexanol	100.000	84.269	15.7	96	0.02	11.36-11.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064027.D D8015.M Wed Apr 27 10:42:27 2016

12.6.2

12

Continuing Calibration Summary

Job Number: JC18649
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2768-CC2768
Lab FileID: XY064033.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\042616\XY064033.D          Vial: 10
Acq On    : 26 Apr 2016   3:45 pm                   Operator: StevenH
Sample    : cc2768-4                                Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methanol	100.000	84.359	15.6	96	0.00	1.52- 2.12
2	Isopropyl alcohol	100.000	83.127	16.9	97	0.01	1.72- 2.32
3	Ethanol	100.000	99.641	0.4	102	0.00	1.87- 2.47
4	n-Propyl alcohol	100.000	91.055	8.9	99	0.00	3.49- 4.09
5	Isobutyl alcohol	100.000	91.441	8.6	100	0.04	4.87- 5.47
6	n-Butyl alcohol	100.000	90.166	9.8	99	0.04	6.54- 7.14
7	2-Ethoxyethanol	100.000	91.105	8.9	97	0.01	8.84- 9.44
8 S	Hexanol	100.000	86.737	13.3	98	0.02	11.36-11.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064027.D D8015.M Wed Apr 27 10:42:27 2016

12.6.3
12

Continuing Calibration Summary

Job Number: JC18649
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2768-ECC2768
Lab FileID: XY064044.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\042616\XY064044.D          Vial: 20
Acq On    : 26 Apr 2016   7:16 pm                   Operator: StevenH
Sample    : cc2768-5                                Inst    : VOA5
Misc      : gc18771,gxy2769,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methanol	250.000	283.776	-13.5	105	-0.02	1.52- 2.12
2	Isopropyl alcohol	250.000	295.301	-18.1	100	0.01	1.72- 2.32
3	Ethanol	250.000	285.400	-14.2	103	-0.01	1.87- 2.47
4	n-Propyl alcohol	250.000	294.951	-18.0	103	0.00	3.49- 4.09
5	Isobutyl alcohol	250.000	292.852	-17.1	101	0.05	4.87- 5.47
6	n-Butyl alcohol	250.000	293.941	-17.6	102	0.10	6.54- 7.14
7	2-Ethoxyethanol	250.000	279.763	-11.9	104	0.04	8.84- 9.44
8 S	Hexanol	250.000	285.450	-14.2	99	0.03	11.36-11.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064028.D D8015.M Wed Apr 27 11:03:52 2016

12.6.4

12

Continuing Calibration Summary

Job Number: JC18649
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2770-CC2768
Lab FileID: XY064053.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\042716\XY064053.D          Vial: 20
Acq On    : 27 Apr 2016   8:10 am                   Operator: StevenH
Sample    : cc2768-5                                Inst    : VOA5
Misc      : gc18702,gxy2770,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methanol	250.000	205.299	17.9	76	-0.06	1.52- 2.12
2	Isopropyl alcohol	250.000	203.754	18.5	69	-0.04	1.72- 2.32
3	Ethanol	250.000	234.803	6.1	85	-0.07	1.87- 2.47
4	n-Propyl alcohol	250.000	217.072	13.2	75	-0.08	3.49- 4.09
5	Isobutyl alcohol	250.000	216.427	13.4	75	-0.05	4.87- 5.47
6	n-Butyl alcohol	250.000	215.296	13.9	75	-0.09	6.54- 7.14
7	2-Ethoxyethanol	250.000	219.358	12.3	81	-0.09	8.84- 9.44
8 S	Hexanol	250.000	214.352	14.3	75	-0.03	11.36-11.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064028.D D8015.M Wed Apr 27 12:13:41 2016

12.6.5

12

Continuing Calibration Summary

Job Number: JC18649
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2770-ECC2768
Lab FileID: XY064061.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\042716\XY064061.D          Vial: 10
Acq On    : 27 Apr 2016  11:43 am                   Operator: StevenH
Sample    : ecc2768-4                               Inst    : VOA5
Misc      : gc18772,gxy2770,5.00,,,10,1,            Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methanol	100.000	106.351	-6.4	121	0.00	1.52- 2.12
2	Isopropyl alcohol	100.000	111.897	-11.9	130	0.03	1.72- 2.32
3	Ethanol	100.000	108.011	-8.0	111	0.01	1.87- 2.47
4	n-Propyl alcohol	100.000	110.415	-10.4	120	0.04	3.49- 4.09
5	Isobutyl alcohol	100.000	109.912	-9.9	120	0.09	4.87- 5.47
6	n-Butyl alcohol	100.000	109.655	-9.7	120	0.12	6.54- 7.14
7	2-Ethoxyethanol	100.000	104.314	-4.3	111	0.07	8.84- 9.44
8 S	Hexanol	100.000	104.806	-4.8	119	0.05	11.36-11.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064027.D D8015.M Wed Apr 27 12:12:07 2016

12.6.6

12

GC Volatiles

Raw Data

(SGS Accutest Southeast)

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064038.D          Vial: 15
Acq On    : 26 Apr 2016   5:21 pm                   Operator: StevenH
Sample    : jc18649-1a                              Inst    : VOA5
Misc      : gc18771,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

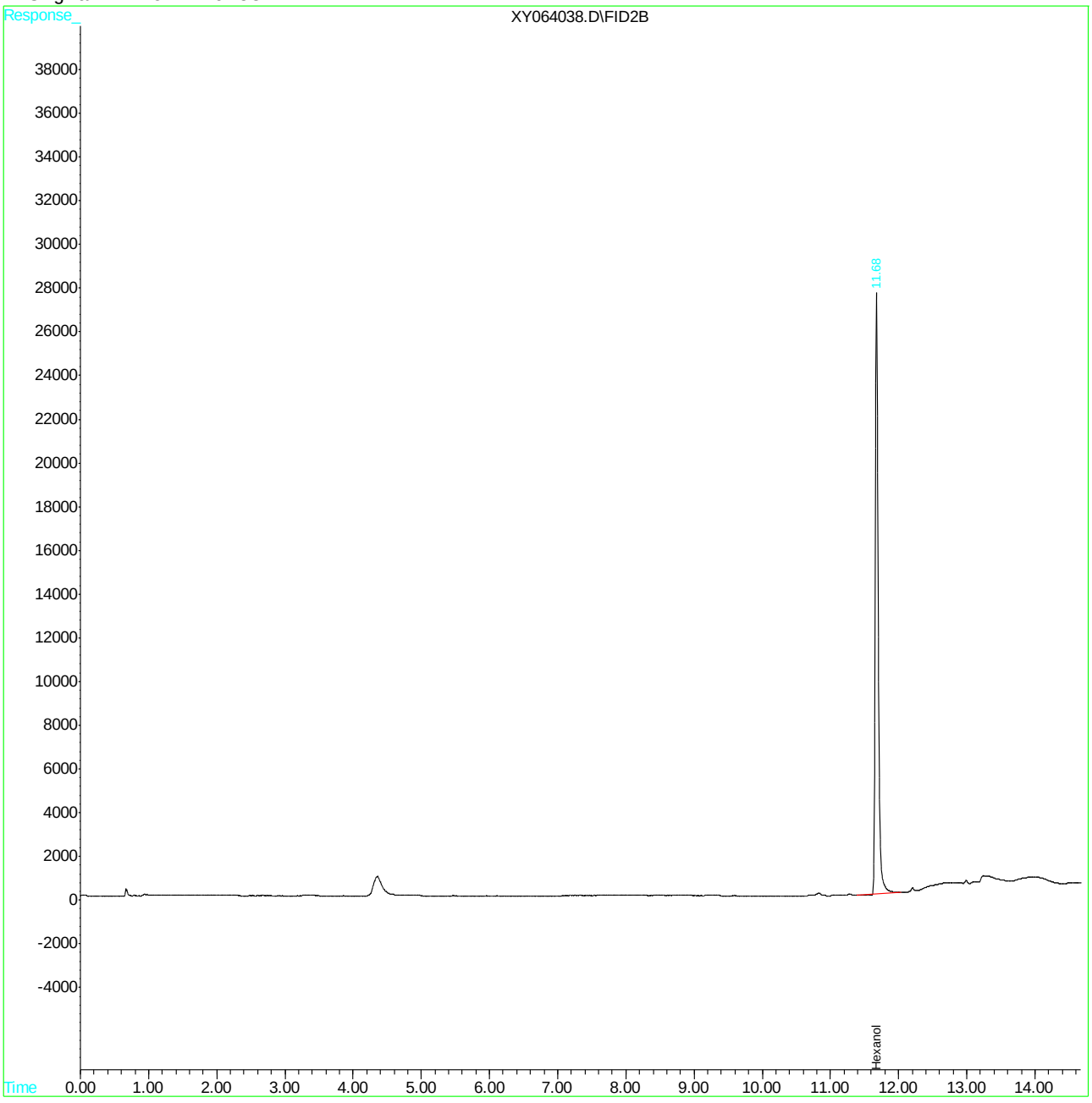
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
8) S Hexanol	11.68	826124	85.744	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 85.74%				
Target Compounds				
1) Methanol	0.00	0	N.D.	mg/L
2) Isopropyl alcohol	0.00	0	N.D.	mg/L
3) Ethanol	0.00	0	N.D.	mg/L
4) n-Propyl alcohol	0.00	0	N.D.	mg/L
5) Isobutyl alcohol	0.00	0	N.D.	mg/L
6) n-Butyl alcohol	0.00	0	N.D.	mg/L
7) 2-Ethoxyethanol	0.00	0	N.D.	mg/L

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064038.D Vial: 15
Acq On : 26 Apr 2016 5:21 pm Operator: StevenH
Sample : jc18649-1a Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064039.D          Vial: 16
Acq On    : 26 Apr 2016   5:40 pm                   Operator: StevenH
Sample    : jc18649-2a                              Inst    : VOA5
Misc      : gc18771,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

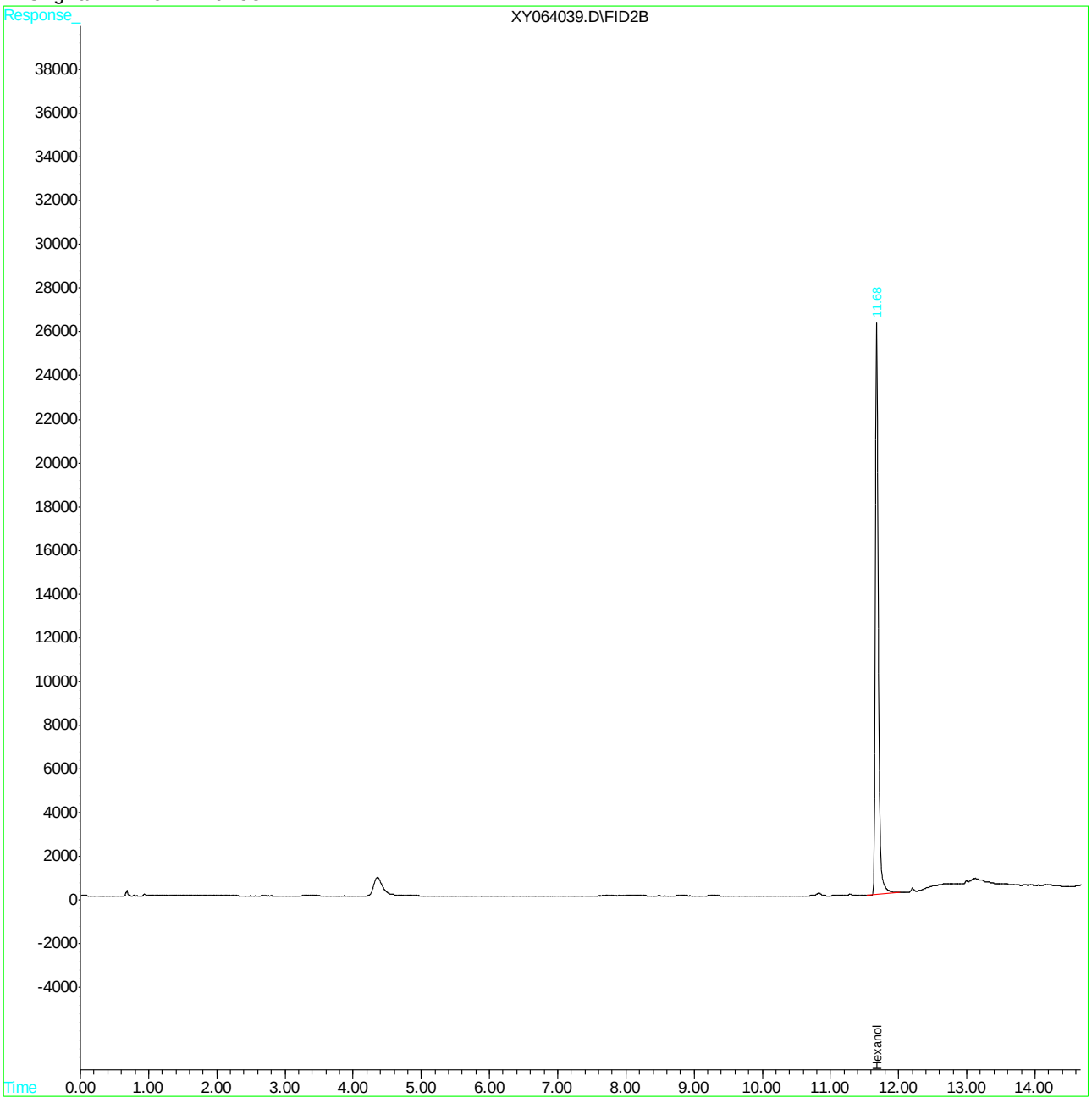
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
8) S Hexanol	11.68	788843	81.875	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 81.88%				
Target Compounds				
1) Methanol	0.00	0	N.D.	mg/L
2) Isopropyl alcohol	0.00	0	N.D.	mg/L
3) Ethanol	0.00	0	N.D.	mg/L
4) n-Propyl alcohol	0.00	0	N.D.	mg/L
5) Isobutyl alcohol	0.00	0	N.D.	mg/L
6) n-Butyl alcohol	0.00	0	N.D.	mg/L
7) 2-Ethoxyethanol	0.00	0	N.D.	mg/L

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064039.D Vial: 16
Acq On : 26 Apr 2016 5:40 pm Operator: StevenH
Sample : jc18649-2a Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064058.D Vial: 25
Acq On : 27 Apr 2016 9:46 am Operator: StevenH
Sample : jc18649-3 Inst : VOA5
Misc : gc18772,gxy2770,5.01,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
8) S Hexanol	11.70	1287160	133.595	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 133.60%				
Target Compounds				
1) Methanol	0.00	0	N.D.	mg/L
2) Isopropyl alcohol	0.00	0	N.D.	mg/L
3) Ethanol	0.00	0	N.D.	mg/L
4) n-Propyl alcohol	0.00	0	N.D.	mg/L
5) Isobutyl alcohol	0.00	0	N.D.	mg/L
6) n-Butyl alcohol	0.00	0	N.D.	mg/L
7) 2-Ethoxyethanol	0.00	0	N.D.	mg/L

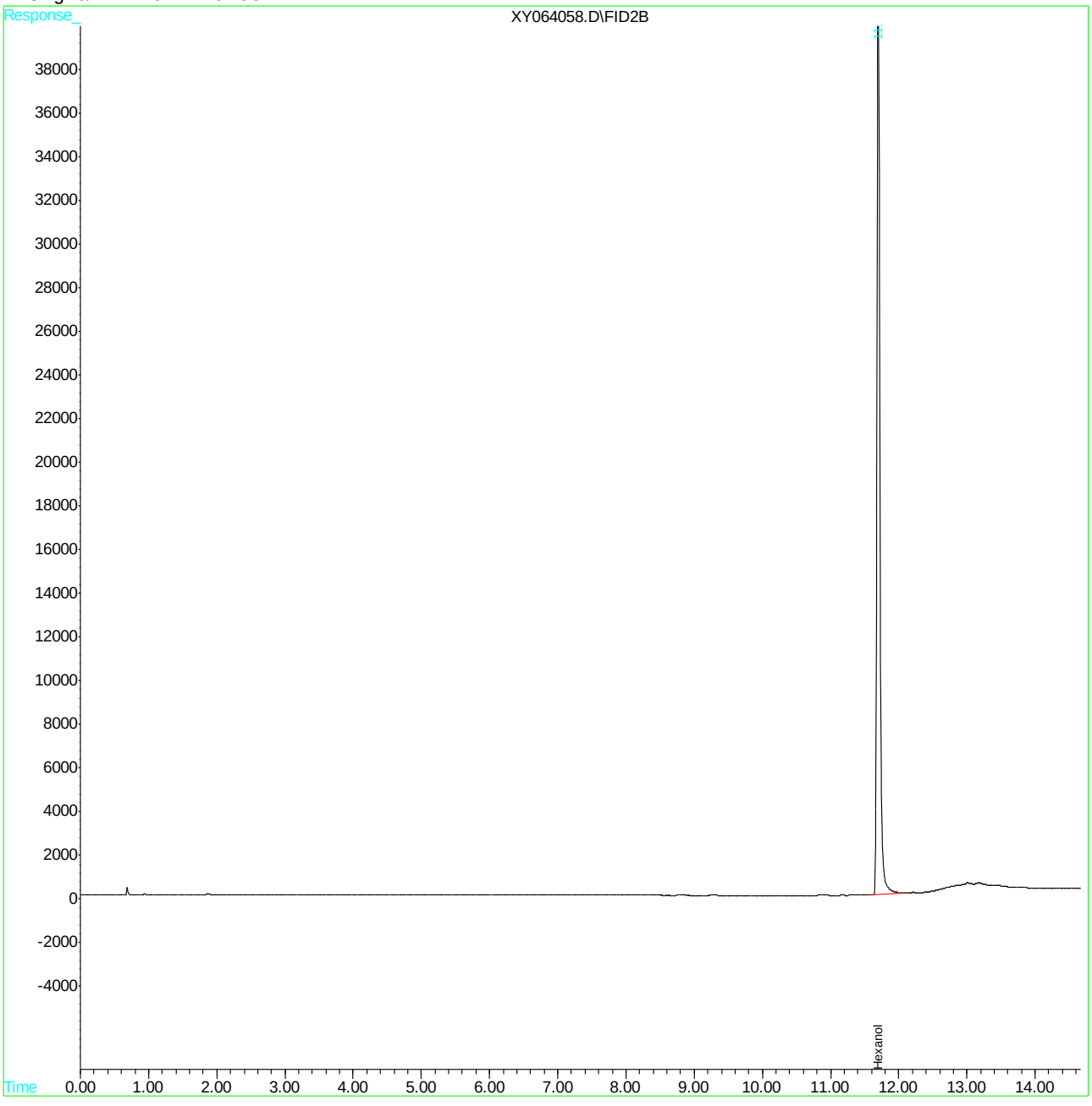
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064058.D D8015.M Wed Apr 27 12:08:47 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064058.D Vial: 25
Acq On : 27 Apr 2016 9:46 am Operator: StevenH
Sample : jc18649-3 Inst : VOA5
Misc : gc18772,gxy2770,5.01,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064040.D          Vial: 17
Acq On    : 26 Apr 2016   5:59 pm                   Operator: StevenH
Sample    : jc18649-4a                              Inst    : VOA5
Misc      : gc18771,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
8) S Hexanol	11.68	954237	99.041	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 99.04%				
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

13.1.4

13

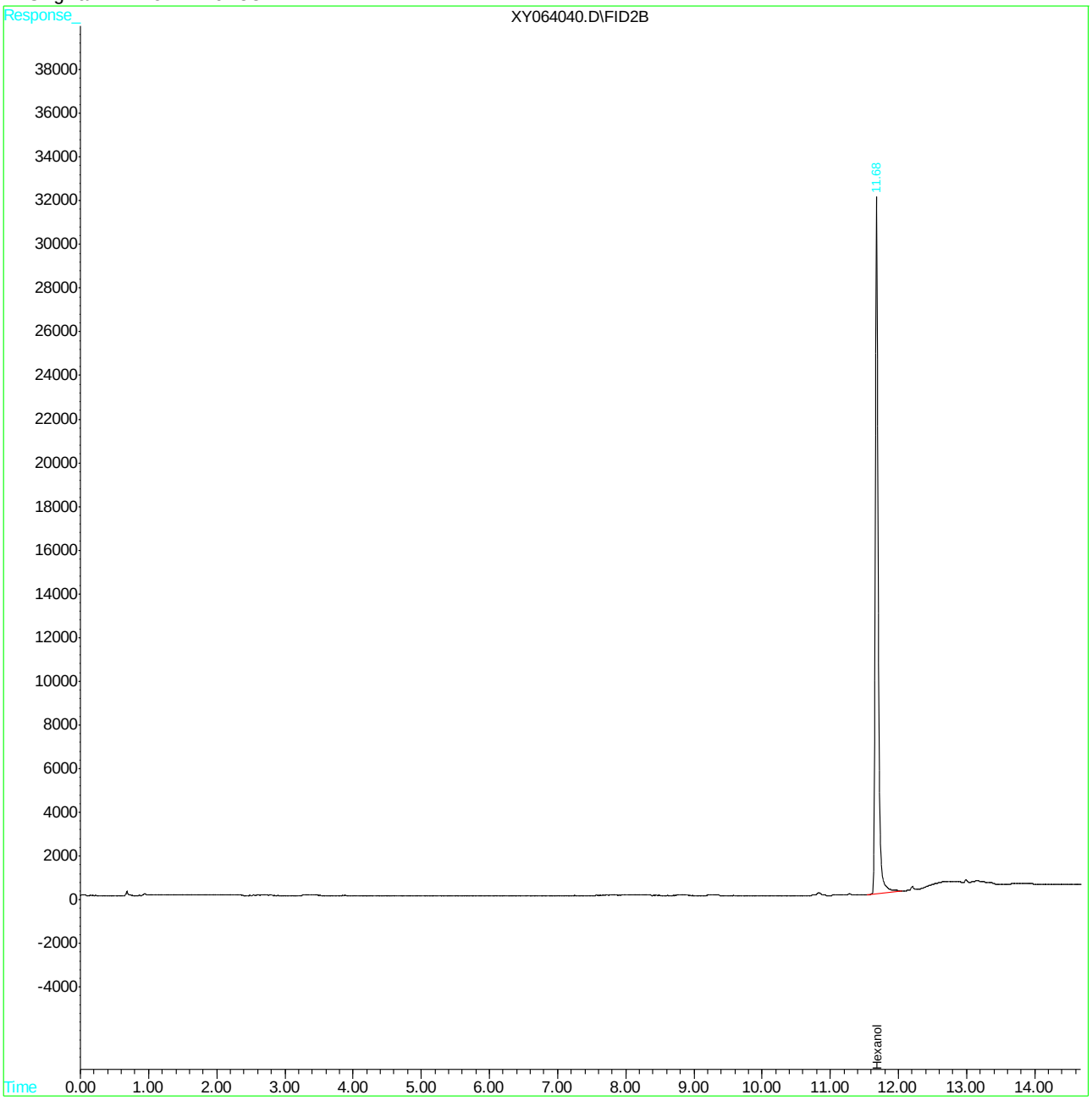
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064040.D Vial: 17
Acq On : 26 Apr 2016 5:59 pm Operator: StevenH
Sample : jc18649-4a Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064041.D          Vial: 18
Acq On    : 26 Apr 2016   6:18 pm                   Operator: StevenH
Sample    : jc18649-5a                              Inst    : VOA5
Misc      : gc18771,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

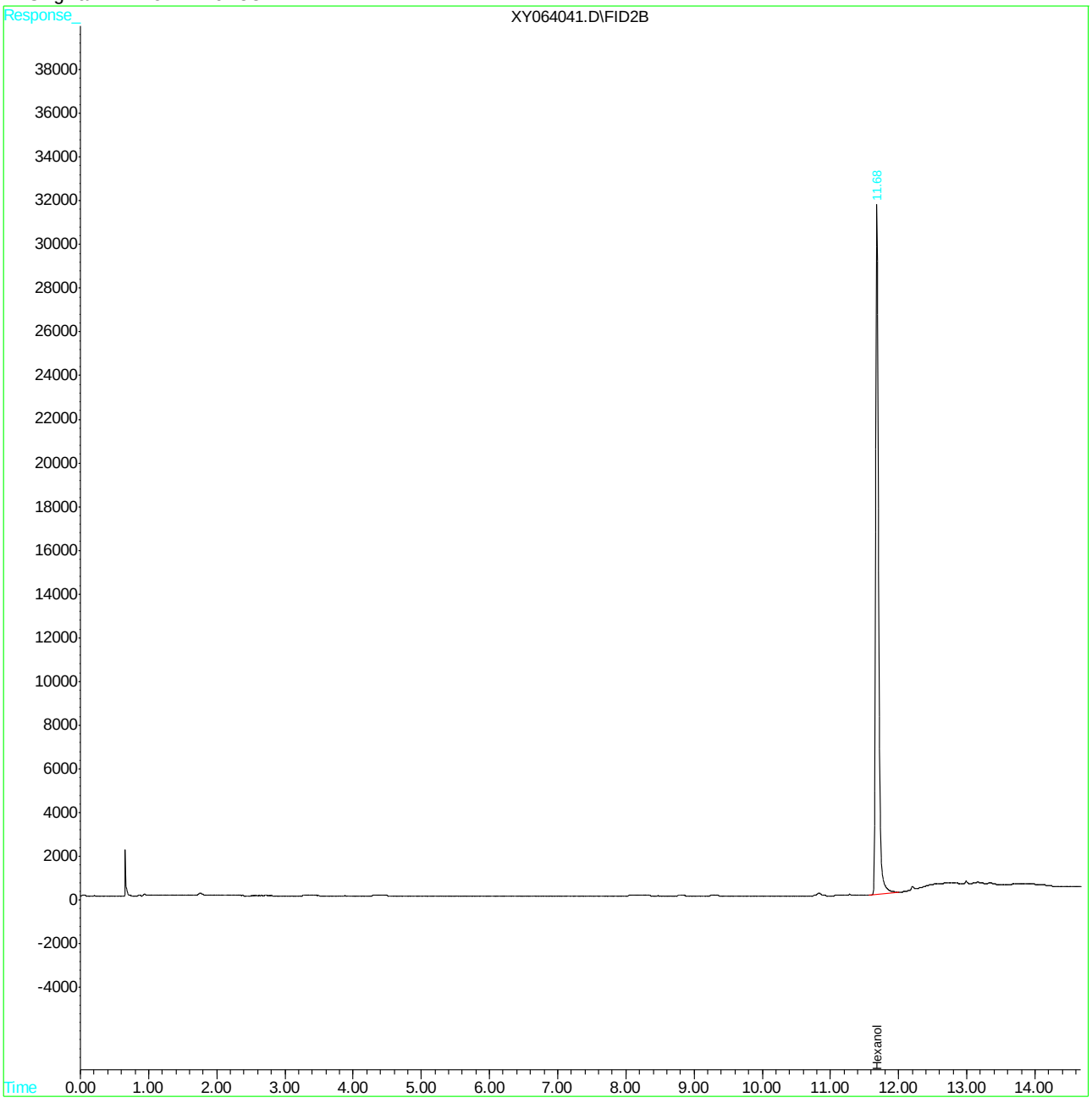
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
8) S Hexanol	11.68	927196	96.235	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 96.23%				
Target Compounds				
1) Methanol	0.00	0	N.D.	mg/L
2) Isopropyl alcohol	0.00	0	N.D.	mg/L
3) Ethanol	0.00	0	N.D.	mg/L
4) n-Propyl alcohol	0.00	0	N.D.	mg/L
5) Isobutyl alcohol	0.00	0	N.D.	mg/L
6) n-Butyl alcohol	0.00	0	N.D.	mg/L
7) 2-Ethoxyethanol	0.00	0	N.D.	mg/L

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064041.D Vial: 18
Acq On : 26 Apr 2016 6:18 pm Operator: StevenH
Sample : jc18649-5a Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064035.D Vial: 12
Acq On : 26 Apr 2016 4:24 pm Operator: StevenH
Sample : mb Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
8) S Hexanol	11.68	886696	92.031	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 92.03%				
Target Compounds				
1) Methanol	0.00	0	N.D.	mg/L
2) Isopropyl alcohol	0.00	0	N.D.	mg/L
3) Ethanol	0.00	0	N.D.	mg/L
4) n-Propyl alcohol	0.00	0	N.D.	mg/L
5) Isobutyl alcohol	0.00	0	N.D.	mg/L
6) n-Butyl alcohol	0.00	0	N.D.	mg/L
7) 2-Ethoxyethanol	0.00	0	N.D.	mg/L

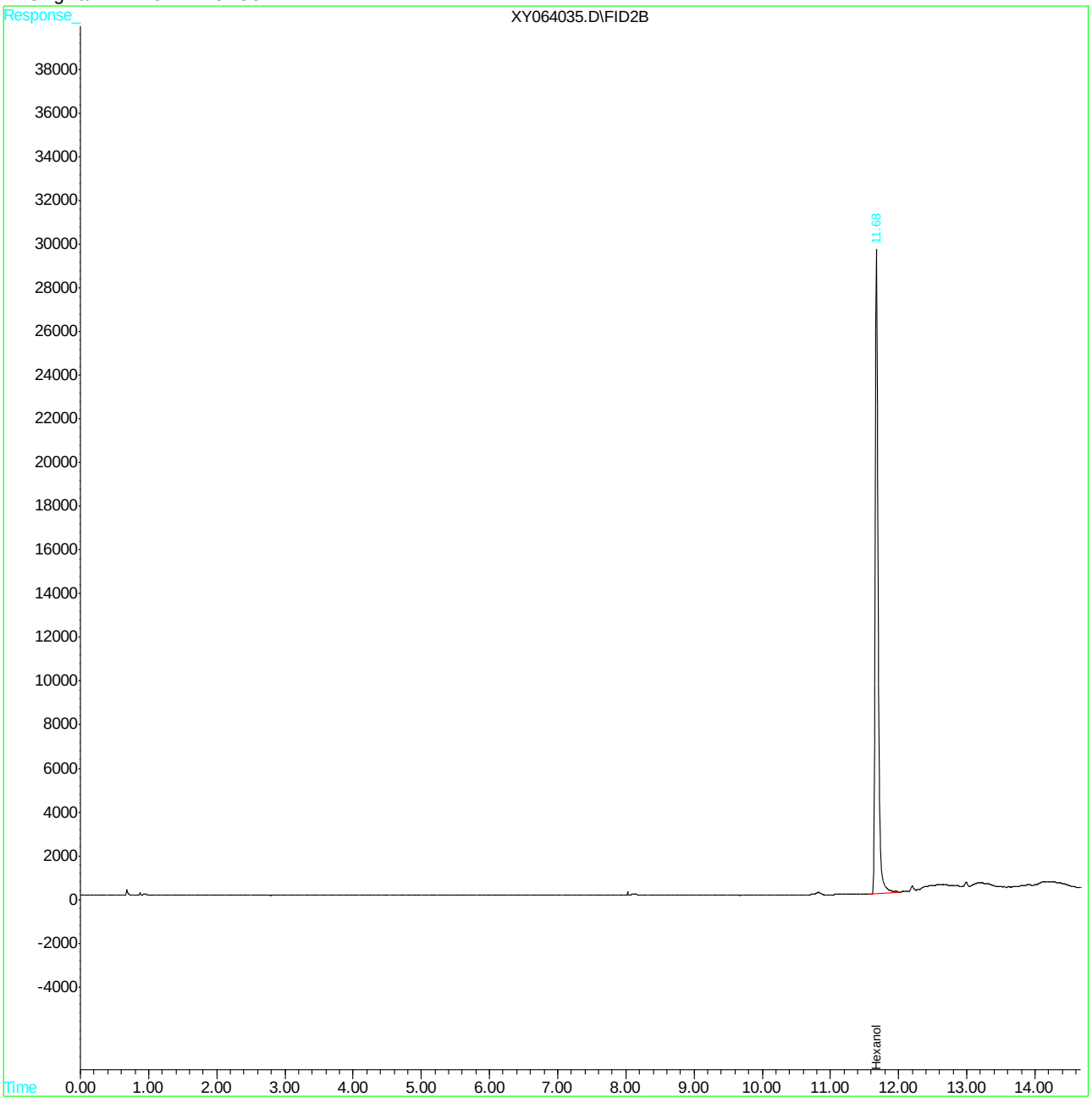
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064035.D D8015.M Wed Apr 27 10:39:14 2016 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064035.D Vial: 12
Acq On : 26 Apr 2016 4:24 pm Operator: StevenH
Sample : mb Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042716\XY064055.D          Vial: 22
Acq On    : 27 Apr 2016   8:48 am                   Operator: StevenH
Sample    : mb                                      Inst    : VOA5
Misc      : gc18702,gxy2770,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 12:07 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

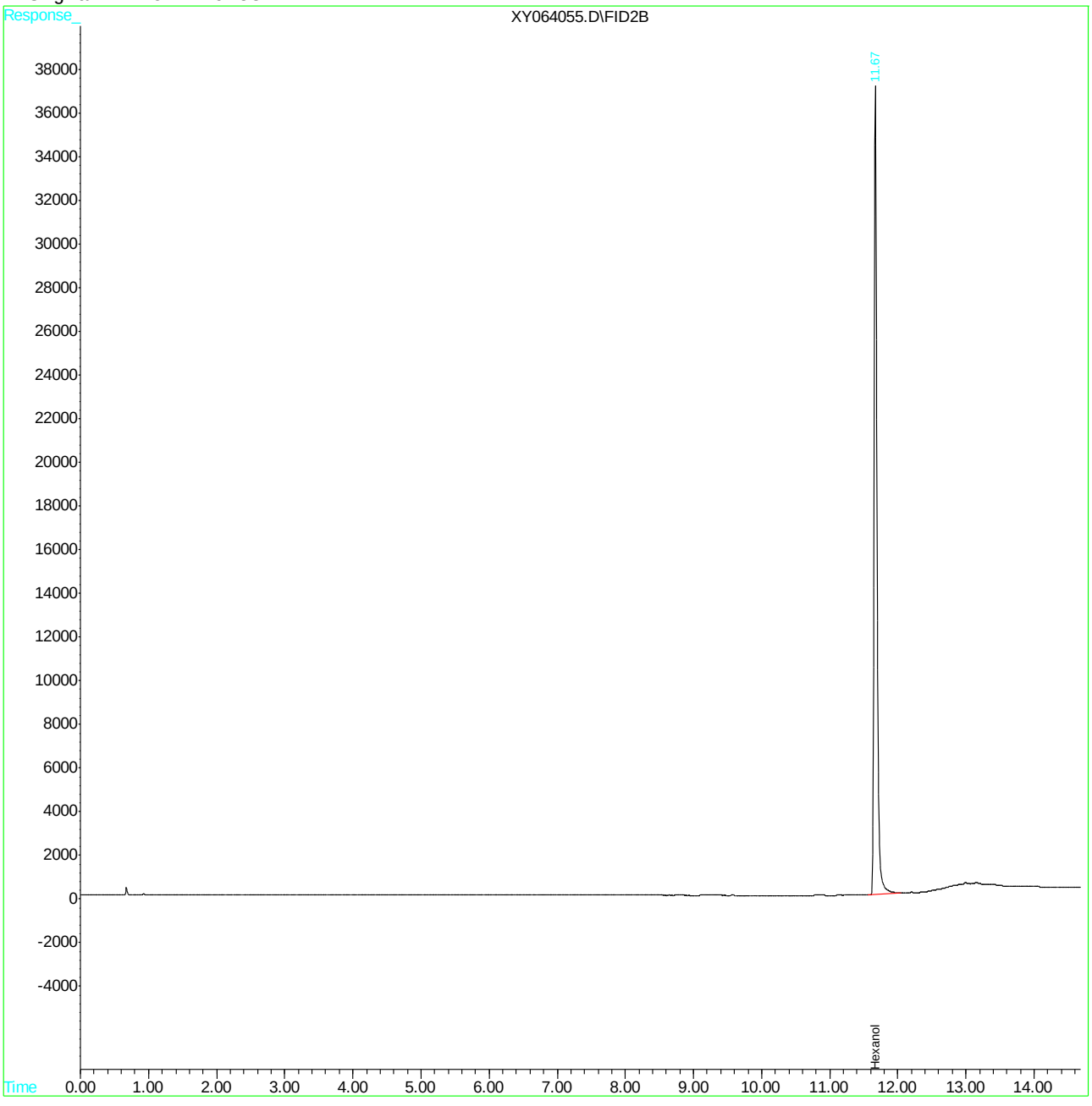
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
8) S Hexanol	11.67	1096417	113.798	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 113.80%				
Target Compounds				
1) Methanol	0.00	0	N.D.	mg/L
2) Isopropyl alcohol	0.00	0	N.D.	mg/L
3) Ethanol	0.00	0	N.D.	mg/L
4) n-Propyl alcohol	0.00	0	N.D.	mg/L
5) Isobutyl alcohol	0.00	0	N.D.	mg/L
6) n-Butyl alcohol	0.00	0	N.D.	mg/L
7) 2-Ethoxyethanol	0.00	0	N.D.	mg/L

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064055.D Vial: 22
Acq On : 27 Apr 2016 8:48 am Operator: StevenH
Sample : mb Inst : VOA5
Misc : gc18702,gxy2770,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064034.D          Vial: 11
Acq On    : 26 Apr 2016   4:04 pm                   Operator: StevenH
Sample    : bs                                      Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.68	765934	79.497 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 79.50%			
Target Compounds			
1) Methanol	1.82	377609	80.171 mg/L
2) Isopropyl alcohol	2.04	519917	80.813 mg/L
3) Ethanol	2.17	633515	85.050 mg/L
4) n-Propyl alcohol	3.81	671713	78.245 mg/L
5) Isobutyl alcohol	5.22	790938	79.763 mg/L
6) n-Butyl alcohol	6.87	765163	80.934 mg/L
7) 2-Ethoxyethanol	9.15	461128	88.367 mg/L

13.3.1

13

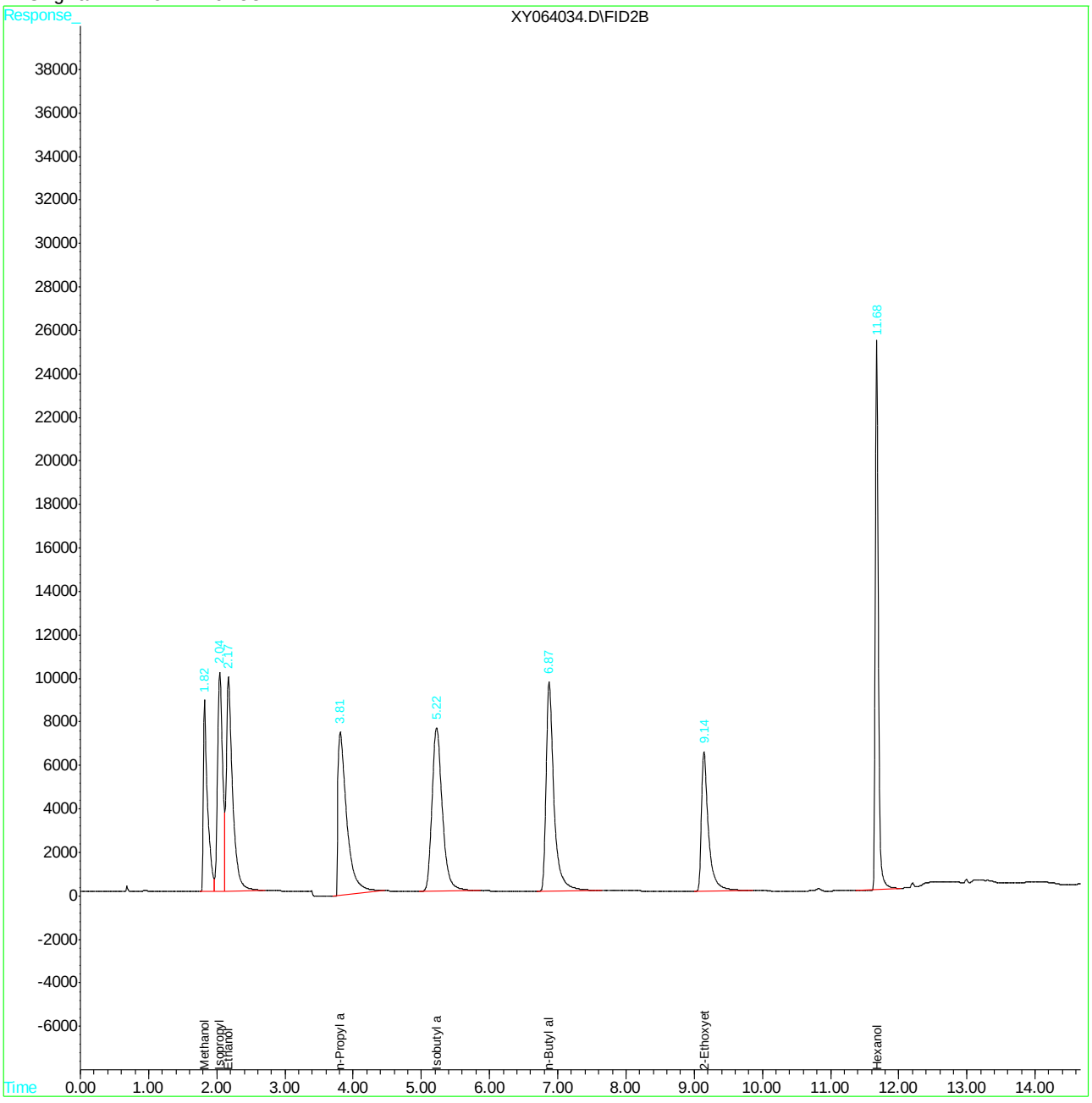
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064034.D Vial: 11
Acq On : 26 Apr 2016 4:04 pm Operator: StevenH
Sample : bs Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042716\XY064054.D          Vial: 21
Acq On    : 27 Apr 2016   8:29 am                   Operator: StevenH
Sample    : bs                                      Inst    : VOA5
Misc      : gc18772,gxy2770,5.00,,,10,1,            Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 12:07 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.65	762846	79.176 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 79.18%			
Target Compounds			
1) Methanol	1.79	372929	79.178 mg/L
2) Isopropyl alcohol	2.01	515461	80.120 mg/L
3) Ethanol	2.14	627565	84.251 mg/L
4) n-Propyl alcohol	3.76	701006	81.657 mg/L
5) Isobutyl alcohol	5.16	786788	79.344 mg/L
6) n-Butyl alcohol	6.81	762703	80.673 mg/L
7) 2-Ethoxyethanol	9.10	457778	87.725 mg/L

13.3.2

13

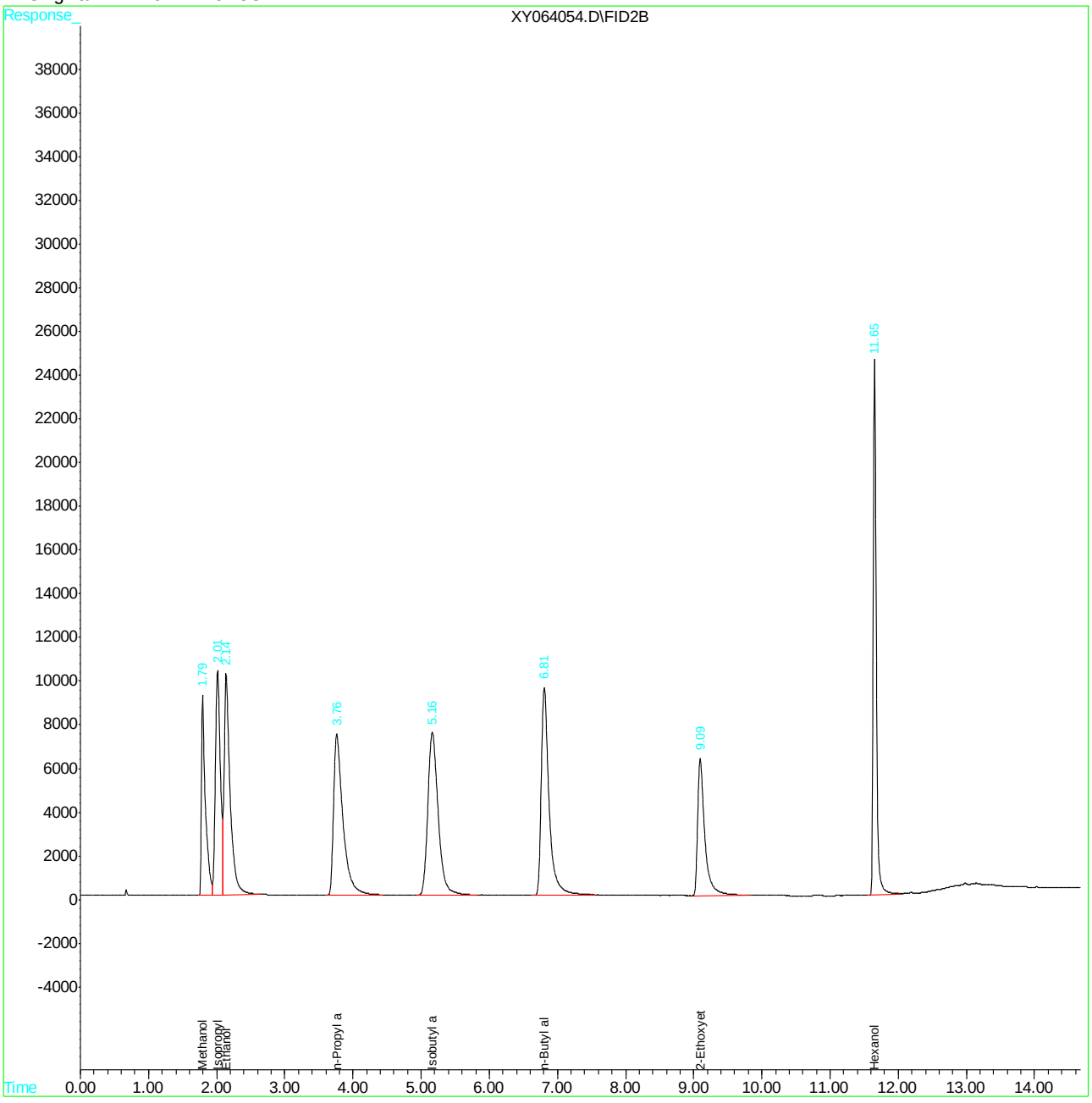
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064054.D Vial: 21
Acq On : 27 Apr 2016 8:29 am Operator: StevenH
Sample : bs Inst : VOA5
Misc : gc18772,gxy2770,5.00,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



XY064054.D D8015.M Wed Apr 27 12:08:42 2016 Page 2

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064042.D          Vial: 19
Acq On    : 26 Apr 2016   6:38 pm                   Operator: StevenH
Sample    : jc18516-4ams                            Inst    : VOA5
Misc      : gc18771,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.68	864505	89.728 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 89.73%			
Target Compounds			
1) Methanol	1.82	423994	90.020 mg/L
2) Isopropyl alcohol	2.04	607249	94.387 mg/L
3) Ethanol	2.17	680974	91.422 mg/L
4) n-Propyl alcohol	3.81	791982	92.254 mg/L
5) Isobutyl alcohol	5.22	890545	89.808 mg/L
6) n-Butyl alcohol	6.89	862556	91.235 mg/L
7) 2-Ethoxyethanol	9.16	496374	95.122 mg/L

13.4.1

13

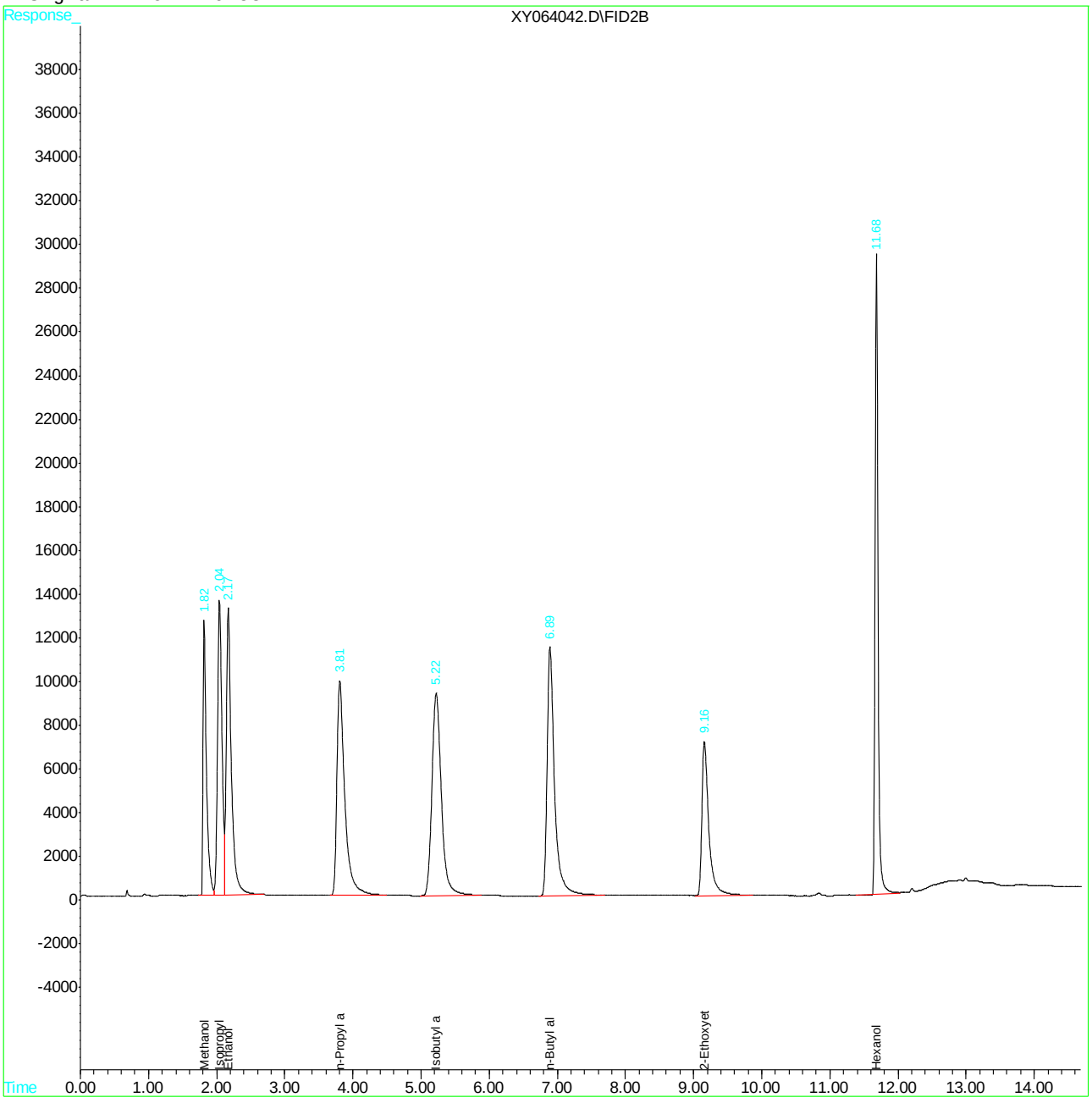
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064042.D Vial: 19
Acq On : 26 Apr 2016 6:38 pm Operator: StevenH
Sample : jc18516-4ams Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064043.D Vial: 19
Acq On : 26 Apr 2016 6:57 pm Operator: StevenH
Sample : jc18516-4amsd Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.69	944780	98.060 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 98.06%			
Target Compounds			
1) Methanol	1.82	456976	97.022 mg/L
2) Isopropyl alcohol	2.04	667233	103.711 mg/L
3) Ethanol	2.17	735865	98.791 mg/L
4) n-Propyl alcohol	3.81	864938	100.753 mg/L
5) Isobutyl alcohol	5.23	973830	98.207 mg/L
6) n-Butyl alcohol	6.91	943300	99.776 mg/L
7) 2-Ethoxyethanol	9.17	523493	100.319 mg/L

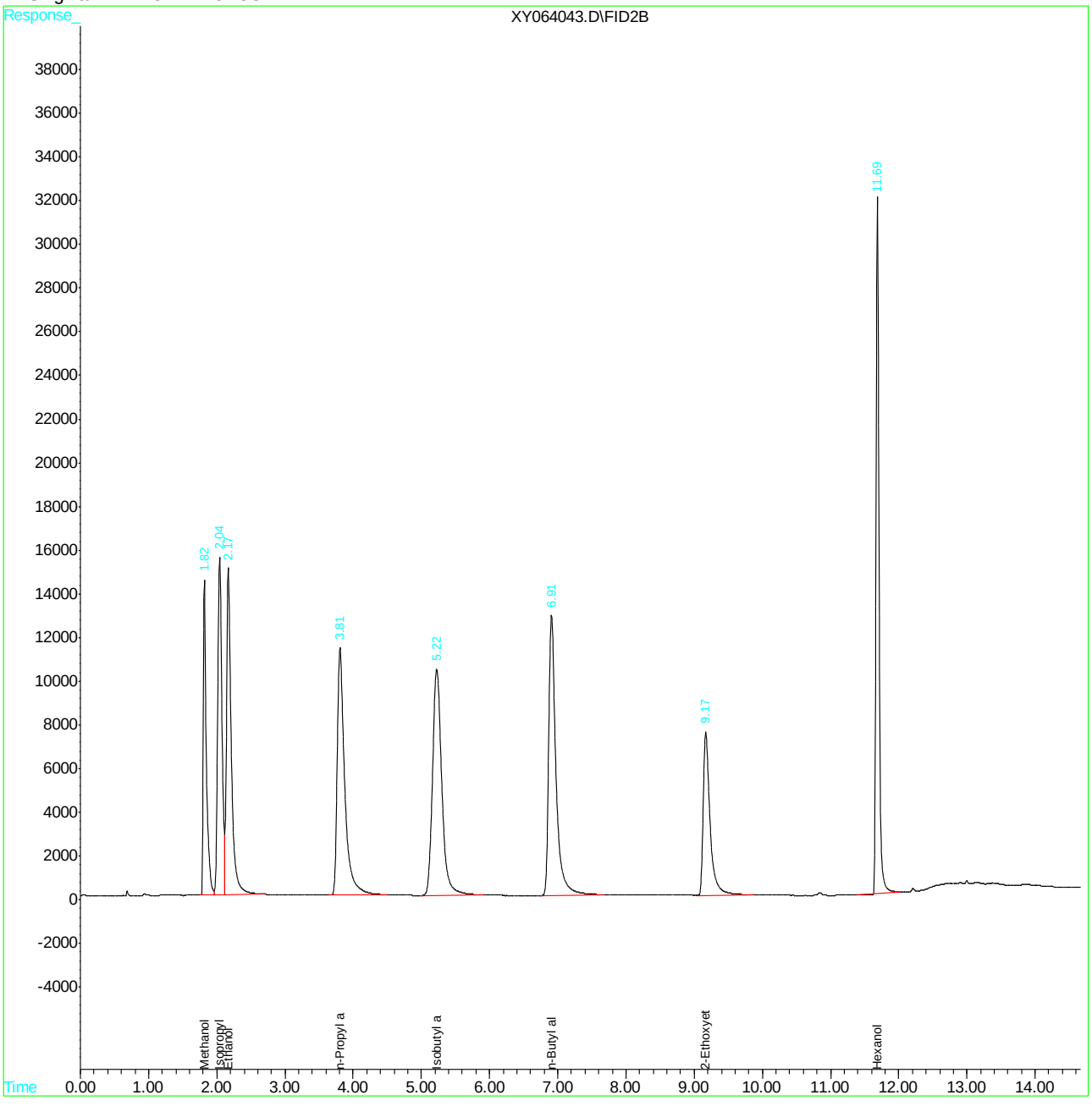
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064043.D Vial: 19
Acq On : 26 Apr 2016 6:57 pm Operator: StevenH
Sample : jc18516-4amsd Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



XY064043.D D8015.M Wed Apr 27 10:39:26 2016 Page 2

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042716\XY064059.D          Vial: 26
Acq On    : 27 Apr 2016  10:44 am                   Operator: StevenH
Sample    : jc18516-2ams                            Inst    : VOA5
Misc      : gc18772,gxy2770,4.87,,,10,1,            Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 12:07 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

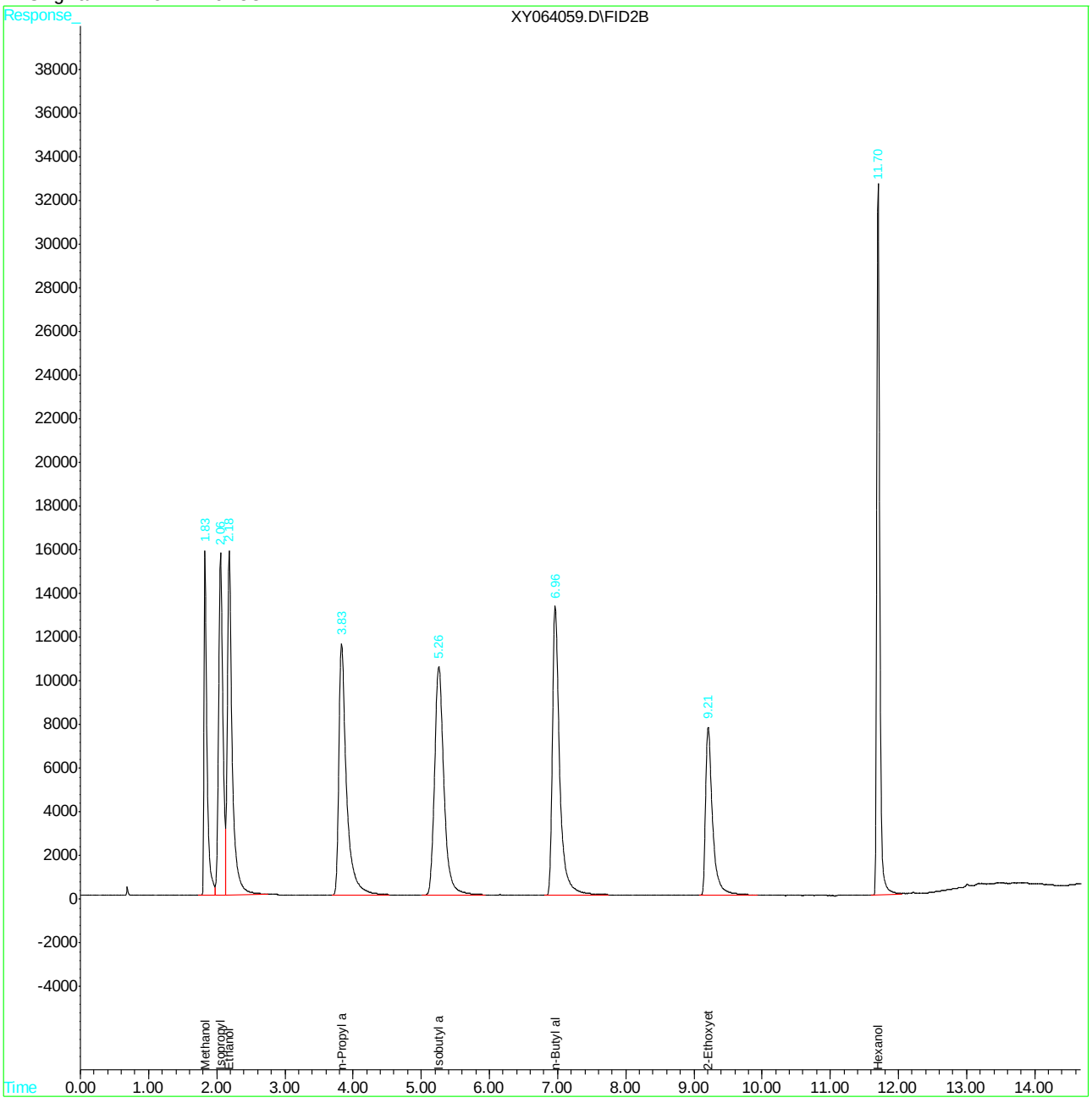
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.70	970719	100.752 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 100.75%			
Target Compounds			
1) Methanol	1.83	484329	102.829 mg/L
2) Isopropyl alcohol	2.06	683786	106.284 mg/L
3) Ethanol	2.18	782950	105.112 mg/L
4) n-Propyl alcohol	3.83	899402	104.767 mg/L
5) Isobutyl alcohol	5.26	998150	100.659 mg/L
6) n-Butyl alcohol	6.97	976128	103.248 mg/L
7) 2-Ethoxyethanol	9.21	551020	105.594 mg/L

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064059.D Vial: 26
Acq On : 27 Apr 2016 10:44 am Operator: StevenH
Sample : jc18516-2ams Inst : VOA5
Misc : gc18772,gxy2770,4.87,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



XY064059.D D8015.M Wed Apr 27 12:08:49 2016 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064060.D Vial: 26
Acq On : 27 Apr 2016 11:24 am Operator: StevenH
Sample : jc18516-2amsd Inst : VOA5
Misc : gc18772,gxy2770,4.87,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.70	918788	95.362 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 95.36%			
Target Compounds			
1) Methanol	1.83	461866	98.060 mg/L
2) Isopropyl alcohol	2.06	652322	101.393 mg/L
3) Ethanol	2.18	744735	99.982 mg/L
4) n-Propyl alcohol	3.83	856825	99.807 mg/L
5) Isobutyl alcohol	5.26	949348	95.738 mg/L
6) n-Butyl alcohol	6.95	922931	97.621 mg/L
7) 2-Ethoxyethanol	9.20	531426	101.839 mg/L

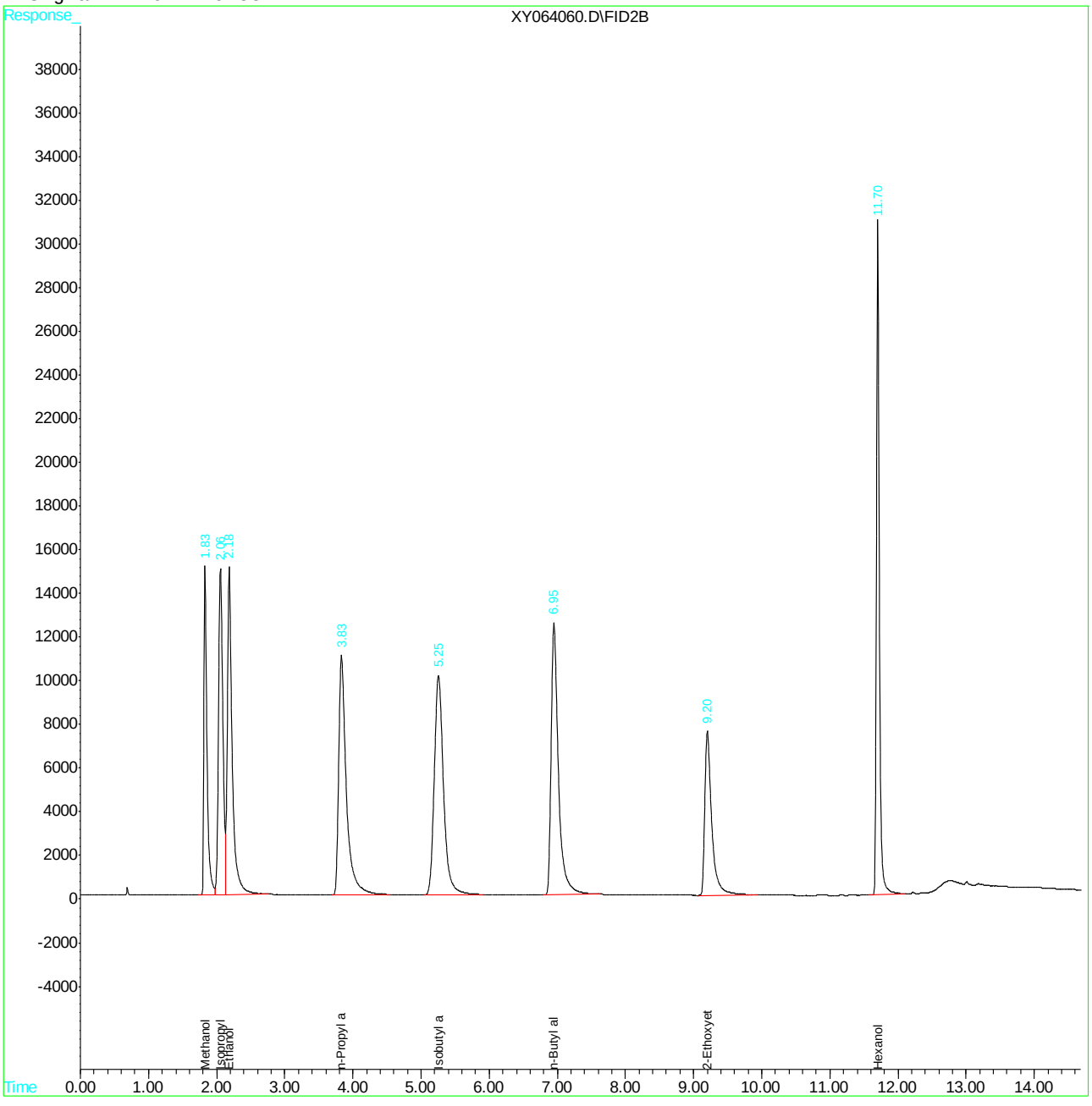
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064060.D Vial: 26
Acq On : 27 Apr 2016 11:24 am Operator: StevenH
Sample : jc18516-2amsd Inst : VOA5
Misc : gc18772,gxy2770,4.87,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Manual Integrations
APPROVED
(compounds with "m" flag)
Juan Garcia
04/27/16 15:16

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064024.D          Vial: 1
Acq On    : 26 Apr 2016  12:28 pm                   Operator: StevenH
Sample    : ic2768-1                                Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:27 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.65	20948	2.174 mg/L m
Spiked Amount 100.000 Range 57 - 142 Recovery = 2.17%#			
Target Compounds			
1) Methanol	1.80	11102	2.357 mg/L
2) Isopropyl alcohol	2.00	14154	2.200 mg/L
3) Ethanol	2.15	14479	1.944 mg/L
4) n-Propyl alcohol	3.77	17687	2.060 mg/L
5) Isobutyl alcohol	5.15	21045	2.122 mg/L
6) n-Butyl alcohol	6.85	18529	1.960 mg/L
7) 2-Ethoxyethanol	9.14	10281	1.970 mg/L

(f)=RT Delta > 1/2 Window (m)=manual int.

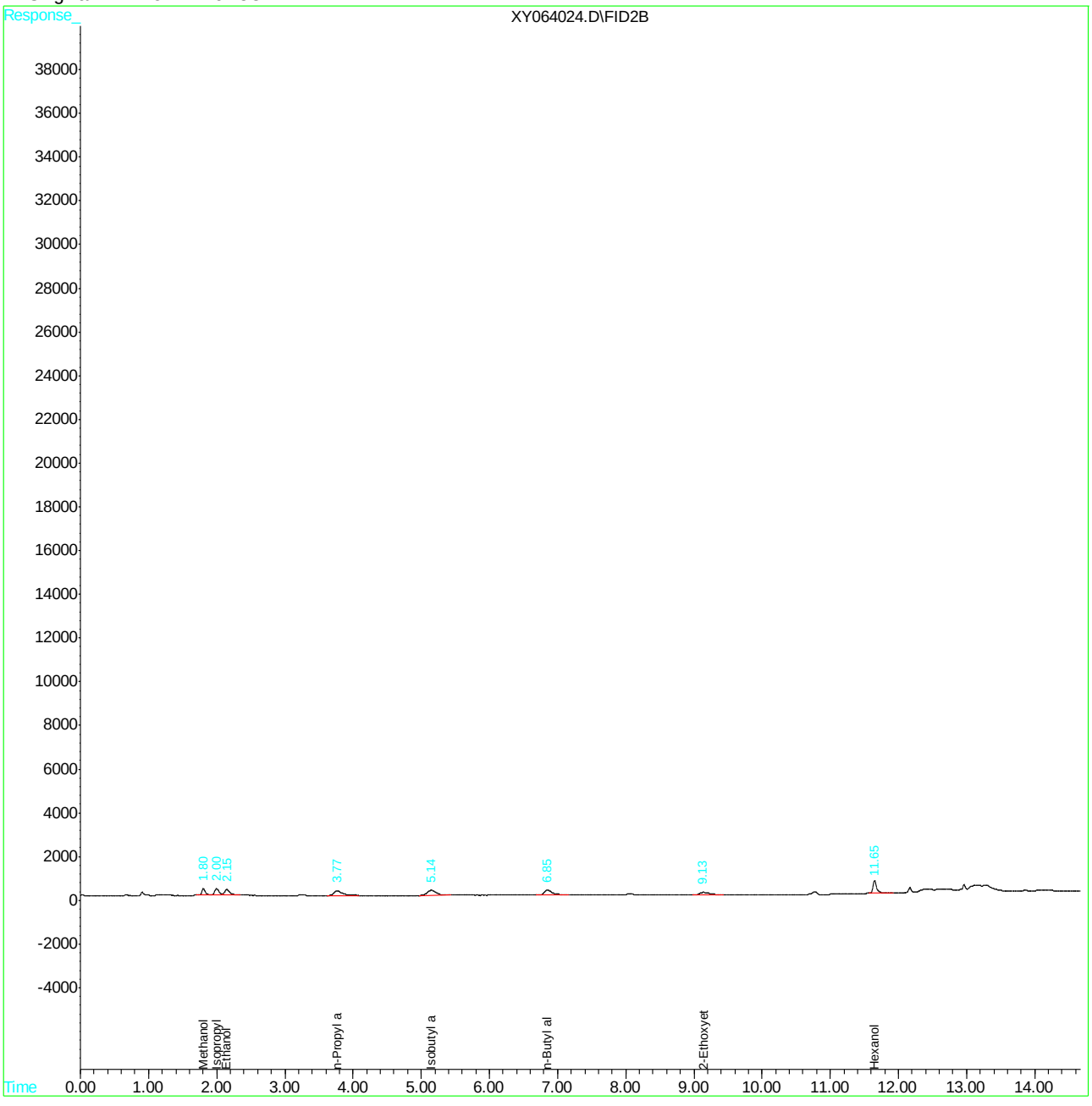
SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064024.D Vial: 1
Acq On : 26 Apr 2016 12:28 pm Operator: StevenH
Sample : ic2768-1 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:27 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Manual Integration Approval Summary

Sample Number:	GXY2768-IC2768	**Method:**	SW846 8015C
Lab FileID:	XY064024.D	**Analyst approved:**	04/27/16 11:04 Steven Heller
Injection Time:	04/26/16 12:28	**Supervisor approved:**	04/27/16 15:16 Juan Garcia

Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexanol	111-27-3	1	11.65	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/27/16 15:16

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064025.D          Vial: 2
Acq On    : 26 Apr 2016  12:47 pm                   Operator: StevenH
Sample    : ic2768-2                                Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:28 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.66	42122	4.372 mg/L m
Spiked Amount 100.000 Range 57 - 142 Recovery = 4.37%#			
Target Compounds			
1) Methanol	1.82	21757	4.619 mg/L
2) Isopropyl alcohol	2.02	29637	4.607 mg/L
3) Ethanol	2.17	31836	4.274 mg/L
4) n-Propyl alcohol	3.79	37653	4.386 mg/L
5) Isobutyl alcohol	5.17	45620	4.601 mg/L
6) n-Butyl alcohol	6.84	41221	4.360 mg/L
7) 2-Ethoxyethanol	9.14	22756	4.361 mg/L

13.5.2
13

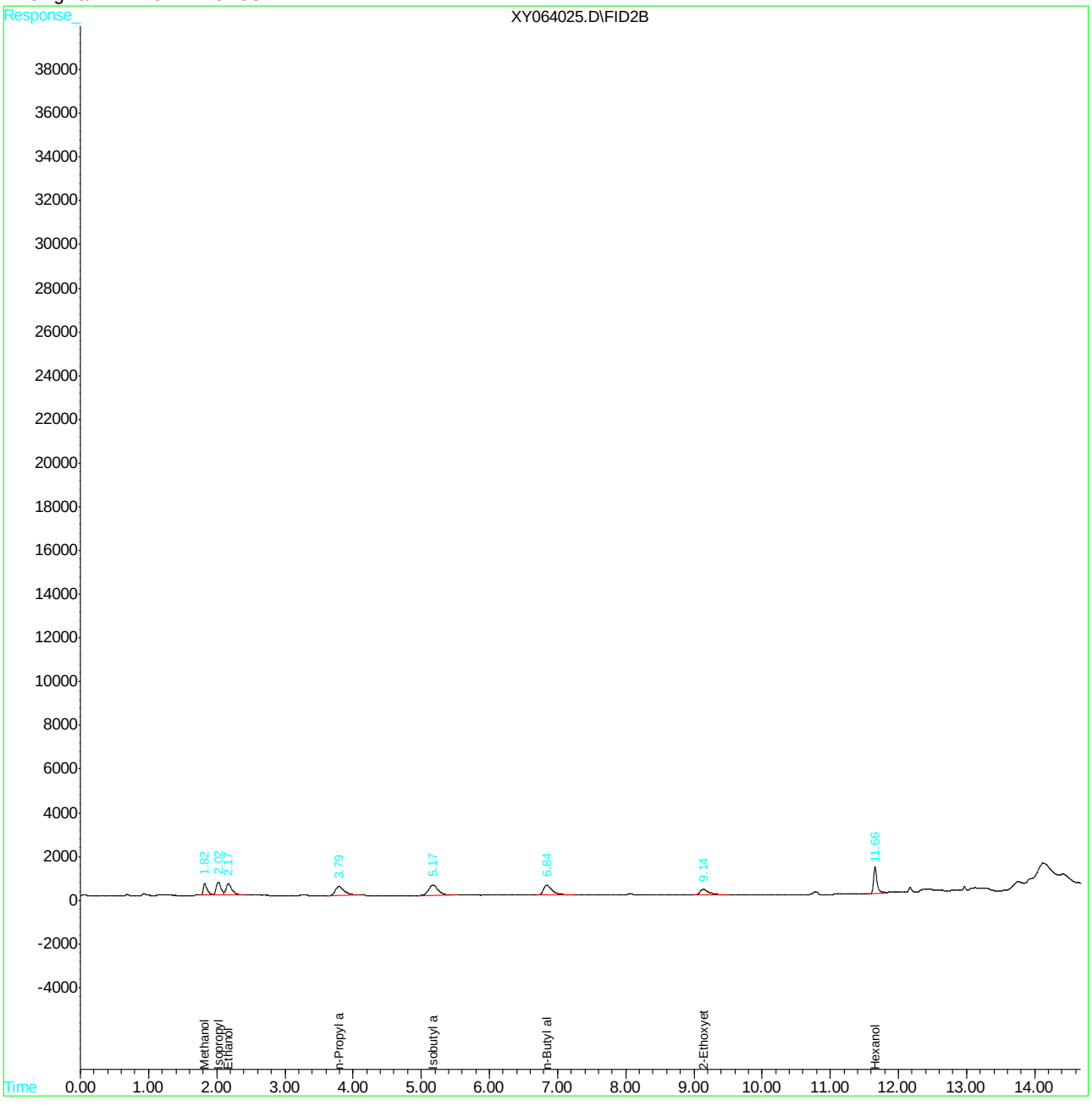
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064025.D Vial: 2
Acq On : 26 Apr 2016 12:47 pm Operator: StevenH
Sample : ic2768-2 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Manual Integration Approval Summary

Sample Number:	GXY2768-IC2768	**Method:**	SW846 8015C
Lab FileID:	XY064025.D	**Analyst approved:**	04/27/16 11:04 Steven Heller
Injection Time:	04/26/16 12:47	**Supervisor approved:**	04/27/16 15:16 Juan Garcia

Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexanol	111-27-3	1	11.66	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/27/16 15:16

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064026.D Vial: 3
Acq On : 26 Apr 2016 1:07 pm Operator: StevenH
Sample : ic2768-3 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.66	265048	27.510 mg/L m
Spiked Amount 100.000 Range 57 - 142 Recovery = 27.51%#			
Target Compounds			
1) Methanol	1.81	107739	22.874 mg/L
2) Isopropyl alcohol	2.02	155841	24.223 mg/L
3) Ethanol	2.16	173320	23.268 mg/L
4) n-Propyl alcohol	3.79	203825	23.743 mg/L
5) Isobutyl alcohol	5.18	238945	24.097 mg/L
6) n-Butyl alcohol	6.85	223962	23.689 mg/L
7) 2-Ethoxyethanol	9.14	117164	22.452 mg/L

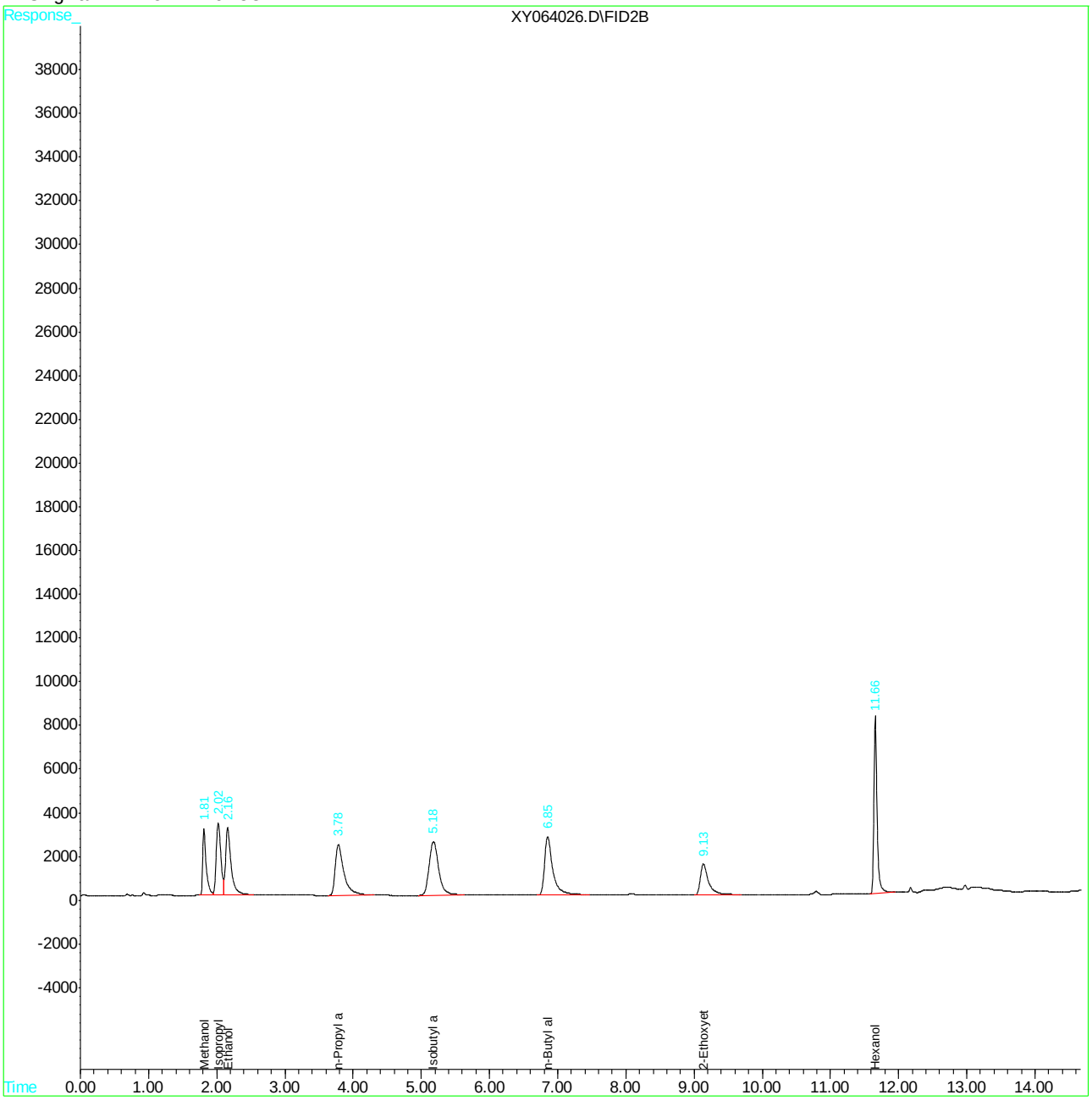
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064026.D D8015.M Wed Apr 27 11:22:18 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064026.D Vial: 3
Acq On : 26 Apr 2016 1:07 pm Operator: StevenH
Sample : ic2768-3 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Manual Integration Approval Summary

Sample Number:	GXY2768-IC2768	**Method:**	SW846 8015C
Lab FileID:	XY064026.D	**Analyst approved:**	04/27/16 11:04 Steven Heller
Injection Time:	04/26/16 13:07	**Supervisor approved:**	04/27/16 15:16 Juan Garcia

Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexanol	111-27-3	1	11.66	Poor instrument integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064027.D Vial: 4
Acq On : 26 Apr 2016 1:34 pm Operator: StevenH
Sample : icc2768-4 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.66	845336	87.738 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 87.74%			
Target Compounds			
1) Methanol	1.80	412352	87.548 mg/L
2) Isopropyl alcohol	2.02	551631	85.742 mg/L
3) Ethanol	2.15	711817	95.562 mg/L
4) n-Propyl alcohol	3.78	779538	90.805 mg/L
5) Isobutyl alcohol	5.19	898139	90.573 mg/L
6) n-Butyl alcohol	6.85	848521	89.751 mg/L
7) 2-Ethoxyethanol	9.12	481776	92.324 mg/L

13.5.4 13

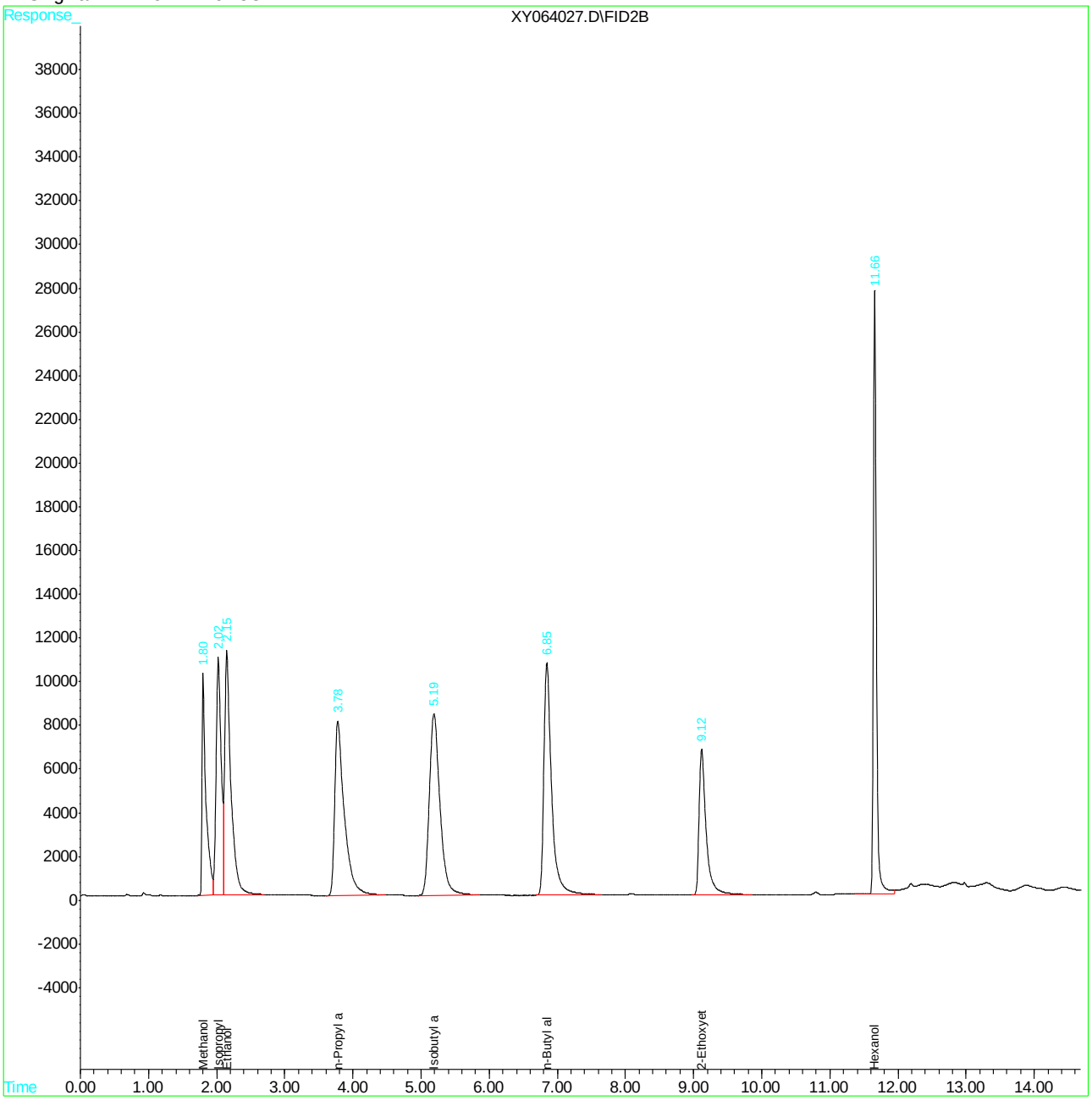
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064027.D D8015.M Wed Apr 27 11:22:19 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064027.D Vial: 4
Acq On : 26 Apr 2016 1:34 pm Operator: StevenH
Sample : icc2768-4 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064028.D Vial: 5
Acq On : 26 Apr 2016 1:54 pm Operator: StevenH
Sample : ic2768-5 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.66	2748396	285.258 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 285.26%#			
Target Compounds			
1) Methanol	1.79	1277947	271.325 mg/L
2) Isopropyl alcohol	2.02	1893527	294.319 mg/L
3) Ethanol	2.13	2061099	276.705 mg/L
4) n-Propyl alcohol	3.76	2461208	286.694 mg/L
5) Isobutyl alcohol	5.18	2861662	288.586 mg/L
6) n-Butyl alcohol	6.88	2712684	286.929 mg/L
7) 2-Ethoxyethanol	9.13	1393528	267.046 mg/L

(f)=RT Delta > 1/2 Window (m)=manual int.

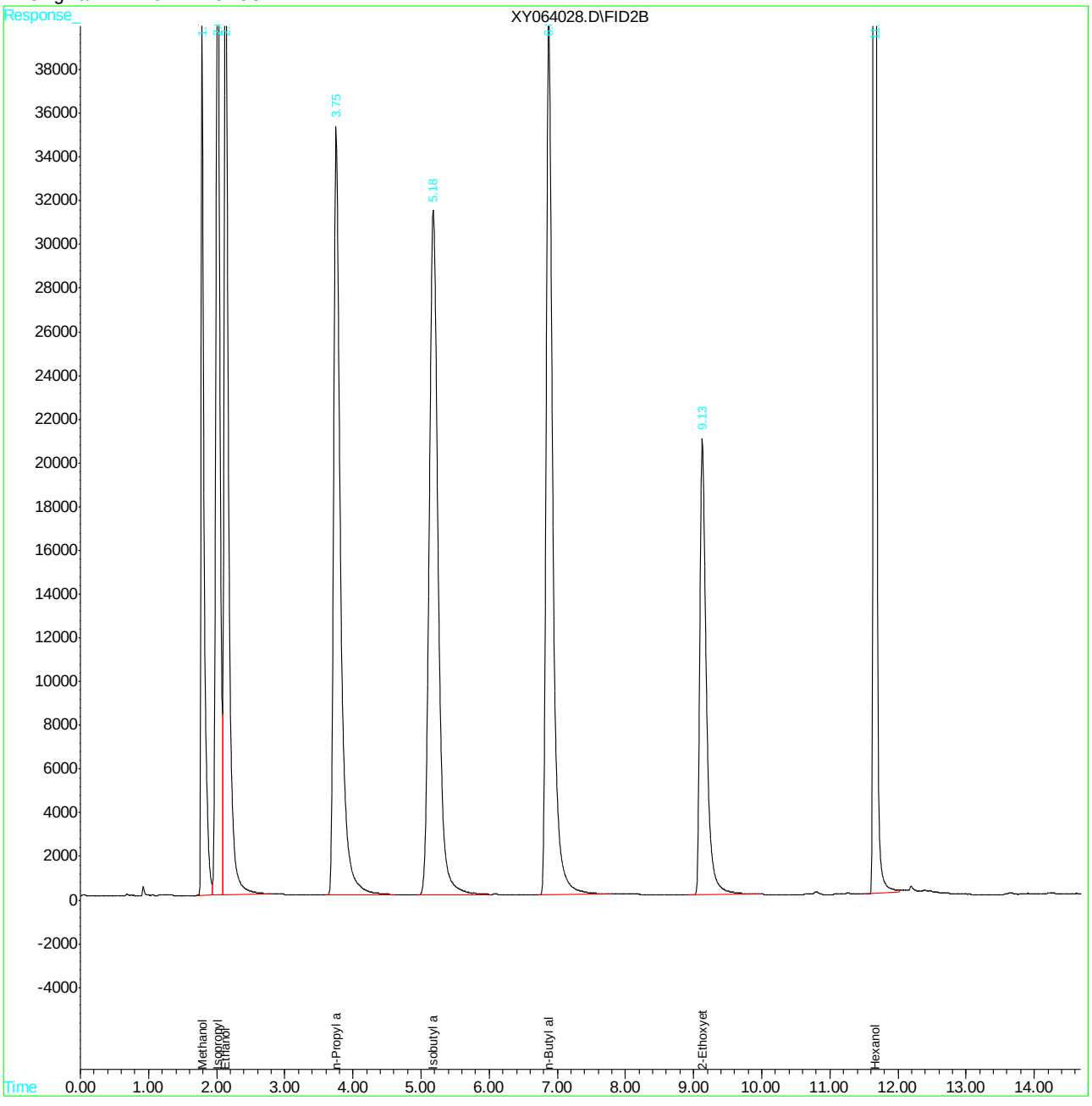
SGS ACCUTEST JC18649

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064028.D Vial: 5
Acq On : 26 Apr 2016 1:54 pm Operator: StevenH
Sample : ic2768-5 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064029.D Vial: 6
Acq On : 26 Apr 2016 2:28 pm Operator: StevenH
Sample : ic2768-6 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.65	5180923	537.733 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 537.73%#			
Target Compounds			
1) Methanol	1.77	2571370	545.935 mg/L
2) Isopropyl alcohol	2.01	3715326	577.488 mg/L
3) Ethanol	2.12	4013228	538.781 mg/L
4) n-Propyl alcohol	3.74	4791789	558.173 mg/L
5) Isobutyl alcohol	5.17	5453821	549.994 mg/L
6) n-Butyl alcohol	6.88	5241609	554.420 mg/L
7) 2-Ethoxyethanol	9.12	2887563	553.352 mg/L

13.5.6

13

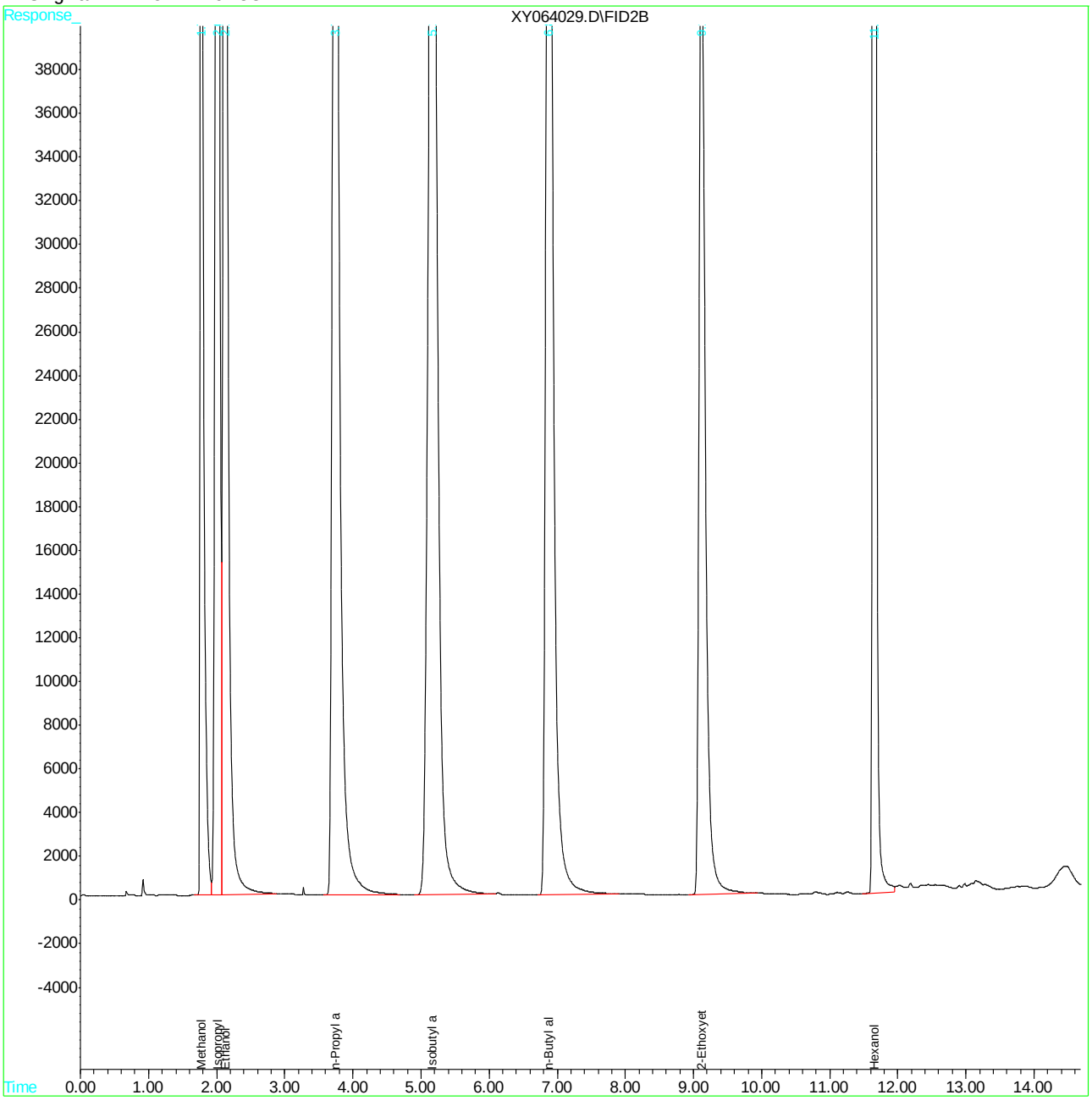
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064029.D D8015.M Wed Apr 27 11:22:22 2016 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064029.D Vial: 6
Acq On : 26 Apr 2016 2:28 pm Operator: StevenH
Sample : ic2768-6 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064030.D Vial: 7
Acq On : 26 Apr 2016 2:47 pm Operator: StevenH
Sample : ic2768-7 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.66	7874409	817.292 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 817.29%#			
Target Compounds			
1) Methanol	1.79	3641412	773.119 mg/L
2) Isopropyl alcohol	2.02	4756015	739.246 mg/L
3) Ethanol	2.13	6705375	900.205 mg/L
4) n-Propyl alcohol	3.76	7043504	820.465 mg/L
5) Isobutyl alcohol	5.19	8151543	822.047 mg/L
6) n-Butyl alcohol	6.82	7739233	818.602 mg/L
7) 2-Ethoxyethanol	9.09	4435508	849.989 mg/L

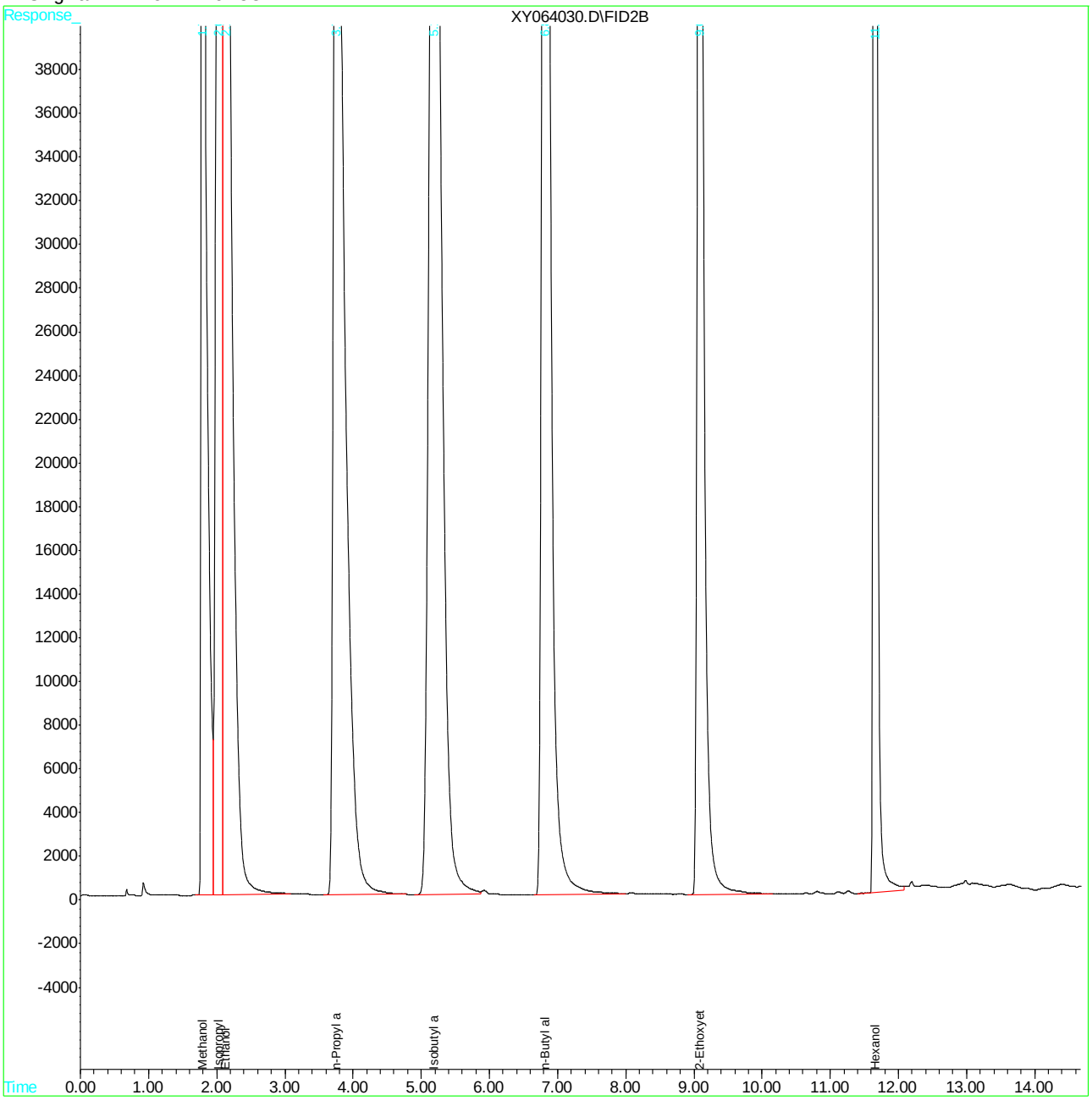
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064030.D Vial: 7
Acq On : 26 Apr 2016 2:47 pm Operator: StevenH
Sample : ic2768-7 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064032.D          Vial: 9
Acq On    : 26 Apr 2016   3:26 pm                   Operator: StevenH
Sample    : icv2768-4                               Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.67	811908	84.269 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 84.27%			
Target Compounds			
1) Methanol	1.82	395964	84.068 mg/L
2) Isopropyl alcohol	2.04	559920	87.031 mg/L
3) Ethanol	2.17	635082	85.261 mg/L
4) n-Propyl alcohol	3.80	733391	85.429 mg/L
5) Isobutyl alcohol	5.21	824249	83.122 mg/L
6) n-Butyl alcohol	6.86	797106	84.312 mg/L
7) 2-Ethoxyethanol	9.14	477070	91.422 mg/L

13.5.8

13

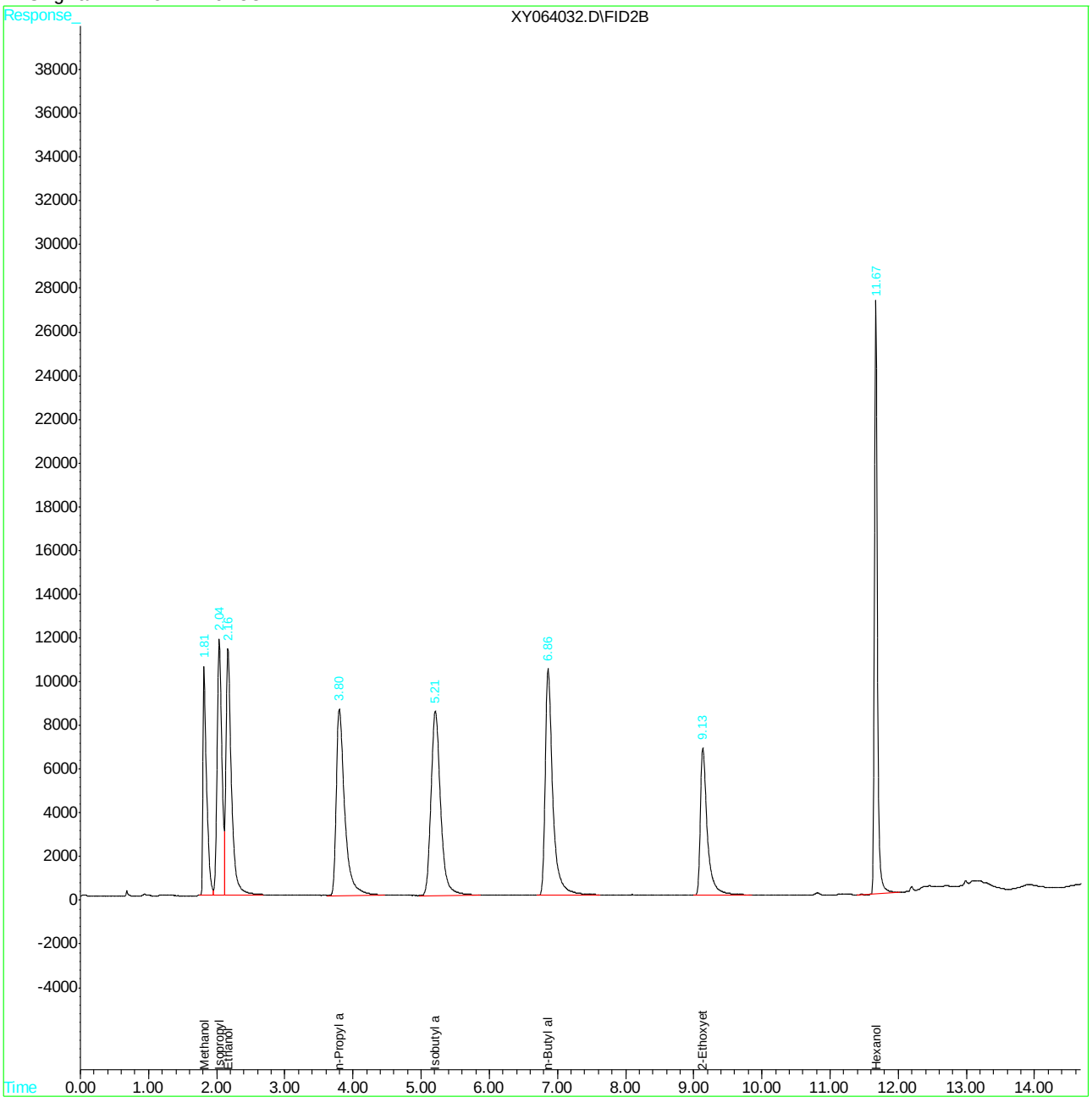
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064032.D Vial: 9
Acq On : 26 Apr 2016 3:26 pm Operator: StevenH
Sample : icv2768-4 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



XY064032.D D8015.M Wed Apr 27 10:39:10 2016 Page 2

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064033.D          Vial: 10
Acq On    : 26 Apr 2016   3:45 pm                   Operator: StevenH
Sample    : cc2768-4                                Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.68	835687	86.737 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 86.74%			
Target Compounds			
1) Methanol	1.82	397334	84.359 mg/L
2) Isopropyl alcohol	2.04	534804	83.127 mg/L
3) Ethanol	2.17	742195	99.641 mg/L
4) n-Propyl alcohol	3.80	781685	91.055 mg/L
5) Isobutyl alcohol	5.22	906745	91.441 mg/L
6) n-Butyl alcohol	6.88	852449	90.166 mg/L
7) 2-Ethoxyethanol	9.15	475416	91.105 mg/L

13.5.9

13

(f)=RT Delta > 1/2 Window (m)=manual int.

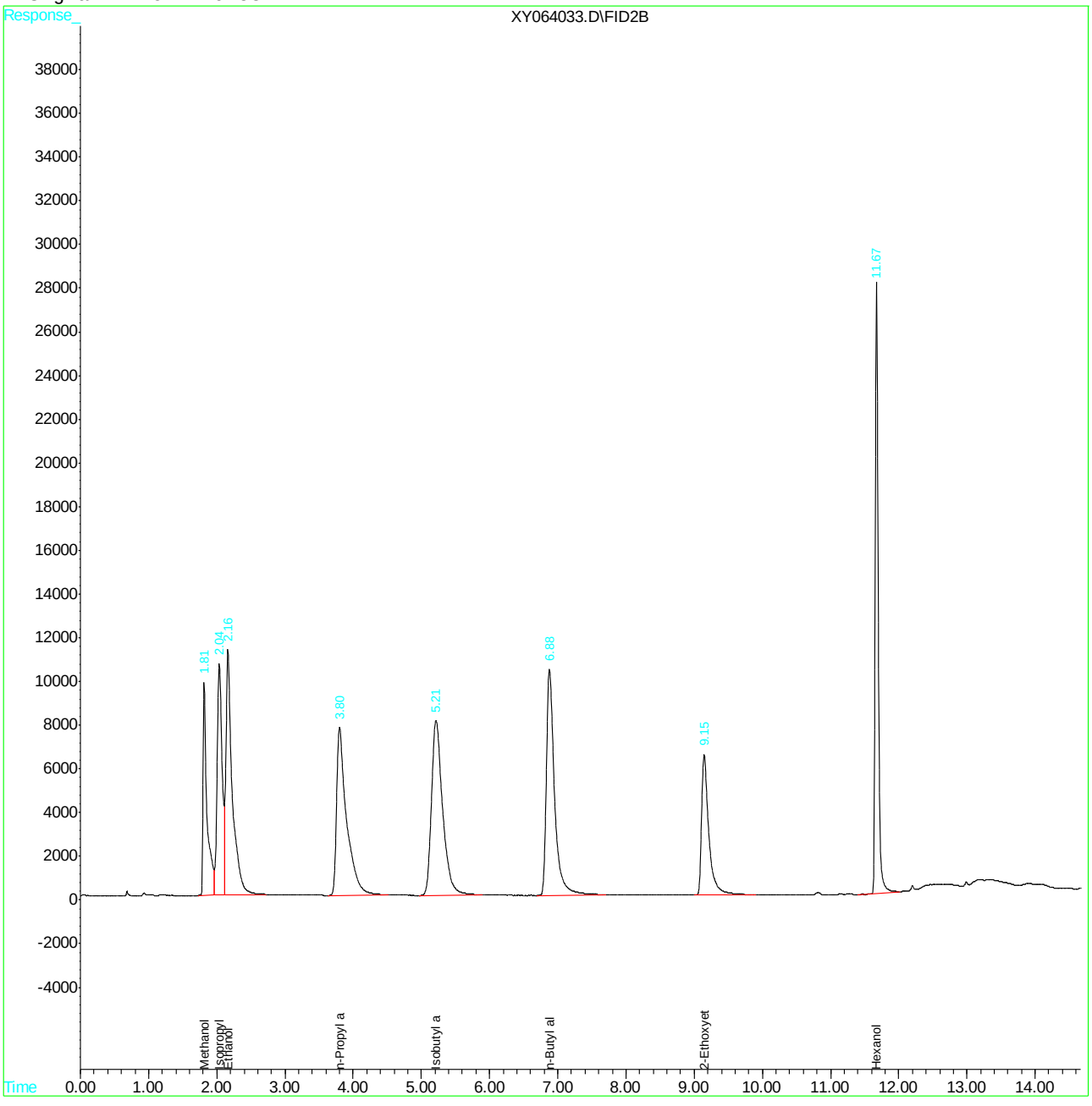
XY064033.D D8015.M Wed Apr 27 10:39:11 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064033.D Vial: 10
Acq On : 26 Apr 2016 3:45 pm Operator: StevenH
Sample : cc2768-4 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064044.D          Vial: 20
Acq On    : 26 Apr 2016   7:16 pm                   Operator: StevenH
Sample    : ecc2768-5                               Inst    : VOA5
Misc      : gc18771,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

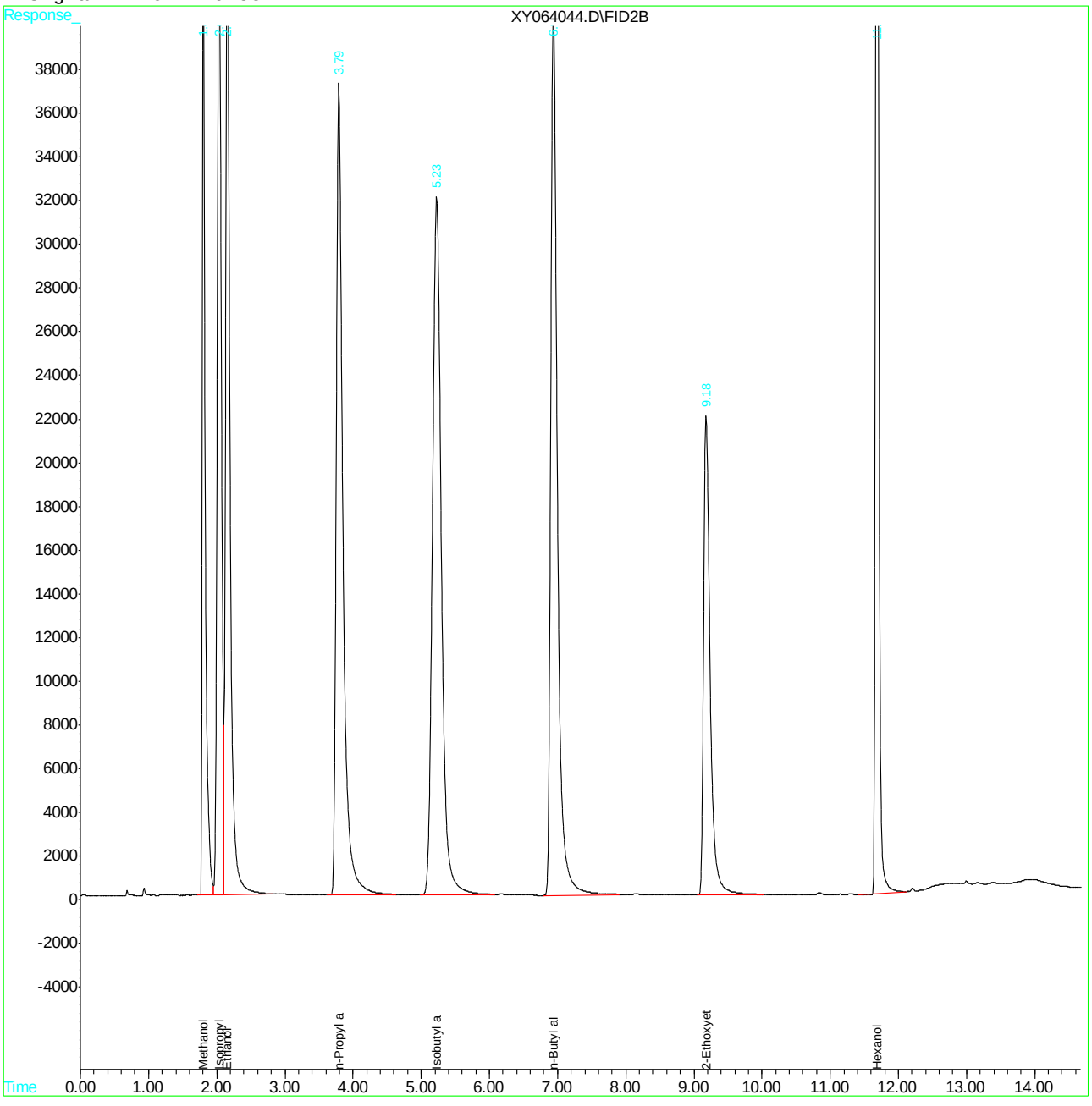
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.69	2750238	285.450 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 285.45%#			
Target Compounds			
1) Methanol	1.80	1336592	283.776 mg/L
2) Isopropyl alcohol	2.04	1951882	303.389 mg/L
3) Ethanol	2.16	2125862	285.400 mg/L
4) n-Propyl alcohol	3.79	2532088	294.951 mg/L
5) Isobutyl alcohol	5.23	2903967	292.852 mg/L
6) n-Butyl alcohol	6.94	2778982	293.941 mg/L
7) 2-Ethoxyethanol	9.18	1459891	279.763 mg/L

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064044.D Vial: 20
Acq On : 26 Apr 2016 7:16 pm Operator: StevenH
Sample : ecc2768-5 Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 04/27/16 13:26

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042716\XY064053.D          Vial: 20
Acq On    : 27 Apr 2016   8:10 am                   Operator: StevenH
Sample    : cc2768-5                                Inst    : VOA5
Misc      : gc18702,gxy2770,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 12:11 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.63	2065228	214.352 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 214.35%#			
Target Compounds			
1) Methanol	1.76	966963	205.299 mg/L
2) Isopropyl alcohol	1.99	1310870	203.754 mg/L m
3) Ethanol	2.10	1748980	234.803 mg/L
4) n-Propyl alcohol	3.71	1863513	217.072 mg/L
5) Isobutyl alcohol	5.12	2146121	216.427 mg/L
6) n-Butyl alcohol	6.75	2035457	215.296 mg/L
7) 2-Ethoxyethanol	9.04	1144677	219.358 mg/L

13.5.11 13

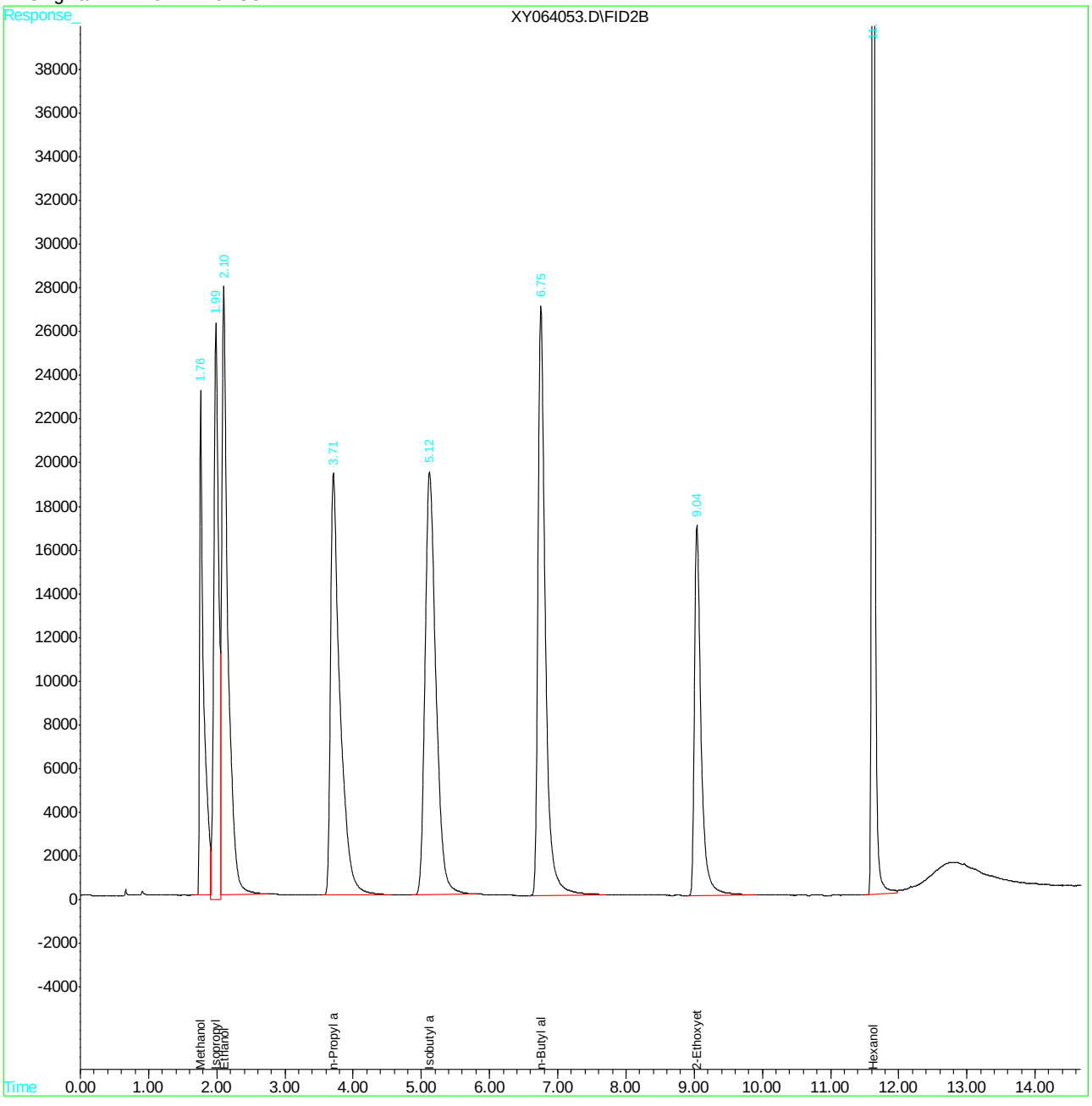
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064053.D Vial: 20
Acq On : 27 Apr 2016 8:10 am Operator: StevenH
Sample : cc2768-5 Inst : VOA5
Misc : gc18702,gxy2770,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:11 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



XY064053.D D8015.M Wed Apr 27 12:13:47 2016 Page 2

Manual Integration Approval Summary

Sample Number:	GXY2770-CC2768	**Method:**	SW846 8015C
Lab FileID:	XY064053.D	**Analyst approved:**	04/27/16 12:16 Steven Heller
Injection Time:	04/27/16 08:10	**Supervisor approved:**	04/27/16 13:26 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Isopropyl Alcohol	67-63-0	1	1.99	Poor instrument integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064061.D Vial: 10
Acq On : 27 Apr 2016 11:43 am Operator: StevenH
Sample : ecc2768-4 Inst : VOA5
Misc : gc18772,gxy2770,5.00,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.71	1009781	104.806 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 104.81%			
Target Compounds			
1) Methanol	1.83	500916	106.351 mg/L
2) Isopropyl alcohol	2.06	719902	111.897 mg/L
3) Ethanol	2.18	804546	108.011 mg/L
4) n-Propyl alcohol	3.83	947889	110.415 mg/L
5) Isobutyl alcohol	5.26	1089904	109.912 mg/L
6) n-Butyl alcohol	6.96	1036703	109.655 mg/L
7) 2-Ethoxyethanol	9.21	544342	104.314 mg/L

13.5.12

13

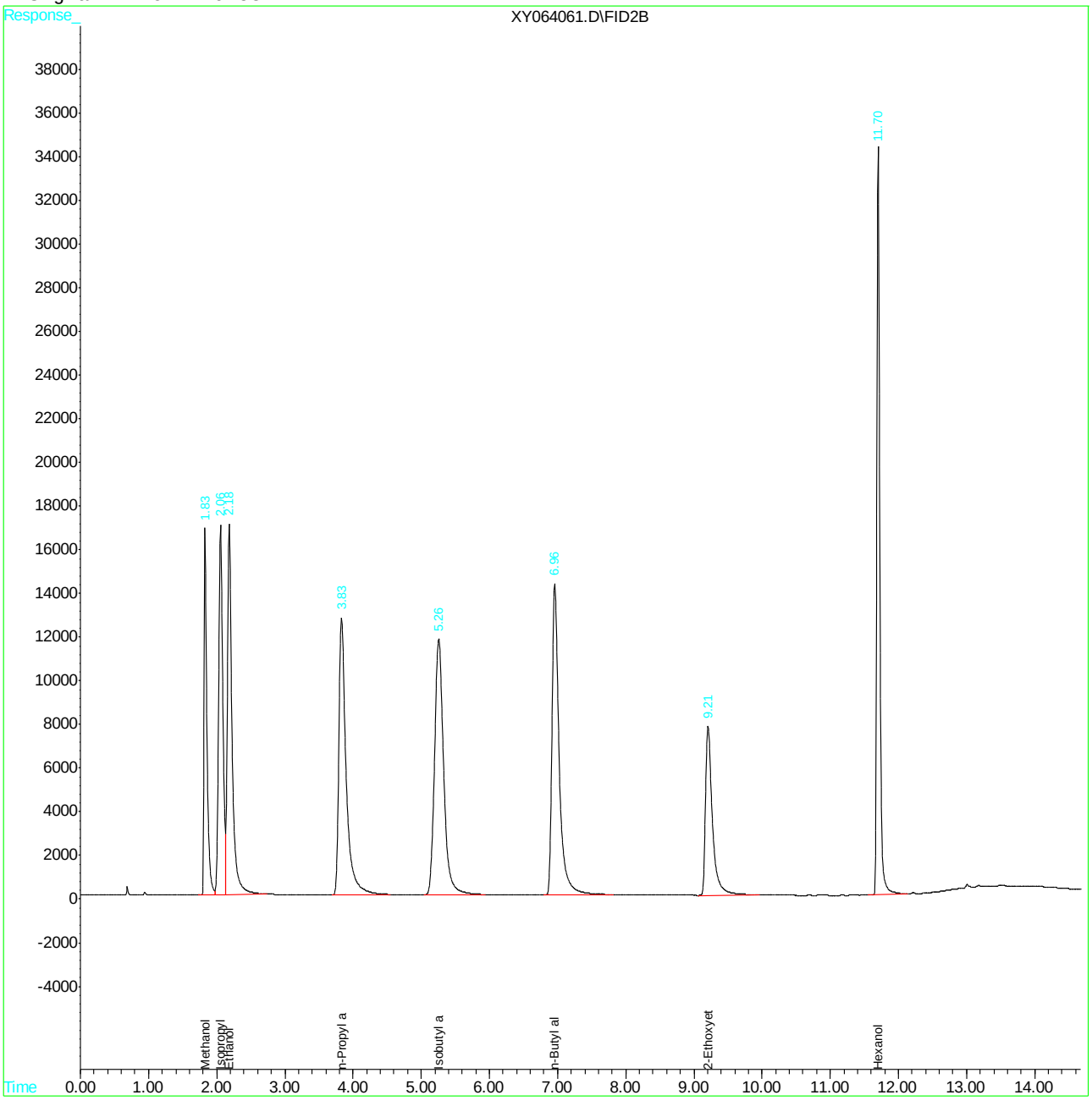
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064061.D Vial: 10
Acq On : 27 Apr 2016 11:43 am Operator: StevenH
Sample : ecc2768-4 Inst : VOA5
Misc : gc18772,gxy2770,5.00,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



XY064061.D D8015.M Wed Apr 27 12:08:52 2016 Page 2

SGS ACCUTEST JC18649

ACCUTEST LABORATORIES S

DATE:	4/26/16
COLUMN TYPE:	Stabil Wax
DETECTOR:	FID
INSTRUMENT:	VOA5-XY
ANALYST:	GH

1-12 pH
LOT 200814
0-3 pH
LOT 204413A

GC VOA5-XY ANALYSIS LOG

METHODS:	Alcohols
METHOD FILE:	DAIWAK1D8015
CALIB. DATE:	9/26/16
RUN ID:	GXY 2764/69

STANDARDS

ICAL/CCV:	V20132
ISTD/SURR:	V19752
ICV/QC:	7896A
AMBIENT TEMP.:	NA
THERM ID:	1

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	SAMPLE AMT.	FINAL VOL.	ALS POSITION	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	RR	COMMENTS
XY 06 40 21	CC 2763-4	NA	W	1.0mL	1ml	1		NA	✓	100ul- 1mL LAW
XY 22	BS					2			✓	10ul- 1mL
XY 23	~~MB~~ TEST STD					3			✓	100ul- 1mL
XY 24	IC 2768-1	NA				1	8 PII	NA		2 ul- 1mL GH 4/26/16
XY 25	2					2	8 PII			5 + ~~495 ul~~ 495 ul
XY 26	3					3	8 PII			25 + 975ul
XY 27	4					4				100 + 900ul
XY 29	5					5				250 + 750ul
XY 29	6					6				250 + 250ul
XY 30	7					7				500ul
XY 31	BLANK					8				GH 4/26/16
XY 32	ICV 2768-4					9				~~100~~ 10ul- 1mL
XY 33	CC 2768-4					10				100ul + 900 ul
XY 34	BS					11				10 ul- 1ml
XY 35	MB					12				
XY 36	JC 18516-1	1				13		1		
XY 37	4	1				14		1		
XY 38	JC18649-1	1				15		1		
XY 39	2	1				16		1		
XY 40	4	1				17		1		
XY 41	5	1				18		1		
XY 42	JC18516-4MS	1				19	GH 4/26/16	1		10ul- 1mL
XY 43	4MSD	1				~~20~~ 19		1		
XY 44	CC2768-5	NA				20	2 PII	NA		250 ul + 750 ul
XY 45	BS		S	5g/10mL		21			✓	10 ul- 1mL
XY 46	MB					22			✓	
XY 47	JC18516-2	NA		4.87/10mL		23			✓	B13 4L

Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.
Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: [signature]

gcvoa5_xy_log.xls NF 08/15

ACCUTEST LABORATORIES SE

DATE:	4/26/16
COLUMN TYPE:	Stabilwax
DETECTOR:	FID
INSTRUMENT:	VOA5-XY
ANALYST:	SH

GC VOA5-XY ANALYSIS LOG

METHODS:	Alcohols
METHOD FILE:	D6015/AA1WAX
CALIB. DATE:	4/26/16
RUN ID:	GXY 2769

STANDARDS

ICAL/CCV:	120132
ISTD/SURR:	119752
ICV/QC:	7496A
AMBIENT TEMP.:	NA
THERM ID:	↓

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	SAMPLE AMT.	FINAL VOL.	ALS POSITION	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	RR	COMMENTS
XY 064048	JC18516-3	NA	S	5.08g/10mL	1L	24		NA	✓	B1343
XY 49	JC18649-3	↓	↓	5.01g/10mL	↓	25		↓	✓	B1341
XY 50	~~ECC 2768-4~~ 51162MS			4.82g/10mL		26			✓	10ul-1mL JC18516-2MS
XY 51	JC18516-2 MSD			↓	↓	26			✓	↓ ↓ MSD HI BAD INT
XY 52	ECC 2768-4			NA	↓	10			✓	100ml+900ul HI BAD INT.
XY										
XY										
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24
4/27/16

Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate

Analyst's Signature: SH

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

gcvoa5_xy_log.xls NF 08/15

ACCUTEST LABORATORIES SE

DATE:	4/27/16
COLUMN TYPE:	stabilwax
DETECTOR:	FID
INSTRUMENT:	VOA5-XY
ANALYST:	SH

GC VOA5-XY ANALYSIS LOG

METHODS:	Alcohols
METHOD FILE:	DA: WRK / B6015
CALIB. DATE:	4/26/16
RUN ID:	GXY 2770

STANDARDS

ICAL/CCV:	V10132
ISTD/SURR:	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 064053	CL2768-5	NA	S	5g/10mL	1mL	20	2 PII	NA		250ul + 750ul
XY 54	BS	↓	↓	↓	↓	21		↓		10ul - 1mL
XY 55	MB	↓	↓	↓	↓	22		↓		↓
XY 56	JC18516-2a	↓	↓	4.87 g/10mL	↓	23		↓		B1342
XY 57	3a SH 4/27/16	↓	↓	5.08 g/10mL	↓	24		↓		B1343
XY 58	JL18649-3 ~~2a, MS~~	↓	↓	5.02g/10mL	↓	25		↓		B1341
XY 59	2A, MSD	↓	↓	4.87/10mL	↓	26		↓		B1342 10ul - 1mL
XY 60	2A, MSD	↓	↓	↓ ↓	↓	27	SH 4/27/16	↓		↓ ↓ ↓
XY 61	ECL2768-4	↓	↓	5g/10mL	↓	~~27~~ 10		↓		100ul + 900ul
XY										
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XY										

SH 4/27/16

Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate

Analyst's Signature: [signature]

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

5035A SOIL PREP LOG

BALANCE ID: NAV 4

Serial #	Sample #	Vial Type or Vial Lot #	Tare Wt gram	Total Wt gram	Sample Wt gram	Date	Time	Initials	Container Type *	Comments
B1328	FA33409-6	M	29.55	29.52	-0.03	4/26/15	10:10	CG	PT	IN TB
29	-6	M	29.49	29.49	0.00		10:11			↓ ↓
30	FA33363-5	W (AC2481)	—	—	4.27		11:25		5030A	OOH bot #7 reprep
31	FA33412-1	W	30.94	36.47	5.53		11:29		PT	IN
32	-1	W	30.90	36.93	6.03					
33	-1	M	29.73	32.77	3.04					
34	-1	M	—	—	4.78					leaked?
35	-2	W	30.89	37.49	6.60				5030A	bot #5 reprep
36	-2	W	30.95	37.13	6.18				PT	
37	-2	M	29.63	36.92	7.29		11:36			
38	FA33410-1	W	—	—	5.78		11:39		EN	IN, FS
39	-1	W	—	—	5.68					
40	-1	M (AC2456)	—	—	5.70		11:45			
41	JC18649-3	W	—	—	5.01	4/26/16	12:32	SH	5030A	OOH - 10mL F.K. BOTL
42	JC18516-2	↓	—	—	4.87	↓		↓	↓	↓ ↓
43	3		—	—	5.08					
44										
45										
46										
47										
48										
49										
B1350										

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

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