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Automated Report

Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, PR

SM04.00.06

SGS Accutest Job Number: JC20314

Sampling Date: 05/13/16

Report to:

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Total number of pages in report: **906**

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

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SGS Accutest

Sample Summary

Anderson, Mulholland & Associates

Job No: JC20314

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC20314-1	05/13/16	10:20	TT	05/14/16	SO	Soil	RA9(5-6)
JC20314-2	05/13/16	10:38	NR	05/14/16	AQ	Equipment Blank	EB051316
JC20314-3	05/13/16	11:50	TT	05/14/16	SO	Soil	BR4(4.5-5.5)
JC20314-4	05/13/16	13:20	TT	05/14/16	AQ	Ground Water	RA9-GWS

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Anderson, Mulholland & Associates	**Job No**	JC20314
Site:	BMSMC, Building 5 Area, PR	**Report Date**	6/1/2016 9:19:12 AM

On 05/14/2016, 4 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 2.4 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC20314 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:** OP93924

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Blank Spike/Blank Spike Duplicate Recovery(s) for 4-Chloroaniline are outside control limits.
- JC20314-2: There is compound in BS was outside in house QC limits. There's no sample left to re-extract.
- JC20314-2 for 4-Chloroaniline: This compound in BS is outside in house QC limits bias low. There's no sample left to reextract.
- OP93924-BSD for Atrazine: Analytical precision exceeds in-house control limits.

Matrix: SO **Batch ID:** OP93998

- All samples were extracted within the recommended method holding time.
- Sample(s) JC20218-17AMS, JC20218-17AMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP93924A

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

Matrix: SO **Batch ID:** OP93998A

- All samples were extracted within the recommended method holding time.
- Sample(s) JC20314-1MS, JC20314-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 1,4-Dioxane are outside control limits.
- JC20314-1 for 1,4-Dioxane: Not accredited for this compound at the time of analysis, but all method requirements were followed.
- JC20314-3 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 (DAI)

Matrix: AQ **Batch ID:** GGH5285

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC19644-1MS, JC19644-1MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for Isopropyl Alcohol, n-Butyl Alcohol are outside control limits.
- Matrix Spike Recovery(s) for n-Butyl Alcohol are outside control limits.
- Matrix Spike Duplicate Recovery(s) for Isobutyl Alcohol, n-Butyl Alcohol are outside control limits.
- GGH5285-MB3: Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.
- GGH5285-BS: Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.
- GGH5285-BS for n-Butyl Alcohol: High percent recoveries and no associated positive found in the QC batch.
- GGH5285-BS for Isopropyl Alcohol: High percent recoveries and no associated positive found in the QC batch.
- JC19644-1MS for n-Butyl Alcohol: High percent recoveries and no associated positive found in the QC batch.

Matrix: SO **Batch ID:** GGH5292

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC20464-1MS, JC20464-1MSD were used as the QC samples indicated.

Extractables by GC By Method SW846 8081B

Matrix: AQ **Batch ID:** OP93925

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

Wet Chemistry By Method SM2540 G-97

Matrix: SO **Batch ID:** GN45967

- The data for SM2540 G-97 meets quality control requirements.

SGS Accutest certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the 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.

SGS Accutest 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 SGS Accutest indicated via signature on the report cover

Summary of Hits

Job Number: JC20314
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Collected: 05/13/16

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Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC20314-1	**RA9(5-6)**					
No hits reported in this sample.						
JC20314-2	**EB051316**					
No hits reported in this sample.						
JC20314-3	**BR4(4.5-5.5)**					
Benzo(b)fluoranthene		20.5 J	35	7.4	ug/kg	SW846 8270D
Benzo(g,h,i)perylene		16.9 J	35	9.4	ug/kg	SW846 8270D
bis(2-Ethylhexyl)phthalate		36.7 J	70	7.6	ug/kg	SW846 8270D
Fluoranthene		23.6 J	35	16	ug/kg	SW846 8270D
Fluorene		26.2 J	35	14	ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		14.7 J	35	12	ug/kg	SW846 8270D
1-Methylnaphthalene		277	70	6.2	ug/kg	SW846 8270D
2-Methylnaphthalene		226	70	28	ug/kg	SW846 8270D
Phenanthrene		14.3 J	35	8.4	ug/kg	SW846 8270D
Pyrene		25.1 J	35	6.1	ug/kg	SW846 8270D
Naphthalene		47.4	3.5	0.43	ug/kg	SW846 8270D BY SIM
Methanol		296	220	53	ug/kg	SW846-8015C (DAI)
JC20314-4	**RA9-GWS**					
No hits reported in this sample.						

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	RA9(5-6)		
Lab Sample ID:	JC20314-1	**Date Sampled:**	05/13/16
Matrix:	SO - Soil	**Date Received:**	05/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	83.7
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z110820.D	1	05/20/16	AC	05/18/16	OP93998	EZ5538
Run #2							

	Initial Weight	Final Volume
Run #1	30.9 g	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	77	27	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	190	35	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	190	38	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	190	93	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	190	150	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	190	56	ug/kg	
95-48-7	2-Methylphenol	ND	77	44	ug/kg	
	3&4-Methylphenol	ND	77	44	ug/kg	
88-75-5	2-Nitrophenol	ND	190	34	ug/kg	
100-02-7	4-Nitrophenol	ND	390	110	ug/kg	
87-86-5	Pentachlorophenol	ND	190	33	ug/kg	
108-95-2	Phenol	ND	77	30	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	190	50	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	190	55	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	190	43	ug/kg	
83-32-9	Acenaphthene	ND	39	7.3	ug/kg	
208-96-8	Acenaphthylene	ND	39	5.3	ug/kg	
98-86-2	Acetophenone	ND	190	20	ug/kg	
120-12-7	Anthracene	ND	39	17	ug/kg	
1912-24-9	Atrazine	ND	77	12	ug/kg	
56-55-3	Benzo(a)anthracene	ND	39	6.0	ug/kg	
50-32-8	Benzo(a)pyrene	ND	39	9.5	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	39	8.1	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	39	10	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	39	11	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	77	18	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	77	22	ug/kg	
92-52-4	1,1'-Biphenyl	ND	77	11	ug/kg	
100-52-7	Benzaldehyde	ND	190	9.4	ug/kg	
91-58-7	2-Chloronaphthalene	ND	77	7.3	ug/kg	
106-47-8	4-Chloroaniline	ND	190	11	ug/kg	
86-74-8	Carbazole	ND	77	7.5	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:	RA9(5-6)		
Lab Sample ID:	JC20314-1	**Date Sampled:**	05/13/16
Matrix:	SO - Soil	**Date Received:**	05/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	83.7
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	77	28	ug/kg	
218-01-9	Chrysene	ND	39	9.9	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	77	8.2	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	77	22	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	77	15	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	77	10	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	39	14	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	39	12	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	77	52	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	39	15	ug/kg	
132-64-9	Dibenzofuran	ND	77	7.0	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	77	24	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	77	25	ug/kg	
84-66-2	Diethyl phthalate	ND	77	8.7	ug/kg	
131-11-3	Dimethyl phthalate	ND	77	7.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	77	8.4	ug/kg	
206-44-0	Fluoranthene	ND	39	18	ug/kg	
86-73-7	Fluorene	ND	39	15	ug/kg	
118-74-1	Hexachlorobenzene	ND	77	9.8	ug/kg	
87-68-3	Hexachlorobutadiene	ND	39	15	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	390	23	ug/kg	
67-72-1	Hexachloroethane	ND	190	29	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	39	13	ug/kg	
78-59-1	Isophorone	ND	77	8.6	ug/kg	
90-12-0	1-Methylnaphthalene	ND	77	6.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	77	31	ug/kg	
88-74-4	2-Nitroaniline	ND	190	28	ug/kg	
99-09-2	3-Nitroaniline	ND	190	14	ug/kg	
100-01-6	4-Nitroaniline	ND	190	15	ug/kg	
98-95-3	Nitrobenzene	ND	77	17	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	77	18	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	190	22	ug/kg	
85-01-8	Phenanthrene	ND	39	9.2	ug/kg	
129-00-0	Pyrene	ND	39	6.8	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	190	8.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	79%		30-106%
4165-62-2	Phenol-d5	81%		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:	RA9(5-6)		
Lab Sample ID:	JC20314-1	**Date Sampled:**	05/13/16
Matrix:	SO - Soil	**Date Received:**	05/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	83.7
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	82%		24-140%
4165-60-0	Nitrobenzene-d5	83%		26-122%
321-60-8	2-Fluorobiphenyl	81%		36-112%
1718-51-0	Terphenyl-d14	79%		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:	RA9(5-6)		
Lab Sample ID:	JC20314-1	**Date Sampled:**	05/13/16
Matrix:	SO - Soil	**Date Received:**	05/14/16
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	83.7
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P16370.D	1	05/20/16	LK	05/18/16	OP93998A	E4P867
Run #2							

	Initial Weight	Final Volume
Run #1	30.9 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	0.47	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	97%		15-138%
321-60-8	2-Fluorobiphenyl	83%		12-148%
1718-51-0	Terphenyl-d14	88%		10-157%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA9(5-6)		
Lab Sample ID:	JC20314-1	**Date Sampled:**	05/13/16
Matrix:	SO - Soil	**Date Received:**	05/14/16
Method:	SW846-8015C (DAI)	**Percent Solids:**	83.7
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH105108.D	1	05/19/16	XPL	n/a	n/a	GGH5292
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

Low Molecular Alcohol List

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	120	82	ug/kg	
78-83-1	Isobutyl Alcohol	ND	120	70	ug/kg	
67-63-0	Isopropyl Alcohol	ND	120	68	ug/kg	
71-23-8	n-Propyl Alcohol	ND	120	48	ug/kg	
71-36-3	n-Butyl Alcohol	ND	120	65	ug/kg	
78-92-2	sec-Butyl Alcohol	ND	120	64	ug/kg	
67-56-1	Methanol	ND	240	57	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	96%		52-141%
111-27-3	Hexanol	101%		52-141%

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

SGS Accutest

Report of Analysis

Client Sample ID:	EB051316		
Lab Sample ID:	JC20314-2	**Date Sampled:**	05/13/16
Matrix:	AQ - Equipment Blank	**Date Received:**	05/14/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Z110704.D	1	05/16/16	AC	05/15/16	OP93924	EZ5530
Run #2							

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

ABN TCL Special List

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

ND = Not detected MDL = Method Detection Limit
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:	EB051316		
Lab Sample ID:	JC20314-2	**Date Sampled:**	05/13/16
Matrix:	AQ - Equipment Blank	**Date Received:**	05/14/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	38%		14-88%
4165-62-2	Phenol-d5	23%		10-110%

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

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

Report of Analysis

Client Sample ID:	EB051316		
Lab Sample ID:	JC20314-2	**Date Sampled:**	05/13/16
Matrix:	AQ - Equipment Blank	**Date Received:**	05/14/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
118-79-6	2,4,6-Tribromophenol	62%		39-149%
4165-60-0	Nitrobenzene-d5	76%		32-128%
321-60-8	2-Fluorobiphenyl	68%		35-119%
1718-51-0	Terphenyl-d14	83%		10-126%

(a) There is compound in BS was outside in house QC limits. There's no sample left to re-extract.
(b) This compound in BS is outside in house QC limits bias low. There's no sample left to reextract.

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	EB051316		
Lab Sample ID:	JC20314-2	**Date Sampled:**	05/13/16
Matrix:	AQ - Equipment Blank	**Date Received:**	05/14/16
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	3M61366.D	1	05/16/16	AD	05/15/16	OP93924A	E3M2885
Run #2							

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

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	63%		24-125%
321-60-8	2-Fluorobiphenyl	74%		19-127%
1718-51-0	Terphenyl-d14	93%		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:	EB051316		
Lab Sample ID:	JC20314-2	**Date Sampled:**	05/13/16
Matrix:	AQ - Equipment Blank	**Date Received:**	05/14/16
Method:	SW846-8015C (DAI)	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH104985.D	1	05/16/16	XPL	n/a	n/a	GGH5285
Run #2							

Low Molecular Alcohol List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	103%		56-145%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	EB051316		
Lab Sample ID:	JC20314-2	**Date Sampled:**	05/13/16
Matrix:	AQ - Equipment Blank	**Date Received:**	05/14/16
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	1G123140.D	1	05/17/16	RK	05/15/16	OP93925	G1G3990
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.010	0.0060	ug/l	
319-84-6	alpha-BHC	ND	0.010	0.0060	ug/l	
319-85-7	beta-BHC	ND	0.010	0.0057	ug/l	
319-86-8	delta-BHC	ND	0.010	0.0046	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.010	0.0028	ug/l	
5103-71-9	alpha-Chlordane	ND	0.010	0.0046	ug/l	
5103-74-2	gamma-Chlordane	ND	0.010	0.0046	ug/l	
60-57-1	Dieldrin	ND	0.010	0.0036	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0038	ug/l	
72-55-9	4,4'-DDE	ND	0.010	0.0062	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0050	ug/l	
72-20-8	Endrin	ND	0.010	0.0050	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.010	0.0053	ug/l	
7421-93-4	Endrin aldehyde	ND	0.010	0.0051	ug/l	
53494-70-5	Endrin ketone	ND	0.010	0.0051	ug/l	
959-98-8	Endosulfan-I	ND	0.010	0.0050	ug/l	
33213-65-9	Endosulfan-II	ND	0.010	0.0043	ug/l	
76-44-8	Heptachlor	ND	0.010	0.0038	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.010	0.0065	ug/l	
72-43-5	Methoxychlor	ND	0.020	0.0057	ug/l	
8001-35-2	Toxaphene	ND	0.25	0.18	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		26-132%
877-09-8	Tetrachloro-m-xylene	88%		26-132%
2051-24-3	Decachlorobiphenyl	57%		10-118%
2051-24-3	Decachlorobiphenyl	61%		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:	BR4(4.5-5.5)		
Lab Sample ID:	JC20314-3	**Date Sampled:**	05/13/16
Matrix:	SO - Soil	**Date Received:**	05/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	89.7
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Z110821.D	1	05/20/16	AC	05/18/16	OP93998	EZ5538
Run #2							

	Initial Weight	Final Volume
Run #1	31.8 g	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	70	24	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	180	32	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	180	34	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	180	84	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	180	140	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	180	51	ug/kg	
95-48-7	2-Methylphenol	ND	70	40	ug/kg	
	3&4-Methylphenol	ND	70	40	ug/kg	
88-75-5	2-Nitrophenol	ND	180	30	ug/kg	
100-02-7	4-Nitrophenol	ND	350	97	ug/kg	
87-86-5	Pentachlorophenol	ND	180	30	ug/kg	
108-95-2	Phenol	ND	70	27	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	180	46	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	180	50	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	180	39	ug/kg	
83-32-9	Acenaphthene	ND	35	6.6	ug/kg	
208-96-8	Acenaphthylene	ND	35	4.8	ug/kg	
98-86-2	Acetophenone	ND	180	18	ug/kg	
120-12-7	Anthracene	ND	35	15	ug/kg	
1912-24-9	Atrazine	ND	70	11	ug/kg	
56-55-3	Benzo(a)anthracene	ND	35	5.4	ug/kg	
50-32-8	Benzo(a)pyrene	ND	35	8.6	ug/kg	
205-99-2	Benzo(b)fluoranthene	20.5	35	7.4	ug/kg	J
191-24-2	Benzo(g,h,i)perylene	16.9	35	9.4	ug/kg	J
207-08-9	Benzo(k)fluoranthene	ND	35	10	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	70	16	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	70	20	ug/kg	
92-52-4	1,1'-Biphenyl	ND	70	9.9	ug/kg	
100-52-7	Benzaldehyde	ND	180	8.5	ug/kg	
91-58-7	2-Chloronaphthalene	ND	70	6.6	ug/kg	
106-47-8	4-Chloroaniline	ND	180	10	ug/kg	
86-74-8	Carbazole	ND	70	6.8	ug/kg	

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

Report of Analysis

Client Sample ID:	BR4(4.5-5.5)		
Lab Sample ID:	JC20314-3	**Date Sampled:**	05/13/16
Matrix:	SO - Soil	**Date Received:**	05/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	89.7
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	70	26	ug/kg	
218-01-9	Chrysene	ND	35	8.9	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	70	7.4	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	70	20	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	70	14	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	70	9.3	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	35	13	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	35	11	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	70	47	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	35	13	ug/kg	
132-64-9	Dibenzofuran	ND	70	6.3	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	70	22	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	70	23	ug/kg	
84-66-2	Diethyl phthalate	ND	70	7.9	ug/kg	
131-11-3	Dimethyl phthalate	ND	70	7.2	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	36.7	70	7.6	ug/kg	J
206-44-0	Fluoranthene	23.6	35	16	ug/kg	J
86-73-7	Fluorene	26.2	35	14	ug/kg	J
118-74-1	Hexachlorobenzene	ND	70	8.9	ug/kg	
87-68-3	Hexachlorobutadiene	ND	35	14	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	350	21	ug/kg	
67-72-1	Hexachloroethane	ND	180	27	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	14.7	35	12	ug/kg	J
78-59-1	Isophorone	ND	70	7.8	ug/kg	
90-12-0	1-Methylnaphthalene	277	70	6.2	ug/kg	
91-57-6	2-Methylnaphthalene	226	70	28	ug/kg	
88-74-4	2-Nitroaniline	ND	180	25	ug/kg	
99-09-2	3-Nitroaniline	ND	180	12	ug/kg	
100-01-6	4-Nitroaniline	ND	180	14	ug/kg	
98-95-3	Nitrobenzene	ND	70	15	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	70	16	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	180	20	ug/kg	
85-01-8	Phenanthrene	14.3	35	8.4	ug/kg	J
129-00-0	Pyrene	25.1	35	6.1	ug/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	180	7.9	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	77%		30-106%
4165-62-2	Phenol-d5	75%		30-106%

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

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

Report of Analysis

Client Sample ID:	BR4(4.5-5.5)		
Lab Sample ID:	JC20314-3	**Date Sampled:**	05/13/16
Matrix:	SO - Soil	**Date Received:**	05/14/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	89.7
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
118-79-6	2,4,6-Tribromophenol	75%		24-140%
4165-60-0	Nitrobenzene-d5	79%		26-122%
321-60-8	2-Fluorobiphenyl	76%		36-112%
1718-51-0	Terphenyl-d14	76%		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:	BR4(4.5-5.5)		
Lab Sample ID:	JC20314-3	**Date Sampled:**	05/13/16
Matrix:	SO - Soil	**Date Received:**	05/14/16
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	89.7
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4P16371.D	1	05/20/16	LK	05/18/16	OP93998A	E4P867
Run #2							

	Initial Weight	Final Volume
Run #1	31.8 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane [a]	ND	3.5	0.70	ug/kg	
91-20-3	Naphthalene	47.4	3.5	0.43	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	116%		15-138%
321-60-8	2-Fluorobiphenyl	35%		12-148%
1718-51-0	Terphenyl-d14	85%		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:	BR4(4.5-5.5)		
Lab Sample ID:	JC20314-3	**Date Sampled:**	05/13/16
Matrix:	SO - Soil	**Date Received:**	05/14/16
Method:	SW846-8015C (DAI)	**Percent Solids:**	89.7
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH105111.D	1	05/19/16	XPL	n/a	n/a	GGH5292
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

Low Molecular Alcohol List

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	110	77	ug/kg	
78-83-1	Isobutyl Alcohol	ND	110	66	ug/kg	
67-63-0	Isopropyl Alcohol	ND	110	64	ug/kg	
71-23-8	n-Propyl Alcohol	ND	110	45	ug/kg	
71-36-3	n-Butyl Alcohol	ND	110	61	ug/kg	
78-92-2	sec-Butyl Alcohol	ND	110	59	ug/kg	
67-56-1	Methanol	296	220	53	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	105%		52-141%
111-27-3	Hexanol	109%		52-141%

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA9-GWS		
Lab Sample ID:	JC20314-4	**Date Sampled:**	05/13/16
Matrix:	AQ - Ground Water	**Date Received:**	05/14/16
Method:	SW846-8015C (DAI)	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH104986.D	1	05/16/16	XPL	n/a	n/a	GGH5285
Run #2							

Low Molecular Alcohol List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	102%		56-145%

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

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

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SO WEB GW

CHAIN OF CUSTODY

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2235 Route 130, Dayton, NJ 08810
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www.accutest.com

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Bottle Order Control #

SGS Accutest Quote #

SGS Accutest Job # JC20314

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 #: Fax #:
Sampler(s) Name(s): N. Rivera, T. Taylor, D. Lindstrand Phone #:

Project Information

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

Billing Information (if different from Report to)

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

Requested Analysis (see TEST CODE sheet)

Matrix Codes

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

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	SVOC-Method 8270D	LMA-Method 8015B	Pesticides-Method 8081B	1,4 Dioxane + Naphthalene by Method 8270D SIM	LAB USE ONLY
1	RA9 (5-6)		05/13/16	1020	TT	SO	2					2				X	X		X	D16
2	EB051316		05/13/16	1038	NR	EB	6	3				3				X	X	X	X	4C6
3	BR4 (4.5-5.5)		05/13/16	1150	TT	SO	2					2				X	X		X	E79
4	RA9-GWS		05/13/16	1320	TT	GW	5	3				2				X	X		X	V105

Turnaround Time (Business days)

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

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date:
INITIAL ASESSMENT 3/14
LABEL VERIFICATION JM

Data Deliverable Information

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

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

Comments / Special Instructions

Add to Report: 1-methyl naphthalene with SVOC method 8270D

Sample inventory is verified upon receipt in the Laboratory

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	05/13/16 1500	1 Fed Ex	2 Fed Ex	5/14/16 0945	2 [signature]
3		3	4		4
5		5			

Custody Seal # 366 [ ] Intact [ ] Not intact

Preserved where applicable [ ]

On Ice [ ]

Cooler Temp. 20c

5.1 5

JC20314: Chain of Custody
Page 1 of 3

SGS Accutest Sample Receipt Summary

Job Number: JC20314 **Client:** Anderson Mulholland Assoc. **Project:** BMS Release Assessment

Date / Time Received: 5/14/2016 9:45:00 AM **Delivery Method:** FedEx **Airbill #'s:** 8012 1953 6051

Cooler Temps (Raw Measured) °C: Cooler 1: (2.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.4);

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

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

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

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

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

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

Comments -4 Received 1x950ml bottle broken. Received 1x950ml bottle with approx. 700ml volume. Limited volume.

SGS Accutest Sample - Problem Resolution

Accutest Job Number: JC20314

CSR: Tammy McCloskey **Response Date** 5/16/2016

Response: -4 cancel SVOC analyses, client will re-sample.

JC20314: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC20314

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC20314-1 RA9(5-6)	Collected: 13-MAY-16 10:20 By: TT		Received: 14-MAY-16 By: JK			
JC20314-1	SM2540 G-97	16-MAY-16 17:12	RK			SOL104
JC20314-1	SW846-8015C (DAI)	19-MAY-16 19:18	XPL			D8015LMA
JC20314-1	SW846 8270D	20-MAY-16 10:25	AC	18-MAY-16	FN	AB8270SL
JC20314-1	SW846 8270D BY SIM	20-MAY-16 11:21	LK	18-MAY-16	TM	B8270SIM14DIOX,BSIM + NAP
JC20314-2 EB051316	Collected: 13-MAY-16 10:38 By: NR		Received: 14-MAY-16 By: JK			
JC20314-2	SW846 8270D	16-MAY-16 14:42	AC	15-MAY-16	AC	AB8270SL
JC20314-2	SW846 8270D BY SIM	16-MAY-16 20:01	AD	15-MAY-16	SG	B8270SIM14DIOX,BSIM + NAP
JC20314-2	SW846-8015C (DAI)	16-MAY-16 22:41	XPL			D8015LMA
JC20314-2	SW846 8081B	17-MAY-16 10:47	RK	15-MAY-16	SG	P8081PESTTCL
JC20314-3 BR4(4.5-5.5)	Collected: 13-MAY-16 11:50 By: TT		Received: 14-MAY-16 By: JK			
JC20314-3	SM2540 G-97	16-MAY-16 17:12	RK			SOL104
JC20314-3	SW846-8015C (DAI)	19-MAY-16 20:08	XPL			D8015LMA
JC20314-3	SW846 8270D	20-MAY-16 10:55	AC	18-MAY-16	FN	AB8270SL
JC20314-3	SW846 8270D BY SIM	20-MAY-16 11:51	LK	18-MAY-16	TM	B8270SIM14DIOX,BSIM + NAP
JC20314-4 RA9-GWS	Collected: 13-MAY-16 13:20 By: TT		Received: 14-MAY-16 By: JK			
JC20314-4	SW846-8015C (DAI)	16-MAY-16 23:03	XPL			D8015LMA

SGS Accutest Internal Chain of Custody

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC20314-1.1	Secured Storage	Alfredo Crespo	05/16/16 14:07	Retrieve from Storage
JC20314-1.1	Alfredo Crespo	Secured Staging Area	05/16/16 14:07	Return to Storage
JC20314-1.1	Bernadette Vassilatos	Secured Storage	05/17/16 08:25	Return to Storage
Analyst unavailable for custody transfer.				
JC20314-1.1	Secured Storage	Nicole Kern	05/18/16 06:25	Retrieve from Storage
JC20314-1.1	Nicole Kern	Albert Quayson	05/18/16 08:04	Custody Transfer
JC20314-1.1	Albert Quayson	Secured Storage	05/18/16 12:09	Return to Storage
JC20314-1.1.1	Albert Quayson	Organics Prep	05/18/16 08:15	Extract from JC20314-1.1
JC20314-1.1.1	Organics Prep	Finley Nyaata	05/18/16 16:45	Extract from JC20314-1.1
JC20314-1.1.1	Finley Nyaata	Extract Storage	05/18/16 16:45	Return to Storage
JC20314-1.1.1	Extract Storage	Linsey Kirschmann	05/19/16 15:27	Retrieve from Storage
JC20314-1.1.1	Linsey Kirschmann	GCMS4P	05/19/16 15:27	Load on Instrument
JC20314-1.1.1	GCMS4P	Linsey Kirschmann	05/26/16 09:11	Unload from Instrument
JC20314-1.1.1	Linsey Kirschmann	Extract Freezer	05/26/16 09:11	Return to Storage
JC20314-1.2	Secured Storage	Xu Liu	05/18/16 10:45	Retrieve from Storage
JC20314-1.2	Xu Liu	Secured Storage	05/18/16 14:09	Return to Storage
JC20314-2.1	Secured Storage	Shanice Grant	05/15/16 07:20	Retrieve from Storage
JC20314-2.1	Shanice Grant	Secured Storage	05/15/16 12:36	Return to Storage
JC20314-2.1	Secured Staging Area	Sahara Feliciano	05/15/16 15:35	Retrieve from Storage
Analyst chain of custody update error.				
JC20314-2.1	Sahara Feliciano	Shanice Grant	05/15/16 15:35	Custody Transfer
JC20314-2.1	Shanice Grant		05/15/16 15:36	Depleted
JC20314-2.1.1	Shanice Grant	Organics Prep	05/15/16 07:23	Extract from JC20314-2.1
JC20314-2.1.1	Organics Prep	Shanice Grant	05/15/16 15:56	Extract from JC20314-2.1
JC20314-2.1.1	Shanice Grant	Extract Storage	05/15/16 15:56	Return to Storage
JC20314-2.1.1	Extract Storage	Khaliah Douglas	05/15/16 18:35	Retrieve from Storage
JC20314-2.1.1	Khaliah Douglas	GC2Z	05/15/16 18:35	Load on Instrument
JC20314-2.1.1	GC2Z	Thomas Lally	05/19/16 15:35	Unload from Instrument
JC20314-2.1.1	Thomas Lally	Extract Freezer	05/19/16 15:35	Return to Storage
JC20314-2.2	Secured Storage	Shanice Grant	05/15/16 07:20	Retrieve from Storage
JC20314-2.2	Shanice Grant	Secured Storage	05/15/16 12:36	Return to Storage
JC20314-2.2	Secured Staging Area	Sahara Feliciano	05/15/16 15:35	Retrieve from Storage
Analyst chain of custody update error.				
JC20314-2.2	Sahara Feliciano	Shanice Grant	05/15/16 15:35	Custody Transfer
JC20314-2.2	Shanice Grant		05/15/16 15:36	Depleted
JC20314-2.2.1	Shanice Grant	Organics Prep	05/15/16 07:22	Extract from JC20314-2.2
JC20314-2.2.1	Shanice Grant	Extract Storage	05/15/16 15:59	Return to Storage
JC20314-2.2.1	Organics Prep	Shanice Grant	05/15/16 15:59	Extract from JC20314-2.2

SGS Accutest Internal Chain of Custody

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC20314-2.2.1	Extract Storage	Rebecca Krug	05/17/16 09:27	Retrieve from Storage
JC20314-2.2.1	Rebecca Krug	GC1G	05/17/16 09:27	Load on Instrument
JC20314-2.2.1	GC1G	Rebecca Krug	05/22/16 09:06	Unload from Instrument
JC20314-2.2.1	Rebecca Krug	Extract Freezer	05/22/16 09:06	Return to Storage
JC20314-2.3	Secured Storage	Shanice Grant	05/15/16 07:20	Retrieve from Storage
JC20314-2.3	Shanice Grant	Secured Storage	05/15/16 12:36	Return to Storage
JC20314-2.3	Secured Staging Area	Sahara Feliciano	05/15/16 15:35	Retrieve from Storage
Analyst chain of custody update error.				
JC20314-2.3	Sahara Feliciano	Shanice Grant	05/15/16 15:35	Custody Transfer
JC20314-2.3	Shanice Grant		05/15/16 15:36	Depleted
JC20314-2.3.1	Shanice Grant	Organics Prep	05/15/16 07:20	Extract from JC20314-2.3
JC20314-2.3.1	Organics Prep	Shanice Grant	05/15/16 15:59	Extract from JC20314-2.3
JC20314-2.3.1	Shanice Grant	Extract Storage	05/15/16 15:59	Return to Storage
JC20314-2.3.1	Extract Storage	Arielle Cocozza	05/16/16 14:29	Retrieve from Storage
JC20314-2.3.1	Arielle Cocozza	GCMSZ	05/16/16 14:29	Load on Instrument
JC20314-2.3.1	GCMSZ	Arielle Cocozza	05/17/16 10:26	Unload from Instrument
JC20314-2.3.1	Arielle Cocozza	Extract Freezer	05/17/16 10:26	Return to Storage
JC20314-2.4	Secured Storage	Xu Liu	05/16/16 11:51	Retrieve from Storage
JC20314-2.4	Xu Liu	Secured Storage	05/16/16 13:54	Return to Storage
JC20314-3.1	Secured Storage	Alfredo Crespo	05/16/16 14:07	Retrieve from Storage
JC20314-3.1	Alfredo Crespo	Secured Staging Area	05/16/16 14:07	Return to Storage
JC20314-3.1	Bernadette Vassilatos	Secured Storage	05/17/16 08:25	Return to Storage
Analyst unavailable for custody transfer.				
JC20314-3.1	Secured Storage	Nicole Kern	05/18/16 06:25	Retrieve from Storage
JC20314-3.1	Nicole Kern	Albert Quayson	05/18/16 08:04	Custody Transfer
JC20314-3.1	Albert Quayson	Secured Storage	05/18/16 12:09	Return to Storage
JC20314-3.1.1	Albert Quayson	Organics Prep	05/18/16 08:15	Extract from JC20314-3.1
JC20314-3.1.1	Organics Prep	Finley Nyaata	05/18/16 16:45	Extract from JC20314-3.1
JC20314-3.1.1	Finley Nyaata	Extract Storage	05/18/16 16:45	Return to Storage
JC20314-3.1.1	Extract Storage	Linsey Kirschmann	05/19/16 15:27	Retrieve from Storage
JC20314-3.1.1	Linsey Kirschmann	GCMS4P	05/19/16 15:27	Load on Instrument
JC20314-3.1.1	GCMS4P	Linsey Kirschmann	05/26/16 09:11	Unload from Instrument
JC20314-3.1.1	Linsey Kirschmann	Extract Freezer	05/26/16 09:11	Return to Storage
JC20314-3.2	Secured Storage	Xu Liu	05/18/16 10:45	Retrieve from Storage
JC20314-3.2	Xu Liu	Secured Storage	05/18/16 14:09	Return to Storage
JC20314-4.1	Secured Storage	Shanice Grant	05/15/16 07:20	Retrieve from Storage
JC20314-4.1	Shanice Grant	Secured Storage	05/15/16 10:36	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/14/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC20314-4.1.1	Shanice Grant	Organics Prep	05/15/16 07:20	Extract from JC20314-4.1
JC20314-4.1.1	Organics Prep	Shanice Grant	05/15/16 15:59	Extract from JC20314-4.1
JC20314-4.1.1	Shanice Grant	Extract Storage	05/15/16 15:59	Return to Storage
JC20314-4.1.1	Extract Storage	Arielle Cocozza	05/16/16 14:29	Retrieve from Storage
JC20314-4.1.1	Arielle Cocozza	GCMSZ	05/16/16 14:29	Load on Instrument
JC20314-4.1.1	GCMSZ	Arielle Cocozza	05/17/16 10:26	Unload from Instrument
JC20314-4.1.1	Arielle Cocozza	Extract Freezer	05/17/16 10:26	Return to Storage
JC20314-4.1.2	Shanice Grant	Organics Prep	05/15/16 07:23	Extract from JC20314-4.1
JC20314-4.1.2	Organics Prep	Shanice Grant	05/15/16 15:56	Extract from JC20314-4.1
JC20314-4.1.2	Shanice Grant	Extract Storage	05/15/16 15:56	Return to Storage
JC20314-4.1.2	Extract Storage	Khaliah Douglas	05/15/16 18:35	Retrieve from Storage
JC20314-4.1.2	Khaliah Douglas	GC2Z	05/15/16 18:35	Load on Instrument
JC20314-4.1.2	GC2Z	Thomas Lally	05/19/16 15:35	Unload from Instrument
JC20314-4.1.2	Thomas Lally	Extract Freezer	05/19/16 15:35	Return to Storage
JC20314-4.2	Secured Storage	Xu Liu	05/16/16 11:51	Retrieve from Storage
JC20314-4.2	Xu Liu	Secured Storage	05/16/16 13:54	Return to Storage

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93924-MB1	Z110703.D	1	05/16/16	AC	05/15/16	OP93924	EZ5530

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

JC20314-2

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: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93924-MB1	Z110703.D	1	05/16/16	AC	05/15/16	OP93924	EZ5530

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

JC20314-2

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	46%	14-88%

Method Blank Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93924-MB1	Z110703.D	1	05/16/16	AC	05/15/16	OP93924	EZ5530

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

JC20314-2

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

Method Blank Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93998-MB1	Z110790.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537

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

JC20314-1, JC20314-3

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

Method Blank Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93998-MB1	Z110790.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537

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

JC20314-1, JC20314-3

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	91%	30-106%

Method Blank Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93998-MB1	Z110790.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537

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

JC20314-1, JC20314-3

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	91%	30-106%
118-79-6	2,4,6-Tribromophenol	97%	24-140%
4165-60-0	Nitrobenzene-d5	95%	26-122%
321-60-8	2-Fluorobiphenyl	99%	36-112%
1718-51-0	Terphenyl-d14	97%	36-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.03	350	ug/kg	J
	system artifact	3.36	270	ug/kg	J
	system artifact/aldol-condensation	3.40	170	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93924A-MB1	3M61365.D	1	05/16/16	AD	05/15/16	OP93924A	E3M2885

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

JC20314-2

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

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	75%	24-125%
321-60-8	2-Fluorobiphenyl	72%	19-127%
1718-51-0	Terphenyl-d14	93%	10-119%

Method Blank Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93998A-MB1	4P16354.D	1	05/19/16	LK	05/18/16	OP93998A	E4P866

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

JC20314-1, JC20314-3

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	99%	15-138%
321-60-8	2-Fluorobiphenyl	48%	12-148%
1718-51-0	Terphenyl-d14	106%	10-157%

Blank Spike Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93998-BS1	Z110791.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537

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

JC20314-1, JC20314-3

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	1510	91	52-107
120-83-2	2,4-Dichlorophenol	1670	1480	89	53-105
105-67-9	2,4-Dimethylphenol	1670	1460	88	49-115
51-28-5	2,4-Dinitrophenol	3330	3750	113	30-127
534-52-1	4,6-Dinitro-o-cresol	1670	1760	106	41-114
95-48-7	2-Methylphenol	1670	1380	83	53-103
	3&4-Methylphenol	1670	1370	82	53-102
88-75-5	2-Nitrophenol	1670	1490	89	52-104
100-02-7	4-Nitrophenol	1670	1730	104	36-143
87-86-5	Pentachlorophenol	1670	1580	95	29-128
108-95-2	Phenol	1670	1320	79	45-106
58-90-2	2,3,4,6-Tetrachlorophenol	1670	1520	91	47-113
95-95-4	2,4,5-Trichlorophenol	1670	1370	82	55-112
88-06-2	2,4,6-Trichlorophenol	1670	1480	89	57-108
83-32-9	Acenaphthene	1670	1420	85	60-108
208-96-8	Acenaphthylene	1670	1330	80	54-94
98-86-2	Acetophenone	1670	1380	83	53-110
120-12-7	Anthracene	1670	1460	88	59-109
1912-24-9	Atrazine	1670	1610	97	59-126
56-55-3	Benzo(a)anthracene	1670	1470	88	52-113
50-32-8	Benzo(a)pyrene	1670	1500	90	56-122
205-99-2	Benzo(b)fluoranthene	1670	1450	87	53-119
191-24-2	Benzo(g,h,i)perylene	1670	1470	88	48-117
207-08-9	Benzo(k)fluoranthene	1670	1490	89	52-115
101-55-3	4-Bromophenyl phenyl ether	1670	1530	92	58-114
85-68-7	Butyl benzyl phthalate	1670	1510	91	44-132
92-52-4	1,1'-Biphenyl	1670	1400	84	54-101
100-52-7	Benzaldehyde	1670	1300	78	39-117
91-58-7	2-Chloronaphthalene	1670	1390	83	54-103
106-47-8	4-Chloroaniline	1670	638	38	10-110
86-74-8	Carbazole	1670	1530	92	55-105
105-60-2	Caprolactam	1670	1390	83	42-111
218-01-9	Chrysene	1670	1430	86	51-119
111-91-1	bis(2-Chloroethoxy)methane	1670	1420	85	51-106
111-44-4	bis(2-Chloroethyl)ether	1670	1430	86	48-107

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93998-BS1	Z110791.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537

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

JC20314-1, JC20314-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	1670	934	56	46-103
7005-72-3	4-Chlorophenyl phenyl ether	1670	1450	87	54-112
121-14-2	2,4-Dinitrotoluene	1670	1650	99	56-116
606-20-2	2,6-Dinitrotoluene	1670	1600	96	56-115
91-94-1	3,3'-Dichlorobenzidine	3330	1680	50	22-103
53-70-3	Dibenzo(a,h)anthracene	1670	1460	88	49-118
132-64-9	Dibenzofuran	1670	1410	85	55-103
84-74-2	Di-n-butyl phthalate	1670	1550	93	56-117
117-84-0	Di-n-octyl phthalate	1670	1490	89	47-137
84-66-2	Diethyl phthalate	1670	1500	90	54-112
131-11-3	Dimethyl phthalate	1670	1440	86	56-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1480	89	45-130
206-44-0	Fluoranthene	1670	1480	89	58-110
86-73-7	Fluorene	1670	1420	85	59-108
118-74-1	Hexachlorobenzene	1670	1490	89	55-114
87-68-3	Hexachlorobutadiene	1670	1450	87	44-118
77-47-4	Hexachlorocyclopentadiene	3330	3280	98	41-137
67-72-1	Hexachloroethane	1670	1400	84	50-107
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1490	89	48-120
78-59-1	Isophorone	1670	1490	89	54-109
90-12-0	1-Methylnaphthalene	1670	1410	85	50-110
91-57-6	2-Methylnaphthalene	1670	1400	84	48-104
88-74-4	2-Nitroaniline	1670	1460	88	49-124
99-09-2	3-Nitroaniline	1670	842	51	22-110
100-01-6	4-Nitroaniline	1670	1470	88	50-107
98-95-3	Nitrobenzene	1670	1400	84	47-108
621-64-7	N-Nitroso-di-n-propylamine	1670	1320	79	49-106
86-30-6	N-Nitrosodiphenylamine	1670	1510	91	53-112
85-01-8	Phenanthrene	1670	1460	88	57-105
129-00-0	Pyrene	1670	1510	91	50-117
95-94-3	1,2,4,5-Tetrachlorobenzene	1670	1490	89	52-109

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93998-BS1	Z110791.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537

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

JC20314-1, JC20314-3

CAS No.	Surrogate Recoveries	BSP	Limits
4165-62-2	Phenol-d5	80%	30-106%
118-79-6	2,4,6-Tribromophenol	92%	24-140%
4165-60-0	Nitrobenzene-d5	85%	26-122%
321-60-8	2-Fluorobiphenyl	85%	36-112%
1718-51-0	Terphenyl-d14	89%	36-132%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93924A-BS12	3M61364.D	1	05/16/16	AD	05/15/16	OP93924A	E3M2885

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

JC20314-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	1	0.783	78	40-119
123-91-1	1,4-Dioxane	1	0.446	45	20-160

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	76%	24-125%
321-60-8	2-Fluorobiphenyl	79%	19-127%
1718-51-0	Terphenyl-d14	93%	10-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93998A-BS12	4P16390.D	1	05/20/16	LK	05/18/16	OP93998A	E4P867

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

JC20314-1, JC20314-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
123-91-1	1,4-Dioxane	1	0.313	31	10-100
91-20-3	Naphthalene	1	1.21	121	35-142

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	134%	15-138%
321-60-8	2-Fluorobiphenyl	55%	12-148%
1718-51-0	Terphenyl-d14	99%	10-157%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93924-BS1	Z110701A.D	1	05/16/16	AC	05/15/16	OP93924	EZ5530
OP93924-BSD	Z110702.D	1	05/16/16	AC	05/15/16	OP93924	EZ5530

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

JC20314-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	50	29.2	58	30.2	60	3	48-106/30
59-50-7	4-Chloro-3-methyl phenol	50	41.4	83	41.5	83	0	49-113/30
120-83-2	2,4-Dichlorophenol	50	36.4	73	35.8	72	2	49-111/30
105-67-9	2,4-Dimethylphenol	50	40.8	82	39.8	80	2	42-117/30
51-28-5	2,4-Dinitrophenol	100	87.1	87	72.7	73	18	37-132/30
534-52-1	4,6-Dinitro-o-cresol	50	53.3	107	44.6	89	18	49-119/30
95-48-7	2-Methylphenol	50	32.4	65	33.2	66	2	42-103/30
	3&4-Methylphenol	50	28.8	58	27.9	56	3	39-110/30
88-75-5	2-Nitrophenol	50	37.0	74	35.3	71	5	49-114/30
100-02-7	4-Nitrophenol	50	40.7	81	40.5	81	0	16-95/30
87-86-5	Pentachlorophenol	50	41.6	83	33.1	66	23	30-136/30
108-95-2	Phenol	50	21.5	43	23.7	47	10	10-110/30
58-90-2	2,3,4,6-Tetrachlorophenol	50	39.4	79	36.3	73	8	47-118/30
95-95-4	2,4,5-Trichlorophenol	50	37.8	76	33.9	68	11	55-116/30
88-06-2	2,4,6-Trichlorophenol	50	41.9	84	40.4	81	4	56-115/30
83-32-9	Acenaphthene	50	33.5	67	31.8	64	5	54-112/30
208-96-8	Acenaphthylene	50	31.0	62	28.5	57	8	49-99/30
98-86-2	Acetophenone	50	34.0	68	33.6	67	1	52-111/30
120-12-7	Anthracene	50	38.6	77	32.6	65	17	58-112/30
1912-24-9	Atrazine	50	56.1	112	38.0	76	38* [a]	62-134/30
100-52-7	Benzaldehyde	50	35.4	71	33.8	68	5	40-129/30
56-55-3	Benzo(a)anthracene	50	43.8	88	36.3	73	19	44-120/30
50-32-8	Benzo(a)pyrene	50	41.8	84	34.5	69	19	41-127/30
205-99-2	Benzo(b)fluoranthene	50	44.8	90	35.7	71	23	41-129/30
191-24-2	Benzo(g,h,i)perylene	50	38.1	76	29.5	59	25	34-128/30
207-08-9	Benzo(k)fluoranthene	50	47.0	94	37.8	76	22	42-122/30
101-55-3	4-Bromophenyl phenyl ether	50	41.1	82	35.8	72	14	54-121/30
85-68-7	Butyl benzyl phthalate	50	40.4	81	33.0	66	20	20-143/30
92-52-4	1,1'-Biphenyl	50	31.6	63	28.5	57	10	51-106/30
91-58-7	2-Chloronaphthalene	50	31.0	62	28.6	57	8	48-104/30
106-47-8	4-Chloroaniline	50	4.2	8* [b]	4.6	9* [b]	9	10-110/30
86-74-8	Carbazole	50	41.7	83	33.8	68	21	56-110/30
105-60-2	Caprolactam	50	9.9	20	9.0	18	10	10-110/30
218-01-9	Chrysene	50	42.1	84	34.4	69	20	45-125/30
111-91-1	bis(2-Chloroethoxy)methane	50	33.5	67	31.8	64	5	47-117/30
111-44-4	bis(2-Chloroethyl)ether	50	32.2	64	32.5	65	1	48-115/30

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93924-BS1	Z110701A.D	1	05/16/16	AC	05/15/16	OP93924	EZ5530
OP93924-BSD	Z110702.D	1	05/16/16	AC	05/15/16	OP93924	EZ5530

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

JC20314-2

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	29.5	59	31.8	64	8	44-112/30
7005-72-3	4-Chlorophenyl phenyl ether	50	43.8	88	37.1	74	17	50-117/30
121-14-2	2,4-Dinitrotoluene	50	40.4	81	38.0	76	6	57-122/30
606-20-2	2,6-Dinitrotoluene	50	40.6	81	37.6	75	8	58-122/30
91-94-1	3,3'-Dichlorobenzidine	100	53.2	53	50.1	50	6	10-110/30
53-70-3	Dibenzo(a,h)anthracene	50	38.3	77	30.6	61	22	36-130/30
132-64-9	Dibenzofuran	50	35.6	71	32.3	65	10	55-108/30
84-74-2	Di-n-butyl phthalate	50	42.7	85	35.6	71	18	45-123/30
117-84-0	Di-n-octyl phthalate	50	46.9	94	35.0	70	29	37-144/30
84-66-2	Diethyl phthalate	50	39.9	80	34.3	69	15	23-130/30
131-11-3	Dimethyl phthalate	50	41.1	82	36.1	72	13	10-140/30
117-81-7	bis(2-Ethylhexyl)phthalate	50	39.7	79	33.6	67	17	36-138/30
206-44-0	Fluoranthene	50	46.1	92	38.0	76	19	58-116/30
86-73-7	Fluorene	50	38.2	76	32.0	64	18	57-113/30
118-74-1	Hexachlorobenzene	50	39.3	79	33.8	68	15	49-122/30
87-68-3	Hexachlorobutadiene	50	39.5	79	39.9	80	1	24-112/30
77-47-4	Hexachlorocyclopentadiene	100	32.9	33	40.0	40	19	14-119/30
67-72-1	Hexachloroethane	50	31.4	63	31.5	63	0	31-107/30
193-39-5	Indeno(1,2,3-cd)pyrene	50	38.0	76	29.5	59	25	34-128/30
78-59-1	Isophorone	50	42.1	84	41.3	83	2	52-119/30
90-12-0	1-Methylnaphthalene	50	33.1	66	33.9	68	2	46-103/30
91-57-6	2-Methylnaphthalene	50	35.0	70	34.0	68	3	45-107/30
88-74-4	2-Nitroaniline	50	41.6	83	35.6	71	16	51-127/30
99-09-2	3-Nitroaniline	50	23.6	47	25.4	51	7	10-110/30
100-01-6	4-Nitroaniline	50	36.7	73	30.0	60	20	50-112/30
98-95-3	Nitrobenzene	50	41.8	84	39.4	79	6	44-116/30
621-64-7	N-Nitroso-di-n-propylamine	50	32.8	66	33.9	68	3	49-117/30
86-30-6	N-Nitrosodiphenylamine	50	37.7	75	32.3	65	15	51-113/30
85-01-8	Phenanthrene	50	39.7	79	34.3	69	15	56-111/30
129-00-0	Pyrene	50	40.3	81	33.9	68	17	47-120/30
95-94-3	1,2,4,5-Tetrachlorobenzene	50	31.1	62	31.8	64	2	36-114/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
367-12-4	2-Fluorophenol	48%	51%	14-88%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93924-BS1	Z110701A.D	1	05/16/16	AC	05/15/16	OP93924	EZ5530
OP93924-BSD	Z110702.D	1	05/16/16	AC	05/15/16	OP93924	EZ5530

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

JC20314-2

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
4165-62-2	Phenol-d5	53%	45%	10-110%
118-79-6	2,4,6-Tribromophenol	68%	63%	39-149%
4165-60-0	Nitrobenzene-d5	78%	81%	32-128%
321-60-8	2-Fluorobiphenyl	65%	61%	35-119%
1718-51-0	Terphenyl-d14	88%	69%	10-126%

(a) Analytical precision exceeds in-house control limits.
(b) Outside of in house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93998-MS	Z110801.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537
OP93998-MSD	Z110802.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537
JC20218-17A	Z110799.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537

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

JC20314-1, JC20314-3

CAS No.	Compound	JC20218-17A ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		1850	1390	75	1850	1290	70	7	33-106/35
59-50-7	4-Chloro-3-methyl phenol	ND		1850	1500	81	1850	1430	77	5	27-124/34
120-83-2	2,4-Dichlorophenol	ND		1850	1510	82	1850	1430	77	5	25-122/34
105-67-9	2,4-Dimethylphenol	ND		1850	1560	84	1850	1500	81	4	23-133/34
51-28-5	2,4-Dinitrophenol	ND		3690	2290	62	3710	2150	58	6	10-110/51
534-52-1	4,6-Dinitro-o-cresol	ND		1850	1240	67	1850	1180	64	5	10-113/49
95-48-7	2-Methylphenol	ND		1850	1410	76	1850	1340	72	5	32-111/34
	3&4-Methylphenol	ND		1850	1410	76	1850	1350	73	4	32-113/34
88-75-5	2-Nitrophenol	ND		1850	1480	80	1850	1380	74	7	17-118/37
100-02-7	4-Nitrophenol	ND		1850	1700	92	1850	1620	87	5	14-154/39
87-86-5	Pentachlorophenol	ND		1850	1570	85	1850	1490	80	5	10-131/43
108-95-2	Phenol	ND		1850	1340	73	1850	1300	70	3	25-112/33
58-90-2	2,3,4,6-Tetrachlorophenol	ND		1850	1510	82	1850	1480	80	2	19-125/37
95-95-4	2,4,5-Trichlorophenol	ND		1850	1380	75	1850	1330	72	4	30-125/35
88-06-2	2,4,6-Trichlorophenol	ND		1850	1510	82	1850	1460	79	3	26-126/35
83-32-9	Acenaphthene	ND		1850	1470	80	1850	1430	77	3	34-125/36
208-96-8	Acenaphthylene	ND		1850	1390	75	1850	1370	74	1	28-113/34
98-86-2	Acetophenone	ND		1850	1360	74	1850	1200	65	13	26-120/34
120-12-7	Anthracene	ND		1850	1430	77	1850	1390	75	3	31-131/41
1912-24-9	Atrazine	ND		1850	1460	79	1850	1340	72	9	34-138/36
56-55-3	Benzo(a)anthracene	25.1	J	1850	1450	77	1850	1420	75	2	23-136/43
50-32-8	Benzo(a)pyrene	24.9	J	1850	1460	78	1850	1420	75	3	22-144/42
205-99-2	Benzo(b)fluoranthene	34.4	J	1850	1460	77	1850	1400	74	4	18-145/43
191-24-2	Benzo(g,h,i)perylene	19.9	J	1850	1440	77	1850	1400	74	3	20-138/43
207-08-9	Benzo(k)fluoranthene	ND		1850	1400	76	1850	1370	74	2	27-129/43
101-55-3	4-Bromophenyl phenyl ether	ND		1850	1550	84	1850	1510	81	3	39-124/33
85-68-7	Butyl benzyl phthalate	ND		1850	1520	82	1850	1460	79	4	27-143/35
92-52-4	1,1'-Biphenyl	ND		1850	1390	75	1850	1280	69	8	33-116/32
100-52-7	Benzaldehyde	ND		1850	1500	81	1850	1340	72	11	20-129/34
91-58-7	2-Chloronaphthalene	ND		1850	1430	77	1850	1390	75	3	38-110/32
106-47-8	4-Chloroaniline	ND		1850	520	28	1850	638	34	20	10-110/49
86-74-8	Carbazole	ND		1850	1500	81	1850	1460	79	3	27-129/38
105-60-2	Caprolactam	ND		1850	1280	69	1850	1230	66	4	18-127/35
218-01-9	Chrysene	30.2	J	1850	1430	76	1850	1390	73	3	21-142/43
111-91-1	bis(2-Chloroethoxy)methane	ND		1850	1430	77	1850	1340	72	6	32-116/33
111-44-4	bis(2-Chloroethyl)ether	ND		1850	1460	79	1850	1360	73	7	30-113/37

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93998-MS	Z110801.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537
OP93998-MSD	Z110802.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537
JC20218-17A	Z110799.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537

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

JC20314-1, JC20314-3

CAS No.	Compound	JC20218-17A ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
108-60-1	bis(2-Chloroisopropyl)ether	ND		1850	954	52	1850	912	49	5	28-110/33
7005-72-3	4-Chlorophenyl phenyl ether	ND		1850	1480	80	1850	1420	77	4	38-119/33
121-14-2	2,4-Dinitrotoluene	ND		1850	1630	88	1850	1570	85	4	28-126/36
606-20-2	2,6-Dinitrotoluene	ND		1850	1640	89	1850	1570	85	4	31-126/34
91-94-1	3,3'-Dichlorobenzidine	ND		3690	1510	41	3710	1770	48	16	10-115/44
53-70-3	Dibenzo(a,h)anthracene	ND		1850	1420	77	1850	1380	74	3	25-135/41
132-64-9	Dibenzofuran	ND		1850	1480	80	1850	1430	77	3	30-125/35
84-74-2	Di-n-butyl phthalate	ND		1850	1520	82	1850	1480	80	3	32-131/34
117-84-0	Di-n-octyl phthalate	ND		1850	1450	78	1850	1400	76	4	28-144/35
84-66-2	Diethyl phthalate	ND		1850	1510	82	1850	1460	79	3	35-124/32
131-11-3	Dimethyl phthalate	ND		1850	1490	81	1850	1460	79	2	36-121/33
117-81-7	bis(2-Ethylhexyl)phthalate	ND		1850	1500	81	1850	1450	78	3	25-146/35
206-44-0	Fluoranthene	34.3	J	1850	1470	78	1850	1440	76	2	15-143/46
86-73-7	Fluorene	ND		1850	1450	78	1850	1400	76	4	30-129/37
118-74-1	Hexachlorobenzene	ND		1850	1470	80	1850	1410	76	4	34-125/34
87-68-3	Hexachlorobutadiene	ND		1850	1420	77	1850	1360	73	4	29-120/34
77-47-4	Hexachlorocyclopentadiene	ND		3690	2360	64	3710	2180	59	8	10-127/46
67-72-1	Hexachloroethane	ND		1850	1370	74	1850	1280	69	7	21-109/38
193-39-5	Indeno(1,2,3-cd)pyrene	19.4	J	1850	1470	79	1850	1440	77	2	23-141/44
78-59-1	Isophorone	ND		1850	1520	82	1850	1460	79	4	31-124/32
90-12-0	1-Methylnaphthalene	ND		1850	1380	75	1850	1240	67	11	24-122/33
91-57-6	2-Methylnaphthalene	ND		1850	1420	77	1850	1360	73	4	21-125/33
88-74-4	2-Nitroaniline	ND		1850	1550	84	1850	1490	80	4	29-138/33
99-09-2	3-Nitroaniline	ND		1850	937	51	1850	1040	56	10	12-112/38
100-01-6	4-Nitroaniline	ND		1850	1430	77	1850	1390	75	3	21-117/38
98-95-3	Nitrobenzene	ND		1850	1410	76	1850	1350	73	4	28-118/32
621-64-7	N-Nitroso-di-n-propylamine	ND		1850	1340	73	1850	1280	69	5	26-121/34
86-30-6	N-Nitrosodiphenylamine	ND		1850	1520	82	1850	1490	80	2	24-142/35
85-01-8	Phenanthrene	21.3	J	1850	1450	77	1850	1430	76	1	14-144/44
129-00-0	Pyrene	41.8		1850	1580	83	1850	1510	79	5	16-147/46
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		1850	1540	83	1850	1530	83	1	37-115/32

CAS No.	Surrogate Recoveries	MS	MSD	JC20218-17A	Limits
367-12-4	2-Fluorophenol	75%	70%	71%	30-106%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93998-MS	Z110801.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537
OP93998-MSD	Z110802.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537
JC20218-17A	Z110799.D	1	05/19/16	AC	05/18/16	OP93998	EZ5537

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

JC20314-1, JC20314-3

CAS No.	Surrogate Recoveries	MS	MSD	JC20218-17A	Limits
4165-62-2	Phenol-d5	76%	70%	70%	30-106%
118-79-6	2,4,6-Tribromophenol	85%	81%	78%	24-140%
4165-60-0	Nitrobenzene-d5	80%	74%	77%	26-122%
321-60-8	2-Fluorobiphenyl	81%	77%	77%	36-112%
1718-51-0	Terphenyl-d14	82%	78%	78%	36-132%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93998A-MS	4P16356.D	1	05/19/16	LK	05/18/16	OP93998A	E4P866
OP93998A-MSD	4P16357.D	1	05/19/16	LK	05/18/16	OP93998A	E4P866
JC20314-1	4P16370.D	1	05/20/16	LK	05/18/16	OP93998A	E4P867

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

JC20314-1, JC20314-3

CAS No.	Compound	JC20314-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
123-91-1	1,4-Dioxane	ND		38.8	18.7	48* [a]	38.9	22.2	57	17	50-150/30
91-20-3	Naphthalene	ND		38.8	34.9	90	38.9	39.3	101	12	10-190/36

CAS No.	Surrogate Recoveries	MS	MSD	JC20314-1	Limits
4165-60-0	Nitrobenzene-d5	82%	105%	97%	15-138%
321-60-8	2-Fluorobiphenyl	44%	39%	83%	12-148%
1718-51-0	Terphenyl-d14	86%	86%	88%	10-157%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC20314
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: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2885-DFTPP
Lab File ID: 3M61346.D
Instrument ID: GCMS3M
Injection Date: 05/16/16
Injection Time: 09:31

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	244935	36.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	324951	48.0		Pass
70	Less than 2.0% of mass 69	858	0.13	(0.26) [a]	Pass
127	40.0 - 60.0% of mass 198	329520	48.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	676352	100.0		Pass
199	5.0 - 9.0% of mass 198	45920	6.79		Pass
275	10.0 - 30.0% of mass 198	168085	24.9		Pass
365	1.0 - 100.0% of mass 198	19236	2.84		Pass
441	Present, but less than mass 443	93331	13.8	(85.4) [b]	Pass
442	40.0 - 100.0% of mass 198	558571	82.6		Pass
443	17.0 - 23.0% of mass 442	109304	16.2	(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
E3M2885-CC2855	3M61347.D	05/16/16	09:42	00:11	Continuing cal 0.5
OP93903A-MB1	3M61348.D	05/16/16	10:21	00:50	Method Blank
OP93903A-BS12	3M61349.D	05/16/16	10:53	01:22	Blank Spike
ZZZZZZ	3M61350.D	05/16/16	11:25	01:54	(unrelated sample)
ZZZZZZ	3M61351.D	05/16/16	11:57	02:26	(unrelated sample)
ZZZZZZ	3M61352.D	05/16/16	12:29	02:58	(unrelated sample)
ZZZZZZ	3M61353.D	05/16/16	13:01	03:30	(unrelated sample)
ZZZZZZ	3M61354.D	05/16/16	13:33	04:02	(unrelated sample)
ZZZZZZ	3M61355.D	05/16/16	14:05	04:34	(unrelated sample)
ZZZZZZ	3M61356.D	05/16/16	14:38	05:07	(unrelated sample)
C45791-1	3M61357.D	05/16/16	15:10	05:39	(used for QC only; not part of job JC20314)
ZZZZZZ	3M61358.D	05/16/16	15:42	06:11	(unrelated sample)
ZZZZZZ	3M61359.D	05/16/16	16:15	06:44	(unrelated sample)
ZZZZZZ	3M61360.D	05/16/16	16:47	07:16	(unrelated sample)
ZZZZZZ	3M61361.D	05/16/16	17:19	07:48	(unrelated sample)
OP93903A-MS	3M61362.D	05/16/16	17:52	08:21	Matrix Spike
OP93903A-MSD	3M61363.D	05/16/16	18:24	08:53	Matrix Spike Duplicate
OP93924A-BS12	3M61364.D	05/16/16	18:56	09:25	Blank Spike
OP93924A-MB1	3M61365.D	05/16/16	19:29	09:58	Method Blank

Instrument Performance Check (DFTPP)

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	E3M2885-DFTPP	**Injection Date:**	05/16/16
Lab File ID:	3M61346.D	**Injection Time:**	09:31
Instrument ID:	GCMS3M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JC20314-2	3M61366.D	05/16/16	20:01	10:30	EB051316

Instrument Performance Check (DFTPP)

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4P863-DFTPP
Lab File ID: 4P16322.D
Instrument ID: GCMS4P
Injection Date: 05/18/16
Injection Time: 10:31

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	114372	43.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	129119	48.9		Pass
70	Less than 2.0% of mass 69	161	0.06	(0.12) [a]	Pass
127	40.0 - 60.0% of mass 198	139120	52.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	264137	100.0		Pass
199	5.0 - 9.0% of mass 198	17146	6.49		Pass
275	10.0 - 30.0% of mass 198	48518	18.4		Pass
365	1.0 - 100.0% of mass 198	3668	1.39		Pass
441	Present, but less than mass 443	23869	9.04	(80.7) [b]	Pass
442	40.0 - 100.0% of mass 198	143801	54.4		Pass
443	17.0 - 23.0% of mass 442	29562	11.2	(20.6) [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
E4P863-ICC863	4P16323.D	05/18/16	10:43	00:12	Initial cal 1
E4P863-IC863	4P16324.D	05/18/16	11:13	00:42	Initial cal .5
E4P863-IC863	4P16325.D	05/18/16	11:43	01:12	Initial cal .2
E4P863-IC863	4P16326.D	05/18/16	12:12	01:41	Initial cal .1
E4P863-IC863	4P16327.D	05/18/16	12:42	02:11	Initial cal .05
E4P863-IC863	4P16328.D	05/18/16	13:12	02:41	Initial cal .02
E4P863-IC863	4P16329.D	05/18/16	13:42	03:11	Initial cal .01
E4P863-IC863	4P16330.D	05/18/16	14:12	03:41	Initial cal 5
E4P863-IC863	4P16331.D	05/18/16	14:42	04:11	Initial cal 2.5
E4P863-ICV863	4P16332.D	05/18/16	15:12	04:41	Initial cal verification 1
E4P863-ICV863	4P16333.D	05/18/16	15:41	05:10	Initial cal verification 1
E4P863-ICV863	4P16334.D	05/18/16	16:12	05:41	Initial cal verification 1

Instrument Performance Check (DFTPP)

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4P866-DFTPP
Lab File ID: 4P16346.D
Instrument ID: GCMS4P
Injection Date: 05/19/16
Injection Time: 14:31

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	104847	42.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	118801	48.4		Pass
70	Less than 2.0% of mass 69	560	0.23	(0.47) [a]	Pass
127	40.0 - 60.0% of mass 198	121237	49.4		Pass
197	Less than 1.0% of mass 198	653	0.27		Pass
198	Base peak, 100% relative abundance	245568	100.0		Pass
199	5.0 - 9.0% of mass 198	14880	6.06		Pass
275	10.0 - 30.0% of mass 198	46141	18.8		Pass
365	1.0 - 100.0% of mass 198	4017	1.64		Pass
441	Present, but less than mass 443	21035	8.57	(74.3) [b]	Pass
442	40.0 - 100.0% of mass 198	146288	59.6		Pass
443	17.0 - 23.0% of mass 442	28311	11.5	(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
E4P866-CC863	4P16347.D	05/19/16	14:43	00:12	Continuing cal 1
OP94042A-MB1	4P16361.D	05/19/16	17:23	02:52	Method Blank
OP94042A-BS12	4P16362.D	05/19/16	17:53	03:22	Blank Spike
OP93998A-MB1	4P16354.D	05/19/16	20:54	06:23	Method Blank
OP93998A-MS	4P16356.D	05/19/16	21:54	07:23	Matrix Spike
OP93998A-MSD	4P16357.D	05/19/16	22:24	07:53	Matrix Spike Duplicate
ZZZZZZ	4P16360.D	05/19/16	23:54	09:23	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4P867-DFTPP
Lab File ID: 4P16366.D
Instrument ID: GCMS4P
Injection Date: 05/20/16
Injection Time: 09:29

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	79510	39.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	91799	46.0		Pass
70	Less than 2.0% of mass 69	39	0.02	(0.04) [a]	Pass
127	40.0 - 60.0% of mass 198	97344	48.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	199674	100.0		Pass
199	5.0 - 9.0% of mass 198	13231	6.63		Pass
275	10.0 - 30.0% of mass 198	39426	19.7		Pass
365	1.0 - 100.0% of mass 198	3394	1.70		Pass
441	Present, but less than mass 443	16146	8.09	(59.0) [b]	Pass
442	40.0 - 100.0% of mass 198	139666	69.9		Pass
443	17.0 - 23.0% of mass 442	27364	13.7	(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
E4P867-CC863	4P16367.D	05/20/16	09:44	00:15	Continuing cal .5
OP94049A-MB1	4P16368.D	05/20/16	10:21	00:52	Method Blank
OP94049A-BS12	4P16369.D	05/20/16	10:51	01:22	Blank Spike
JC20314-1	4P16370.D	05/20/16	11:21	01:52	RA9(5-6)
JC20314-3	4P16371.D	05/20/16	11:51	02:22	BR4(4.5-5.5)
ZZZZZZ	4P16372.D	05/20/16	12:21	02:52	(unrelated sample)
OP93998A-BS12	4P16390.D	05/20/16	12:51	03:22	Blank Spike
ZZZZZZ	4P16373.D	05/20/16	13:21	03:52	(unrelated sample)
ZZZZZZ	4P16374.D	05/20/16	13:51	04:22	(unrelated sample)
ZZZZZZ	4P16375.D	05/20/16	14:20	04:51	(unrelated sample)
ZZZZZZ	4P16376.D	05/20/16	14:50	05:21	(unrelated sample)
ZZZZZZ	4P16377.D	05/20/16	15:20	05:51	(unrelated sample)
JC20147-5	4P16379.D	05/20/16	16:20	06:51	(used for QC only; not part of job JC20314)
ZZZZZZ	4P16380.D	05/20/16	19:51	10:22	(unrelated sample)
ZZZZZZ	4P16381.D	05/20/16	20:21	10:52	(unrelated sample)
ZZZZZZ	4P16382.D	05/20/16	20:51	11:22	(unrelated sample)
ZZZZZZ	4P16383.D	05/20/16	21:21	11:52	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC20314
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: JC20314
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: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EZ5530-DFTPP
Lab File ID: Z110697.D
Instrument ID: GCMSZ
Injection Date: 05/16/16
Injection Time: 10:58

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	49566	34.4		Pass
68	Less than 2.0% of mass 69	523	0.36	(0.75) [a]	Pass
69	Mass 69 relative abundance	69681	48.4		Pass
70	Less than 2.0% of mass 69	347	0.24	(0.50) [a]	Pass
127	40.0 - 60.0% of mass 198	72782	50.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	143978	100.0		Pass
199	5.0 - 9.0% of mass 198	9128	6.34		Pass
275	10.0 - 30.0% of mass 198	37930	26.3		Pass
365	1.0 - 100.0% of mass 198	4831	3.36		Pass
441	Present, but less than mass 443	19240	13.4	(76.4) [b]	Pass
442	40.0 - 100.0% of mass 198	132352	91.9		Pass
443	17.0 - 23.0% of mass 442	25170	17.5	(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
EZ5530-CC5485	Z110698.D	05/16/16	11:13	00:15	Continuing cal 50
EZ5530-CC5486	Z110699.D	05/16/16	11:42	00:44	Continuing cal 50
OP93924-BS1	Z110701A.D	05/16/16	12:46	01:48	Blank Spike
OP93924-BSD	Z110702.D	05/16/16	13:15	02:17	Blank Spike Duplicate
OP93924-MB1	Z110703.D	05/16/16	13:44	02:46	Method Blank
OP93835-MB1	Z110706.D	05/16/16	14:13	03:15	Method Blank
JC20314-2	Z110704.D	05/16/16	14:42	03:44	EB051316
ZZZZZZ	Z110707.D	05/16/16	15:40	04:42	(unrelated sample)
ZZZZZZ	Z110708.D	05/16/16	16:09	05:11	(unrelated sample)
ZZZZZZ	Z110709.D	05/16/16	16:38	05:40	(unrelated sample)
ZZZZZZ	Z110710.D	05/16/16	17:07	06:09	(unrelated sample)
ZZZZZZ	Z110711.D	05/16/16	17:36	06:38	(unrelated sample)
ZZZZZZ	Z110712.D	05/16/16	18:05	07:07	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EZ5533-DFTPP
Lab File ID: Z110736.D
Instrument ID: GCMSZ
Injection Date: 05/17/16
Injection Time: 16:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	37322	36.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	51066	49.5		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	54952	53.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	103253	100.0		Pass
199	5.0 - 9.0% of mass 198	7138	6.91		Pass
275	10.0 - 30.0% of mass 198	27598	26.7		Pass
365	1.0 - 100.0% of mass 198	3275	3.17		Pass
441	Present, but less than mass 443	11504	11.1	(86.0) [b]	Pass
442	40.0 - 100.0% of mass 198	69957	67.8		Pass
443	17.0 - 23.0% of mass 442	13382	13.0	(19.1) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ5533-ICC5533	Z110737.D	05/17/16	17:11	00:27	Initial cal 50
EZ5533-IC5533	Z110738.D	05/17/16	17:54	01:10	Initial cal 25
EZ5533-IC5533	Z110739.D	05/17/16	18:47	02:03	Initial cal 1
EZ5533-IC5533	Z110740.D	05/17/16	19:16	02:32	Initial cal 2
EZ5533-IC5533	Z110741.D	05/17/16	19:45	03:01	Initial cal 5
EZ5533-IC5533	Z110742.D	05/17/16	20:14	03:30	Initial cal 10
EZ5533-IC5533	Z110743.D	05/17/16	20:44	04:00	Initial cal 100
EZ5533-IC5533	Z110744.D	05/17/16	21:13	04:29	Initial cal 80

Instrument Performance Check (DFTPP)

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EZ5534-DFTPP
Lab File ID: Z110745.D
Instrument ID: GCMSZ
Injection Date: 05/17/16
Injection Time: 22:38

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	36533	35.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	48266	47.4		Pass
70	Less than 2.0% of mass 69	478	0.47	(0.99) [a]	Pass
127	40.0 - 60.0% of mass 198	54108	53.1		Pass
197	Less than 1.0% of mass 198	156	0.15		Pass
198	Base peak, 100% relative abundance	101906	100.0		Pass
199	5.0 - 9.0% of mass 198	7122	6.99		Pass
275	10.0 - 30.0% of mass 198	27206	26.7		Pass
365	1.0 - 100.0% of mass 198	3615	3.55		Pass
441	Present, but less than mass 443	11332	11.1	(84.5) [b]	Pass
442	40.0 - 100.0% of mass 198	70888	69.6		Pass
443	17.0 - 23.0% of mass 442	13417	13.2	(18.9) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ5534-ICC5534	Z110746.D	05/17/16	22:56	00:18	Initial cal 50
EZ5534-IC5534	Z110747.D	05/17/16	23:25	00:47	Initial cal 25
EZ5534-IC5534	Z110748.D	05/17/16	23:54	01:16	Initial cal 1
EZ5534-IC5534	Z110749.D	05/18/16	00:24	01:46	Initial cal 2
EZ5534-IC5534	Z110750.D	05/18/16	00:53	02:15	Initial cal 5
EZ5534-IC5534	Z110751.D	05/18/16	01:22	02:44	Initial cal 10
EZ5534-IC5534	Z110752.D	05/18/16	01:51	03:13	Initial cal 100
EZ5534-IC5534	Z110753.D	05/18/16	02:20	03:42	Initial cal 80

Instrument Performance Check (DFTPP)

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EZ5535-DFTPP
Lab File ID: Z110754.D
Instrument ID: GCMSZ
Injection Date: 05/18/16
Injection Time: 08:38

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	23680	33.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	31692	44.9		Pass
70	Less than 2.0% of mass 69	384	0.54	(1.21) [a]	Pass
127	40.0 - 60.0% of mass 198	36039	51.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	70562	100.0		Pass
199	5.0 - 9.0% of mass 198	4556	6.46		Pass
275	10.0 - 30.0% of mass 198	19456	27.6		Pass
365	1.0 - 100.0% of mass 198	2354	3.34		Pass
441	Present, but less than mass 443	8279	11.7	(83.3) [b]	Pass
442	40.0 - 100.0% of mass 198	50381	71.4		Pass
443	17.0 - 23.0% of mass 442	9940	14.1	(19.7) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ5535-ICV5533	Z110755B.D	05/18/16	10:17	01:39	Initial cal verification 50
EZ5535-ICV5533	Z110756A.D	05/18/16	10:46	02:08	Initial cal verification 50
EZ5535-ICV5533	Z110757A.D	05/18/16	11:16	02:38	Initial cal verification 50
EZ5535-ICV5534	Z110758A.D	05/18/16	11:46	03:08	Initial cal verification 50
EZ5535-ICV5533	Z110758.D	05/18/16	11:46	03:08	Initial cal verification 50
EZ5535-ICV5533	Z110759.D	05/18/16	12:15	03:37	Initial cal verification 50
EZ5535-ICV5534	Z110759A.D	05/18/16	12:15	03:37	Initial cal verification 50
EZ5535-ICV5534	Z110760.D	05/18/16	12:45	04:07	Initial cal verification 50
EZ5535-ICV5534	Z110761.D	05/18/16	13:15	04:37	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EZ5537-DFTPP
Lab File ID: Z110787.D
Instrument ID: GCMSZ
Injection Date: 05/19/16
Injection Time: 08:42

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	34035	36.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	47077	50.0		Pass
70	Less than 2.0% of mass 69	216	0.23	(0.46) [a]	Pass
127	40.0 - 60.0% of mass 198	50089	53.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	94122	100.0		Pass
199	5.0 - 9.0% of mass 198	6730	7.15		Pass
275	10.0 - 30.0% of mass 198	26121	27.8		Pass
365	1.0 - 100.0% of mass 198	3206	3.41		Pass
441	Present, but less than mass 443	10619	11.3	(78.9) [b]	Pass
442	40.0 - 100.0% of mass 198	66896	71.1		Pass
443	17.0 - 23.0% of mass 442	13453	14.3	(20.1) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ5537-CC5533	Z110788.D	05/19/16	08:56	00:14	Continuing cal 25
EZ5537-CC5534	Z110789.D	05/19/16	09:26	00:44	Continuing cal 25
OP93998-MB1	Z110790.D	05/19/16	09:56	01:14	Method Blank
OP93998-BS1	Z110791.D	05/19/16	10:25	01:43	Blank Spike
ZZZZZZ	Z110792.D	05/19/16	10:55	02:13	(unrelated sample)
ZZZZZZ	Z110793.D	05/19/16	11:25	02:43	(unrelated sample)
ZZZZZZ	Z110794.D	05/19/16	11:54	03:12	(unrelated sample)
ZZZZZZ	Z110796.D	05/19/16	12:54	04:12	(unrelated sample)
ZZZZZZ	Z110797.D	05/19/16	13:24	04:42	(unrelated sample)
ZZZZZZ	Z110798.D	05/19/16	13:54	05:12	(unrelated sample)
JC20218-17A	Z110799.D	05/19/16	14:24	05:42	(used for QC only; not part of job JC20314)
ZZZZZZ	Z110800.D	05/19/16	14:54	06:12	(unrelated sample)
OP93998-MS	Z110801.D	05/19/16	15:23	06:41	Matrix Spike
OP93998-MSD	Z110802.D	05/19/16	15:53	07:11	Matrix Spike Duplicate
ZZZZZZ	Z110803.D	05/19/16	16:23	07:41	(unrelated sample)
ZZZZZZ	Z110804.D	05/19/16	16:53	08:11	(unrelated sample)
ZZZZZZ	Z110805.D	05/19/16	17:23	08:41	(unrelated sample)
ZZZZZZ	Z110806.D	05/19/16	17:53	09:11	(unrelated sample)
ZZZZZZ	Z110807.D	05/19/16	18:23	09:41	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	EZ5537-DFTPP	**Injection Date:**	05/19/16
Lab File ID:	Z110787.D	**Injection Time:**	08:42
Instrument ID:	GCMSZ		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	Z110808.D	05/19/16	18:53	10:11	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EZ5538-DFTPP
Lab File ID: Z110815.D
Instrument ID: GCMSZ
Injection Date: 05/20/16
Injection Time: 08:13

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	20676	34.2		Pass
68	Less than 2.0% of mass 69	55	0.09	(0.19) [a]	Pass
69	Mass 69 relative abundance	28246	46.7		Pass
70	Less than 2.0% of mass 69	238	0.39	(0.84) [a]	Pass
127	40.0 - 60.0% of mass 198	30237	50.0		Pass
197	Less than 1.0% of mass 198	347	0.57		Pass
198	Base peak, 100% relative abundance	60518	100.0		Pass
199	5.0 - 9.0% of mass 198	4046	6.69		Pass
275	10.0 - 30.0% of mass 198	17332	28.6		Pass
365	1.0 - 100.0% of mass 198	2262	3.74		Pass
441	Present, but less than mass 443	6867	11.3	(79.6) [b]	Pass
442	40.0 - 100.0% of mass 198	43069	71.2		Pass
443	17.0 - 23.0% of mass 442	8632	14.3	(20.0) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EZ5538-CC5533	Z110816.D	05/20/16	08:27	00:14	Continuing cal 50
EZ5538-CC5534	Z110817.D	05/20/16	08:57	00:44	Continuing cal 50
OP94056-MB1	Z110818.D	05/20/16	09:26	01:13	Method Blank
OP94056-BS1	Z110819.D	05/20/16	09:56	01:43	Blank Spike
JC20314-1	Z110820.D	05/20/16	10:25	02:12	RA9(5-6)
JC20314-3	Z110821.D	05/20/16	10:55	02:42	BR4(4.5-5.5)
ZZZZZZ	Z110823.D	05/20/16	11:54	03:41	(unrelated sample)
ZZZZZZ	Z110824.D	05/20/16	12:24	04:11	(unrelated sample)
ZZZZZZ	Z110825.D	05/20/16	12:54	04:41	(unrelated sample)
ZZZZZZ	Z110826.D	05/20/16	13:24	05:11	(unrelated sample)
ZZZZZZ	Z110840.D	05/20/16	13:53	05:40	(unrelated sample)
OP93751-MB1	Z110844A.D	05/20/16	17:39	09:26	Method Blank
ZZZZZZ	Z110828A.D	05/20/16	18:09	09:56	(unrelated sample)
ZZZZZZ	Z110829.D	05/20/16	18:39	10:26	(unrelated sample)
ZZZZZZ	Z110830.D	05/20/16	19:09	10:56	(unrelated sample)
ZZZZZZ	Z110831.D	05/20/16	19:39	11:26	(unrelated sample)
ZZZZZZ	Z110832.D	05/20/16	20:09	11:56	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3M2885-CC2855	**Injection Date:**	05/16/16
Lab File ID:	3M61347.D	**Injection Time:**	09:42
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	615904	10.39	943018	13.37	1676777	17.59	1447214	22.21
Upper Limit [a]	1231808	10.89	1886036	13.87	3353554	18.09	2894428	22.71
Lower Limit [b]	307952	9.89	471509	12.87	838389	17.09	723607	21.71

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93903A-MB1	560791	10.39	837378	13.37	1424109	17.59	1119958	22.21
OP93903A-BS12	590534	10.39	871580	13.37	1445494	17.59	1175406	22.20
ZZZZZZ	700978	10.39	1057695	13.37	1754416	17.59	1437107	22.21
ZZZZZZ	625052	10.39	911172	13.37	1553041	17.59	1218553	22.21
ZZZZZZ	650221	10.39	939408	13.37	1573063	17.59	1218547	22.21
ZZZZZZ	701846	10.39	956018	13.37	1650804	17.59	1238937	22.21
ZZZZZZ	686432	10.39	956902	13.37	1659119	17.61	1286135	22.21
ZZZZZZ	628838	10.39	861360	13.37	1467619	17.61	1136729	22.21
ZZZZZZ	1021929	10.39	962549	13.37	1626725	17.61	1251375	22.23
C45791-1	816353	10.39	1052316	13.39	1644398	17.62	1325395	22.24
ZZZZZZ	687194	10.41	949519	13.39	1594655	17.62	1293536	22.24
ZZZZZZ	646710	10.41	906340	13.41	1449059	17.62	1208028	22.24
ZZZZZZ	767156	10.41	1020944	13.41	1585976	17.62	1269807	22.24
ZZZZZZ	727030	10.41	929726	13.41	1495784	17.62	1250709	22.24
OP93903A-MS	847042	10.41	990778	13.41	1563295	17.64	1253392	22.26
OP93903A-MSD	643644	10.41	905665	13.41	1485072	17.65	1192798	22.27
OP93924A-BS12	434278	10.41	620636	13.41	1058428	17.65	898060	22.26
OP93924A-MB1	427371	10.41	649956	13.41	1036511	17.65	865509	22.26
JC20314-2	501042	10.41	721747	13.41	1141384	17.64	933713	22.26

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: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4P866-CC863	**Injection Date:**	05/19/16
Lab File ID:	4P16347.D	**Injection Time:**	14:43
Instrument ID:	GCMS4P	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	251208	7.88	293043	10.81	395328	15.04	258245	19.65
Upper Limit [a]	502416	8.38	586086	11.31	790656	15.54	516490	20.15
Lower Limit [b]	125604	7.38	146522	10.31	197664	14.54	129123	19.15

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP94042A-MB1	249611	7.88	253928	10.81	372504	15.04	206623	19.66
OP94042A-BS12	215700	7.88	270387	10.81	344730	15.04	219111	19.66
OP93998A-MB1	198469	7.88	287548	10.81	330261	15.04	167704	19.66
OP93998A-MS	226336	7.88	324976	10.81	425932	15.04	202597	19.66
OP93998A-MSD	197487	7.88	336158	10.81	407588	15.02	195742	19.66
ZZZZZZ	235202	7.88	288535	10.81	384302	15.04	265028	19.66

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: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4P867-CC863	**Injection Date:**	05/20/16
Lab File ID:	4P16367.D	**Injection Time:**	09:44
Instrument ID:	GCMS4P	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	149395	7.86	178338	10.81	317617	15.02	170370	19.65
Upper Limit [a]	298790	8.36	356676	11.31	635234	15.52	340740	20.15
Lower Limit [b]	74698	7.36	89169	10.31	158809	14.52	85185	19.15

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP94049A-MB1	141317	7.86	131387	10.81	246488	15.02	135452	19.64
OP94049A-BS12	161210	7.86	153633	10.81	274348	15.02	169398	19.64
JC20314-1	171612	7.86	161585	10.81	334734	15.02	157312	19.65
JC20314-3	150481	7.88	271791	10.81	320309	15.02	217419	19.65
ZZZZZZ	182999	7.86	266210	10.81	367741	15.02	254718	19.65
OP93998A-BS12	153652	7.86	227774	10.81	317497	15.02	200725	19.65
ZZZZZZ	128732	7.86	222788	10.81	320521	15.02	214452	19.65
ZZZZZZ	153471	7.86	230885	10.81	320347	15.02	231632	19.65
ZZZZZZ	114143	7.86	193961	10.81	275330	15.02	184568	19.65
ZZZZZZ	111466	7.86	183219	10.81	249023	15.02	162400	19.65
ZZZZZZ	106717	7.86	162965	10.81	236575	15.02	153304	19.65
JC20147-5	118482	7.88	221820	10.81	266693	15.02	165466	19.65
ZZZZZZ	113330	7.86	199891	10.81	288413	15.02	167938	19.65
ZZZZZZ	115622	7.86	172932	10.81	267684	15.02	158468	19.65
ZZZZZZ	125709	7.86	180412	10.81	268289	15.02	156588	19.65
ZZZZZZ	118853	7.86	177377	10.81	265747	15.02	157961	19.65

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: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EZ5530-CC5485	**Injection Date:**	05/16/16
Lab File ID:	Z110698.D	**Injection Time:**	11:13
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	179144	4.21	648434	5.13	414917	6.40	717853	8.01	765672	12.91	648921	15.89
Upper Limit [a]	358288	4.71	1296868	5.63	829834	6.90	1435706	8.51	1531344	13.41	1297842	16.39
Lower Limit [b]	89572	3.71	324217	4.63	207459	5.90	358927	7.51	382836	12.41	324461	15.39

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
OP93924-BS1	187955	4.21	664307	5.13	429924	6.40	684265	8.00	697173	12.91	642393	15.90
OP93924-BSD	173153	4.21	654357	5.13	429619	6.40	718658	8.00	721151	12.91	712301	15.89
OP93924-MB1	173783	4.20	633403	5.13	390478	6.40	693726	8.00	713666	12.90	714001	15.89
OP93835-MB1	208849	4.20	830957	5.13	514406	6.40	860170	8.00	894278	12.91	897668	15.89
JC20314-2 [c]	188692	4.21	703606	5.13	447371	6.40	718255	8.00	704029	12.90	747674	15.89
ZZZZZZ	170605	4.21	660985	5.13	421958	6.40	717240	8.00	794901	12.90	667915	15.89
ZZZZZZ	159056	4.21	605342	5.13	388475	6.40	664727	8.00	680525	12.90	597356	15.89
ZZZZZZ	168493	4.21	694680	5.13	422426	6.40	740292	8.00	689250	12.92	634183	15.91
ZZZZZZ	177269	4.21	690901	5.13	429580	6.40	765564	8.01	666844	12.93	580281	15.92
ZZZZZZ	181810	4.21	681014	5.13	456826	6.40	731455	8.01	704088	12.92	613083	15.91
ZZZZZZ	186743	4.21	733182	5.13	451045	6.40	715425	8.01	733265	12.93	650365	15.91

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

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
(c) There is compound in BS was outside in house QC limits. There's no sample left to re-extract.

Semivolatile Internal Standard Area Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EZ5537-CC5533	**Injection Date:**	05/19/16
Lab File ID:	Z110788.D	**Injection Time:**	08:56
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	162495	4.65	614256	5.57	363287	6.97	635270	8.83	634243	14.07	571648	17.10
Upper Limit [a]	324990	5.15	1228512	6.07	726574	7.47	1270540	9.33	1268486	14.57	1143296	17.60
Lower Limit [b]	81248	4.15	307128	5.07	181644	6.47	317635	8.33	317122	13.57	285824	16.60

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
OP93998-MB1	148590	4.65	559856	5.57	320175	6.97	537366	8.83	498296	14.06	434368	17.08
OP93998-BS1	165672	4.65	605799	5.57	360674	6.97	604615	8.83	571020	14.07	506433	17.09
ZZZZZZ	166341	4.65	627768	5.57	356877	6.97	583338	8.83	566443	14.06	500853	17.09
ZZZZZZ	158748	4.65	601592	5.57	343644	6.97	568643	8.83	548789	14.06	486391	17.08
ZZZZZZ	153540	4.65	585658	5.57	327428	6.97	557358	8.83	524346	14.07	482604	17.11
ZZZZZZ	162922	4.65	613842	5.57	351334	6.97	586507	8.83	516096	14.07	458680	17.10
ZZZZZZ	178926	4.65	676274	5.57	381617	6.97	648089	8.83	567384	14.07	482557	17.10
ZZZZZZ	159108	4.65	600588	5.57	344442	6.97	569828	8.83	513672	14.07	451482	17.10
JC20218-17A	174606	4.65	647051	5.57	374219	6.97	618505	8.83	555386	14.07	492935	17.10
ZZZZZZ	173375	4.65	652557	5.57	369568	6.97	615801	8.83	553225	14.07	493269	17.10
OP93998-MS	168632	4.65	625164	5.57	364646	6.97	616644	8.83	555041	14.07	501306	17.10
OP93998-MSD	164049	4.65	601981	5.57	345677	6.97	585127	8.83	534968	14.08	484976	17.10
ZZZZZZ	164506	4.67	558361	5.58	375375	6.97	629316	8.83	562982	14.07	503673	17.10
ZZZZZZ	169138	4.65	614142	5.57	326205	6.97	550763	8.84	555701	14.09	516874	17.12
ZZZZZZ	171898	4.65	619792	5.57	332039	6.97	561738	8.84	546422	14.09	519601	17.13
ZZZZZZ	166897	4.65	605388	5.57	326800	6.98	549778	8.85	529413	14.11	504268	17.15
ZZZZZZ	165918	4.65	556923	5.57	314585	6.99	541881	8.86	567492	14.15	545334	17.22
ZZZZZZ	179002	4.66	646808	5.58	345761	6.98	578728	8.86	553981	14.13	529374	17.17

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: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EZ5538-CC5533	**Injection Date:**	05/20/16
Lab File ID:	Z110816.D	**Injection Time:**	08:27
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	158244	4.65	590249	5.57	345179	6.98	593772	8.84	578906	14.09	517410	17.12
Upper Limit [a]	316488	5.15	1180498	6.07	690358	7.48	1187544	9.34	1157812	14.59	1034820	17.62
Lower Limit [b]	79122	4.15	295125	5.07	172590	6.48	296886	8.34	289453	13.59	258705	16.62

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
OP94056-MB1	167465	4.65	629978	5.57	359640	6.97	613950	8.84	570167	14.08	486002	17.11
OP94056-BS1	164277	4.65	631685	5.57	361923	6.97	612376	8.84	584255	14.08	505037	17.11
JC20314-1	175510	4.65	679100	5.57	408298	6.97	697423	8.84	672126	14.08	590780	17.11
JC20314-3	158615	4.65	562138	5.57	341739	6.98	645485	8.84	616150	14.08	544543	17.11
ZZZZZZ	156039	4.66	591299	5.57	335481	6.97	576417	8.84	554347	14.08	486295	17.11
ZZZZZZ	175985	4.65	680466	5.57	388795	6.97	655122	8.83	609641	14.08	517165	17.11
ZZZZZZ	166206	4.65	629371	5.57	354762	6.97	587318	8.83	547918	14.07	462309	17.11
ZZZZZZ	159749	4.65	606170	5.57	340130	6.97	550267	8.83	505680	14.07	437228	17.11
ZZZZZZ	140942	4.65	539478	5.57	299459	6.97	473322	8.84	448573	14.09	364676	17.13
OP93751-MB1	192726	4.65	742464	5.57	420976	6.97	690575	8.84	607100	14.09	552755	17.12
ZZZZZZ	183117	4.65	676767	5.57	390215	6.97	630587	8.84	574729	14.09	516934	17.12
ZZZZZZ	195877	4.65	706524	5.57	388194	6.98	647313	8.85	624303	14.09	584853	17.13
ZZZZZZ	181907	4.65	690998	5.57	373885	6.98	612389	8.84	571637	14.09	531299	17.13
ZZZZZZ	170287	4.65	624482	5.57	347482	6.98	584617	8.84	553663	14.10	511070	17.14
ZZZZZZ	164674	4.65	629987	5.57	362919	6.98	594282	8.84	548385	14.09	492286	17.13

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: JC20314
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
JC20314-2	Z110704.D	38	23	62	76	68	83
OP93924-BS1	Z110701A.D	48	53	68	78	65	88
OP93924-BSD	Z110702.D	51	45	63	81	61	69
OP93924-MB1	Z110703.D	46	39	62	79	70	79

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

Semivolatile Surrogate Recovery Summary

Job Number: JC20314
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
JC20314-1	Z110820.D	79	81	82	83	81	79
JC20314-3	Z110821.D	77	75	75	79	76	76
OP93998-BS1	Z110791.D	82	80	92	85	85	89
OP93998-MB1	Z110790.D	91	91	97	95	99	97
OP93998-MS	Z110801.D	75	76	85	80	81	82
OP93998-MSD	Z110802.D	70	70	81	74	77	78

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

Semivolatile Surrogate Recovery Summary

Job Number: JC20314
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
JC20314-2	3M61366.D	63	74	93
OP93924A-BS12	3M61364.D	76	79	93
OP93924A-MB1	3M61365.D	75	72	93

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

Semivolatile Surrogate Recovery Summary

Job Number: JC20314
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
JC20314-1	4P16370.D	97	83	88
JC20314-3	4P16371.D	116	35	85
OP93998A-BS12	4P16390.D	134	55	99
OP93998A-MB1	4P16354.D	99	48	106
OP93998A-MS	4P16356.D	82	44	86
OP93998A-MSD	4P16357.D	105	39	86

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

Initial Calibration Summary

Job Number: JC20314
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: JC20314 **Sample:** E3M2855-ICC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60763A.D
Project: BMSMC, Building 5 Area, PR

```
22)  Hexachlorobenzene
           0.191 0.190 0.190 0.190 0.186 0.186 0.187 0.186 0.196        0.189    1.67
23)  Pentachlorophenol
           0.133 0.135 0.123 0.099 0.084 0.077             0.134        0.112   22.28
            ---- Quadratic regression ----  Coefficient =  0.9999
              Response Ratio = -0.00592 + 0.13565 *A + -0.00012 *A^2

24)  Phenanthrene
           0.997 0.998 0.996 0.962 0.938 0.921 0.981 1.013 1.014        0.980    3.36
25)  Anthracene
           0.976 0.941 0.912 0.863 0.787 0.773 0.758 0.766 1.007        0.865   11.30
26)  Fluoranthene
           1.111 1.150 1.092 1.112 1.098 1.149 1.440 1.808 1.123        1.231   19.61
27)  Pyrene
           1.134 1.180 1.158 1.109 1.065 1.078 1.108 1.287 1.178        1.144    5.89
28)  Terphenyl-d14
           0.578 0.563 0.590 0.618 0.600 0.611             0.501        0.580    6.83
29)  Benzo[a]anthracene
           1.009 1.068 1.029 0.987 0.960 1.043 1.216 1.538 1.019        1.097   16.49
30)  Chrysene
           1.077 1.074 1.014 1.032 1.014 1.069             1.077        1.051    2.84

31) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
32)  Benzo[b]fluoranthene
           1.285 1.344 1.281 1.288 1.257 1.317 1.607       1.269        1.331    8.62
33)  Benzo[k]fluoranthene
           1.212 1.238 1.139 1.169 1.261 1.246 1.449 1.113 1.259        1.232    7.92
34)  Benzo[a]pyrene
           1.170 1.217 1.162 1.160 1.081 1.465 1.220 1.504 1.177        1.240   11.69
35)  Indeno[1,2,3-cd]pyrene
           1.291 1.342 1.265 1.286 1.256 1.194 1.201 1.184 1.320        1.260    4.48
36)  Dibenz[a,h]anthracene
           1.076 1.073 0.976 1.048 1.030 0.956 0.902 1.177 1.111        1.039    8.10
37)  Benzo[g,h,i]perylene
           1.122 1.143 1.083 1.090 1.091 1.073 1.041 1.074 1.135        1.095    3.02
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M3M2855SIM.M        Fri Apr 22 09:08:14 2016   RPT1
```

Initial Calibration Verification

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3M2855-ICV2855
Lab FileID: 3M60772.D

Evaluate Continuing Calibration Report

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

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

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

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

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

Initial Calibration Verification

Job Number: JC20314 **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: JC20314
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: JC20314 **Sample:** E3M2885-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M61347.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2885\3m61347.D          Vial: 2
Acq On    : 16 May 2016   9:42 am                    Operator: ashleyd
Sample    : cc2855-0.5                               Inst    : MS3M
Misc      : op93756a,e3m2885                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2855SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu May 12 12:34:26 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	172	0.02	10.39
2	t	1,4-dioxane	0.207	0.195	5.8	158	0.01	2.11
3	S	2-Fluorophenol	0.500	0.508	-1.6	168	0.02	4.34
4	S	Phenol-d5	0.828	0.825	0.4	162	0.02	5.95
5		Phenol	0.893	0.864	3.2	159	0.02	5.96
6	t	bis(2-Chloroethyl)ether	0.675	0.602	10.8	145	0.01	6.06
7	S	Nitrobenzene-d5	0.770	0.757	1.7	156	0.00	7.49
8	t	Nitrobenzene	0.836	0.770	7.9	158	0.02	7.53
9	t	Naphthalene	2.223	2.238	-0.7	175	0.02	8.89
10	t	Hexachlorobutadiene	0.387	0.414	-7.0	176	0.00	9.17
11	t	2-Methylnaphthalene	1.158	1.312	-13.3	199	0.02	10.26
12	t	1-Methylnaphthalene	1.559	1.501	3.7	185	0.00	10.45
13		Hexachlorocyclopentadiene	0.308	0.294	4.5	156	0.00	10.59
14	I	Fluorene-d10	1.000	1.000	0.0	165	0.00	13.37
15	S	2-Fluorobiphenyl	1.099	1.163	-5.8	172	0.02	11.05
16	t	Acenaphthylene	1.385	1.421	-2.6	158	0.01	12.03
17	t	Acenaphthene	0.925	0.943	-1.9	164	0.01	12.38
		----------	True	Calc.	% Drift	----------		
18	t	4,6-dinitro-2-methylpheno	2.500	2.523	-0.9	215	0.02	13.62
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	1.110	1.169	-5.3	168	0.02	13.43
20	S	2,4,6-Tribromophenol	0.125	0.124	0.8	153	0.02	13.94
21	I	Fluoranthene-d10	1.000	1.000	0.0	173	0.00	17.59
22	t	Hexachlorobenzene	0.189	0.182	3.7	165	0.00	14.52
		----------	True	Calc.	% Drift	----------		
23	t	Pentachlorophenol	2.500	1.852	25.9#	128	0.00	14.96
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	0.980	0.935	4.6	162	0.00	15.34
25	t	Anthracene	0.865	0.854	1.3	162	0.00	15.44
26	t	Fluoranthene	1.231	1.059	14.0	167	0.00	17.62
27	t	Pyrene	1.144	1.052	8.0	157	0.02	18.02
28	S	Terphenyl-d14	0.580	0.603	-4.0	176	0.00	18.41
29	t	Benzo[a]anthracene	1.097	1.015	7.5	170	0.02	20.11
30	t	Chrysene	1.051	1.019	3.0	173	0.02	20.17
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	180	0.02	22.21

Continuing Calibration Summary

Job Number: JC20314 **Sample:** E3M2885-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M61347.D
Project: BMSMC, Building 5 Area, PR

32	t	Benzo[b]fluoranthene	1.331	1.249	6.2	176	0.00	21.78
33	t	Benzo[k]fluoranthene	1.232	1.172	4.9	185	0.02	21.83
34	t	Benzo[a]pyrene	1.240	1.169	5.7	181	0.00	22.23
35	t	Indeno[1,2,3-cd]pyrene	1.260	1.410	-11.9	201#	0.00	23.69
36	t	Dibenz[a,h]anthracene	1.039	1.028	1.1	190	0.00	23.73
37	t	Benzo[g,h,i]perylene	1.095	1.188	-8.5	198	0.00	24.05

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m60764a.D M3M2855SIM.M Mon May 16 13:03:09 2016 RPT1

Initial Calibration Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4P863-ICC863
Lab FileID: 4P16323.D

Response Factor Report MS4P

Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri May 20 11:36:22 2016
Response via : Initial Calibration

Calibration Files
2.5 =4p16331.D 1.0 =4p16323.D 0.5 =4p16324.D 0.2 =4p16325.D
0.1 =4p16326.D 0.05=4p16327.D 0.02=4p16328.D 0.01=4p16329.D
5 =4p16330.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	0.261	0.236	0.271	0.259	0.280	0.283			0.216	0.258	9.38
3) 2-Fluorophenol	0.423	0.401	0.460	0.454	0.432	0.445	0.545		0.362	0.440	12.03
4) Phenol-d5	0.638	0.686	0.736	0.647	0.566	0.559	0.776		0.577	0.648	12.41
5) Phenol	0.862	0.823	0.890	0.822	0.745	0.749	0.668		0.619	0.772	12.26
6) bis(2-Chloroethyl)ether	0.523	0.515	0.534	0.531	0.522	0.553	0.749	0.728	0.447	0.567	17.94
7) Nitrobenzene-d5	0.628	0.482	0.529	0.507	0.525	0.556	0.488		0.535	0.531	8.67
8) Naphthalene	2.287	1.996	2.233	2.131	2.189	2.501	2.432		1.939	2.214	8.82
9) Hexachlorobutadiene	0.374	0.304	0.337	0.329	0.356	0.418	0.432	0.366	0.309	0.358	12.48
10) 2-Methylnaphthalene	1.286	1.199	1.234	1.166	1.119	1.114	1.172	1.047	1.222	1.173	6.17
11) 1-Methylnaphthalene	1.474	1.241	1.367	1.360	1.337	1.571	1.491		1.243	1.386	8.53
12) Hexachlorocyclopentadiene	0.302	0.197	0.173	0.133	0.098	0.101			0.264	0.181	43.56
---- Quadratic regression ---- Coefficient = 0.9933											
Response Ratio = -0.02137 + 0.32043 *A + -0.01829 *A^2											
13) I Fluorene-d10 ----------ISTD----------											
14) 2-Fluorobiphenyl	1.117	1.482	1.721	1.742	1.761	1.625	1.978			1.632	16.68
15) Acenaphthylene	1.615	1.755	1.829	1.557	1.465	1.178			1.816	1.602	14.45
16) Acenaphthene	1.134	1.059	1.198	1.106	1.072	1.103	1.295	1.198	0.991	1.129	8.01
17) Dibenzofuran	1.582	1.905	2.073	1.869	1.750	1.489			1.594	1.751	11.96
18) Fluorene	0.987	1.199	1.307	1.203	1.173	1.196	1.391		1.034	1.186	11.05
19) 4,6-dinitro-2-methylphenol	0.180	0.087	0.066	0.043	0.024				0.205	0.101	74.20
---- Quadratic regression ---- Coefficient = 0.9959											
Response Ratio = -0.04204 + 0.15145 *A + 0.00985 *A^2											
20) n-nitrosodiphenylamine											

```
          0.807 0.634 0.687 0.568 0.535                   0.728        0.660   15.43
21)  1,2-Diphenylhydrazine
          1.180 1.093 1.055 0.741                         1.209        1.056   17.68
22)  2,4,6-Tribromophenol
          0.138 0.169 0.174 0.125                         0.128        0.147   15.73

23)     Fluoranthene-d10      ----------------ISTD---------------------
24)  Hexachlorobenzene
          0.279 0.268 0.297 0.235 0.248 0.259 0.400 0.322 0.262        0.285   17.62
25)  Pentachlorophenol
          0.130 0.105 0.084 0.045 0.037 0.028             0.141        0.081   56.51
           ---- Quadratic regression ----  Coefficient =  0.9994
             Response Ratio = -0.01531 + 0.11960 *A + 0.00390 *A^2

26)  Phenanthrene
          1.226 1.148 1.291 0.964 1.021 1.076 1.207 1.031 1.185        1.128    9.74
27)  Anthracene
          1.186 1.022 1.018 0.705 0.726                   1.208        0.978   22.31
28)  Fluoranthene
          1.323 1.187 1.346 1.144 1.253 1.388 1.725       1.220        1.323   13.76
29)  Pyrene
          1.236 1.033 1.087 1.032 0.842 0.861 0.909       1.194        1.024   14.33
30)  Terphenyl-d14
          0.559 0.558 0.623 0.530 0.500 0.451 0.490 0.325 0.483        0.502   16.73
31)  Benzo[a]anthracene
          0.688 0.551 0.518 0.500 0.326 0.338             0.787        0.530   31.91
           ---- Quadratic regression ----  Coefficient =  0.9997
             Response Ratio = -0.00735 + 0.58093 *A + 0.17083 *A^2

32)  Chrysene
          1.107 1.023 1.111 0.819 0.722 0.720 0.831       1.098        0.929   18.65

33) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
34)  Benzo[b]fluoranthene
          1.308 1.230 1.179 0.839 0.735                   1.518        1.135   25.99
           ---- Quadratic regression ----  Coefficient =  0.9999
             Response Ratio = -0.00739 + 1.14137 *A + 0.30490 *A^2

35)  Benzo[k]fluoranthene
          1.688 1.484 1.376 0.930 0.733                   1.734        1.324   30.85
           ---- Quadratic regression ----  Coefficient =  0.9998
             Response Ratio = -0.03696 + 1.69051 *A + 0.06019 *A^2

36)  Benzo[a]pyrene
          1.454 1.409 1.534 1.498 1.610 1.801             1.484        1.542    8.47
37)  Indeno[1,2,3-cd]pyrene
          1.376 1.359 1.237 0.859 0.782                   1.556        1.195   25.82
           ---- Quadratic regression ----  Coefficient =  0.9998
             Response Ratio = -0.00979 + 1.25902 *A + 0.24261 *A^2

38)  Dibenz[a,h]anthracene
          1.166 1.114 1.045 0.717 0.653 0.652             1.318        0.952   28.73
           ---- Quadratic regression ----  Coefficient =  0.9999
             Response Ratio = -0.00803 + 1.05310 *A + 0.21636 *A^2

39)  Benzo[g,h,i]perylene
          1.364 1.357 1.408 1.021 0.957                   1.442        1.258   16.81
-----------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###
```

Initial Calibration Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4P863-ICC863
Lab FileID: 4P16323.D

M4P863SIM.M Fri May 20 11:37:00 2016

Initial Calibration Verification

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4P863-ICV863
Lab FileID: 4P16332.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4P863\4p16332.D          Vial: 11
Acq On    : 18 May 2016   3:12 pm                   Operator: linseyk
Sample    : icv863-1                                Inst    : MS4P
Misc      : op93791,e4p863                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4P863SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu May 19 13:24:21 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	94	0.00	7.88
5	Phenol	0.772	0.738	4.4	84	0.00	3.84
	----------	AvgRF	CCRF	% Dev	----------		
13 I	Fluorene-d10	1.000	1.000	0.0	91	0.00	10.84
	----------	True	Calc.	% Drift	----------		
19	4,6-dinitro-2-methylpheno	5.000	3.507	29.9	83	0.00	11.06
23	Fluoranthene-d10	1.000	1.000	0.0	95	0.00	15.04
	----------	True	Calc.	% Drift	----------		
25 t	Pentachlorophenol	5.000	3.625	27.5	70	0.00	12.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p16323.D M4P863SIM.M Fri May 20 11:27:48 2016

Initial Calibration Verification

Job Number: JC20314 **Sample:** E4P863-ICV863
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4P16333.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4P863\4p16333.D          Vial: 12
Acq On    : 18 May 2016   3:41 pm                   Operator: linseyk
Sample    : icv863-1                                Inst    : MS4P
Misc      : op93791,e4p863                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4P863SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu May 19 13:24:21 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	110	0.00	7.88
6	t	bis(2-Chloroethyl)ether	0.567	0.562	0.9	120	0.00	3.96
8	t	Naphthalene	2.214	2.147	3.0	119	0.00	6.46
9	t	Hexachlorobutadiene	0.358	0.334	6.7	121	0.00	6.76
10	t	2-Methylnaphthalene	1.173	1.200	-2.3	110	0.00	7.77
		----------	AvgRF	CCRF	% Dev	----------		
13	I	Fluorene-d10	1.000	1.000	0.0	94	0.00	10.84
15	t	Acenaphthylene	1.602	1.847	-15.3	99	0.00	9.49
16	t	Acenaphthene	1.129	1.338	-18.5	119	0.00	9.85
17		Dibenzofuran	1.751	2.183	-24.7	108	0.00	10.20
18	t	Fluorene	1.186	1.305	-10.0	102	-0.02	10.86
		----------	AvgRF	CCRF	% Dev	----------		
20		n-nitrosodiphenylamine	0.660	0.618	6.4	92	0.00	11.21
21		1,2-Diphenylhydrazine	1.056	1.001	5.2	86	0.00	11.25
23		Fluoranthene-d10	1.000	1.000	0.0	93	0.00	15.04
24	t	Hexachlorobenzene	0.285	0.308	-8.1	107	0.00	11.97
		----------	AvgRF	CCRF	% Dev	----------		
26	t	Phenanthrene	1.128	1.243	-10.2	101	0.00	12.75
27	t	Anthracene	1.028	0.938	8.8	85	0.00	12.85
28	t	Fluoranthene	1.323	1.416	-7.0	111	0.00	15.07
29	t	Pyrene	1.024	1.203	-17.5	109	0.00	15.47
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[a]anthracene	1.000	0.826	17.4	81	0.00	17.58
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Chrysene	0.929	1.048	-12.8	95	0.00	17.64
33	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	74	0.00	19.67
		----------	True	Calc.	% Drift	----------		
34	t	Benzo[b]fluoranthene	1.000	0.944	5.6	67	0.00	19.25
35	t	Benzo[k]fluoranthene	1.000	0.939	6.1	72	0.00	19.29
		----------	AvgRF	CCRF	% Dev	----------		
36	t	Benzo[a]pyrene	1.542	1.643	-6.5	86	0.00	19.70
		----------	True	Calc.	% Drift	----------		
37	t	Indeno[1,2,3-cd]pyrene	1.000	0.875	12.5	60	0.00	21.11
38	t	Dibenz[a,h]anthracene	1.000	0.904	9.6	64	0.00	21.16

Initial Calibration Verification

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4P863-ICV863
Lab FileID: 4P16333.D

```
            ----------------------- AvgRF   CCRF     % Dev   -------------
39 t   Benzo[g,h,i]perylene         1.258   1.344     -6.8   73   0.00   21.42
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range                SPCC's out = 0  CCC's out = 0
    4p16323.D  M4P863SIM.M       Fri May 20 11:27:50 2016
```

6.8.8

6

Initial Calibration Verification

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4P863-ICV863
Lab FileID: 4P16334.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4P863\4p16334.D          Vial: 13
Acq On    : 18 May 2016   4:12 pm                   Operator: linseyk
Sample    : icv863-1                                Inst    : MS4P
Misc      : op93791,e4p863                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4P863SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu May 19 13:24:21 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	148	0.00	7.88
2	t	1,4-Dioxane	0.258	0.270	-4.7	169	0.00	1.48
11	t	1-Methylnaphthalene	1.386	1.494	-7.8	178	0.00	7.95
		----------	True	Calc.	% Drift	----------		
12		Hexachlorocyclopentadiene	2.000	1.896	5.2	162	0.00	8.13

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p16323.D M4P863SIM.M Fri May 20 11:27:52 2016

Continuing Calibration Summary

Job Number: JC20314 **Sample:** E4P866-CC863
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4P16347.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4P866\4p16347.D          Vial: 2
Acq On    : 19 May 2016   2:43 pm                   Operator: linseyk
Sample    : cc863-1                                 Inst    : MS4P
Misc      : op93984a,e4p866                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4P863SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu May 19 13:24:21 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	94	0.00	7.88
2	t	1,4-Dioxane	0.258	0.159	38.4#	63	0.00	1.48
3	S	2-Fluorophenol	0.440	0.410	6.8	97	-0.01	2.68
4	S	Phenol-d5	0.648	0.680	-4.9	93	0.00	3.82
5		Phenol	0.772	0.696	9.8	80	0.00	3.84
6	t	bis(2-Chloroethyl)ether	0.567	0.605	-6.7	111	-0.02	3.94
7	S	Nitrobenzene-d5	0.531	0.460	13.4	90	-0.02	5.16
8	t	Naphthalene	2.214	1.808	18.3	86	0.00	6.46
9	t	Hexachlorobutadiene	0.358	0.297	17.0	92	-0.02	6.74
10	t	2-Methylnaphthalene	1.173	1.042	11.2	82	0.00	7.76
11	t	1-Methylnaphthalene	1.386	0.990	28.6#	75	0.00	7.95
		----------	True	Calc.	% Drift	----------		
12		Hexachlorocyclopentadiene	2.000	1.474	26.3#	90	-0.02	8.11
		----------	AvgRF	CCRF	% Dev	----------		
13	I	Fluorene-d10	1.000	1.000	0.0	114	-0.02	10.81
14	S	2-Fluorobiphenyl	1.632	1.030	36.9#	79	0.00	8.54
15	t	Acenaphthylene	1.602	1.474	8.0	95	0.00	9.48
16	t	Acenaphthene	1.129	0.879	22.1#	94	-0.02	9.83
17		Dibenzofuran	1.751	1.633	6.7	97	0.00	10.19
18	t	Fluorene	1.186	1.268	-6.9	120	-0.02	10.86
		----------	True	Calc.	% Drift	----------		
19		4,6-dinitro-2-methylpheno	5.000	3.206	35.9#	90	0.00	11.06
		----------	AvgRF	CCRF	% Dev	----------		
20		n-nitrosodiphenylamine	0.655	0.348	46.9#	62	0.00	11.21
21		1,2-Diphenylhydrazine	1.056	0.773	26.8#	80	0.00	11.25
22	S	2,4,6-Tribromophenol	0.147	0.135	8.2	90	0.00	11.36
23		Fluoranthene-d10	1.000	1.000	0.0	92	0.00	15.04
24	t	Hexachlorobenzene	0.285	0.257	9.8	88	0.00	11.97
		----------	True	Calc.	% Drift	----------		
25	t	Pentachlorophenol	5.000	4.916	1.7	96	-0.02	12.38
		----------	AvgRF	CCRF	% Dev	----------		
26	t	Phenanthrene	1.128	1.199	-6.3	96	0.00	12.75
27	t	Anthracene	1.028	1.051	-2.2	94	0.00	12.85
28	t	Fluoranthene	1.323	1.188	10.2	92	-0.02	15.05

Continuing Calibration Summary

Job Number: JC20314 **Sample:** E4P866-CC863
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4P16347.D
Project: BMSMC, Building 5 Area, PR

29	t	Pyrene	1.024	1.172	-14.5	104	-0.02	15.45
30	S	Terphenyl-d14	0.502	0.593	-18.1	97	-0.02	15.88
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[a]anthracene	1.000	1.201	-20.1#	121	-0.01	17.58
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Chrysene	0.929	1.122	-20.8#	100	0.00	17.64
33	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	104	-0.01	19.65
		----------	True	Calc.	% Drift	----------		
34	t	Benzo[b]fluoranthene	1.000	1.263	-26.3#	130	-0.01	19.24
35	t	Benzo[k]fluoranthene	1.000	0.950	5.0	103	-0.01	19.28
		----------	AvgRF	CCRF	% Dev	----------		
36	t	Benzo[a]pyrene	1.542	1.434	7.0	106	0.00	19.69
		----------	True	Calc.	% Drift	----------		
37	t	Indeno[1,2,3-cd]pyrene	1.000	1.003	-0.3	99	-0.01	21.11
38	t	Dibenz[a,h]anthracene	1.000	0.983	1.7	99	-0.01	21.15
		----------	AvgRF	CCRF	% Dev	----------		
39	t	Benzo[g,h,i]perylene	1.258	1.266	-0.6	97	0.00	21.42

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p16323.D M4P863SIM.M Thu May 19 17:53:15 2016

6.8.10

6

Continuing Calibration Summary

Job Number: JC20314 **Sample:** E4P867-CC863
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4P16367.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4P867\4p16367.D          Vial: 2
Acq On    : 20 May 2016   9:44 am                   Operator: linseyk
Sample    : cc863-.5                                Inst    : MS4P
Misc      : op94042a,e4p867                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4P863SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Fri May 20 11:59:02 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	57	-0.02	7.86
2	t	1,4-Dioxane	0.258	0.265	-2.7	56	-0.01	1.46
3	S	2-Fluorophenol	0.440	0.570	-29.5#	71	-0.01	2.68
4	S	Phenol-d5	0.648	0.851	-31.3#	66	-0.02	3.80
5		Phenol	0.772	1.060	-37.3#	68	-0.02	3.82
6	t	bis(2-Chloroethyl)ether	0.567	0.666	-17.5	72	-0.02	3.94
7	S	Nitrobenzene-d5	0.531	0.771	-45.2#	84	-0.02	5.16
8	t	Naphthalene	2.214	2.765	-24.9#	71	-0.02	6.44
9	t	Hexachlorobutadiene	0.358	0.429	-19.8	73	0.00	6.74
10	t	2-Methylnaphthalene	1.173	1.348	-14.9	63	-0.02	7.74
11	t	1-Methylnaphthalene	1.386	1.762	-27.1#	74	-0.02	7.93
		----------	True	Calc.	% Drift		----------	
12		Hexachlorocyclopentadiene	1.000	1.222	-22.2#	99	-0.02	8.11
		----------	AvgRF	CCRF	% Dev		----------	
13	I	Fluorene-d10	1.000	1.000	0.0	73	-0.02	10.81
14	S	2-Fluorobiphenyl	1.632	1.543	5.5	66	-0.02	8.52
15	t	Acenaphthylene	1.602	1.866	-16.5	75	-0.02	9.46
16	t	Acenaphthene	1.129	1.434	-27.0#	88	-0.02	9.83
17		Dibenzofuran	1.751	1.730	1.2	61	-0.02	10.17
18	t	Fluorene	1.186	1.300	-9.6	73	-0.02	10.86
		----------	True	Calc.	% Drift		----------	
19		4,6-dinitro-2-methylpheno	2.500	2.707	-8.3	115	-0.02	11.04
		----------	AvgRF	CCRF	% Dev		----------	
20		n-nitrosodiphenylamine	0.660	0.997	-51.1#	106	-0.02	11.18
21		1,2-Diphenylhydrazine	1.056	1.171	-10.9	81	-0.02	11.23
22	S	2,4,6-Tribromophenol	0.147	0.173	-17.7	73	-0.02	11.34
23		Fluoranthene-d10	1.000	1.000	0.0	77	-0.02	15.02
24	t	Hexachlorobenzene	0.285	0.254	10.9	65	-0.02	11.95
		----------	True	Calc.	% Drift		----------	
25	t	Pentachlorophenol	2.500	2.460	1.6	87	-0.02	12.38
		----------	AvgRF	CCRF	% Dev		----------	
26	t	Phenanthrene	1.128	1.237	-9.7	73	-0.02	12.73
27	t	Anthracene	0.978	1.108	-13.3	83	-0.02	12.83
28	t	Fluoranthene	1.323	1.249	5.6	71	-0.02	15.05

Continuing Calibration Summary

Job Number: JC20314 **Sample:** E4P867-CC863
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4P16367.D
Project: BMSMC, Building 5 Area, PR

29	t	Pyrene	1.024	1.148	-12.1	81	-0.03	15.43
30	S	Terphenyl-d14	0.502	0.608	-21.1#	75	-0.03	15.86
		----------	True	Calc.	% Drift	----------		
31	t	Benzo[a]anthracene	0.500	0.609	-21.8#	101	-0.03	17.56
		----------	AvgRF	CCRF	% Dev	----------		
32	t	Chrysene	0.929	1.093	-17.7	75	-0.02	17.62
33	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	82	-0.02	19.65
		----------	True	Calc.	% Drift	----------		
34	t	Benzo[b]fluoranthene	0.500	0.576	-15.2	91	-0.03	19.22
35	t	Benzo[k]fluoranthene	0.500	0.536	-7.2	91	-0.02	19.27
		----------	AvgRF	CCRF	% Dev	----------		
36	t	Benzo[a]pyrene	1.542	1.439	6.7	77	-0.02	19.67
		----------	True	Calc.	% Drift	----------		
37	t	Indeno[1,2,3-cd]pyrene	0.500	0.520	-4.0	84	-0.03	21.09
38	t	Dibenz[a,h]anthracene	0.500	0.518	-3.6	83	-0.03	21.13
		----------	AvgRF	CCRF	% Dev	----------		
39	t	Benzo[g,h,i]perylene	1.258	1.359	-8.0	79	-0.03	21.39

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p16324.D M4P863SIM.M Fri May 20 17:05:25 2016

6.8.11

6

Initial Calibration Summary

Job Number: JC20314 **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: JC20314 **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: JC20314 **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: JC20314 **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: JC20314 **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: JC20314 **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: JC20314 **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: JC20314 **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: JC20314 **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

Initial Calibration Verification

Job Number: JC20314
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: JC20314 **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: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EZ5486-ICV5486
Lab FileID: Z109762A.D

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: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EZ5486-ICV5486
Lab FileID: Z109763.D

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: JC20314
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: JC20314 **Sample:** EZ5530-CC5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110698.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5530\Z110698.D          Vial: 2
Acq On    : 16 May 2016  11:13 am                   Operator: ariellec
Sample    : cc5485-50                               Inst    : MSZ
Misc      : op93793,ez5530                          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  : Mon May 16 11:39:38 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	69	0.00	4.21
2		1,4-Dioxane	0.594	0.570	4.0	68	-0.05	1.65
3	t	Pyridine	0.934	0.525	43.8#	40#	-0.13	1.99
4	t	N-Nitrosodimethylamine	0.778	0.484	37.8#	40#	0.00	1.96
5	S	2-Fluorophenol	1.381	1.271	8.0	64	0.00	3.29
6	t	Indene	2.542	2.253	11.4	66	0.00	4.39
7	t	Cumene	3.243	3.186	1.8	70	0.00	3.59
8	S	Phenol-d5	1.619	1.578	2.5	68	0.00	4.05
9	t	Phenol	1.643	1.567	4.6	68	-0.01	4.06
10	t	Aniline	1.890	1.244	34.2#	48#	0.00	4.00
11	t	bis(2-Chloroethyl)ether	1.125	1.116	0.8	73	0.00	4.03
12	t	2-Chlorophenol	1.515	1.370	9.6	68	0.00	4.09
13	t	Decane	1.396	1.125	19.4	62	0.00	4.07
14	t	1,3-Dichlorobenzene	1.648	1.551	5.9	68	0.00	4.16
15	t	1,4-Dichlorobenzene	1.564	1.614	-3.2	74	0.00	4.22
16	t	Benzyl alcohol	0.693	0.665	4.0	62	0.00	4.36
17	t	1,2-Dichlorobenzene	1.515	1.436	5.2	70	0.00	4.34
18	t	Acetophenone	1.763	1.649	6.5	66	0.01	4.52
19	t	2-Methylphenol	1.284	1.201	6.5	67	-0.01	4.47
20	t	2,2'-oxybis(1-Chloropropa	0.393	0.374	4.8	68	0.00	4.42
21	t	3&4-Methylphenol	1.340	1.154	13.9	60	-0.01	4.59
22	t	n-Nitroso-di-n-propylamin	0.912	0.961	-5.4	80	0.00	4.52
23	t	Hexachloroethane	0.456	0.516	-13.2	81	0.00	4.57
24	I	Naphthalene-d8	1.000	1.000	0.0	63	0.00	5.13
25	S	Nitrobenzene-d5	0.323	0.369	-14.2	76	0.00	4.64
26	t	Nitrobenzene	0.325	0.358	-10.2	76	0.00	4.65
27	t	Quinoline	0.757	0.731	3.4	63	0.00	5.40
28	t	Isophorone	0.566	0.612	-8.1	70	0.00	4.81
29	t	2-Nitrophenol	0.202	0.209	-3.5	67	0.00	4.88
30	t	2,4-Dimethylphenol	0.318	0.342	-7.5	71	0.00	4.94
31		Benzoic Acid	0.229	0.277	-21.0#	72	0.03	5.09
32	t	bis(2-Chloroethoxy)methan	0.351	0.346	1.4	66	0.00	4.97
33	t	2,4-Dichlorophenol	0.280	0.297	-6.1	69	0.00	5.07
34		2,6-Dichlorophenol	0.274	0.312	-13.9	75	0.00	5.22
35	t	1,3,5-Trichlorobenzene	0.313	0.368	-17.6	79	0.00	4.86
36	t	1,2,4-Trichlorobenzene	0.292	0.304	-4.1	71	0.00	5.09
37	t	1,2,3-Trichlorobenzene	0.284	0.330	-16.2	78	0.00	5.25
38	t	Naphthalene	1.098	1.067	2.8	67	0.00	5.15
39	t	4-Chloroaniline	0.437	0.386	11.7	62	0.00	5.22
40	t	2,3-Dichloroaniline	0.352	0.373	-6.0	72	0.01	5.86
41	t	Caprolactam	0.142	0.134	5.6	61	0.03	5.50

Continuing Calibration Summary

Job Number: JC20314 **Sample:** EZ5530-CC5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110698.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.130	0.176	-35.4#	89	0.00	5.23
43	t	4-Chloro-3-methylphenol	0.297	0.335	-12.8	74	0.00	5.61
44	t	2-Methylnaphthalene	0.611	0.604	1.1	64	0.00	5.63
45	t	1-Methylnaphthalene	0.654	0.619	5.4	63	0.00	5.70
46	t	Dimethylnaphthalene	0.632	0.711	-12.5	76	0.00	6.07
47	I	Acenaphthene-d10	1.000	1.000	0.0	71	0.00	6.40
48	t	Hexachlorocyclopentadiene	0.267	0.265	0.7	70	0.00	5.74
49	t	2,4,6-Trichlorophenol	0.330	0.348	-5.5	78	0.00	5.86
50	t	2,4,5-Trichlorophenol	0.358	0.373	-4.2	84	0.00	5.91
51	S	2-Fluorobiphenyl	1.282	1.187	7.4	73	0.01	5.90
52	t	2-Chloronaphthalene	1.133	1.062	6.3	74	0.01	5.98
53	t	Biphenyl	1.588	1.405	11.5	69	0.02	5.97
54	t	2-Nitroaniline	0.306	0.314	-2.6	75	0.03	6.09
55	t	Dimethylphthalate	1.273	1.316	-3.4	78	0.01	6.21
56	t	Acenaphthylene	1.991	1.755	11.9	67	0.00	6.29
57	t	2,6-Dinitrotoluene	0.279	0.287	-2.9	75	0.02	6.26
58	t	3-Nitroaniline	0.337	0.298	11.6	65	0.02	6.43
59	t	Acenaphthene	1.191	1.129	5.2	72	0.00	6.43
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	112.303	-12.3	81	-0.02	6.50
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.155	0.180	-16.1	89	-0.02	6.67
62	t	Dibenzofuran	1.645	1.561	5.1	72	0.00	6.59
63	t	2,4-Dinitrotoluene	0.363	0.395	-8.8	77	0.02	6.61
64		2,3,4,6-Tetrachlorophenol	0.284	0.319	-12.3	86	0.00	6.73
65	t	Diethylphthalate	1.306	1.321	-1.1	79	0.00	6.80
66	t	Fluorene	1.354	1.276	5.8	73	0.00	6.90
67	t	4-Chlorophenyl-phenylethe	0.558	0.651	-16.7	89	-0.01	6.90
68	t	4-Nitroaniline	0.337	0.311	7.7	65	0.00	7.02
69	I	Phenanthrene-d10	1.000	1.000	0.0	78	0.00	8.01
70	t	4,6-Dinitro-2-methylpheno	0.119	0.159	-33.6#	89	0.00	7.00
71	t	n-Nitrosodiphenylamine	0.582	0.554	4.8	79	0.02	7.04
72	t	1,2-Diphenylhydrazine	0.695	0.679	2.3	81	0.03	7.07
73	S	2,4,6-Tribromophenol	0.123	0.099	19.5	68	0.00	7.17
74	t	4-Bromophenyl-phenylether	0.208	0.223	-7.2	87	0.00	7.43
75	t	Hexachlorobenzene	0.233	0.219	6.0	78	0.00	7.50
76	t	Pentachlorophenol	0.124	0.133	-7.3	80	0.01	7.81
77	t	Phenanthrene	1.145	1.073	6.3	79	0.00	8.04
78	t	Anthracene	1.179	1.112	5.7	78	0.00	8.11
79	t	Carbazole	1.125	1.084	3.6	77	0.00	8.40
80	t	Di-n-butylphthalate	1.384	1.445	-4.4	84	-0.01	8.96
81	t	Fluoranthene	1.195	1.267	-6.0	88	0.05	9.97
82	t	Octadecane	0.496	0.386	22.2#	65	-0.01	7.85
83	I	Chrysene-d12	1.000	1.000	0.0	92	0.00	12.91
84	t	Pyrene	1.349	1.236	8.4	91	0.06	10.38
85		Butyl stearate	0.365	0.299	18.1	74	0.07	12.08
86	S	Terphenyl-d14	0.840	0.816	2.9	94	0.10	10.77
87	t	Butylbenzylphthalate	0.644	0.651	-1.1	92	0.00	11.89
88	t	Benzo[a]anthracene	1.168	1.191	-2.0	98	0.00	12.89
89	t	3,3'-Dichlorobenzidine	0.422	0.377	10.7	85	0.03	13.00
90	t	Chrysene	1.140	1.087	4.6	94	0.00	12.96
91	t	bis(2-Ethylhexyl)phthalat	0.906	0.849	6.3	86	0.03	13.20
92	I	Perylene-d12	1.000	1.000	0.0	78	0.00	15.89
93	t	Di-n-octylphthalate	1.541	1.825	-18.4	88	0.00	14.60

Continuing Calibration Summary

Job Number: JC20314 **Sample:** EZ5530-CC5485
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110698.D
Project: BMSMC, Building 5 Area, PR

94	t	Benzo[b]fluoranthene	1.263	1.343	-6.3	87	0.02	15.16
95	t	Benzo[k]fluoranthene	1.134	1.221	-7.7	88	0.02	15.21
96	t	Benzo[a]pyrene	1.124	1.157	-2.9	84	0.01	15.77
97	t	Indeno[1,2,3-cd]pyrene	1.124	1.147	-2.0	82	0.03	17.81
98	t	Dibenz(a,h)acridine	1.064	1.029	3.3	79	-0.01	17.45
99	t	Dibenz[a,h]anthracene	1.183	1.177	0.5	81	0.00	17.86
100	t	7,12-Dimethylbenz(a)anthr	0.575	0.587	-2.1	85	0.00	15.16
101	t	Benzo[g,h,i]perylene	1.208	1.161	3.9	79	0.03	18.25

(#) = Out of Range SPCC's out = 0 CCC's out = 0
z109757.D MZ5485.M Mon May 16 12:53:33 2016 RTE

Continuing Calibration Summary

Job Number: JC20314 **Sample:** EZ5530-CC5486
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110699.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5530\Z110699.D          Vial: 3
Acq On    : 16 May 2016  11:42 am                   Operator: ariellec
Sample    : cc5486-50                               Inst    : MSZ
Misc      : op93793,ez5530                          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  : Mon May 16 11:39:38 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	63	-0.06	4.21
103	Benzaldehyde	1.056	0.995	5.8	59	0.03	3.90
104	Phenanthrene-d10a	1.000	1.000	0.0	78	-0.11	8.00
105	Atrazine	0.100	0.119	-19.0	98	-0.10	7.68
106	Chrysene-d12a	1.000	1.000	0.0	85	-0.16	12.90
107	Benzidine	0.547	0.478	12.6	72	-0.07	10.36
108	Acenaphthene-d10a	1.000	1.000	0.0	82	-0.07	6.40
109	1,2,4,5-Tetrachlorobenzen	0.513	0.528	-2.9	85	-0.06	5.75
110 I	Naphthalene-d8a	1.000	1.000	0.0	62	-0.06	5.13
111	Hydroquinone	0.264	0.252	4.5	55	-0.02	5.55

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 Z110097.D  MZ5485.M         Mon May 16 12:52:47 2016   RTE
```

Initial Calibration Summary

Job Number: JC20314 **Sample:** EZ5533-ICC5533
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110737.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MSZ

Method : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Calibration Files
100 =Z110743.D 80 =Z110744.D 50 =Z1107737.D 25 =Z110738.D
10 =Z110742.D 5 =Z110741.D 2 =Z110740.D 1 =Z110739.D

Compound	100	80	50	25	10	5	2	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	----------ISTD----------									
2) 1,4-Dioxane	0.506	0.513	0.524	0.498	0.482	0.588	0.665	0.712	0.561	15.28
3) Pyridine	1.309	1.322	1.323	1.332	1.177	1.293	1.279	1.320	1.294	3.92
4) N-Nitrosodim	0.752	0.752	0.758	0.723	0.637	0.756	0.687	0.756	0.728	6.07
5) 2-Fluorophen	1.345	1.347	1.346	1.312	1.230	1.379	1.358	1.484	1.350	5.22
6) Indene	2.057	2.082	2.168	2.218	2.185	2.571	2.496	2.627	2.301	9.89
7) Cumene	3.163	3.217	3.251	3.236	3.159	3.629	3.556	3.581	3.349	6.03
8) Phenol-d5	1.625	1.633	1.624	1.616	1.552	1.761	1.714	1.801	1.666	5.05
9) Phenol	1.629	1.737	1.669	1.650	1.566	1.878	1.792	1.875	1.724	6.71
10) Aniline	1.549	1.592	1.618	1.668	1.848	2.216	2.094	2.294	1.860	16.18
11) bis(2-Chloro	1.049	1.066	1.087	1.115	1.066	1.225	1.204	1.324	1.142	8.64
12) 2-Chlorophen	1.276	1.296	1.343	1.363	1.338	1.559	1.525	1.639	1.417	9.63
13) Decane	0.954	0.969	0.990	1.016	1.027	1.201	1.230	1.165	1.069	10.42
14) 1,3-Dichloro	1.453	1.472	1.529	1.519	1.483	1.748	1.701	1.681	1.573	7.46
15) 1,4-Dichloro	1.418	1.437	1.459	1.492	1.480	1.743	1.681	1.671	1.548	8.31
16) Benzyl alcoh	0.791	0.802	0.806	0.823	0.773	0.927	0.901	0.861	0.836	6.60
17) 1,2-Dichloro	1.301	1.306	1.372	1.402	1.388	1.652	1.586	1.563	1.446	9.31
18) Acetophenone	1.642	1.702	1.754	1.778	1.824	2.144	1.956	2.198	1.875	10.93
19) 2-Methylphen	1.099	1.106	1.144	1.134	1.132	1.344	1.347	1.269	1.197	8.84
20) 2,2'-oxybis(	0.336	0.346	0.354	0.361	0.356	0.435	0.447	0.402	0.380	11.22
21) 3&4-Methylph	1.221	1.217	1.266	1.263	1.205	1.395	1.349	1.395	1.289	6.17
22) n-Nitroso-di	0.831	0.847	0.897	0.911	0.901	1.116	0.968	1.090	0.945	11.22
23) Hexachloroet	0.502	0.505	0.516	0.504	0.495	0.549	0.572	0.540	0.523	5.30
24) I Naphthalene-d8	----------ISTD----------									
25) Nitrobenzene	0.346	0.355	0.356	0.371	0.359	0.394	0.394	0.408	0.373	6.13
26) Nitrobenzene	0.329	0.347	0.345	0.358	0.354	0.394	0.402	0.426	0.369	9.13
27) Quinoline	0.688	0.703	0.678	0.694	0.662	0.765	0.759	0.748	0.712	5.54
28) Isophorone	0.590	0.605	0.606	0.621	0.611	0.670	0.669	0.724	0.637	7.20
29) 2-Nitropheno	0.190	0.193	0.189	0.192	0.179	0.202	0.186	0.183	0.189	3.70
30) 2,4-Dimethyl	0.329	0.331	0.324	0.317	0.295	0.346	0.313	0.335	0.324	4.81
31) Benzoic Acid	0.285	0.287	0.243	0.239	0.208	0.206	0.184	0.206	0.232	16.50
32) bis(2-Chloro	0.341	0.351	0.352	0.364	0.356	0.404	0.387	0.434	0.374	8.58
33) 2,4-Dichloro	0.281	0.288	0.281	0.288	0.280	0.310	0.304	0.328	0.295	5.85
34) 2,6-Dichloro	0.261	0.269	0.271	0.278	0.277	0.304	0.312	0.309	0.285	7.00
35) 1,3,5-Trichl	0.316	0.326	0.327	0.342	0.345	0.382	0.393	0.374	0.351	8.24
36) 1,2,4-Trichl	0.309	0.319	0.314	0.332	0.323	0.370	0.343	0.380	0.336	7.79
37) 1,2,3-Trichl	0.289	0.299	0.301	0.313	0.303	0.349	0.341	0.346	0.318	7.58
38) Naphthalene	0.962	0.986	1.002	1.026	1.002	1.117	1.134	1.177	1.051	7.60
39) 4-Chloroanil	0.390	0.402	0.400	0.419	0.421	0.493	0.483	0.477	0.436	9.58
40) 2,3-Dichloro	0.338	0.350	0.343	0.355	0.345	0.393	0.386	0.411	0.365	7.47
41) Caprolactam	0.127	0.120	0.120	0.119	0.118	0.132	0.126	0.129	0.124	4.22
42) Hexachlorobu	0.175	0.178	0.178	0.189	0.183	0.202	0.206	0.205	0.190	6.97
43) 4-Chloro-3-m	0.305	0.316	0.313	0.326	0.309	0.347	0.330	0.353	0.325	5.39
44) 2-Methylnaph	0.572	0.582	0.589	0.608	0.596	0.673	0.651	0.682	0.619	6.98
45) 1-Methylnaph	0.574	0.594	0.596	0.617	0.604	0.695	0.700	0.704	0.636	8.57

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46) Dimethylnaph 0.588 0.610 0.606 0.615 0.615 0.691 0.663 0.737 0.641   8.06

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.333 0.343 0.321 0.329 0.310 0.322 0.278 0.248 0.310  10.32
49) 2,4,6-Trichl 0.340 0.347 0.346 0.359 0.343 0.392 0.392 0.387 0.363   6.36
50) 2,4,5-Trichl 0.361 0.366 0.359 0.381 0.373 0.427 0.404 0.438 0.389   7.88
51) 2-Fluorobiph 1.160 1.205 1.202 1.281 1.279 1.468 1.440 1.425 1.308   9.24
52) 2-Chloronaph 0.992 1.036 1.048 1.111 1.104 1.273 1.225 1.290 1.135  10.02
53) Biphenyl     1.342 1.391 1.401 1.443 1.428 1.668 1.594 1.657 1.490   8.63
54) 2-Nitroanili 0.314 0.329 0.323 0.331 0.313 0.352 0.312 0.357 0.329   5.31
55) Dimethylphth 1.210 1.272 1.259 1.320 1.260 1.477 1.444 1.521 1.345   8.75
56) Acenaphthyle 1.737 1.795 1.802 1.907 1.859 2.073 2.059 2.221 1.932   8.73
57) 2,6-Dinitrot 0.271 0.276 0.270 0.278 0.245 0.274 0.247 0.237 0.262   6.23
58) 3-Nitroanili 0.314 0.329 0.315 0.325 0.294 0.336 0.306 0.302 0.315   4.55
59) Acenaphthene 1.071 1.100 1.108 1.142 1.129 1.295 1.286 1.306 1.180   8.35
60) 2,4-Dinitrop 0.142 0.144 0.104 0.090 0.056 0.040 0.019       0.085  57.26
            ---- Quadratic regression ----  Coefficient =  0.9941
              Response Ratio = -0.01563 + 0.09077 *A + 0.01164 *A^2

61) 4-Nitropheno 0.196 0.201 0.189 0.191 0.170 0.190 0.151 0.161 0.181  10.02
62) Dibenzofuran 1.442 1.502 1.499 1.583 1.545 1.825 1.752 1.816 1.620   9.48
63) 2,4-Dinitrot 0.388 0.393 0.376 0.389 0.327 0.353 0.316 0.319 0.358   9.29
64) 2,3,4,6-Tetr 0.318 0.319 0.303 0.316 0.296 0.323 0.301 0.301 0.310   3.36
65) Diethylphtha 1.280 1.311 1.280 1.343 1.272 1.474 1.460 1.446 1.358   6.43
66) Fluorene     1.218 1.265 1.257 1.319 1.269 1.503 1.427 1.531 1.349   8.99
67) 4-Chlorophen 0.565 0.592 0.588 0.619 0.608 0.683 0.679 0.701 0.630   8.13
68) 4-Nitroanili 0.323 0.328 0.315 0.322 0.314 0.333 0.315 0.301 0.319   3.04

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro- 0.126 0.127 0.102 0.095 0.070 0.051 0.026       0.085  44.86
            ---- Quadratic regression ----  Coefficient =  0.9972
              Response Ratio = -0.00616 + 0.09640 *A + 0.01367 *A^2

71) n-Nitrosodip 0.510 0.514 0.513 0.534 0.525 0.586 0.571 0.623 0.547   7.65
72) 1,2-Diphenyl 0.667 0.688 0.715 0.728 0.711 0.840 0.765 0.865 0.747   9.52
73) 2,4,6-Tribro 0.099 0.103 0.101 0.099 0.097 0.111 0.098 0.097 0.101   4.61
74) 4-Bromopheny 0.204 0.207 0.206 0.211 0.203 0.229 0.223 0.222 0.213   4.74
75) Hexachlorobe 0.213 0.217 0.217 0.223 0.215 0.255 0.249 0.253 0.230   8.13
76) Pentachlorop 0.155 0.159 0.152 0.155 0.139 0.147 0.125 0.137 0.146   7.86
77) Phenanthrene 1.013 1.034 1.051 1.072 1.056 1.219 1.205 1.221 1.109   8.09
78) Anthracene   1.031 1.061 1.072 1.098 1.073 1.234 1.202 1.241 1.126   7.53
79) Carbazole    0.987 0.999 0.999 1.033 0.985 1.157 1.089 1.161 1.051   7.11
80) Di-n-butylph 1.307 1.322 1.311 1.341 1.262 1.452 1.356 1.478 1.354   5.50
81) Fluoranthene 1.172 1.199 1.179 1.215 1.181 1.362 1.304 1.397 1.251   7.19
82) Octadecane   0.356 0.366 0.371 0.382 0.365 0.412 0.383 0.417 0.382   5.83

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.228 1.251 1.278 1.314 1.263 1.420 1.441 1.494 1.336   7.53
85) Butyl steara 0.258 0.267 0.261 0.272 0.243 0.277 0.276 0.309 0.270   7.11
86) Terphenyl-d1 0.812 0.831 0.814 0.829 0.808 0.904 0.891 0.972 0.858   6.86
87) Butylbenzylp 0.597 0.613 0.598 0.619 0.571 0.643 0.655 0.698 0.624   6.42
88) Benzo[a]anth 1.142 1.164 1.142 1.170 1.131 1.292 1.318 1.418 1.222   8.73
89) 3,3'-Dichlor 0.409 0.420 0.410 0.423 0.401 0.435 0.429 0.463 0.424   4.56
90) Chrysene     1.061 1.084 1.081 1.097 1.076 1.214 1.220 1.317 1.144   8.24
91) bis(2-Ethylh 0.807 0.820 0.811 0.822 0.769 0.874 0.862 0.990 0.844   7.96

92) I   Perylene-d12          ----------------ISTD---------------------
93) Di-n-octylph 1.498 1.534 1.509 1.573 1.475 1.712 1.679 1.665 1.581   5.83
94) Benzo[b]fluo 1.221 1.260 1.216 1.260 1.220 1.443 1.421 1.491 1.317   8.71
95) Benzo[k]fluo 1.128 1.143 1.166 1.217 1.165 1.331 1.383 1.394 1.241   8.94
```

Initial Calibration Summary

Job Number: JC20314 **Sample:** EZ5533-ICC5533
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110737.D
Project: BMSMC, Building 5 Area, PR

96)	Benzo[a]pyre	1.071	1.094	1.092	1.132	1.061	1.280	1.236	1.379	1.168	9.97
97)	Indeno[1,2,3	0.960	0.980	1.001	1.034	0.942	1.140	1.120	1.249	1.053	10.14
98)	Dibenz(a,h)a	0.906	0.924	0.945	0.962	0.903	1.018	1.022	1.095	0.972	6.94
99)	Dibenz[a,h]a	1.000	1.034	1.063	1.076	0.988	1.168	1.154	1.263	1.093	8.64
100)	7,12-Dimethy	0.539	0.547	0.542	0.547	0.476	0.542	0.498	0.516	0.526	5.03
101)	Benzo[g,h,i]	1.014	1.031	1.071	1.081	1.018	1.160	1.200	1.321	1.112	9.70

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

MZ5533.M Wed May 18 09:03:28 2016 RTE

Initial Calibration Summary

Job Number: JC20314 **Sample:** EZ5534-ICC5534
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110746.D
Project: BMSMC, Building 5 Area, PR

```
                          Response Factor Report  MSZ

  Method       : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
  Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
  Last Update  : Wed May 18 09:02:21 2016
  Response via : Initial Calibration

  Calibration Files
  100 =Z110752.D  80  =Z110753.D  50  =Z110746.D  25  =Z110747.D
  10  =Z110751.D  5   =Z110750.D  2   =Z110749.D  1   =Z110748.D

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

102)     1,4-Dichlorobenzene-d ----------------ISTD---------------------
103) Benzaldehyde 0.777 0.967 1.008 1.036 0.964 1.082 1.112 1.082 1.004  10.62

104)     Phenanthrene-d10a     ----------------ISTD---------------------
105) 1-chloroocta 0.249 0.248 0.250 0.241 0.230 0.258 0.264 0.242 0.248   4.19
106) o-terphenyl  0.560 0.567 0.570 0.570 0.564 0.625 0.615 0.646 0.590   5.72
107) Atrazine     0.102 0.102 0.102 0.100 0.093 0.104 0.105 0.104 0.102   3.62

108)     Chrysene-d12a         ----------------ISTD---------------------
109) Benzidine    0.417 0.418 0.443 0.294 0.204 0.192             0.328  34.47
             ---- Quadratic regression ----  Coefficient =  0.9915
               Response Ratio = -0.03590 + 0.40202 *A + 0.01557 *A^2


110)     Acenaphthene-d10a     ----------------ISTD---------------------
111) 1,2,4,5-Tetr 0.512 0.523 0.534 0.537 0.523 0.566 0.593 0.544 0.542   4.87

112) I   Naphthalene-d8a       ----------------ISTD---------------------
113) Hydroquinone 0.336 0.317 0.348 0.322 0.253 0.339 0.281 0.250 0.306  12.88


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

           MZ5533.M          Wed May 18 10:14:22 2016   RTE
```

Initial Calibration Verification

Job Number: JC20314 **Sample:** EZ5535-ICV5533
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110755B.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5535\Z110755b.D          Vial: 2
Acq On    : 18 May 2016  10:17 am                    Operator: ariellec
Sample    : icv5533-50                               Inst    : MSZ
Misc      : op93924,ez5535                           Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Wed May 18 09:02:21 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	108	0.00	4.65
9	t	Phenol	1.724	1.526	11.5	99	-0.01	4.39
12	t	2-Chlorophenol	1.417	1.309	7.6	105	0.00	4.50
19	t	2-Methylphenol	1.197	1.126	5.9	106	0.00	4.83
21	t	3&4-Methylphenol	1.289	1.168	9.4	99	0.00	4.94
24	I	Naphthalene-d8	1.000	1.000	0.0	101	0.00	5.57
29	t	2-Nitrophenol	0.189	0.186	1.6	100	0.00	5.30
30	t	2,4-Dimethylphenol	0.324	0.362	-11.7	113	0.00	5.33
33	t	2,4-Dichlorophenol	0.295	0.280	5.1	101	0.00	5.47
34		2,6-Dichlorophenol	0.285	0.274	3.9	102	0.00	5.63
43	t	4-Chloro-3-methylphenol	0.325	0.305	6.2	98	-0.02	5.96
47	I	Acenaphthene-d10	1.000	1.000	0.0	101	0.00	6.97
49	t	2,4,6-Trichlorophenol	0.363	0.345	5.0	101	0.00	6.30
50	t	2,4,5-Trichlorophenol	0.389	0.333	14.4	94	-0.01	6.33
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	46.686	6.6	82	-0.01	7.03
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.181	0.181	0.0	97	-0.02	7.07
64		2,3,4,6-Tetrachlorophenol	0.310	0.288	7.1	96	0.00	7.31
69	I	Phenanthrene-d10	1.000	1.000	0.0	98	0.00	8.84
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	47.939	4.1	99	-0.02	7.61
		----------	AvgRF	CCRF	% Dev	----------		
76	t	Pentachlorophenol	0.146	0.146	0.0	96	-0.02	8.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z110746a.D MZ5533.M Wed May 18 10:44:14 2016 RTE

Initial Calibration Verification

Job Number: JC20314 **Sample:** EZ5535-ICV5533
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110756A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5535\Z110756a.D          Vial: 3
Acq On    : 18 May 2016  10:46 am                     Operator: ariellec
Sample    : icv5533-50                                Inst    : MSZ
Misc      : op93924,ez5535                            Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Wed May 18 09:02:21 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	120	0.00	4.65
5	S	2-Fluorophenol	1.350	1.128	16.4	101	0.00	3.67
8	S	Phenol-d5	1.666	1.342	19.4	99	-0.01	4.38
24	I	Naphthalene-d8	1.000	1.000	0.0	118	0.00	5.57
25	S	Nitrobenzene-d5	0.373	0.327	12.3	109	0.00	5.05
47	I	Acenaphthene-d10	1.000	1.000	0.0	112	0.00	6.97
51	S	2-Fluorobiphenyl	1.308	1.166	10.9	109	0.00	6.37
69	I	Phenanthrene-d10	1.000	1.000	0.0	110	0.00	8.84
73	S	2,4,6-Tribromophenol	0.101	0.081	19.8	88	-0.01	7.85
83	I	Chrysene-d12	1.000	1.000	0.0	106	-0.02	14.07
86	S	Terphenyl-d14	0.858	0.728	15.2	95	0.00	11.88

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z110746a.D MZ5533.M Wed May 18 11:19:37 2016 RTE

Initial Calibration Verification

Job Number: JC20314 **Sample:** EZ5535-ICV5533
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110757A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5535\Z110757a.D          Vial: 4
Acq On    : 18 May 2016  11:16 am                    Operator: ariellec
Sample    : icv5533-50                               Inst    : MSZ
Misc      : op93924,ez5535                           Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Wed May 18 09:02:21 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	4.66
3	t	Pyridine	1.294	1.328	-2.6	101	0.10	2.62
10	t	Aniline	1.860	2.079	-11.8	129	0.00	4.41
16	t	Benzyl alcohol	0.836	0.827	1.1	103	0.00	4.76
24	I	Naphthalene-d8	1.000	1.000	0.0	103	0.00	5.57
39	t	4-Chloroaniline	0.436	0.413	5.3	106	-0.01	5.62
44	t	2-Methylnaphthalene	0.619	0.567	8.4	99	0.00	6.09
47	I	Acenaphthene-d10	1.000	1.000	0.0	98	0.00	6.97
54	t	2-Nitroaniline	0.329	0.317	3.6	96	-0.01	6.55
58	t	3-Nitroaniline	0.315	0.293	7.0	91	-0.01	6.92
62	t	Dibenzofuran	1.620	1.579	2.5	104	-0.01	7.18
68	t	4-Nitroaniline	0.319	0.284	11.0	88	-0.02	7.58
69	I	Phenanthrene-d10	1.000	1.000	0.0	99	-0.01	8.83
79	t	Carbazole	1.051	0.998	5.0	99	-0.01	9.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z110746a.D MZ5533.M Wed May 18 11:39:35 2016 RTE

Initial Calibration Verification

Job Number: JC20314 **Sample:** EZ5535-ICV5533
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110758.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\ez5535\Z110758.D Vial: 5
Acq On : 18 May 2016 11:46 am Operator: ariellec
Sample : icv5533-50 Inst : MSZ
Misc : op93924,ez5535 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update : Wed May 18 09:02:21 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	108	0.00	4.65
4	t	N-Nitrosodimethylamine	0.728	0.661	9.2	94	0.01	2.50
11	t	bis(2-Chloroethyl)ether	1.142	1.111	2.7	111	0.00	4.46
14	t	1,3-Dichlorobenzene	1.573	1.473	6.4	104	0.00	4.61
15	t	1,4-Dichlorobenzene	1.548	1.410	8.9	105	0.00	4.67
17	t	1,2-Dichlorobenzene	1.446	1.356	6.2	107	0.00	4.78
20	t	2,2'-oxybis(1-Chloropropa	0.380	0.326	14.2	100	0.00	4.85
22	t	n-Nitroso-di-n-propylamin	0.945	0.839	11.2	101	-0.01	4.95
23	t	Hexachloroethane	0.523	0.492	5.9	103	0.00	5.03
24	I	Naphthalene-d8	1.000	1.000	0.0	102	0.00	5.57
26	t	Nitrobenzene	0.369	0.342	7.3	101	0.00	5.07
28	t	Isophorone	0.637	0.624	2.0	105	-0.01	5.24
32	t	bis(2-Chloroethoxy)methan	0.374	0.340	9.1	98	0.00	5.40
36	t	1,2,4-Trichlorobenzene	0.336	0.320	4.8	104	0.00	5.53
38	t	Naphthalene	1.051	0.967	8.0	98	0.00	5.59
42	t	Hexachlorobutadiene	0.190	0.183	3.7	105	0.00	5.67
47	I	Acenaphthene-d10	1.000	1.000	0.0	99	0.00	6.97
52	t	2-Chloronaphthalene	1.135	1.089	4.1	103	0.00	6.47
55	t	Dimethylphthalate	1.345	1.201	10.7	94	-0.01	6.71
56	t	Acenaphthylene	1.932	1.654	14.4	91	0.00	6.84
57	t	2,6-Dinitrotoluene	0.262	0.239	8.8	88	0.00	6.77
59	t	Acenaphthene	1.180	1.045	11.4	93	0.00	7.00
63	t	2,4-Dinitrotoluene	0.358	0.314	12.3	83	-0.01	7.16
65	t	Diethylphthalate	1.358	1.219	10.2	94	-0.01	7.43
66	t	Fluorene	1.349	1.183	12.3	93	-0.01	7.56
67	t	4-Chlorophenyl-phenylethe	0.630	0.551	12.5	93	0.00	7.57
69	I	Phenanthrene-d10	1.000	1.000	0.0	99	0.00	8.84
71	t	n-Nitrosodiphenylamine	0.547	0.491	10.2	95	-0.01	7.70
72	t	1,2-Diphenylhydrazine	0.747	0.662	11.4	92	0.00	7.76
74	t	4-Bromophenyl-phenylether	0.213	0.195	8.5	94	0.00	8.20
75	t	Hexachlorobenzene	0.230	0.205	10.9	94	0.00	8.27
77	t	Phenanthrene	1.109	0.977	11.9	92	-0.01	8.87
78	t	Anthracene	1.126	0.973	13.6	90	-0.01	8.95
80	t	Di-n-butylphthalate	1.354	1.199	11.4	91	-0.01	9.94
81	t	Fluoranthene	1.251	1.093	12.6	92	-0.01	11.00
83	I	Chrysene-d12	1.000	1.000	0.0	95	-0.02	14.08
84	t	Pyrene	1.336	1.208	9.6	90	-0.01	11.44
87	t	Butylbenzylphthalate	0.624	0.546	12.5	87	0.00	13.07

Initial Calibration Verification

Job Number: JC20314 **Sample:** EZ5535-ICV5533
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110758.D
Project: BMSMC, Building 5 Area, PR

88	t	Benzo[a]anthracene	1.222	1.070	12.4	89	0.00	14.06
89	t	3,3'-Dichlorobenzidine	0.424	0.491	-15.8	113	-0.01	14.10
90	t	Chrysene	1.144	0.983	14.1	86	-0.02	14.14
91	t	bis(2-Ethylhexyl)phthalat	0.844	0.732	13.3	86	0.00	14.49
92	I	Perylene-d12	1.000	1.000	0.0	91	-0.01	17.10
93	t	Di-n-octylphthalate	1.581	1.394	11.8	85	0.00	15.94
94	t	Benzo[b]fluoranthene	1.317	1.141	13.4	86	-0.02	16.35
95	t	Benzo[k]fluoranthene	1.241	1.151	7.3	90	-0.03	16.42
96	t	Benzo[a]pyrene	1.168	1.068	8.6	89	-0.02	16.99
97	t	Indeno[1,2,3-cd]pyrene	1.053	0.978	7.1	89	-0.02	19.03
99	t	Dibenz[a,h]anthracene	1.093	0.980	10.3	84	-0.02	19.10
101	t	Benzo[g,h,i]perylene	1.112	1.039	6.6	89	-0.02	19.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z110746a.D MZ5533.M Wed May 18 13:44:38 2016 RTE

6.8.30

6

Initial Calibration Verification

Job Number: JC20314 **Sample:** EZ5535-ICV5534
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110758A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5535\Z110758a.D          Vial: 5
Acq On    : 18 May 2016  11:46 am                    Operator: ariellec
Sample    : icv5534-50                               Inst    : MSZ
Misc      : op93924,ez5535                           Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Wed May 18 09:02:21 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
110	Acenaphthene-d10a	1.000	1.000	0.0	109	0.00	6.97
111	1,2,4,5-Tetrachlorobenzen	0.542	0.579	-6.8	118	0.00	6.21

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z110746a.D MZ5533.M Wed May 18 13:44:41 2016 RTE

Initial Calibration Verification

Job Number: JC20314 **Sample:** EZ5535-ICV5534
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110759A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5535\Z110759a.D          Vial: 6
Acq On    : 18 May 2016  12:15 pm                    Operator: ariellec
Sample    : icv5534-50                               Inst    : MSZ
Misc      : op93924,ez5535                           Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Wed May 18 09:02:21 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	111	0.00	4.65
103	Benzaldehyde	1.004	1.105	-10.1	122	0.00	4.33
104	Phenanthrene-d10a	1.000	1.000	0.0	103	0.00	8.83
107	Atrazine	0.102	0.107	-4.9	108	0.00	8.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z110746a.D MZ5533.M Wed May 18 13:30:56 2016 RTE

Initial Calibration Verification

Job Number: JC20314 **Sample:** EZ5535-ICV5533
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110759.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5535\Z110759.D          Vial: 6
Acq On    : 18 May 2016  12:15 pm                   Operator: ariellec
Sample    : icv5533-50                              Inst    : MSZ
Misc      : op93924,ez5535                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Wed May 18 09:02:21 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	4.65
2		1,4-Dioxane	0.561	0.488	13.0	97	0.02	2.21
6	t	Indene	2.301	2.290	0.5	110	0.00	4.84
7	t	Cumene	3.349	3.211	4.1	103	0.00	4.07
13	t	Decane	1.069	0.996	6.8	105	0.00	4.54
18	t	Acetophenone	1.875	1.757	6.3	104	-0.01	4.94
24	I	Naphthalene-d8	1.000	1.000	0.0	106	0.00	5.57
27	t	Quinoline	0.712	0.631	11.4	98	-0.02	5.82
40	t	2,3-Dichloroaniline	0.365	0.283	22.5	87	0.00	6.30
41	t	Caprolactam	0.124	0.102	17.7	90	-0.04	5.86
45	t	1-Methylnaphthalene	0.636	0.563	11.5	100	0.00	6.16
46	t	Dimethylnaphthalene	0.641	0.563	12.2	98	0.00	6.59
47	I	Acenaphthene-d10	1.000	1.000	0.0	98	0.00	6.97
48	t	Hexachlorocyclopentadiene	0.310	0.352	-12.0	108	0.00	6.20
53	t	Biphenyl	1.490	1.390	6.7	98	0.00	6.45
69	I	Phenanthrene-d10	1.000	1.000	0.0	94	-0.01	8.83
82	t	Octadecane	0.382	0.366	4.2	93	0.00	8.76
92	I	Perylene-d12	1.000	1.000	0.0	91	-0.02	17.10
100	t	7,12-Dimethylbenz(a)anthr	0.526	0.499	5.1	84	-0.03	16.37

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 Z110746a.D MZ5533.M         Wed May 18 13:30:54 2016   RTE
```

Initial Calibration Verification

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EZ5535-ICV5534
Lab FileID: Z110760.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5535\Z110760.D          Vial: 7
Acq On    : 18 May 2016  12:45 pm                   Operator: ariellec
Sample    : icv5534-50                              Inst    : MSZ
Misc      : op93924,ez5535                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Wed May 18 09:02:21 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  122   0.00   14.07
            ----------------------- True    Calc.   % Drift  ------------
109     Benzidine                 100.000  91.172     8.8  106   0.00   11.35


    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     Z110746a.D MZ5533.M         Wed May 18 13:46:25 2016   RTE
```

Initial Calibration Verification

Job Number: JC20314 **Sample:** EZ5535-ICV5534
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110761.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5535\Z110761.D          Vial: 8
Acq On    : 18 May 2016   1:15 pm                   Operator: ariellec
Sample    : icv5534-50                              Inst    : MSZ
Misc      : op93924,ez5535                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Wed May 18 09:02:21 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	103	0.00	5.57
113	Hydroquinone	0.306	0.298	2.6	88	0.00	5.84

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z110746a.D MZ5533.M Wed May 18 13:40:28 2016 RTE

Continuing Calibration Summary

Job Number: JC20314 **Sample:** EZ5537-CC5533
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110788.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\ez5537\Z110788.D Vial: 2
Acq On : 19 May 2016 8:56 am Operator: ariellec
Sample : cc5533-25 Inst : MSZ
Misc : op93962,ez5537 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update : Wed May 18 09:02:21 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	93	0.00	4.65
2		1,4-Dioxane	0.561	0.535	4.6	100	0.01	2.20
3	t	Pyridine	1.294	1.367	-5.6	96	0.02	2.54
4	t	N-Nitrosodimethylamine	0.728	0.750	-3.0	97	0.00	2.48
5	S	2-Fluorophenol	1.350	1.314	2.7	93	0.00	3.66
6	t	Indene	2.301	2.236	2.8	94	0.00	4.84
7	t	Cumene	3.349	3.325	0.7	96	0.00	4.06
8	S	Phenol-d5	1.666	1.642	1.4	95	0.00	4.38
9	t	Phenol	1.724	1.686	2.2	95	-0.01	4.39
10	t	Aniline	1.860	1.645	11.6	92	0.00	4.41
11	t	bis(2-Chloroethyl)ether	1.142	1.133	0.8	95	-0.01	4.46
12	t	2-Chlorophenol	1.417	1.386	2.2	95	0.00	4.50
13	t	Decane	1.069	1.012	5.3	93	0.00	4.54
14	t	1,3-Dichlorobenzene	1.573	1.521	3.3	93	0.00	4.61
15	t	1,4-Dichlorobenzene	1.548	1.510	2.5	94	0.00	4.66
16	t	Benzyl alcohol	0.836	0.824	1.4	93	-0.01	4.75
17	t	1,2-Dichlorobenzene	1.446	1.386	4.1	92	0.00	4.78
18	t	Acetophenone	1.875	1.856	1.0	97	-0.01	4.94
19	t	2-Methylphenol	1.197	1.200	-0.3	99	0.00	4.83
20	t	2,2'-oxybis(1-Chloropropa	0.380	0.362	4.7	93	0.00	4.85
21	t	3&4-Methylphenol	1.289	1.291	-0.2	95	0.00	4.94
22	t	n-Nitroso-di-n-propylamin	0.945	0.944	0.1	96	-0.01	4.95
23	t	Hexachloroethane	0.523	0.520	0.6	96	0.00	5.02
24	I	Naphthalene-d8	1.000	1.000	0.0	96	0.00	5.57
25	S	Nitrobenzene-d5	0.373	0.373	0.0	96	0.00	5.05
26	t	Nitrobenzene	0.369	0.367	0.5	98	-0.01	5.06
27	t	Quinoline	0.712	0.716	-0.6	99	-0.01	5.83
28	t	Isophorone	0.637	0.634	0.5	98	-0.01	5.24
29	t	2-Nitrophenol	0.189	0.201	-6.3	100	0.00	5.29
30	t	2,4-Dimethylphenol	0.324	0.320	1.2	97	-0.01	5.32
31		Benzoic Acid	0.232	0.274	-18.1	110	-0.04	5.39
32	t	bis(2-Chloroethoxy)methan	0.374	0.366	2.1	96	0.00	5.40
33	t	2,4-Dichlorophenol	0.295	0.295	0.0	98	0.00	5.47
34		2,6-Dichlorophenol	0.285	0.278	2.5	96	-0.01	5.63
35	t	1,3,5-Trichlorobenzene	0.351	0.342	2.6	96	0.00	5.31
36	t	1,2,4-Trichlorobenzene	0.336	0.324	3.6	93	0.00	5.53
37	t	1,2,3-Trichlorobenzene	0.318	0.310	2.5	95	0.00	5.69
38	t	Naphthalene	1.051	1.018	3.1	95	0.00	5.59
39	t	4-Chloroaniline	0.436	0.416	4.6	95	-0.01	5.62
40	t	2,3-Dichloroaniline	0.365	0.359	1.6	97	0.00	6.30
41	t	Caprolactam	0.124	0.128	-3.2	103	-0.03	5.88

Continuing Calibration Summary

Job Number: JC20314 **Sample:** EZ5537-CC5533
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110788.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.190	0.182	4.2	93	0.00	5.67
43	t	4-Chloro-3-methylphenol	0.325	0.331	-1.8	97	-0.01	5.96
44	t	2-Methylnaphthalene	0.619	0.611	1.3	96	0.00	6.09
45	t	1-Methylnaphthalene	0.636	0.624	1.9	97	0.00	6.16
46	t	Dimethylnaphthalene	0.641	0.633	1.2	99	-0.01	6.58
47	I	Acenaphthene-d10	1.000	1.000	0.0	96	0.00	6.97
48	t	Hexachlorocyclopentadiene	0.310	0.350	-12.9	102	0.00	6.20
49	t	2,4,6-Trichlorophenol	0.363	0.360	0.8	96	0.00	6.30
50	t	2,4,5-Trichlorophenol	0.389	0.393	-1.0	100	-0.01	6.33
51	S	2-Fluorobiphenyl	1.308	1.274	2.6	96	0.00	6.37
52	t	2-Chloronaphthalene	1.135	1.109	2.3	96	0.00	6.47
53	t	Biphenyl	1.490	1.458	2.1	97	-0.01	6.45
54	t	2-Nitroaniline	0.329	0.354	-7.6	103	-0.01	6.55
55	t	Dimethylphthalate	1.345	1.332	1.0	97	-0.01	6.71
56	t	Acenaphthylene	1.932	1.912	1.0	97	-0.01	6.83
57	t	2,6-Dinitrotoluene	0.262	0.288	-9.9	100	-0.01	6.76
58	t	3-Nitroaniline	0.315	0.330	-4.8	98	-0.02	6.92
59	t	Acenaphthene	1.180	1.161	1.6	98	0.00	7.00
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	64.305	-28.6#	138	-0.01	7.03
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.181	0.210	-16.0	106	-0.01	7.08
62	t	Dibenzofuran	1.620	1.616	0.2	98	-0.02	7.18
63	t	2,4-Dinitrotoluene	0.358	0.410	-14.5	102	-0.02	7.15
64		2,3,4,6-Tetrachlorophenol	0.310	0.320	-3.2	98	-0.01	7.30
65	t	Diethylphthalate	1.358	1.390	-2.4	100	-0.01	7.43
66	t	Fluorene	1.349	1.352	-0.2	99	-0.01	7.56
67	t	4-Chlorophenyl-phenylethe	0.630	0.626	0.6	97	-0.01	7.56
68	t	4-Nitroaniline	0.319	0.337	-5.6	101	-0.02	7.58
69	I	Phenanthrene-d10	1.000	1.000	0.0	98	-0.01	8.83
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	30.070	-20.3#	123	-0.02	7.61
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.547	0.533	2.6	98	-0.01	7.70
72	t	1,2-Diphenylhydrazine	0.747	0.739	1.1	100	-0.01	7.75
73	S	2,4,6-Tribromophenol	0.101	0.101	0.0	100	-0.01	7.85
74	t	4-Bromophenyl-phenylether	0.213	0.211	0.9	98	-0.01	8.19
75	t	Hexachlorobenzene	0.230	0.223	3.0	99	-0.01	8.26
76	t	Pentachlorophenol	0.146	0.163	-11.6	103	-0.02	8.54
77	t	Phenanthrene	1.109	1.085	2.2	99	-0.02	8.87
78	t	Anthracene	1.126	1.111	1.3	99	-0.02	8.95
79	t	Carbazole	1.051	1.043	0.8	99	-0.02	9.22
80	t	Di-n-butylphthalate	1.354	1.397	-3.2	102	-0.02	9.94
81	t	Fluoranthene	1.251	1.252	-0.1	101	-0.02	10.99
82	t	Octadecane	0.382	0.394	-3.1	101	-0.01	8.75
83	I	Chrysene-d12	1.000	1.000	0.0	102	-0.03	14.07
84	t	Pyrene	1.336	1.296	3.0	101	-0.02	11.43
85		Butyl stearate	0.270	0.272	-0.7	102	-0.02	13.36
86	S	Terphenyl-d14	0.858	0.824	4.0	102	-0.02	11.87
87	t	Butylbenzylphthalate	0.624	0.619	0.8	102	-0.02	13.06
88	t	Benzo[a]anthracene	1.222	1.180	3.4	103	-0.02	14.05
89	t	3,3'-Dichlorobenzidine	0.424	0.410	3.3	99	-0.02	14.09
90	t	Chrysene	1.144	1.100	3.8	102	-0.03	14.13

Continuing Calibration Summary

Job Number: JC20314 **Sample:** EZ5537-CC5533
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110788.D
Project: BMSMC, Building 5 Area, PR

91	t	bis(2-Ethylhexyl)phthalat	0.844	0.844	0.0	105	-0.02	14.47
92	I	Perylene-d12	1.000	1.000	0.0	105	-0.02	17.10
93	t	Di-n-octylphthalate	1.581	1.593	-0.8	106	-0.02	15.92
94	t	Benzo[b]fluoranthene	1.317	1.307	0.8	109	-0.03	16.34
95	t	Benzo[k]fluoranthene	1.241	1.213	2.3	105	-0.04	16.41
96	t	Benzo[a]pyrene	1.168	1.135	2.8	105	-0.03	16.97
97	t	Indeno[1,2,3-cd]pyrene	1.053	1.042	1.0	106	-0.04	19.02
98	t	Dibenz(a,h)acridine	0.972	0.981	-0.9	107	-0.03	18.67
99	t	Dibenz[a,h]anthracene	1.093	1.075	1.6	105	-0.03	19.09
100	t	7,12-Dimethylbenz(a)anthr	0.526	0.544	-3.4	105	-0.03	16.37
101	t	Benzo[g,h,i]perylene	1.112	1.111	0.1	108	-0.04	19.44

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z110747a.D MZ5533.M Thu May 19 12:35:29 2016 RTE

Continuing Calibration Summary

Job Number: JC20314 **Sample:** EZ5537-CC5534
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110789.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5537\Z110789.D          Vial: 3
Acq On    : 19 May 2016   9:26 am                   Operator: ariellec
Sample    : cc5534-25                               Inst    : MSZ
Misc      : op93962,ez5537                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Wed May 18 09:02:21 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	4.65
103	Benzaldehyde	1.004	1.050	-4.6	98	0.00	4.33
104	Phenanthrene-d10a	1.000	1.000	0.0	106	0.00	8.83
105 s	1-chlorooctadecane	0.248	0.242	2.4	107	-0.01	10.98
106 s	o-terphenyl	0.590	0.550	6.8	103	0.00	9.50
107	Atrazine	0.102	0.096	5.9	102	0.00	8.44
108	Chrysene-d12a	1.000	1.000	0.0	105	-0.01	14.06
	----------	True	Calc.	% Drift	----------		
109	Benzidine	25.000	22.489	10.0	112	0.00	11.34
	----------	AvgRF	CCRF	% Dev	----------		
110	Acenaphthene-d10a	1.000	1.000	0.0	103	0.00	6.97
111	1,2,4,5-Tetrachlorobenzen	0.542	0.516	4.8	99	0.00	6.21
112 I	Naphthalene-d8a	1.000	1.000	0.0	99	0.00	5.57
113	Hydroquinone	0.306	0.346	-13.1	107	0.00	5.84

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z110747a.D MZ5533.M Thu May 19 12:35:31 2016 RTE

Continuing Calibration Summary

Job Number: JC20314 **Sample:** EZ5538-CC5533
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110816.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5538\Z110816.D          Vial: 2
Acq On    : 20 May 2016   8:27 am                   Operator: ariellec
Sample    : cc5533-50                               Inst    : MSZ
Misc      : op93962,ez5538                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Fri May 20 09:04:06 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	96	0.00	4.65
2		1,4-Dioxane	0.561	0.498	11.2	91	0.00	2.19
3	t	Pyridine	1.294	1.210	6.5	88	0.01	2.53
4	t	N-Nitrosodimethylamine	0.728	0.717	1.5	91	0.00	2.48
5	S	2-Fluorophenol	1.350	1.294	4.1	92	0.00	3.67
6	t	Indene	2.301	2.123	7.7	94	0.00	4.84
7	t	Cumene	3.349	3.221	3.8	95	0.00	4.06
8	S	Phenol-d5	1.666	1.603	3.8	95	0.00	4.39
9	t	Phenol	1.724	1.706	1.0	98	0.00	4.40
10	t	Aniline	1.860	1.469	21.0#	87	0.00	4.41
11	t	bis(2-Chloroethyl)ether	1.142	1.072	6.1	95	0.00	4.46
12	t	2-Chlorophenol	1.417	1.300	8.3	93	0.00	4.50
13	t	Decane	1.069	0.976	8.7	95	0.00	4.54
14	t	1,3-Dichlorobenzene	1.573	1.466	6.8	92	0.00	4.61
15	t	1,4-Dichlorobenzene	1.548	1.418	8.4	93	0.00	4.66
16	t	Benzyl alcohol	0.836	0.807	3.5	96	0.00	4.76
17	t	1,2-Dichlorobenzene	1.446	1.322	8.6	93	0.00	4.78
18	t	Acetophenone	1.875	1.721	8.2	94	0.00	4.95
19	t	2-Methylphenol	1.197	1.083	9.5	91	0.00	4.84
20	t	2,2'-oxybis(1-Chloropropa	0.380	0.344	9.5	93	0.00	4.85
21	t	3&4-Methylphenol	1.289	1.183	8.2	90	0.00	4.95
22	t	n-Nitroso-di-n-propylamin	0.945	0.879	7.0	94	0.00	4.95
23	t	Hexachloroethane	0.523	0.496	5.2	92	0.00	5.02
24	I	Naphthalene-d8	1.000	1.000	0.0	94	0.00	5.57
25	S	Nitrobenzene-d5	0.373	0.367	1.6	97	0.00	5.05
26	t	Nitrobenzene	0.369	0.351	4.9	96	0.00	5.07
27	t	Quinoline	0.712	0.677	4.9	94	0.00	5.83
28	t	Isophorone	0.637	0.597	6.3	93	0.00	5.25
29	t	2-Nitrophenol	0.189	0.195	-3.2	98	0.00	5.30
30	t	2,4-Dimethylphenol	0.324	0.319	1.5	93	0.00	5.33
31		Benzoic Acid	0.232	0.290	-25.0#	113	0.00	5.42
32	t	bis(2-Chloroethoxy)methan	0.374	0.352	5.9	94	0.00	5.40
33	t	2,4-Dichlorophenol	0.295	0.285	3.4	95	0.00	5.47
34		2,6-Dichlorophenol	0.285	0.266	6.7	92	0.00	5.63
35	t	1,3,5-Trichlorobenzene	0.351	0.324	7.7	93	0.00	5.31
36	t	1,2,4-Trichlorobenzene	0.336	0.315	6.3	95	0.00	5.53
37	t	1,2,3-Trichlorobenzene	0.318	0.297	6.6	93	0.00	5.69
38	t	Naphthalene	1.051	0.979	6.9	92	0.00	5.59
39	t	4-Chloroaniline	0.436	0.381	12.6	90	0.00	5.63
40	t	2,3-Dichloroaniline	0.365	0.342	6.3	94	0.00	6.30
41	t	Caprolactam	0.124	0.119	4.0	94	-0.01	5.89

Continuing Calibration Summary

Job Number: JC20314 **Sample:** EZ5538-CC5533
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110816.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.190	0.177	6.8	94	0.00	5.67
43	t	4-Chloro-3-methylphenol	0.325	0.317	2.5	95	0.00	5.97
44	t	2-Methylnaphthalene	0.619	0.587	5.2	94	0.00	6.09
45	t	1-Methylnaphthalene	0.636	0.596	6.3	94	0.00	6.16
46	t	Dimethylnaphthalene	0.641	0.605	5.6	94	0.00	6.59
47	I	Acenaphthene-d10	1.000	1.000	0.0	93	0.00	6.98
48	t	Hexachlorocyclopentadiene	0.310	0.350	-12.9	102	0.00	6.20
49	t	2,4,6-Trichlorophenol	0.363	0.352	3.0	95	0.00	6.30
50	t	2,4,5-Trichlorophenol	0.389	0.376	3.3	98	0.00	6.34
51	S	2-Fluorobiphenyl	1.308	1.193	8.8	93	0.00	6.37
52	t	2-Chloronaphthalene	1.135	1.050	7.5	94	0.00	6.48
53	t	Biphenyl	1.490	1.408	5.5	94	0.00	6.45
54	t	2-Nitroaniline	0.329	0.337	-2.4	97	0.00	6.56
55	t	Dimethylphthalate	1.345	1.275	5.2	94	0.00	6.72
56	t	Acenaphthylene	1.932	1.817	6.0	94	0.00	6.84
57	t	2,6-Dinitrotoluene	0.262	0.286	-9.2	99	0.00	6.77
58	t	3-Nitroaniline	0.315	0.324	-2.9	96	0.00	6.93
59	t	Acenaphthene	1.180	1.106	6.3	93	0.00	7.01
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	128.585	-28.6#	142	0.00	7.04
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.181	0.202	-11.6	100	0.00	7.09
62	t	Dibenzofuran	1.620	1.520	6.2	95	0.00	7.19
63	t	2,4-Dinitrotoluene	0.358	0.397	-10.9	99	0.00	7.17
64		2,3,4,6-Tetrachlorophenol	0.310	0.321	-3.5	99	0.00	7.31
65	t	Diethylphthalate	1.358	1.331	2.0	97	0.00	7.44
66	t	Fluorene	1.349	1.295	4.0	96	0.00	7.57
67	t	4-Chlorophenyl-phenylethe	0.630	0.600	4.8	95	0.00	7.57
68	t	4-Nitroaniline	0.319	0.303	5.0	90	0.00	7.59
69	I	Phenanthrene-d10	1.000	1.000	0.0	95	0.00	8.84
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	60.094	-20.2#	126	0.00	7.63
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.547	0.519	5.1	96	0.00	7.71
72	t	1,2-Diphenylhydrazine	0.747	0.720	3.6	96	0.00	7.76
73	S	2,4,6-Tribromophenol	0.101	0.101	0.0	95	0.00	7.86
74	t	4-Bromophenyl-phenylether	0.213	0.210	1.4	97	0.00	8.20
75	t	Hexachlorobenzene	0.230	0.218	5.2	95	0.00	8.27
76	t	Pentachlorophenol	0.146	0.157	-7.5	98	0.00	8.56
77	t	Phenanthrene	1.109	1.041	6.1	94	0.00	8.88
78	t	Anthracene	1.126	1.066	5.3	94	0.00	8.96
79	t	Carbazole	1.051	1.012	3.7	96	0.00	9.24
80	t	Di-n-butylphthalate	1.354	1.353	0.1	98	-0.01	9.94
81	t	Fluoranthene	1.251	1.204	3.8	97	0.00	11.01
82	t	Octadecane	0.382	0.384	-0.5	98	0.00	8.76
83	I	Chrysene-d12	1.000	1.000	0.0	97	0.00	14.09
84	t	Pyrene	1.336	1.270	4.9	96	0.00	11.45
85		Butyl stearate	0.270	0.279	-3.3	103	-0.01	13.37
86	S	Terphenyl-d14	0.858	0.828	3.5	98	0.00	11.89
87	t	Butylbenzylphthalate	0.624	0.615	1.4	99	0.00	13.07
88	t	Benzo[a]anthracene	1.222	1.159	5.2	98	0.00	14.07
89	t	3,3'-Dichlorobenzidine	0.424	0.415	2.1	98	0.00	14.11
90	t	Chrysene	1.144	1.082	5.4	97	0.00	14.15

Continuing Calibration Summary

Job Number: JC20314 **Sample:** EZ5538-CC5533
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110816.D
Project: BMSMC, Building 5 Area, PR

91	t	bis(2-Ethylhexyl)phthalat	0.844	0.833	1.3	99	0.00	14.48
92	I	Perylene-d12	1.000	1.000	0.0	95	0.00	17.12
93	t	Di-n-octylphthalate	1.581	1.578	0.2	100	-0.01	15.93
94	t	Benzo[b]fluoranthene	1.317	1.247	5.3	98	0.00	16.37
95	t	Benzo[k]fluoranthene	1.241	1.173	5.5	96	0.00	16.44
96	t	Benzo[a]pyrene	1.168	1.097	6.1	96	0.00	17.00
97	t	Indeno[1,2,3-cd]pyrene	1.053	0.990	6.0	94	0.00	19.06
98	t	Dibenz(a,h)acridine	0.972	0.942	3.1	95	0.00	18.70
99	t	Dibenz[a,h]anthracene	1.093	1.040	4.8	93	0.00	19.12
100	t	7,12-Dimethylbenz(a)anthr	0.526	0.540	-2.7	95	0.00	16.40
101	t	Benzo[g,h,i]perylene	1.112	1.050	5.6	94	0.00	19.48

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z110746a.D MZ5533.M Fri May 20 11:07:49 2016 RTE

6.8.38

6

Continuing Calibration Summary

Job Number: JC20314 **Sample:** EZ5538-CC5534
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** Z110817.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\ez5538\Z110817.D          Vial: 3
Acq On    : 20 May 2016   8:57 am                   Operator: ariellec
Sample    : cc5534-50                               Inst    : MSZ
Misc      : op93962,ez5538                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MZ5533.M (RTE Integrator)
Title        : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
Last Update  : Fri May 20 09:04:06 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	115	0.00	4.65
103		Benzaldehyde	1.004	0.882	12.2	100	0.00	4.33
104		Phenanthrene-d10a	1.000	1.000	0.0	123	0.00	8.84
105	s	1-chlorooctadecane	0.248	0.231	6.9	114	0.00	10.99
106	s	o-terphenyl	0.590	0.506	14.2	110	0.00	9.52
107		Atrazine	0.102	0.093	8.8	112	0.01	8.46
108		Chrysene-d12a	1.000	1.000	0.0	122	-0.01	14.08
		----------	True	Calc.	% Drift	----------		
109		Benzidine	50.000	57.030	-14.1	126	0.00	11.35
		----------	AvgRF	CCRF	% Dev	----------		
110		Acenaphthene-d10a	1.000	1.000	0.0	124	0.00	6.97
111		1,2,4,5-Tetrachlorobenzen	0.542	0.474	12.5	110	0.00	6.21
112	I	Naphthalene-d8a	1.000	1.000	0.0	120	0.00	5.57
113		Hydroquinone	0.306	0.302	1.3	105	0.02	5.86

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Z110746a.D MZ5533.M Fri May 20 11:07:52 2016 RTE

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5538\
Data File : Z110820.D
Acq On : 20 May 2016 10:25 am
Operator : ariellec
Sample : jc20314-1
Misc : op93998,ez5538,30.9
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 20 11:26:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Fri May 20 09:04:06 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.653	152	175510	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	679100	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	408298	40.00	ppm	0.00
69) Phenanthrene-d10	8.836	188	697423	40.00	ppm	0.00
83) Chrysene-d12	14.077	240	672126	40.00	ppm	-0.02
92) Perylene-d12	17.112	264	590780	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.653	152	175510	40.00	ppm	0.00
104) Phenanthrene-d10a	8.836	188	697423	40.00	ppm	0.00
108) Chrysene-d12a	14.077	240	672126	40.00	ppm	-0.02
110) Acenaphthene-d10a	6.972	164	408298	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	679100	40.00	ppm	0.00
114) Chrysene-d12b	14.077	240	672126	40.00	ppm	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	3.670	112	235477	39.75	ppm	0.00
Spiked Amount 50.000			Recovery = 79.50%			
8) Phenol-d5	4.386	99	294285	40.26	ppm	0.00
Spiked Amount 50.000			Recovery = 80.52%			
25) Nitrobenzene-d5	5.054	82	261296	41.27	ppm	0.00
Spiked Amount 50.000			Recovery = 82.54%			
51) 2-Fluorobiphenyl	6.368	172	539712	40.44	ppm	0.00
Spiked Amount 50.000			Recovery = 80.88%			
73) 2,4,6-Tribromophenol	7.853	330	72248	41.23	ppm	0.00
Spiked Amount 50.000			Recovery = 82.46%			
86) Terphenyl-d14	11.882	244	571991	39.69	ppm	0.00
Spiked Amount 50.000			Recovery = 79.38%			
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%			

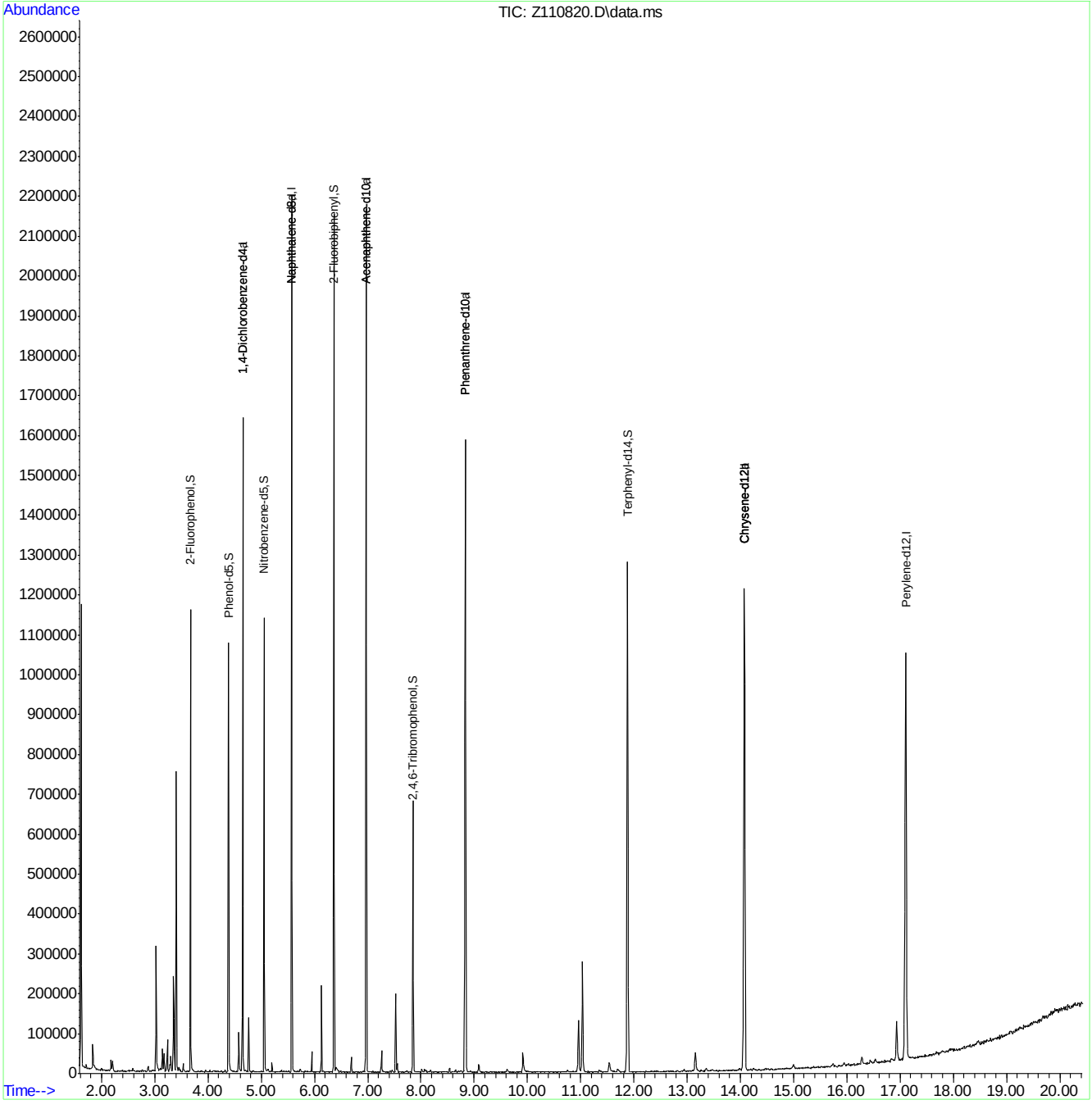
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5538\
Data File : Z110820.D
Acq On : 20 May 2016 10:25 am
Operator : ariellec
Sample : jc20314-1
Misc : op93998,ez5538,30.9
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 20 11:26:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Fri May 20 09:04:06 2016
Response via : Initial Calibration



MZ5533.M Fri May 20 11:26:11 2016 RTE

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110704.D
Acq On : 16 May 2016 2:42 pm
Operator : ariellec
Sample : jc20314-2
Misc : op93924,ez5530,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 16 15:04:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.208	152	188692	40.00	ppm	0.00
24) Naphthalene-d8	5.132	136	703606	40.00	ppm	0.00
47) Acenaphthene-d10	6.403	164	447371	40.00	ppm	0.00
69) Phenanthrene-d10	8.001	188	718255	40.00	ppm	0.00
83) Chrysene-d12	12.900	240	704029	40.00	ppm	-0.01
92) Perylene-d12	15.886	264	747674	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.208	152	188692	40.00	ppm	-0.06
104) Phenanthrene-d10a	8.001	188	718255	40.00	ppm	-0.11
106) Chrysene-d12a	12.900	240	704029	40.00	ppm	-0.17
108) Acenaphthene-d10a	6.403	164	447371	40.00	ppm	-0.07
110) Naphthalene-d8a	5.132	136	703606	40.00	ppm	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	3.289	112	124096	19.05	ppm	0.00
Spiked Amount 50.000			Recovery = 38.10%			
8) Phenol-d5	4.058	99	87767	11.50	ppm	0.02
Spiked Amount 50.000			Recovery = 23.00%			
25) Nitrobenzene-d5	4.635	82	217071	38.23	ppm	0.00
Spiked Amount 50.000			Recovery = 76.46%			
51) 2-Fluorobiphenyl	5.891	172	486686	33.94	ppm	0.00
Spiked Amount 50.000			Recovery = 67.88%			
73) 2,4,6-Tribromophenol	7.167	330	67992	30.80	ppm	0.00
Spiked Amount 50.000			Recovery = 61.60%			
86) Terphenyl-d14	10.773	244	617498	41.75	ppm	0.10
Spiked Amount 50.000			Recovery = 83.50%			

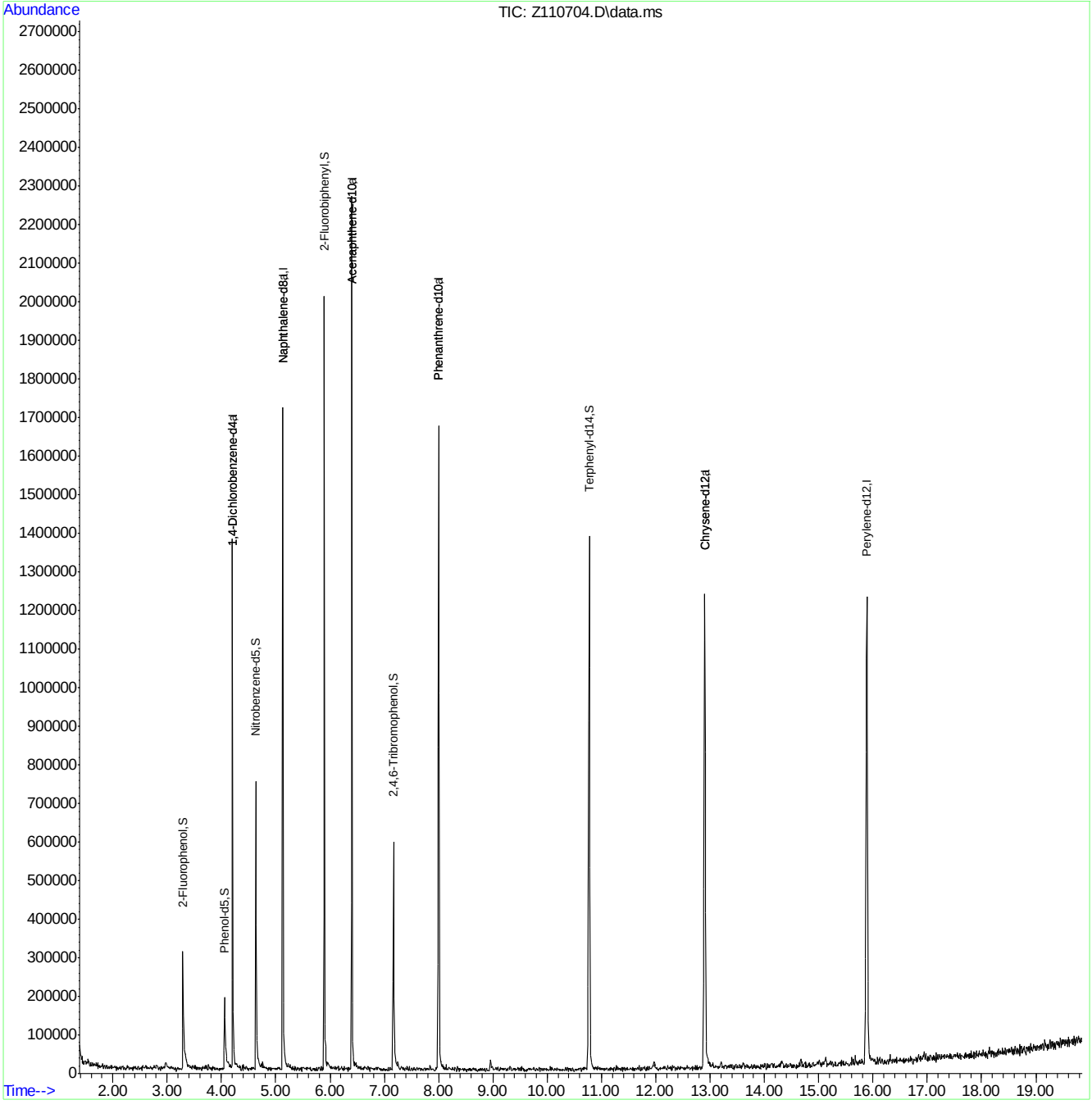
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110704.D
Acq On : 16 May 2016 2:42 pm
Operator : ariellec
Sample : jc20314-2
Misc : op93924,ez5530,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 16 15:04:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration



MZ5485.M Mon May 16 15:04:56 2016 RTE

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5538\
Data File : Z110821.D
Acq On : 20 May 2016 10:55 am
Operator : ariellec
Sample : jc20314-3
Misc : op93998,ez5538,31.8
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 20 15:39:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Fri May 20 09:04:06 2016
Response via : Initial Calibration

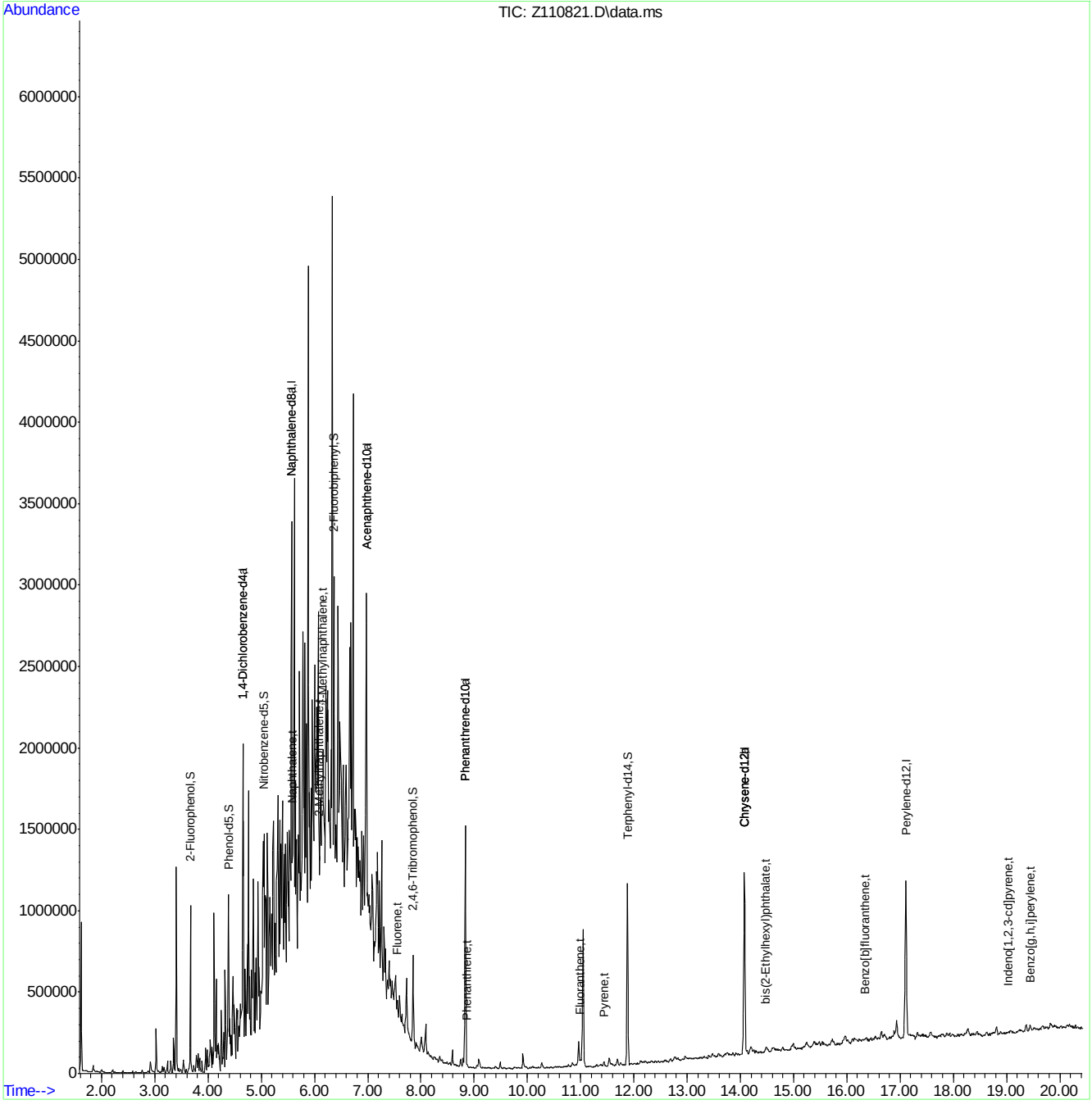
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	158615	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	562138	40.00	ppm	0.00
47) Acenaphthene-d10	6.977	164	341739	40.00	ppm	0.00
69) Phenanthrene-d10	8.836	188	645485	40.00	ppm	0.00
83) Chrysene-d12	14.077	240	616150	40.00	ppm	-0.02
92) Perylene-d12	17.112	264	544543	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.654	152	158615	40.00	ppm	0.00
104) Phenanthrene-d10a	8.836	188	645485	40.00	ppm	0.00
108) Chrysene-d12a	14.077	240	616150	40.00	ppm	-0.02
110) Acenaphthene-d10a	6.977	164	341739	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	562138	40.00	ppm	0.00
114) Chrysene-d12b	14.077	240	616150	40.00	ppm	-0.07
System Monitoring Compounds						
5) 2-Fluorophenol	3.671	112	205812	38.44	ppm	0.00
Spiked Amount 50.000			Recovery = 76.88%			
8) Phenol-d5	4.386	99	247260	37.43	ppm	0.00
Spiked Amount 50.000			Recovery = 74.86%			
25) Nitrobenzene-d5	5.054	82	207823	39.66	ppm	0.00
Spiked Amount 50.000			Recovery = 79.32%			
51) 2-Fluorobiphenyl	6.368	172	423784	37.94	ppm	0.00
Spiked Amount 50.000			Recovery = 75.88%			
73) 2,4,6-Tribromophenol	7.854	330	60608	37.37	ppm	0.00
Spiked Amount 50.000			Recovery = 74.74%			
86) Terphenyl-d14	11.882	244	500858	37.91	ppm	0.00
Spiked Amount 50.000			Recovery = 75.82%			
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
38) Naphthalene	5.588	128	14784	1.00	ppm	61
44) 2-Methylnaphthalene	6.085	141	56038	6.44	ppm	96
45) 1-Methylnaphthalene	6.160	141	70476	7.89	ppm	98
66) Fluorene	7.560	166	8596	0.75	ppm	86
77) Phenanthrene	8.869	178	7295	0.41	ppm	92
81) Fluoranthene	10.995	202	13616	0.67	ppm	95
84) Pyrene	11.438	202	14757	0.72	ppm	96
91) bis(2-Ethylhexyl)phtha...	14.473	149	13629	1.05	ppm	96
94) Benzo[b]fluoranthene	16.348	252	10503	0.59	ppm	79
97) Indeno[1,2,3-cd]pyrene	19.040	276	6012	0.42	ppm	85
101) Benzo[g,h,i]perylene	19.457	276	7293	0.48	ppm	88

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

Quantitation Report (QT Reviewed)

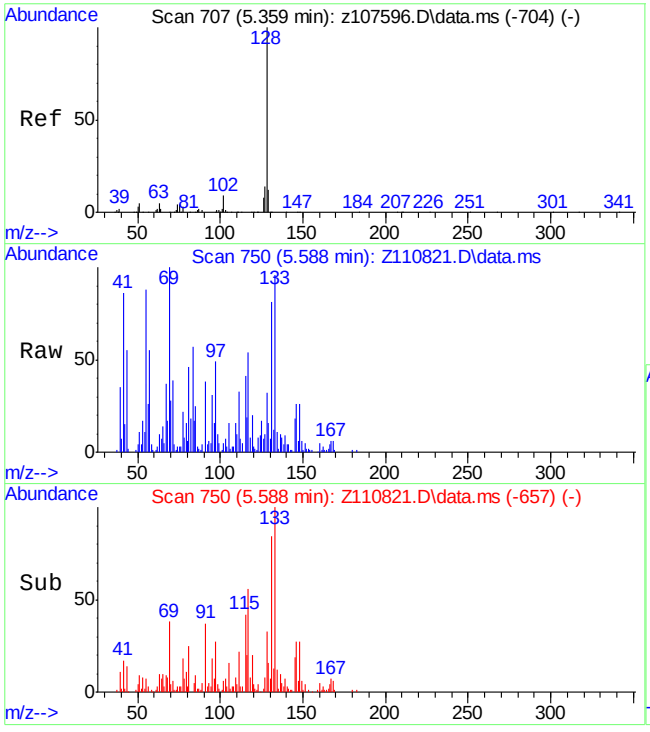
Data Path : C:\msdchem\1\DATA\ez5538\
Data File : Z110821.D
Acq On : 20 May 2016 10:55 am
Operator : ariellec
Sample : jc20314-3
Misc : op93998,ez5538,31.8
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 20 15:39:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Fri May 20 09:04:06 2016
Response via : Initial Calibration



MZ5533.M Fri May 20 15:39:38 2016 RTE

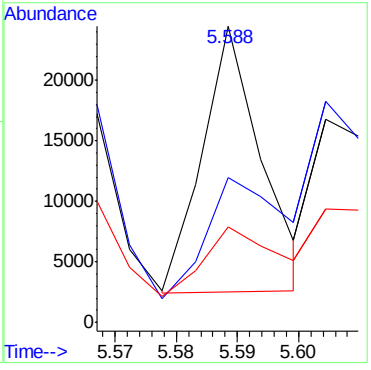
Page: 2

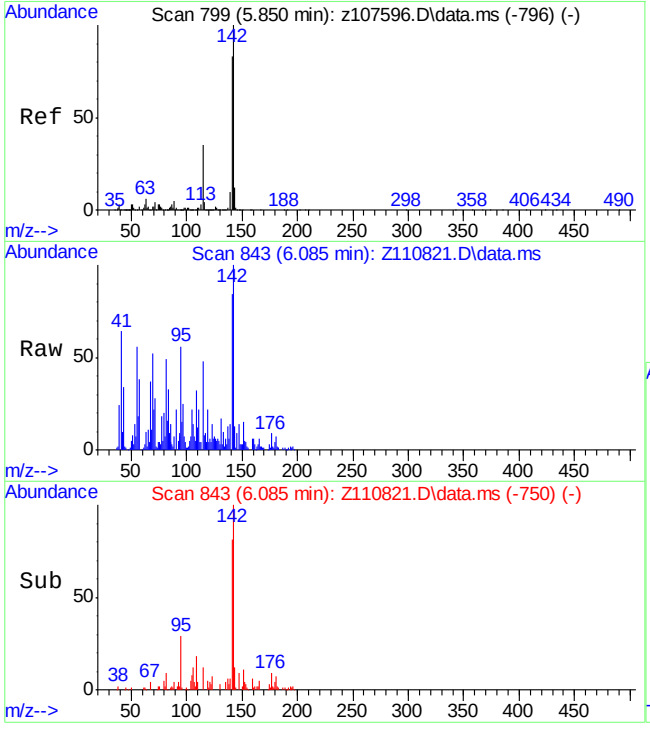


#38
Naphthalene
Concen: 1.00 ppm
RT: 5.588 min Scan# 750
Delta R.T. -0.005 min
Lab File: Z110821.D
Acq: 20 May 2016 10:55 am

Tgt Ion:128 Resp: 14784

Ion	Ratio	Lower	Upper
128	100		
129	34.8	0.0	40.8
127	21.7	0.0	43.6

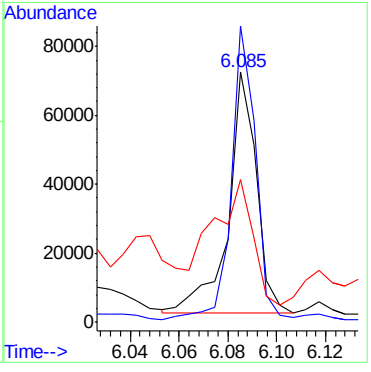


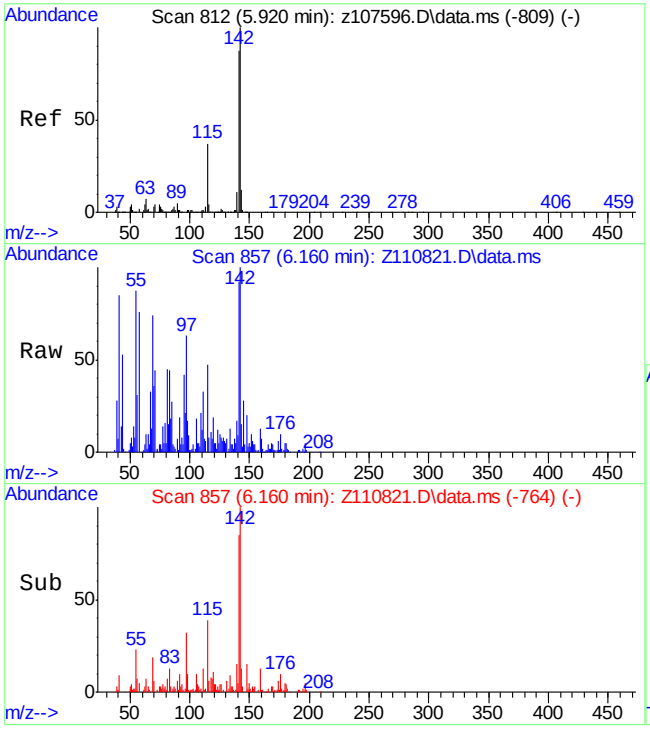


#44
2-Methylnaphthalene
Concen: 6.44 ppm
RT: 6.085 min Scan# 843
Delta R.T. -0.005 min
Lab File: Z110821.D
Acq: 20 May 2016 10:55 am

Tgt Ion:141 Resp: 56038

Ion	Ratio	Lower	Upper
141	100		
142	122.5	87.8	147.8
115	41.5	10.2	70.2

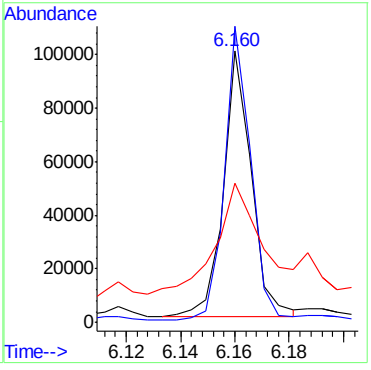


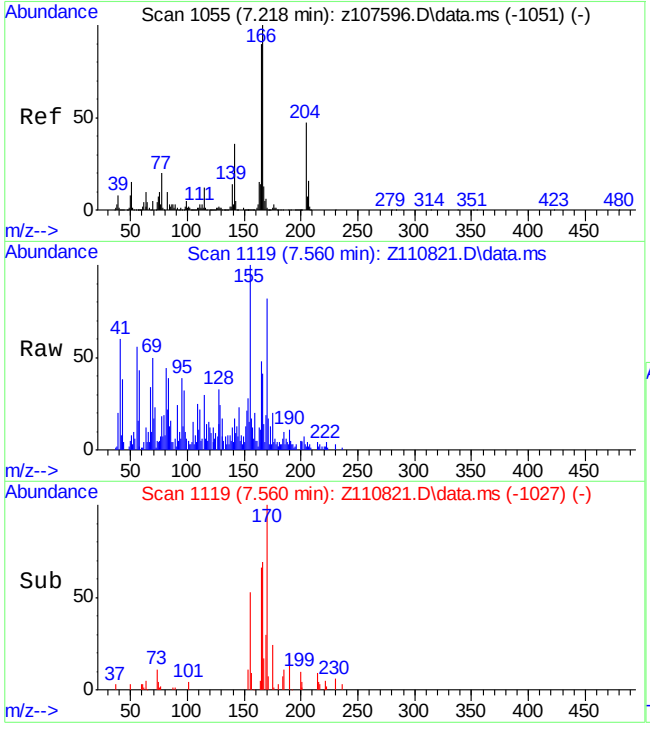


#45
1-Methylnaphthalene
Concen: 7.89 ppm
RT: 6.160 min Scan# 857
Delta R.T. -0.005 min
Lab File: Z110821.D
Acq: 20 May 2016 10:55 am

Tgt Ion:141 Resp: 70476

Ion	Ratio	Lower	Upper
141	100		
142	111.6	82.1	142.1
115	36.5	10.5	70.5

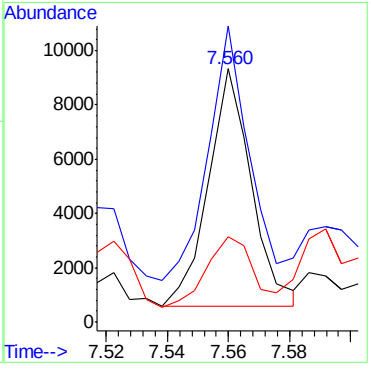


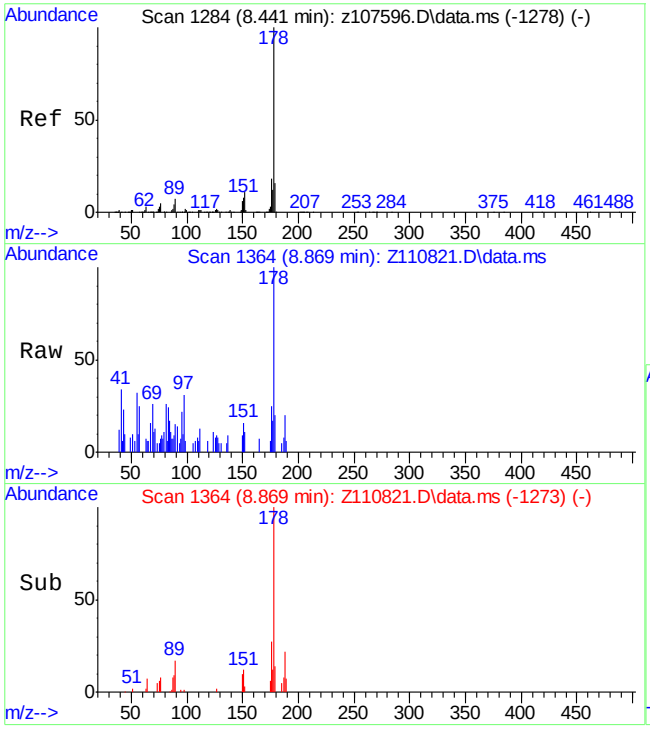


#66
Fluorene
Concen: 0.75 ppm
RT: 7.560 min Scan# 1119
Delta R.T. -0.011 min
Lab File: Z110821.D
Acq: 20 May 2016 10:55 am

Tgt Ion:166 Resp: 8596

Ion	Ratio	Lower	Upper
166	100		
165	105.6	64.3	124.3
167	24.2	0.0	43.8

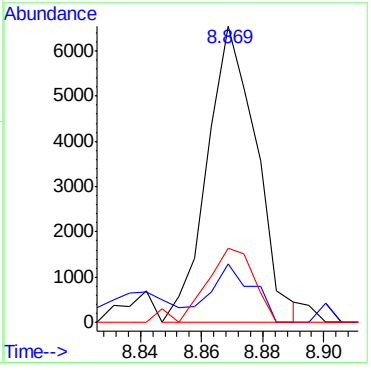


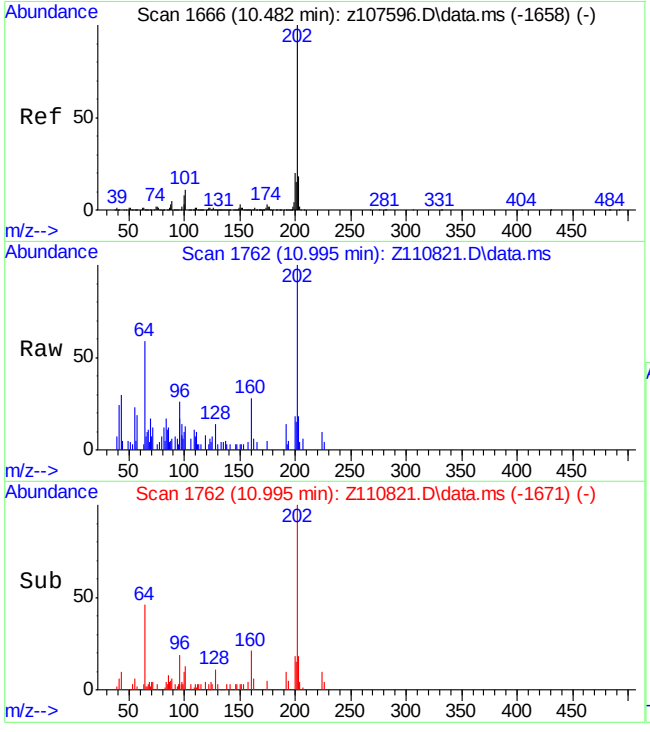


#77
Phenanthrene
Concen: 0.41 ppm
RT: 8.869 min Scan# 1364
Delta R.T. -0.016 min
Lab File: Z110821.D
Acq: 20 May 2016 10:55 am

Tgt Ion:178 Resp: 7295

Ion	Ratio	Lower	Upper
178	100		
179	16.6	0.0	44.8
176	23.3	0.0	48.2

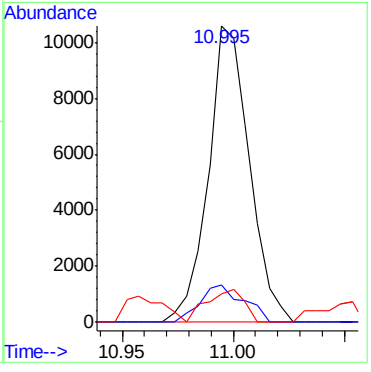


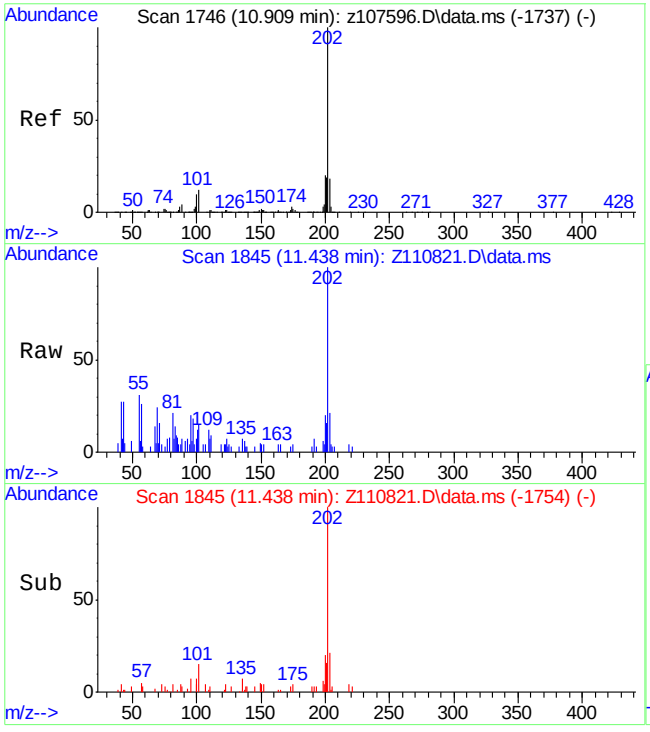


#81
Fluoranthene
Concen: 0.67 ppm
RT: 10.995 min Scan# 1762
Delta R.T. -0.016 min
Lab File: Z110821.D
Acq: 20 May 2016 10:55 am

Tgt Ion:202 Resp: 13616

Ion	Ratio	Lower	Upper
202	100		
101	12.6	0.0	43.3
100	6.5	0.0	40.1

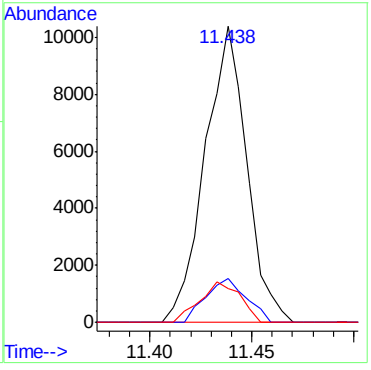


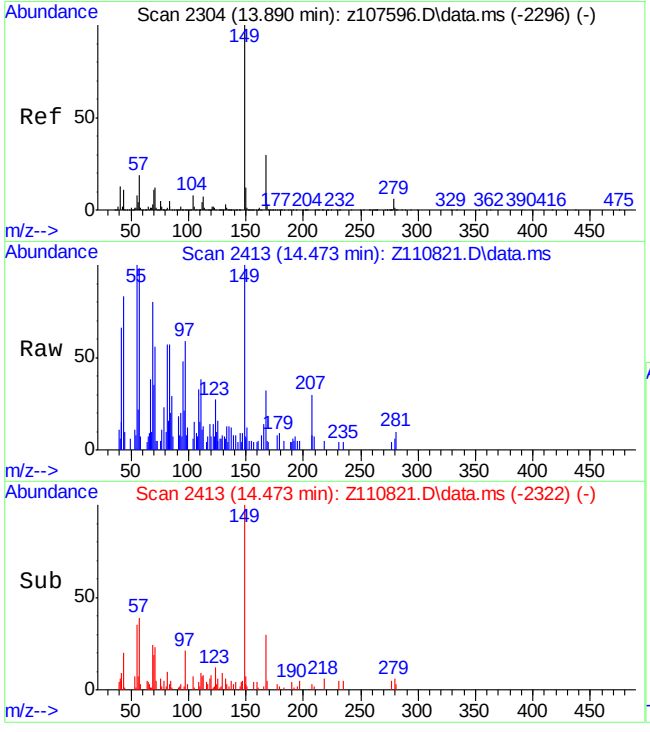


#84
Pyrene
Concen: 0.72 ppm
RT: 11.438 min Scan# 1845
Delta R.T. -0.016 min
Lab File: Z110821.D
Acq: 20 May 2016 10:55 am

Tgt Ion:202 Resp: 14757

Ion	Ratio	Lower	Upper
202	100		
101	14.8	0.0	46.6
100	11.6	0.0	43.0

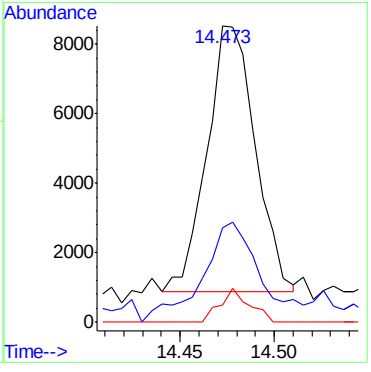


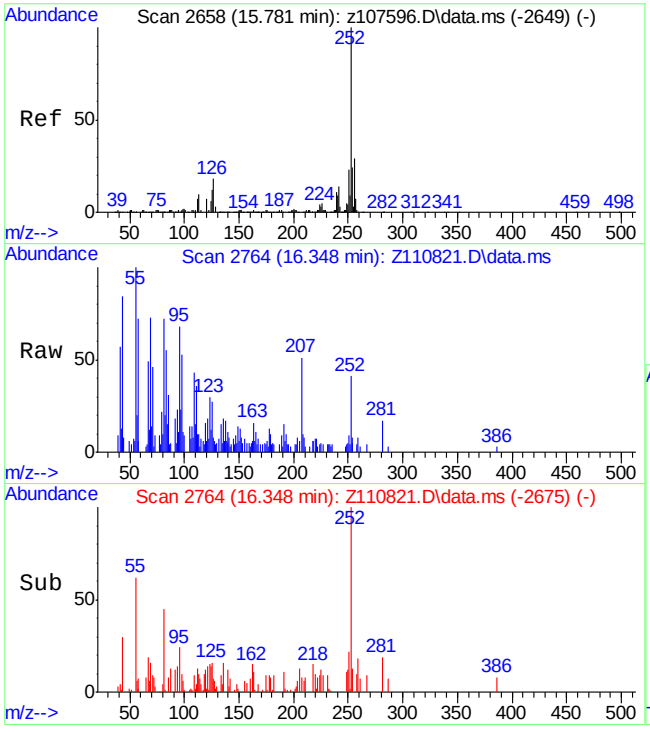


#91
bis(2-Ethylhexyl)phthalate
Concen: 1.05 ppm
RT: 14.473 min Scan# 2413
Delta R.T. -0.016 min
Lab File: Z110821.D
Acq: 20 May 2016 10:55 am

Tgt Ion:149 Resp: 13629

Ion	Ratio	Lower	Upper
149	100		
167	28.2	0.0	56.4
279	6.5	0.0	35.2

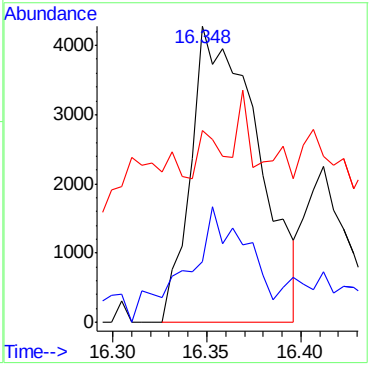


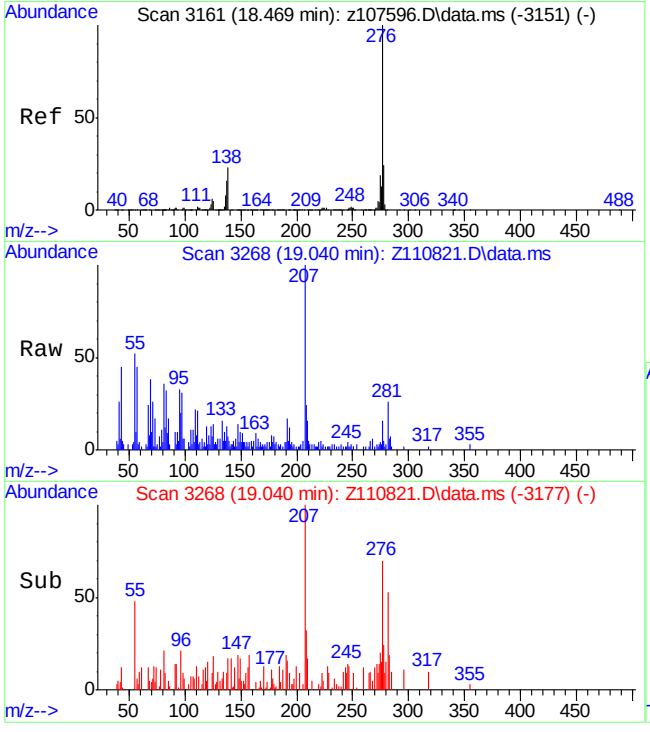


#94
Benzo[b]fluoranthene
Concen: 0.59 ppm
RT: 16.348 min Scan# 2764
Delta R.T. -0.027 min
Lab File: Z110821.D
Acq: 20 May 2016 10:55 am

Tgt Ion:252 Resp: 10503

Ion	Ratio	Lower	Upper
252	100		
253	10.0	0.0	51.2
125	17.7	0.0	41.8

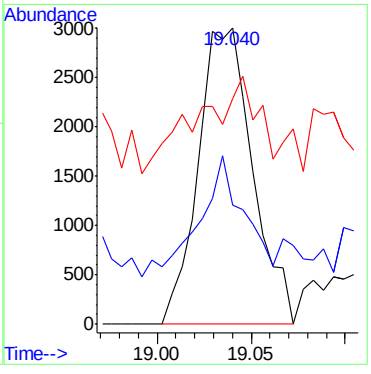


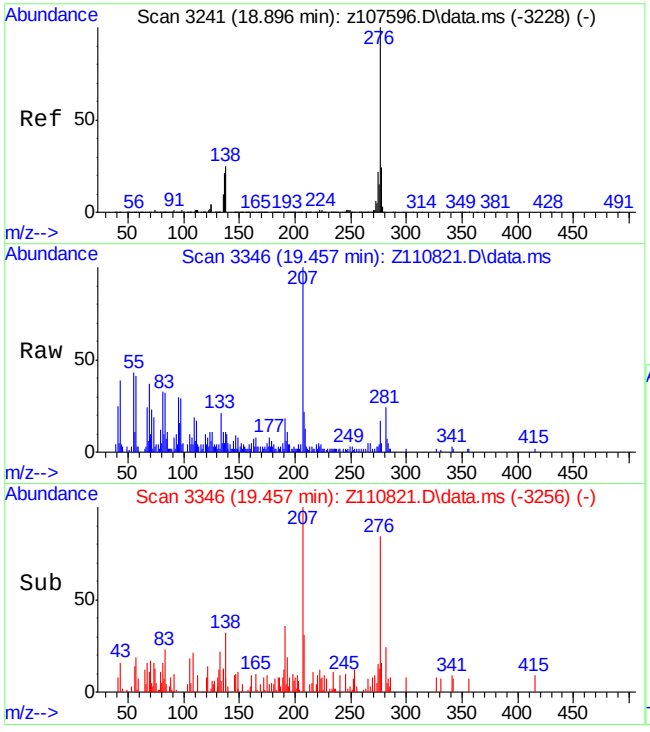


#97
Indeno[1,2,3-cd]pyrene
Concen: 0.42 ppm
RT: 19.040 min Scan# 3268
Delta R.T. -0.016 min
Lab File: Z110821.D
Acq: 20 May 2016 10:55 am

Tgt Ion:276 Resp: 6012

Ion	Ratio	Lower	Upper
276	100		
138	17.2	0.0	54.9
137	12.5	0.0	49.0

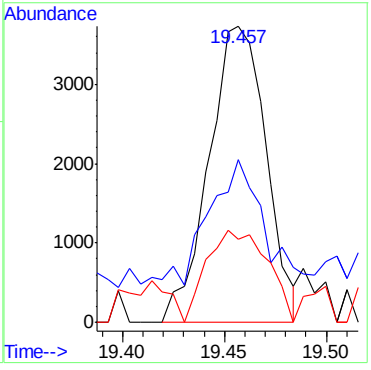




#101
Benzo[g,h,i]perylene
Concen: 0.48 ppm
RT: 19.457 min Scan# 3346
Delta R.T. -0.021 min
Lab File: Z110821.D
Acq: 20 May 2016 10:55 am

Tgt Ion:276 Resp: 7293

Ion	Ratio	Lower	Upper
276	100		
138	40.9	0.0	59.0
277	24.4	0.0	54.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16370.D
Acq On : 20 May 2016 11:21 am
Operator : linseyk
Sample : jc20314-1
Misc : op93998a,e4p867,30.9
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 20 16:39:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 20 11:36:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.858	150	171612	4.00	ppm	-0.02
13) Fluorene-d10	10.814	176	161585	4.00	ppm	-0.02
23) Fluoranthene-d10	15.020	212	334734	4.00	ppm	-0.02
33) Benzo(a)pyrene-d12	19.649	264	157312	4.00	ppm	-0.02
System Monitoring Compounds						
3) 2-Fluorophenol	2.682	112	906292	47.98	ppm	-0.01
Spiked Amount 50.000			Recovery = 95.96%			
4) Phenol-d5	3.802	99	1208262	43.45	ppm	-0.02
Spiked Amount 50.000			Recovery = 86.90%			
7) Nitrobenzene-d5	5.159	82	1108646	48.64	ppm	-0.02
Spiked Amount 50.000			Recovery = 97.28%			
14) 2-Fluorobiphenyl	8.523	172	2742113	41.59	ppm	-0.02
Spiked Amount 50.000			Recovery = 83.18%			
22) 2,4,6-Tribromophenol	11.337	330	338973	57.16	ppm	-0.02
Spiked Amount 50.000			Recovery = 114.32%			
30) Terphenyl-d14	15.863	244	1858241	44.22	ppm	-0.03
Spiked Amount 50.000			Recovery = 88.44%			
Target Compounds						Qvalue

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

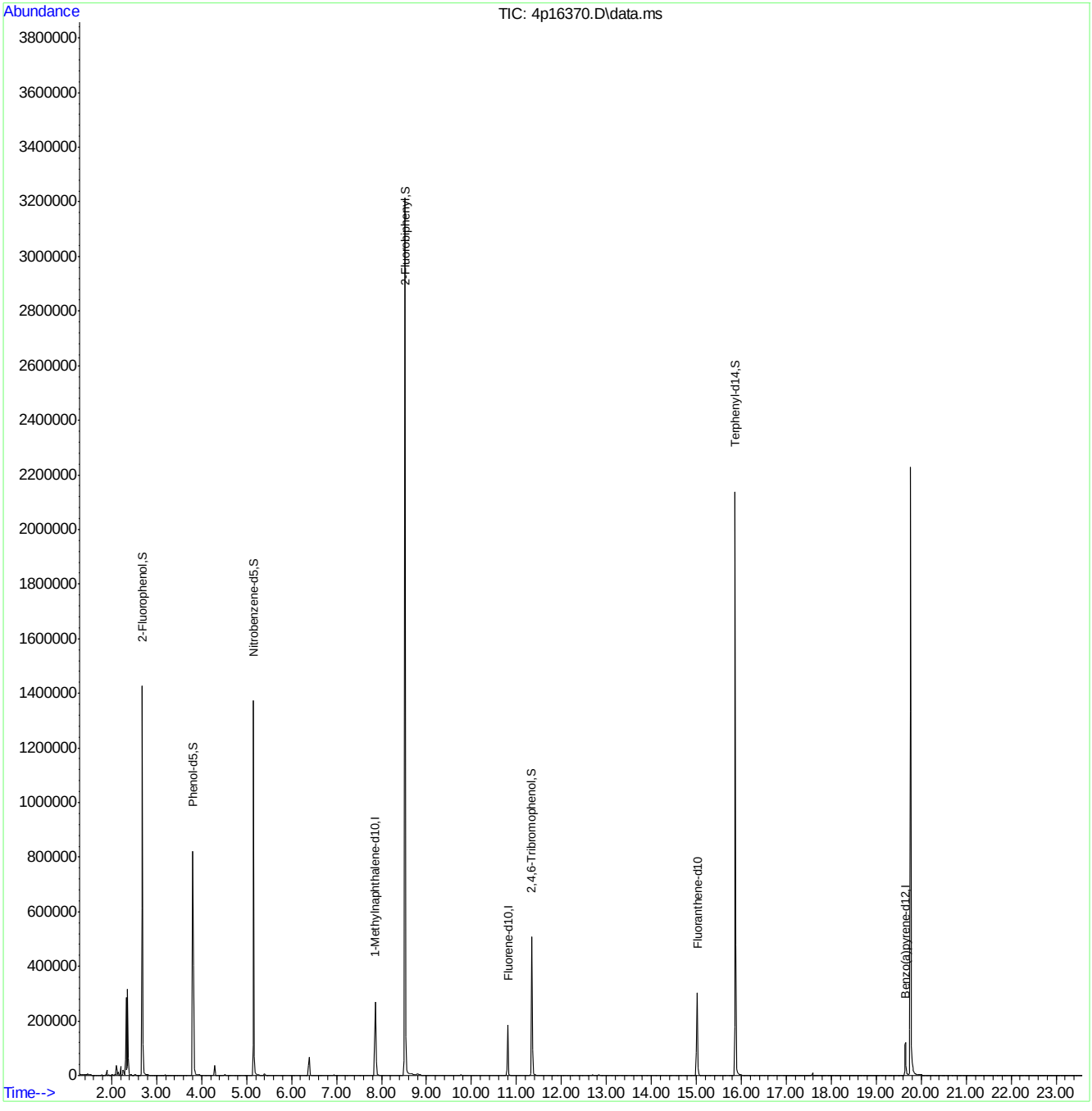
7.1.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16370.D
Acq On : 20 May 2016 11:21 am
Operator : linseyk
Sample : jc20314-1
Misc : op93998a,e4p867,30.9
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 20 16:39:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 20 11:36:22 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2885\
Data File : 3m61366.D
Acq On : 16 May 2016 8:01 pm
Operator : ashleyd
Sample : jc20314-2
Misc : op93924a,e3m2885,1000
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 17 10:03:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 16 17:09:16 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.406	150	501042	4.00	ppm	0.04
14) Fluorene-d10	13.411	176	721747	4.00	ppm	0.04
21) Fluoranthene-d10	17.639	212	1141384	4.00	ppm	0.05
31) Benzo(a)pyrene-d12	22.258	264	933713	4.00	ppm	0.06
System Monitoring Compounds						
3) 2-Fluorophenol	4.399	112	1588685	25.34	ppm	0.08
Spiked Amount 50.000			Recovery = 50.68%			
4) Phenol-d5	6.036	99	1735309	16.73	ppm	0.11
Spiked Amount 50.000			Recovery = 33.46%			
7) Nitrobenzene-d5	7.531	82	3020436	31.32	ppm	0.04
Spiked Amount 50.000			Recovery = 62.64%			
15) 2-Fluorobiphenyl	11.083	172	7359122	37.11	ppm	0.05
Spiked Amount 50.000			Recovery = 74.22%			
20) 2,4,6-Tribromophenol	13.976	330	858284	38.00	ppm	0.06
Spiked Amount 50.000			Recovery = 76.00%			
28) Terphenyl-d14	18.458	244	7698579	46.50	ppm	0.05
Spiked Amount 50.000			Recovery = 93.00%			

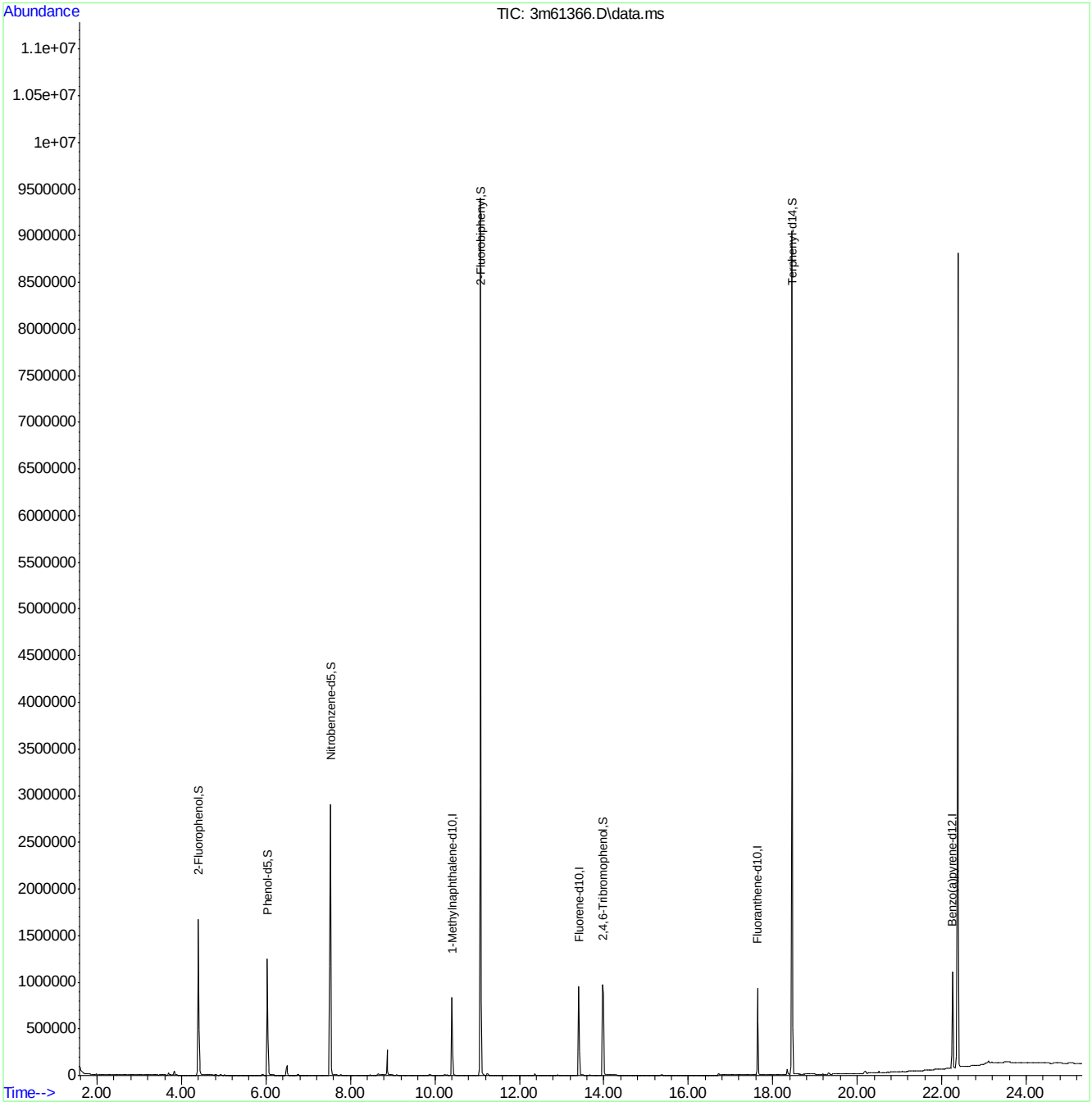
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2885\
Data File : 3m61366.D
Acq On : 16 May 2016 8:01 pm
Operator : ashleyd
Sample : jc20314-2
Misc : op93924a,e3m2885,1000
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 17 10:03:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 16 17:09:16 2016
Response via : Initial Calibration



M3M2855SIM.M Tue May 17 10:03:19 2016 RPT1 Page: 2

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/31/16 18:48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16371.D
Acq On : 20 May 2016 11:51 am
Operator : linseyk
Sample : jc20314-3
Misc : op93998a,e4p867,31.8
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 20 16:42:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 20 11:59:02 2016
Response via : Initial Calibration

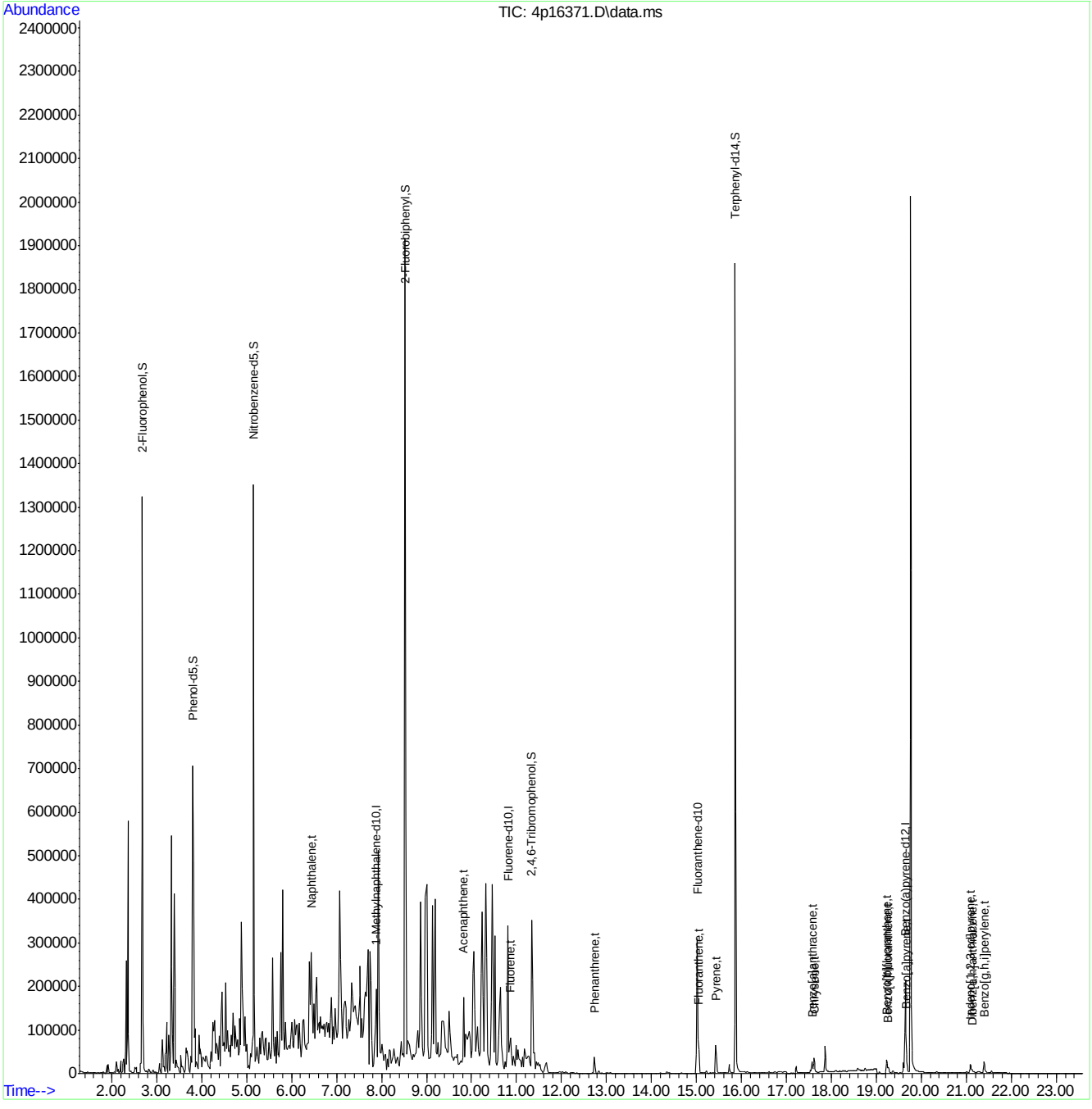
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.879	150	150481	4.00	ppm	0.00
13) Fluorene-d10	10.812	176	271791	4.00	ppm	-0.02
23) Fluoranthene-d10	15.018	212	320309	4.00	ppm	-0.02
33) Benzo(a)pyrene-d12	19.645	264	217419	4.00	ppm	-0.02
System Monitoring Compounds						
3) 2-Fluorophenol	2.682	112	828004	49.99	ppm	-0.01
Spiked Amount 50.000			Recovery = 99.98%			
4) Phenol-d5	3.802	99	1091343	44.75	ppm	-0.02
Spiked Amount 50.000			Recovery = 89.50%			
7) Nitrobenzene-d5	5.158	82	1156323	57.86	ppm	-0.02
Spiked Amount 50.000			Recovery = 115.72%			
14) 2-Fluorobiphenyl	8.521	172	1958608	17.66	ppm	-0.02
Spiked Amount 50.000			Recovery = 35.32%			
22) 2,4,6-Tribromophenol	11.335	330	289028	28.98	ppm	-0.02
Spiked Amount 50.000			Recovery = 57.96%			
30) Terphenyl-d14	15.861	244	1717841	42.72	ppm	-0.03
Spiked Amount 50.000			Recovery = 85.44%			
Target Compounds						Qvalue
8) Naphthalene	6.438	128	112672	1.35	ppm	58
16) Acenaphthene	9.827	153	41147	0.54	ppm #	44
18) Fluorene	10.862	166	51451	0.64	ppm #	64
26) Phenanthrene	12.729	178	42596	0.47	ppm	96
28) Fluoranthene	15.053	202	73177	0.69	ppm	99
29) Pyrene	15.431	202	82253	1.00	ppm	86
31) Benzo[a]anthracene	17.572	228	29440	0.65	ppm	75
32) Chrysene	17.620	228	38512	0.52	ppm	97
34) Benzo[b]fluoranthene	19.231	252	44850m	0.71	ppm	
35) Benzo[k]fluoranthene	19.266	252	14888m	0.25	ppm	
36) Benzo[a]pyrene	19.668	252	27331	0.33	ppm	97
37) Indeno[1,2,3-cd]pyrene	21.089	276	33733	0.51	ppm	98
38) Dibenz[a,h]anthracene	21.128	278	7039	0.15	ppm	100
39) Benzo[g,h,i]perylene	21.397	276	37410	0.55	ppm	100

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

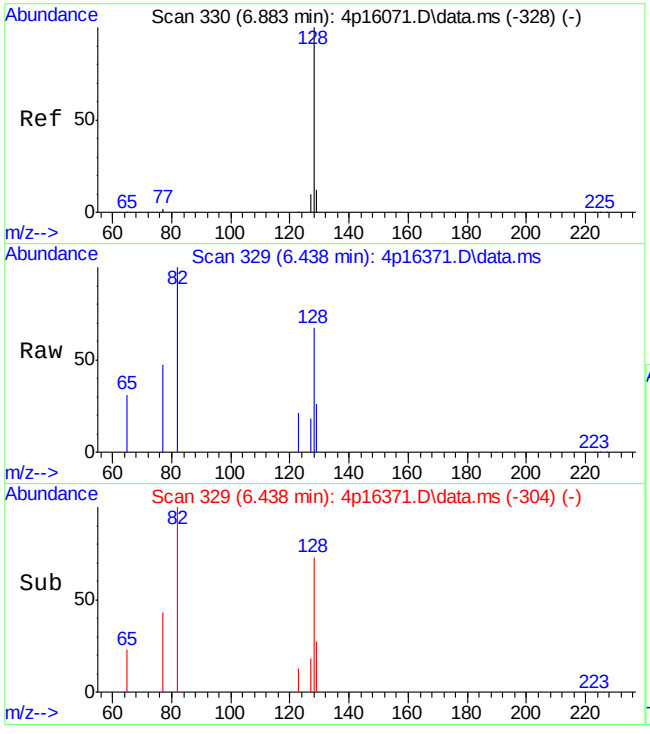
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16371.D
Acq On : 20 May 2016 11:51 am
Operator : linseyk
Sample : jc20314-3
Misc : op93998a,e4p867,31.8
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 20 16:42:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 20 11:59:02 2016
Response via : Initial Calibration



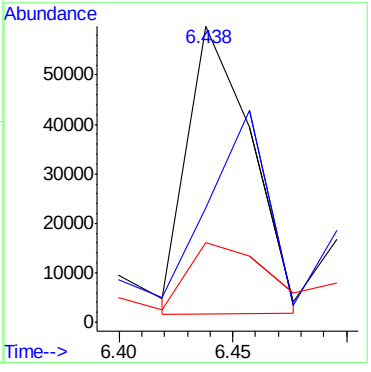
M4P863SIM.M Fri May 20 16:42:48 2016 Page: 2

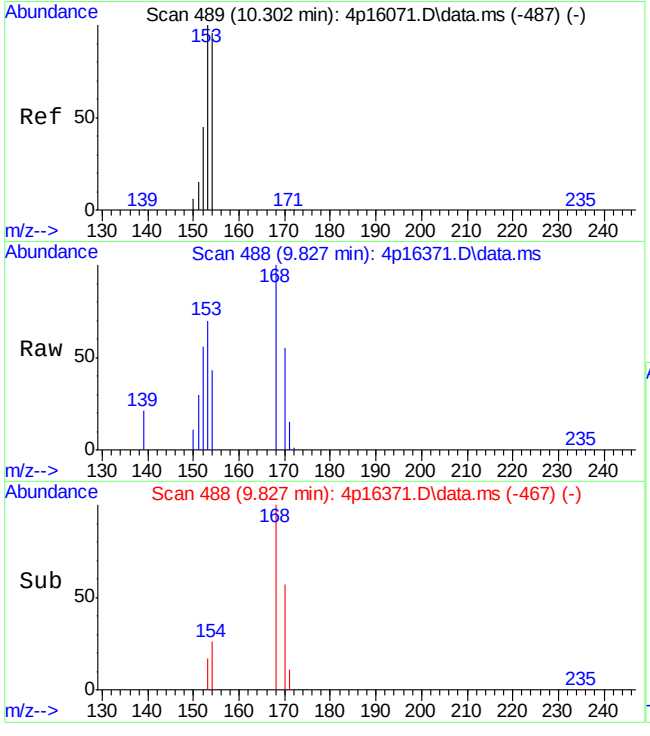


#8
Naphthalene
Concen: 1.35 ppm
RT: 6.438 min Scan# 329
Delta R.T. -0.019 min
Lab File: 4p16371.D
Acq: 20 May 2016 11:51 am

Tgt Ion:128 Resp: 112672

Ion	Ratio	Lower	Upper
128	100		
129	34.1	0.0	42.0
127	21.6	0.0	41.4

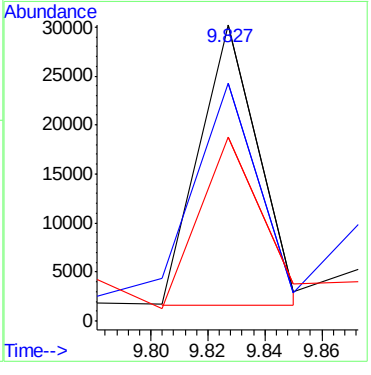


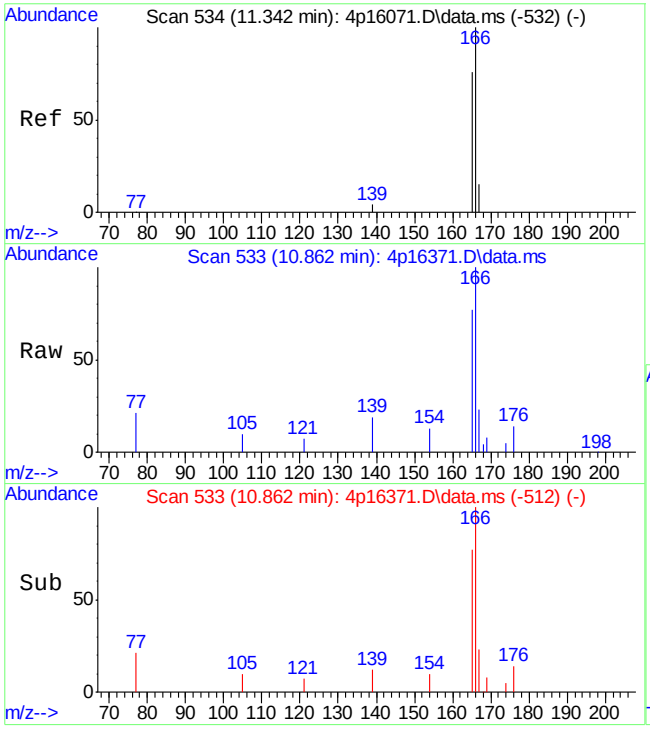


#16
Acenaphthene
Concen: 0.54 ppm
RT: 9.827 min Scan# 488
Delta R.T. -0.023 min
Lab File: 4p16371.D
Acq: 20 May 2016 11:51 am

Tgt Ion:153 Resp: 41147

Ion	Ratio	Lower	Upper
153	100		
152	74.0	6.6	66.6#
154	58.5	86.5	146.5#

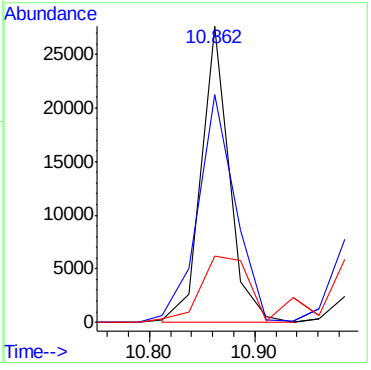


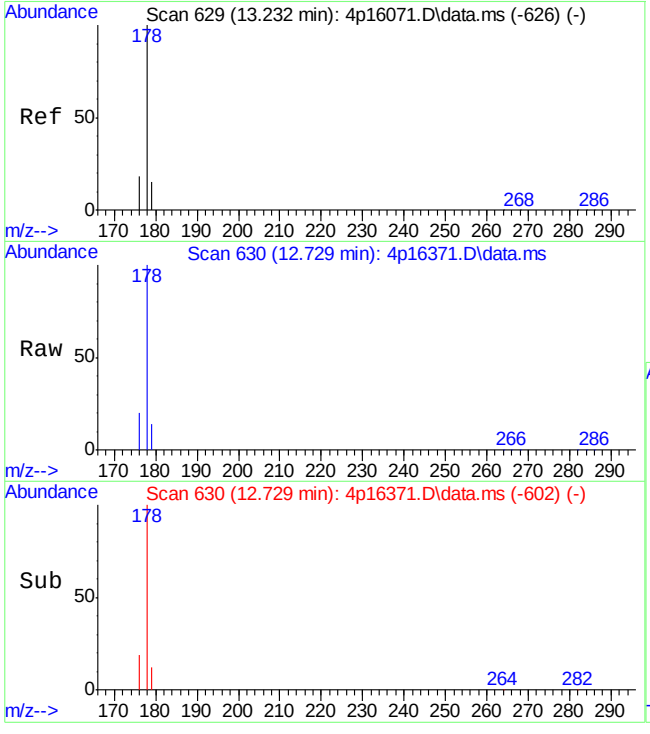


#18
Fluorene
Concen: 0.64 ppm
RT: 10.862 min Scan# 533
Delta R.T. -0.025 min
Lab File: 4p16371.D
Acq: 20 May 2016 11:51 am

Tgt Ion:166 Resp: 51451

Ion	Ratio	Lower	Upper
166	100		
165	75.8	86.4	146.4#
167	17.9	0.0	40.4

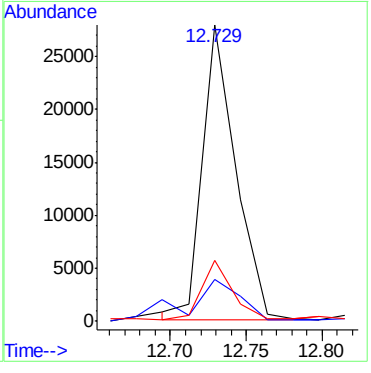


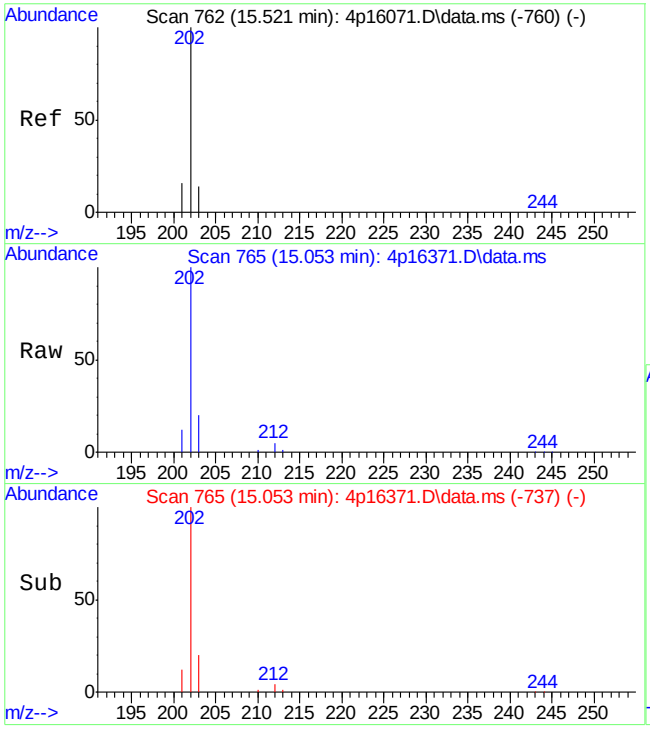


#26
Phenanthrene
Concen: 0.47 ppm
RT: 12.729 min Scan# 630
Delta R.T. -0.017 min
Lab File: 4p16371.D
Acq: 20 May 2016 11:51 am

Tgt Ion:178 Resp: 42596

Ion	Ratio	Lower	Upper
178	100		
179	10.7	0.0	43.7
176	20.2	0.0	50.9

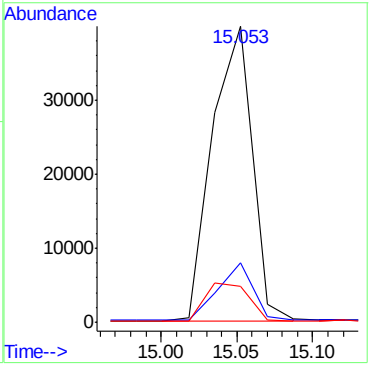


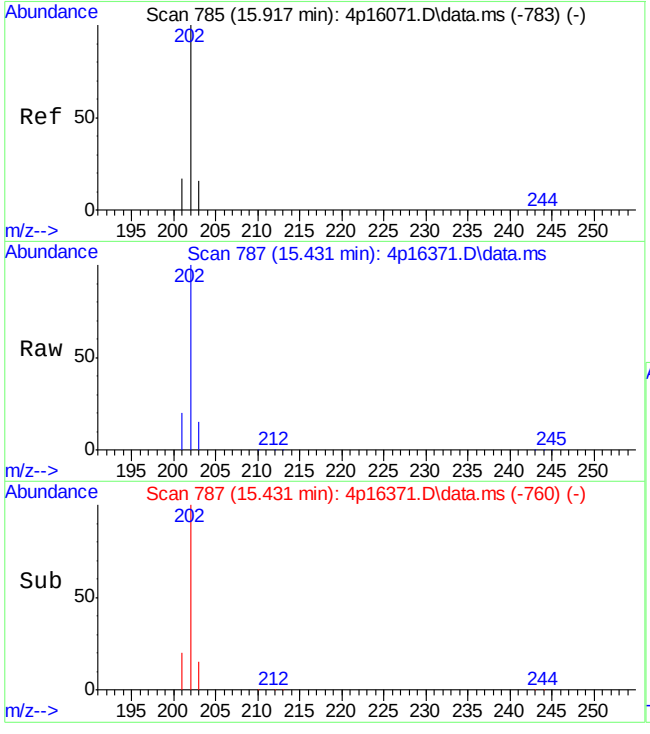


#28
Fluoranthene
Concen: 0.69 ppm
RT: 15.053 min Scan# 765
Delta R.T. -0.017 min
Lab File: 4p16371.D
Acq: 20 May 2016 11:51 am

Tgt Ion:202 Resp: 73177

Ion	Ratio	Lower	Upper
202	100		
203	19.5	0.0	49.4
201	11.7	0.0	42.2

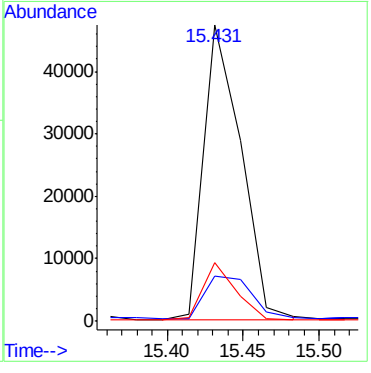


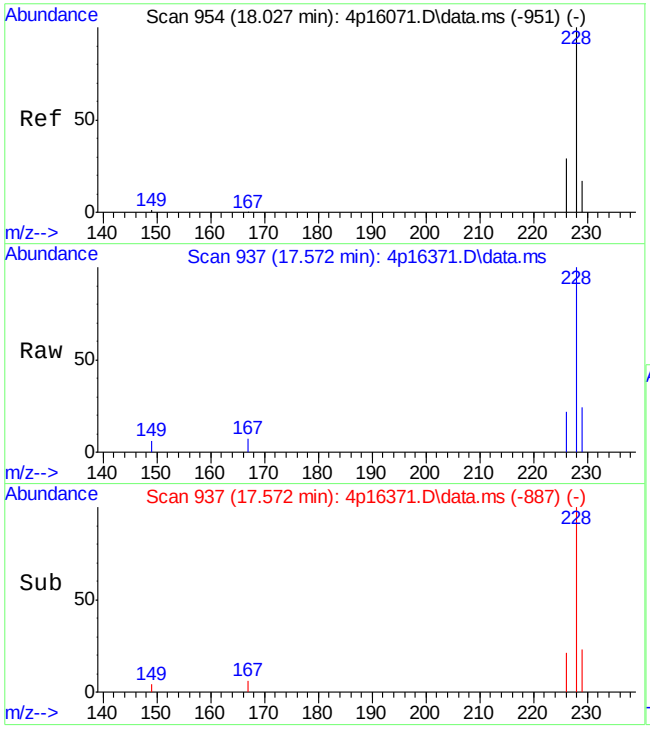


#29
Pyrene
Concen: 1.00 ppm
RT: 15.431 min Scan# 787
Delta R.T. -0.034 min
Lab File: 4p16371.D
Acq: 20 May 2016 11:51 am

Tgt Ion:202 Resp: 82253

Ion	Ratio	Lower	Upper
202	100		
203	14.5	0.0	50.8
201	19.6	0.0	43.7

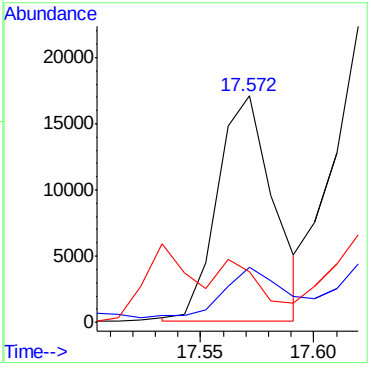


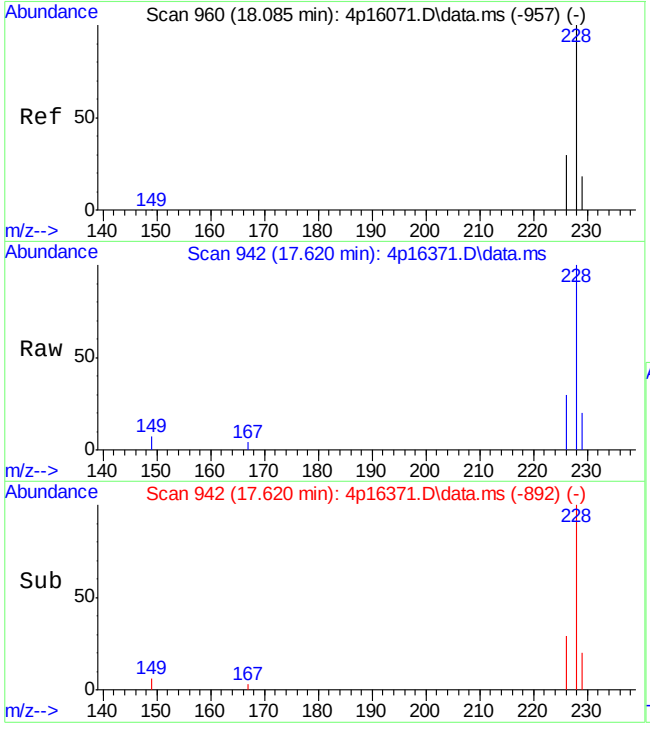


#31
Benzo[a]anthracene
Concen: 0.65 ppm
RT: 17.572 min Scan# 937
Delta R.T. -0.018 min
Lab File: 4p16371.D
Acq: 20 May 2016 11:51 am

Tgt Ion:228 Resp: 29440

Ion	Ratio	Lower	Upper
228	100		
229	20.3	0.0	51.0
226	0.6	0.0	53.3

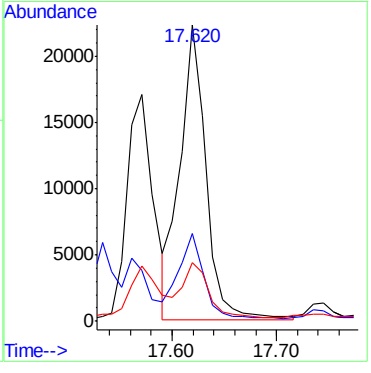


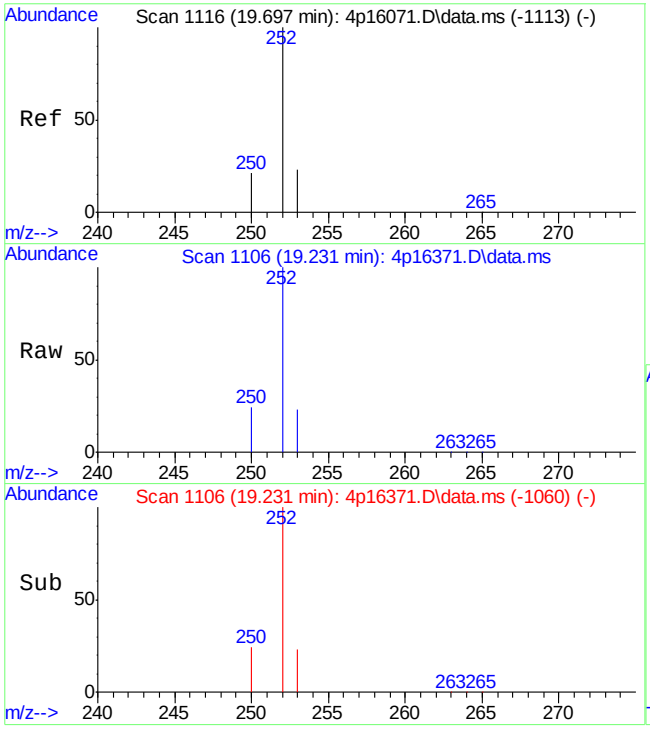


#32
Chrysene
Concen: 0.52 ppm
RT: 17.620 min Scan# 942
Delta R.T. -0.019 min
Lab File: 4p16371.D
Acq: 20 May 2016 11:51 am

Tgt Ion:228 Resp: 38512

Ion	Ratio	Lower	Upper
228	100		
226	29.6	0.6	60.6
229	16.5	0.0	48.2

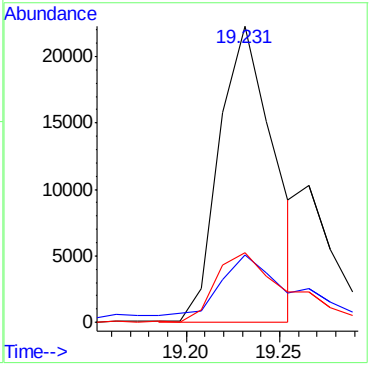


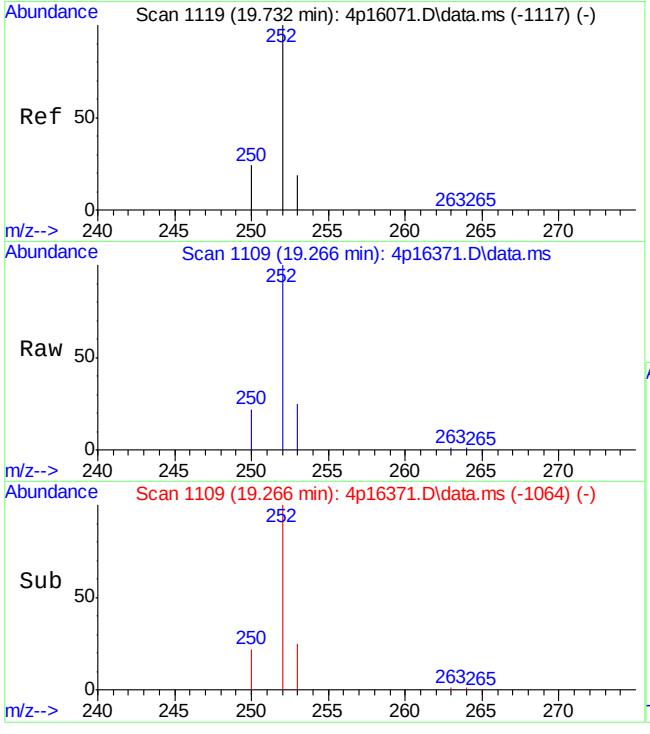


#34
Benzo[b]fluoranthene
Concen: 0.71 ppm m
RT: 19.231 min Scan# 1106
Delta R.T. -0.023 min
Lab File: 4p16371.D
Acq: 20 May 2016 11:51 am

Tgt Ion:252 Resp: 44850

Ion	Ratio	Lower	Upper
252	100		
253	22.9	0.0	47.4
250	23.6	0.0	56.7

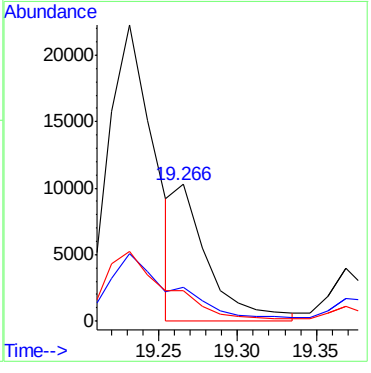


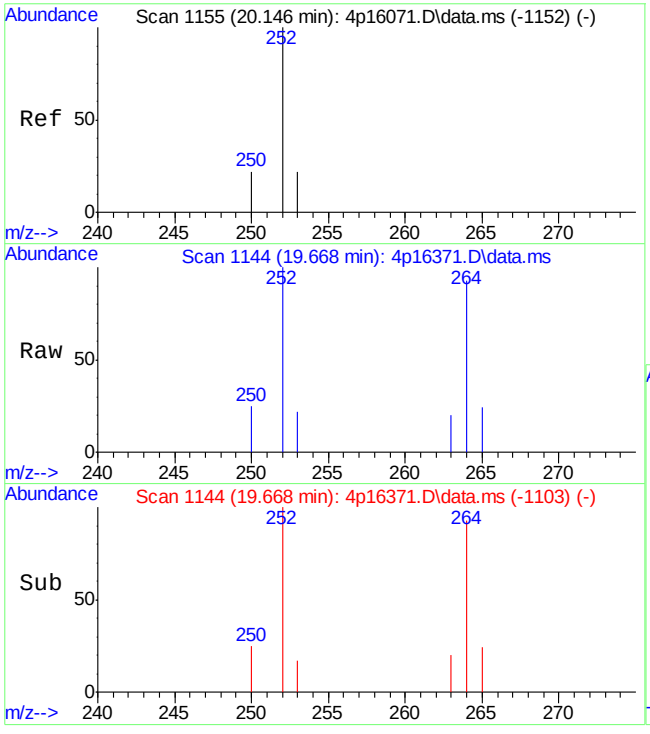


#35
Benzo[k]fluoranthene
Concen: 0.25 ppm m
RT: 19.266 min Scan# 1109
Delta R.T. -0.022 min
Lab File: 4p16371.D
Acq: 20 May 2016 11:51 am

Tgt Ion:252 Resp: 14888

Ion	Ratio	Lower	Upper
252	100		
253	24.9	0.0	51.7
250	22.0	0.0	50.2

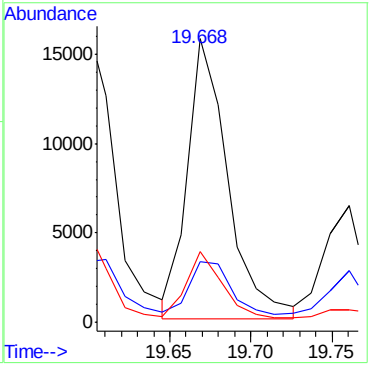


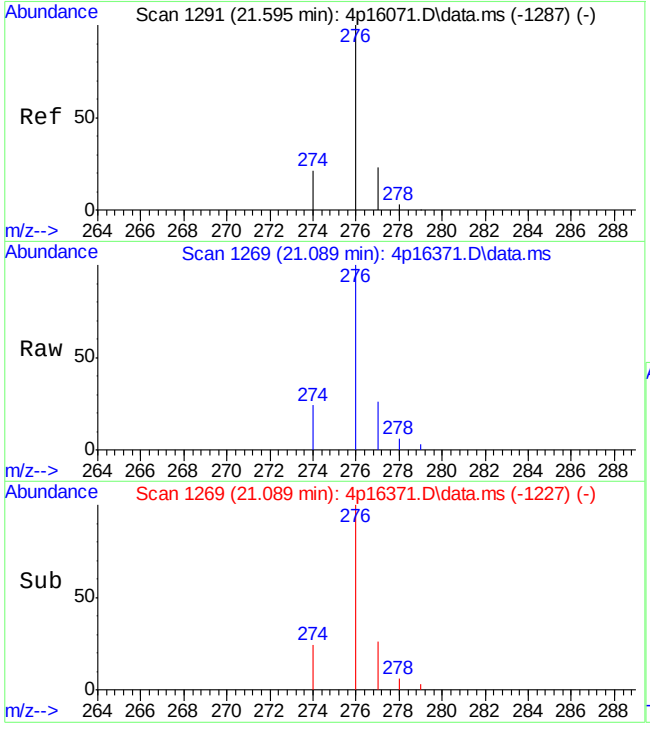


#36
Benzo[a]pyrene
Concen: 0.33 ppm
RT: 19.668 min Scan# 1144
Delta R.T. -0.023 min
Lab File: 4p16371.D
Acq: 20 May 2016 11:51 am

Tgt Ion:252 Resp: 27331

Ion	Ratio	Lower	Upper
252	100		
253	19.5	0.0	50.9
250	25.0	0.0	53.5

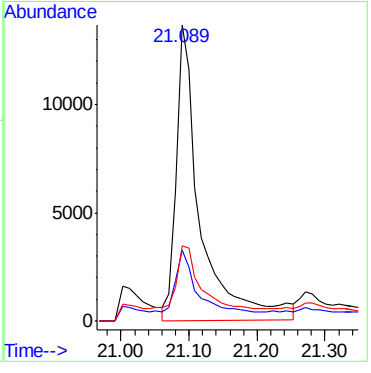


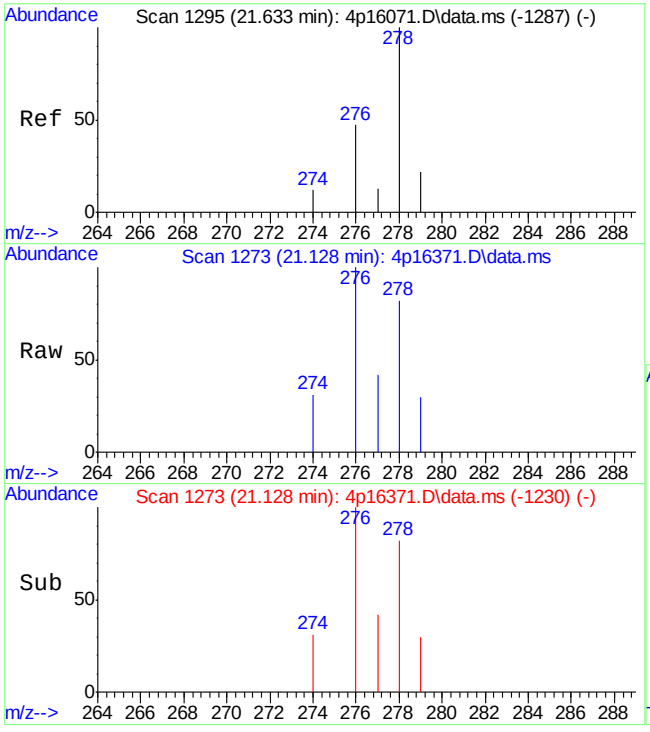


#37
Indeno[1,2,3-cd]pyrene
Concen: 0.51 ppm
RT: 21.089 min Scan# 1269
Delta R.T. -0.031 min
Lab File: 4p16371.D
Acq: 20 May 2016 11:51 am

Tgt Ion:276 Resp: 33733

Ion	Ratio	Lower	Upper
276	100		
274	21.8	0.0	51.9
277	22.3	0.0	50.9

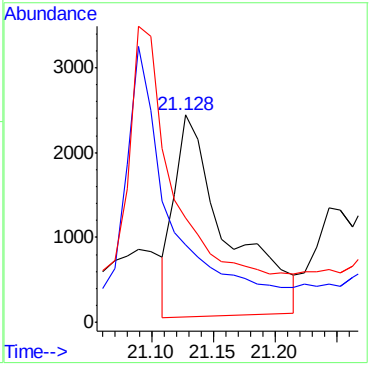


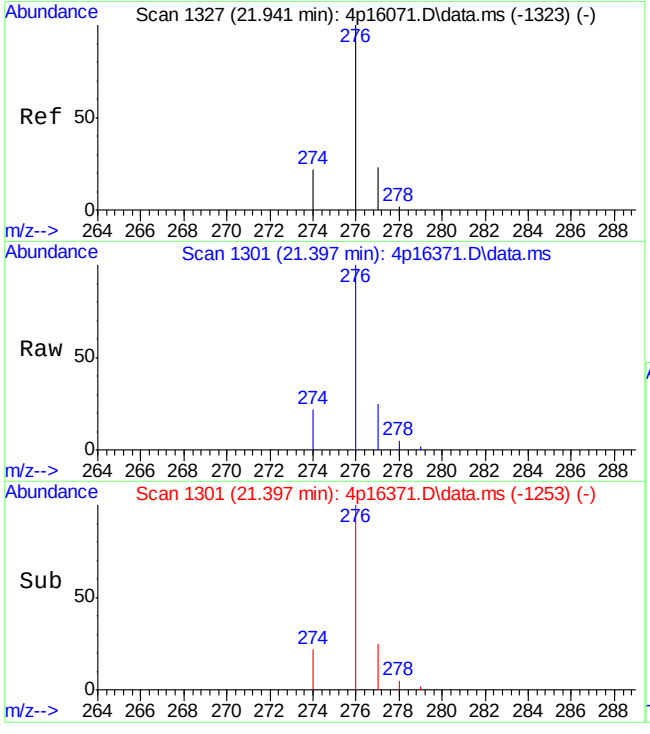


#38
Dibenz[a,h]anthracene
Concen: 0.15 ppm
RT: 21.128 min Scan# 1273
Delta R.T. -0.030 min
Lab File: 4p16371.D
Acq: 20 May 2016 11:51 am

Tgt Ion:278 Resp: 7039

Ion	Ratio	Lower	Upper
278	100		
274	0.0	0.0	30.2
277	0.0	0.0	30.0

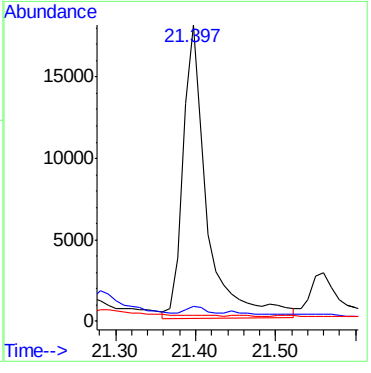




#39
Benzo[g,h,i]perylene
Concen: 0.55 ppm
RT: 21.397 min Scan# 1301
Delta R.T. -0.021 min
Lab File: 4p16371.D
Acq: 20 May 2016 11:51 am

Tgt Ion:276 Resp: 37410

Ion	Ratio	Lower	Upper
276	100		
278	2.5	0.0	32.5
279	0.0	0.0	30.2



Manual Integration Approval Summary

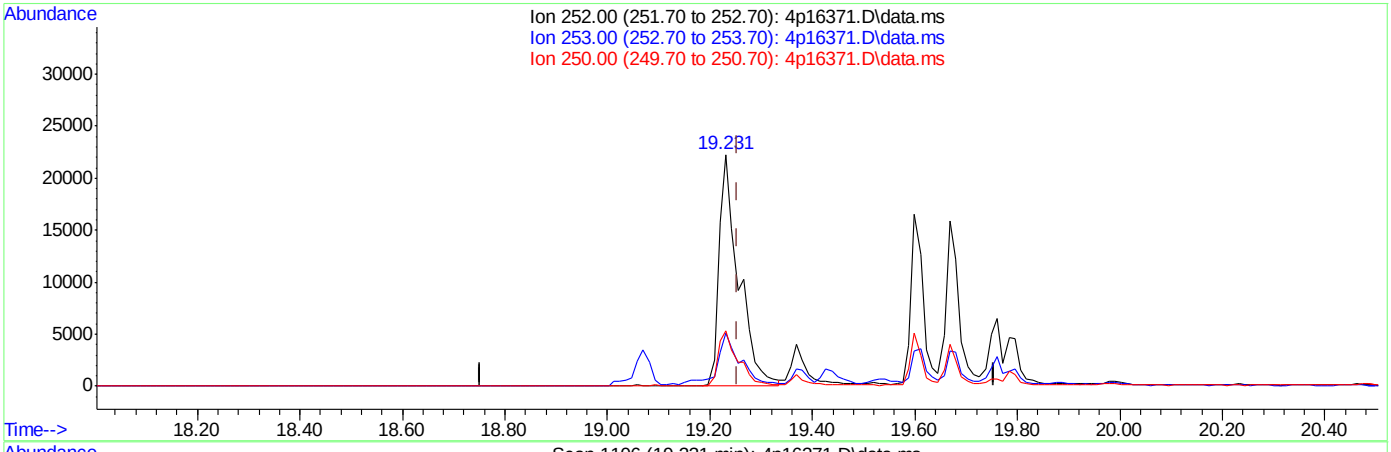
Sample Number:	JC20314-3	**Method:**	SW846 8270D BY SIM
Lab FileID:	4P16371.D	**Analyst approved:**	05/20/16 17:07 Sean Block
Injection Time:	05/20/16 11:51	**Supervisor approved:**	05/31/16 18:48 Nina Pandya

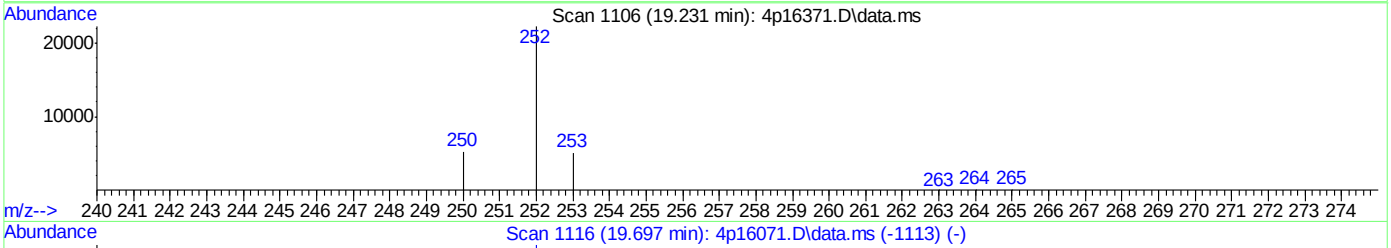
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		19.23	Overlapping peak
Benzo(k)fluoranthene	207-08-9		19.27	Overlapping peak

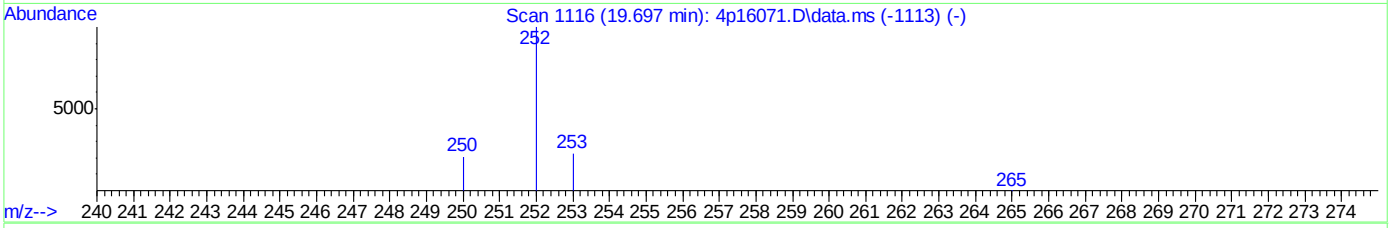
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16371.D
Acq On : 20 May 2016 11:51 am
Operator : linseyk
Sample : jc20314-3
Misc : op93998a,e4p867,31.8
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 20 12:15:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 20 11:59:02 2016
Response via : Initial Calibration







TIC: 4p16371.D\data.ms

(34) Benzo[b]fluoranthene (t)

19.231min (-0.023) 0.92ppm

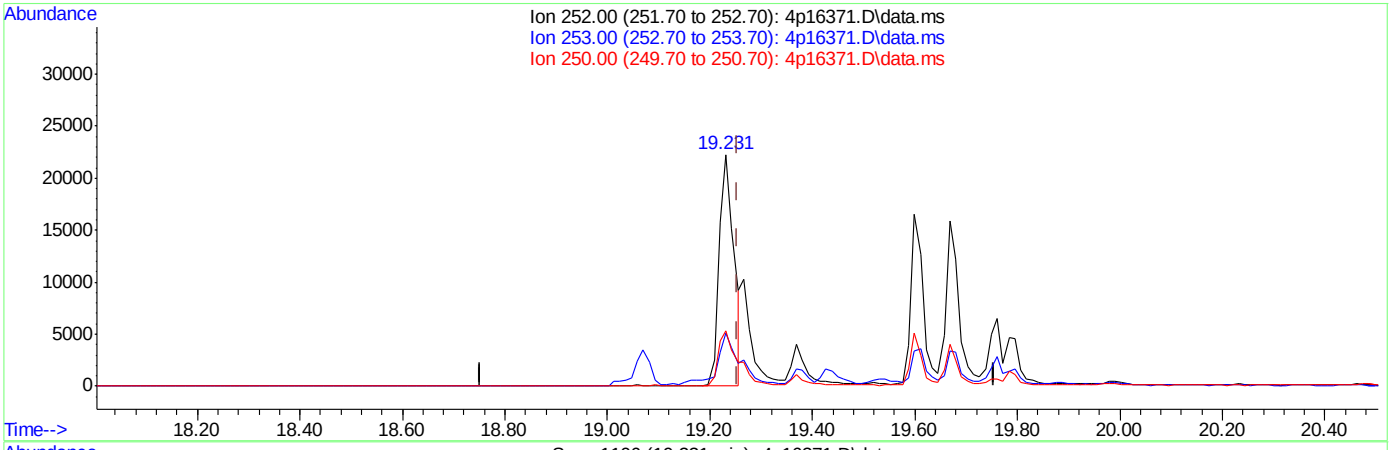
response 58965

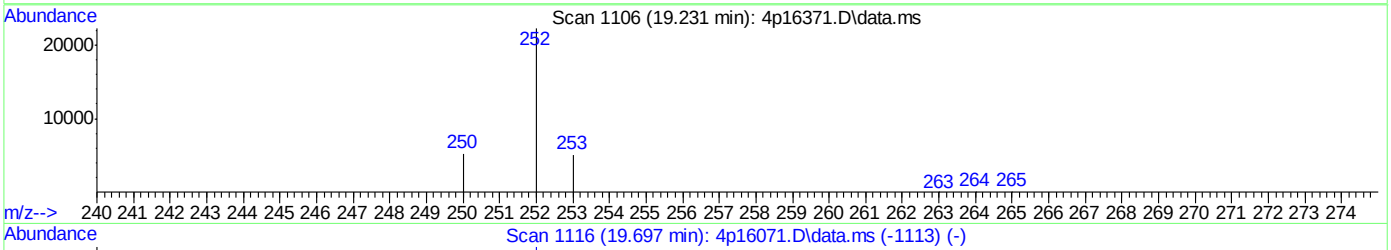
Ion	Exp%	Act%
252.00	100	100
253.00	17.40	21.39
250.00	26.70	23.53
0.00	0.00	0.00

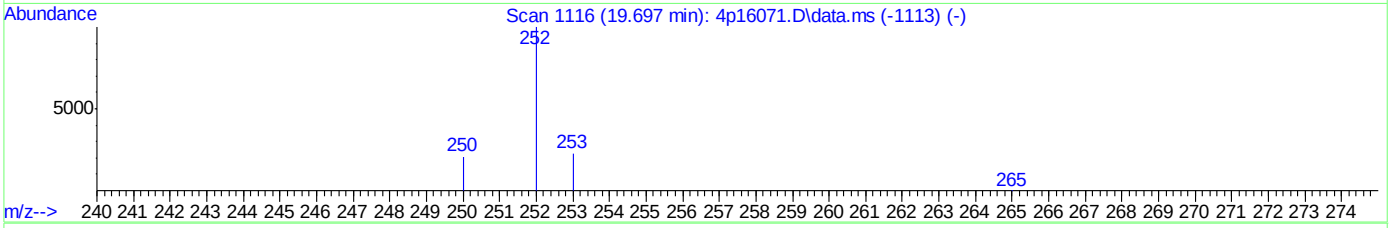
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16371.D
Acq On : 20 May 2016 11:51 am
Operator : linseyk
Sample : jc20314-3
Misc : op93998a,e4p867,31.8
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 20 12:15:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 20 11:59:02 2016
Response via : Initial Calibration







TIC: 4p16371.D\data.ms

(34) Benzo[b]fluoranthene (t)

19.231min (-0.023) 0.71ppm m

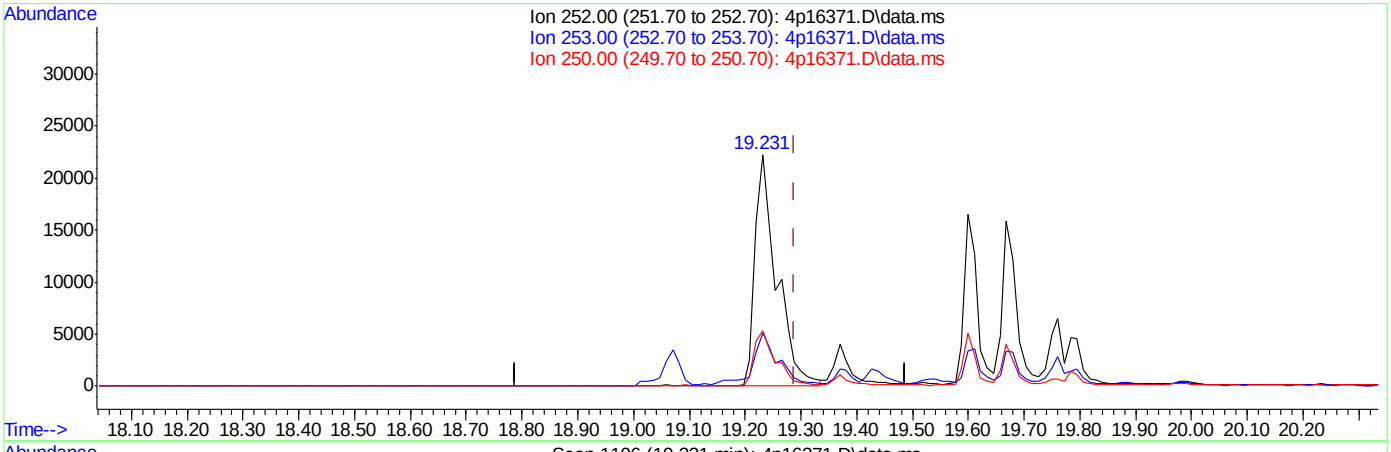
response 44850

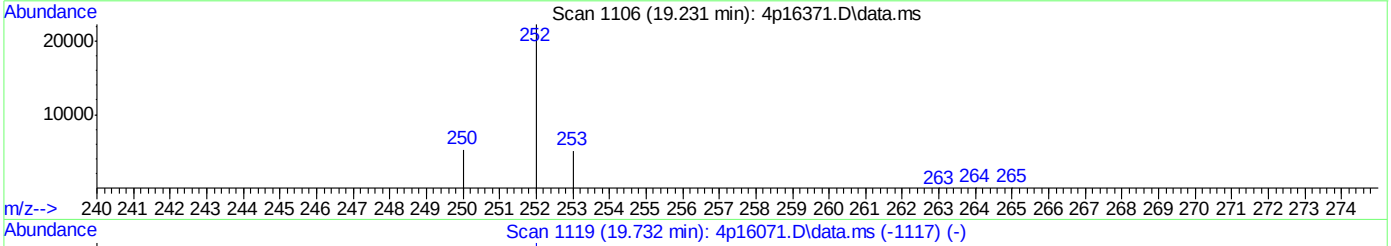
Ion	Exp%	Act%
252.00	100	100
253.00	17.40	22.94
250.00	26.70	23.65
0.00	0.00	0.00

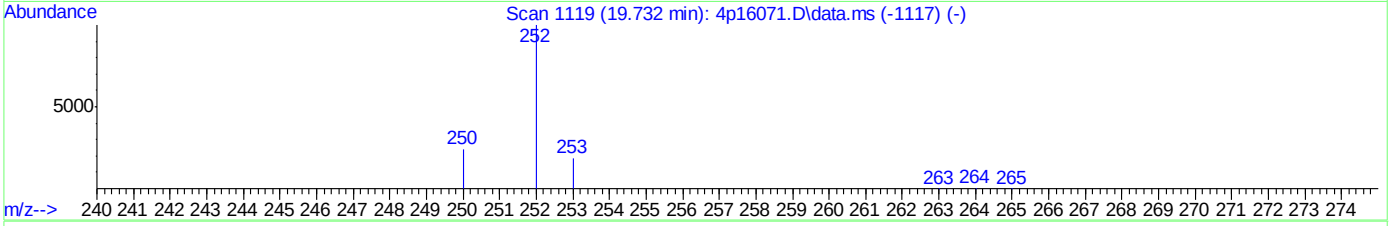
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16371.D
Acq On : 20 May 2016 11:51 am
Operator : linseyk
Sample : jc20314-3
Misc : op93998a,e4p867,31.8
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 20 12:15:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 20 11:59:02 2016
Response via : Initial Calibration







TIC: 4p16371.D\data.ms

(35) Benzo[k]fluoranthene (t)

19.231min (-0.057) 0.72ppm

response 58965

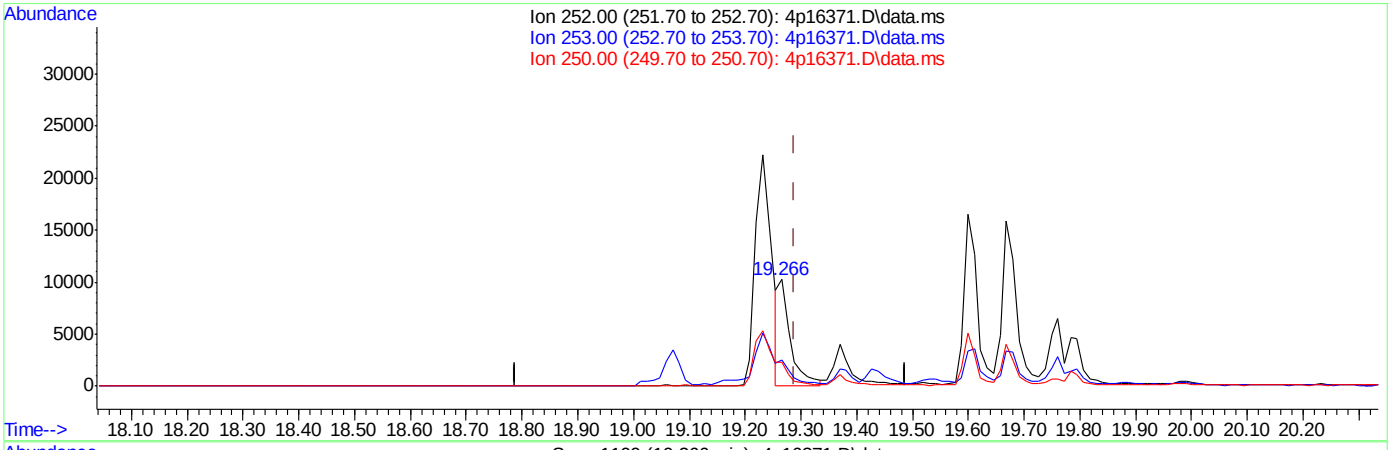
Ion	Exp%	Act%
252.00	100	100
253.00	21.70	21.39
250.00	20.20	23.53
0.00	0.00	0.00

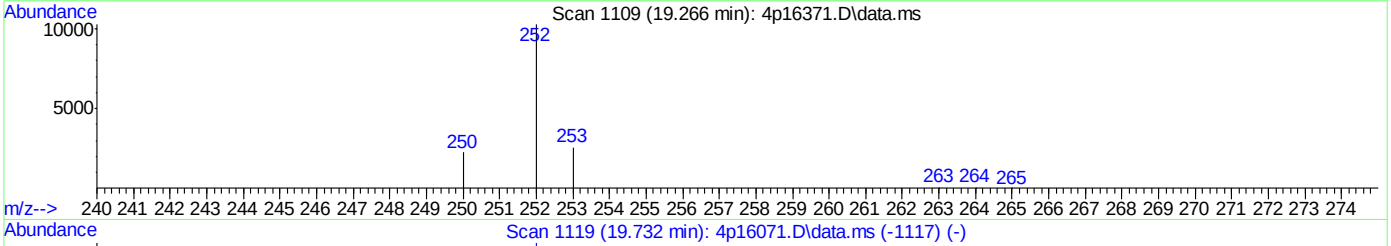
SGS ACCUTEST JC20314

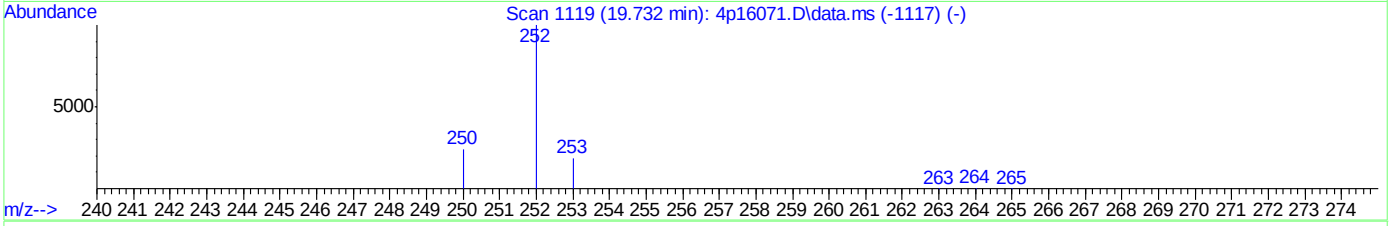
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16371.D
Acq On : 20 May 2016 11:51 am
Operator : linseyk
Sample : jc20314-3
Misc : op93998a,e4p867,31.8
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 20 12:15:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 20 11:59:02 2016
Response via : Initial Calibration







TIC: 4p16371.D\data.ms

(35) Benzo[k]fluoranthene (t)

19.266min (-0.022) 0.25ppm m

response 14888

Ion	Exp%	Act%
252.00	100	100
253.00	21.70	24.93
250.00	20.20	22.05
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110703.D
Acq On : 16 May 2016 1:44 pm
Operator : ariellec
Sample : op93924-mb1
Misc : op93924,ez5530,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 16 14:48:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.202	152	173783	40.00	ppm	0.00
24) Naphthalene-d8	5.132	136	633403	40.00	ppm	0.00
47) Acenaphthene-d10	6.403	164	390478	40.00	ppm	0.00
69) Phenanthrene-d10	8.001	188	693726	40.00	ppm	0.00
83) Chrysene-d12	12.900	240	713666	40.00	ppm	-0.01
92) Perylene-d12	15.886	264	714001	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.202	152	173783	40.00	ppm	-0.06
104) Phenanthrene-d10a	8.001	188	693726	40.00	ppm	-0.11
106) Chrysene-d12a	12.900	240	713666	40.00	ppm	-0.17
108) Acenaphthene-d10a	6.403	164	390478	40.00	ppm	-0.07
110) Naphthalene-d8a	5.132	136	633403	40.00	ppm	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	3.289	112	138946	23.15	ppm	0.00
Spiked Amount 50.000			Recovery = 46.30%			
8) Phenol-d5	4.053	99	137598	19.57	ppm	0.01
Spiked Amount 50.000			Recovery = 39.14%			
25) Nitrobenzene-d5	4.635	82	202900	39.69	ppm	0.00
Spiked Amount 50.000			Recovery = 79.38%			
51) 2-Fluorobiphenyl	5.891	172	440813	35.22	ppm	0.00
Spiked Amount 50.000			Recovery = 70.44%			
73) 2,4,6-Tribromophenol	7.167	330	66260	31.08	ppm	0.00
Spiked Amount 50.000			Recovery = 62.16%			
86) Terphenyl-d14	10.773	244	595628	39.72	ppm	0.10
Spiked Amount 50.000			Recovery = 79.44%			

Target Compounds Qvalue

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

7.2.1

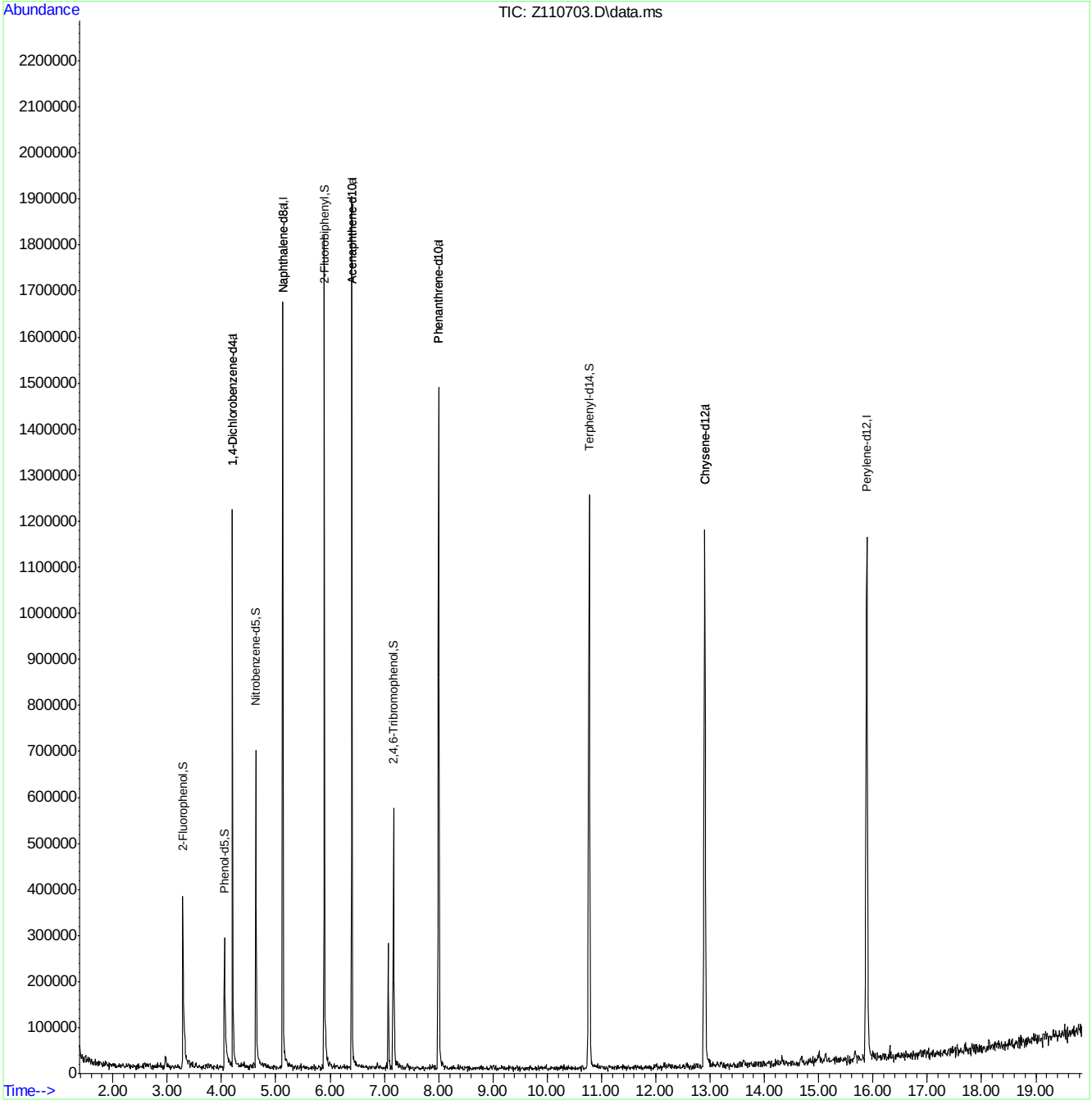
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110703.D
Acq On : 16 May 2016 1:44 pm
Operator : ariellec
Sample : op93924-mb1
Misc : op93924,ez5530,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 16 14:48:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration



MZ5485.M Mon May 16 15:33:12 2016 RTE

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110790.D
Acq On : 19 May 2016 9:56 am
Operator : ariellec
Sample : op93998-mb1
Misc : op93998,ez5537,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 19 11:58:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.653	152	148590	40.00	ppm	0.00
24) Naphthalene-d8	5.567	136	559856	40.00	ppm	-0.01
47) Acenaphthene-d10	6.967	164	320175	40.00	ppm	-0.01
69) Phenanthrene-d10	8.831	188	537366	40.00	ppm	-0.01
83) Chrysene-d12	14.061	240	498296	40.00	ppm	-0.03
92) Perylene-d12	17.085	264	434368	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.653	152	148590	40.00	ppm	0.00
104) Phenanthrene-d10a	8.831	188	537366	40.00	ppm	0.00
108) Chrysene-d12a	14.061	240	498296	40.00	ppm	-0.01
110) Acenaphthene-d10a	6.967	164	320175	40.00	ppm	0.00
112) Naphthalene-d8a	5.567	136	559856	40.00	ppm	0.00
114) Chrysene-d12b	14.061	240	498296	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.665	112	228579	45.57	ppm	0.00
Spiked Amount 50.000			Recovery = 91.14%			
8) Phenol-d5	4.376	99	281026	45.42	ppm	-0.01
Spiked Amount 50.000			Recovery = 90.84%			
25) Nitrobenzene-d5	5.049	82	248396	47.59	ppm	-0.01
Spiked Amount 50.000			Recovery = 95.18%			
51) 2-Fluorobiphenyl	6.363	172	515999	49.30	ppm	-0.01
Spiked Amount 50.000			Recovery = 98.60%			
73) 2,4,6-Tribromophenol	7.848	330	65169	48.26	ppm	-0.01
Spiked Amount 50.000			Recovery = 96.52%			
86) Terphenyl-d14	11.871	244	520529	48.71	ppm	-0.02
Spiked Amount 50.000			Recovery = 97.42%			
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%			

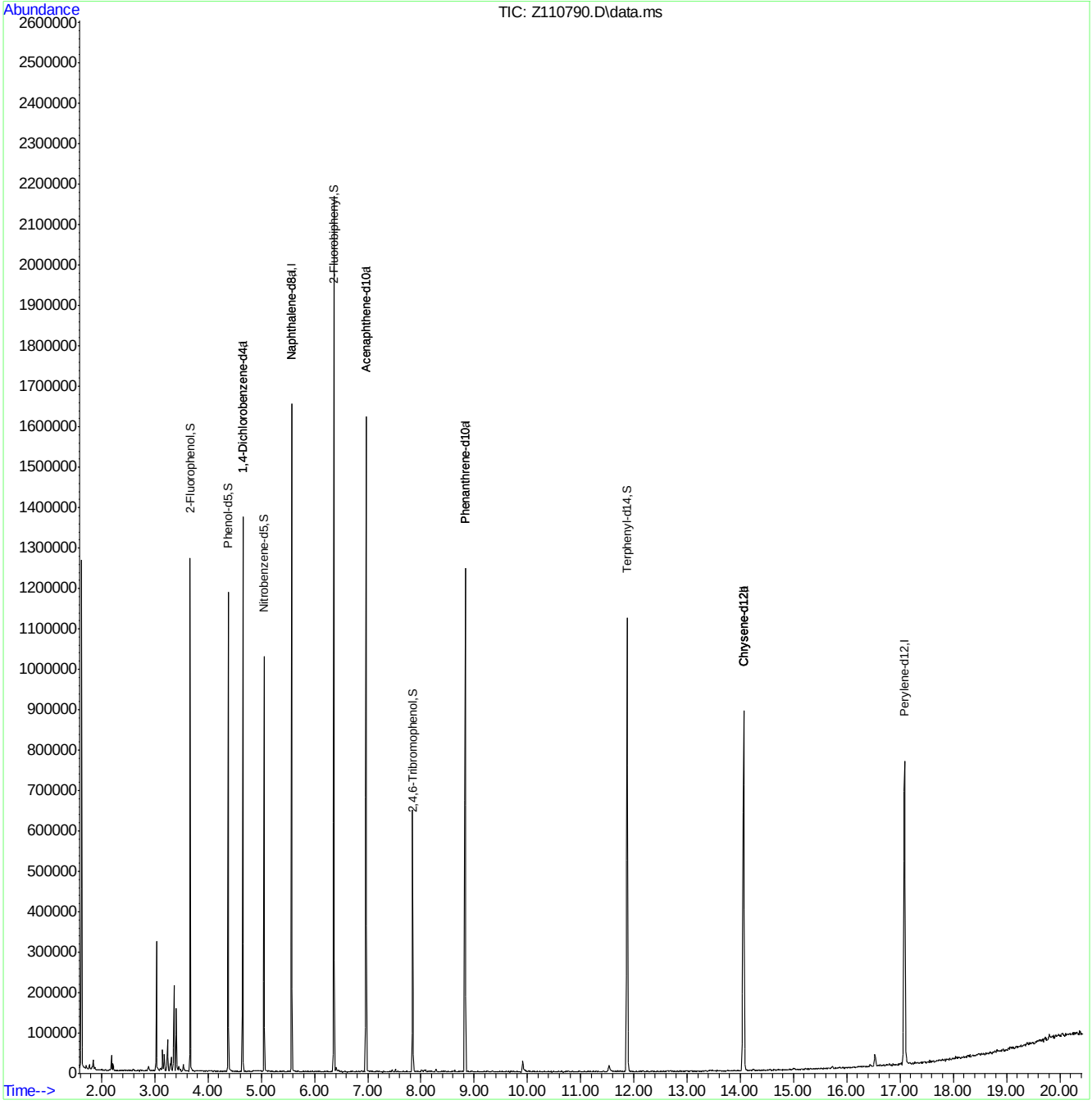
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110790.D
Acq On : 19 May 2016 9:56 am
Operator : ariellec
Sample : op93998-mb1
Misc : op93998,ez5537,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 19 11:58:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



MZ5533.M Thu May 19 11:58:10 2016 RTE

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2885\
Data File : 3m61365.D
Acq On : 16 May 2016 7:29 pm
Operator : ashleyd
Sample : op93924a-mb1
Misc : op93924a,e3m2885,1000
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 17 10:02:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 16 17:09:16 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.406	150	427371	4.00	ppm	0.04
14) Fluorene-d10	13.411	176	649956	4.00	ppm	0.04
21) Fluoranthene-d10	17.654	212	1036511	4.00	ppm	0.06
31) Benzo(a)pyrene-d12	22.258	264	865509	4.00	ppm	0.06
System Monitoring Compounds						
3) 2-Fluorophenol	4.399	112	1848162	34.57	ppm	0.08
Spiked Amount 50.000			Recovery = 69.14%			
4) Phenol-d5	6.036	99	2260049	25.55	ppm	0.11
Spiked Amount 50.000			Recovery = 51.10%			
7) Nitrobenzene-d5	7.531	82	3098017	37.66	ppm	0.04
Spiked Amount 50.000			Recovery = 75.32%			
15) 2-Fluorobiphenyl	11.083	172	6404132	35.86	ppm	0.05
Spiked Amount 50.000			Recovery = 71.72%			
20) 2,4,6-Tribromophenol	13.995	330	795950	39.13	ppm	0.07
Spiked Amount 50.000			Recovery = 78.26%			
28) Terphenyl-d14	18.458	244	7022763	46.71	ppm	0.05
Spiked Amount 50.000			Recovery = 93.42%			

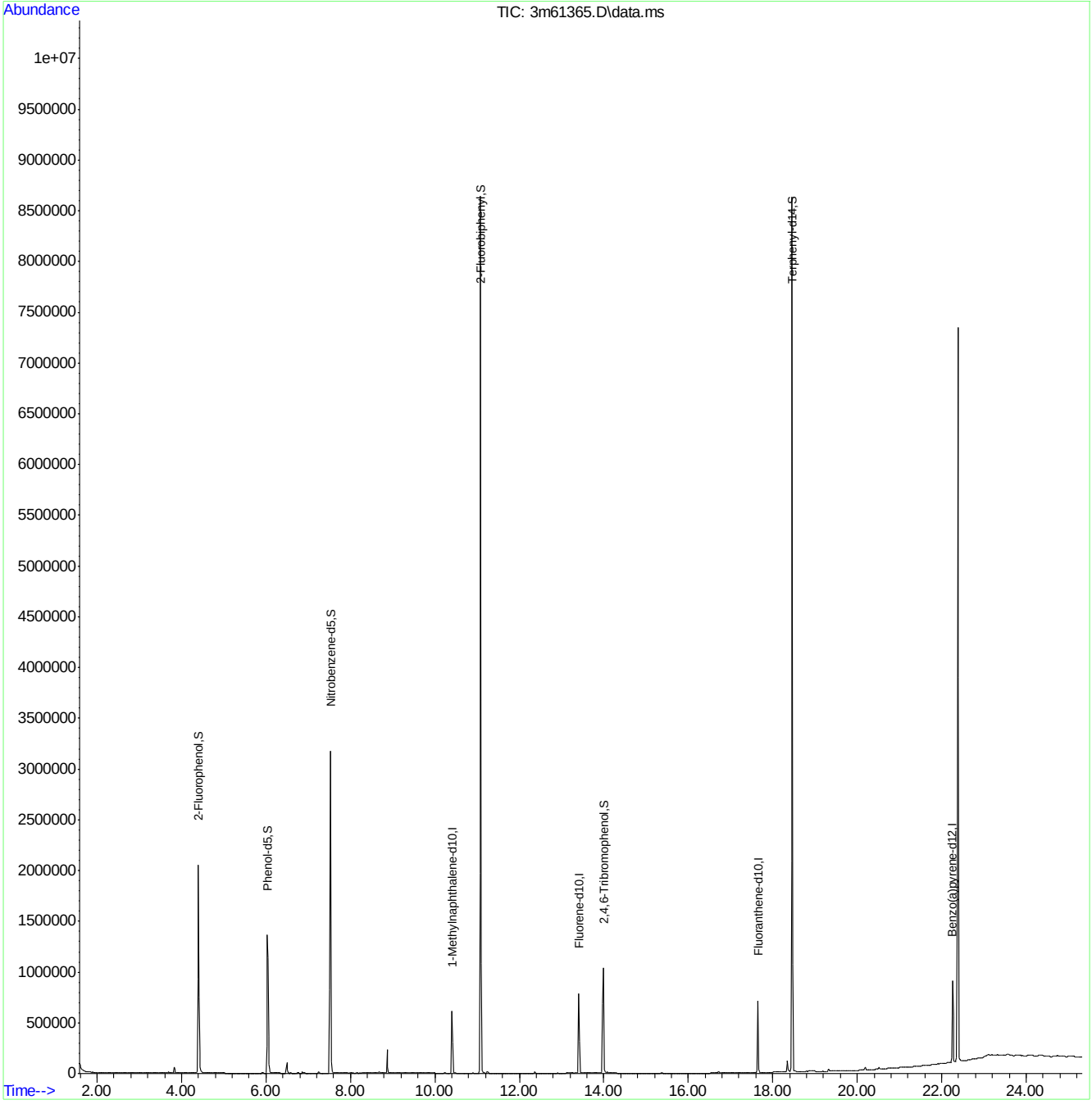
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2885\
Data File : 3m61365.D
Acq On : 16 May 2016 7:29 pm
Operator : ashleyd
Sample : op93924a-mb1
Misc : op93924a,e3m2885,1000
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 17 10:02:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 16 17:09:16 2016
Response via : Initial Calibration



M3M2855SIM.M Tue May 17 10:02:30 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P866\
Data File : 4p16354.D
Acq On : 19 May 2016 8:54 pm
Operator : linseyk
Sample : op93998a-mb1
Misc : op93998a,e4p866,30.0
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 20 12:25:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 13:24:21 2016
Response via : Initial Calibration

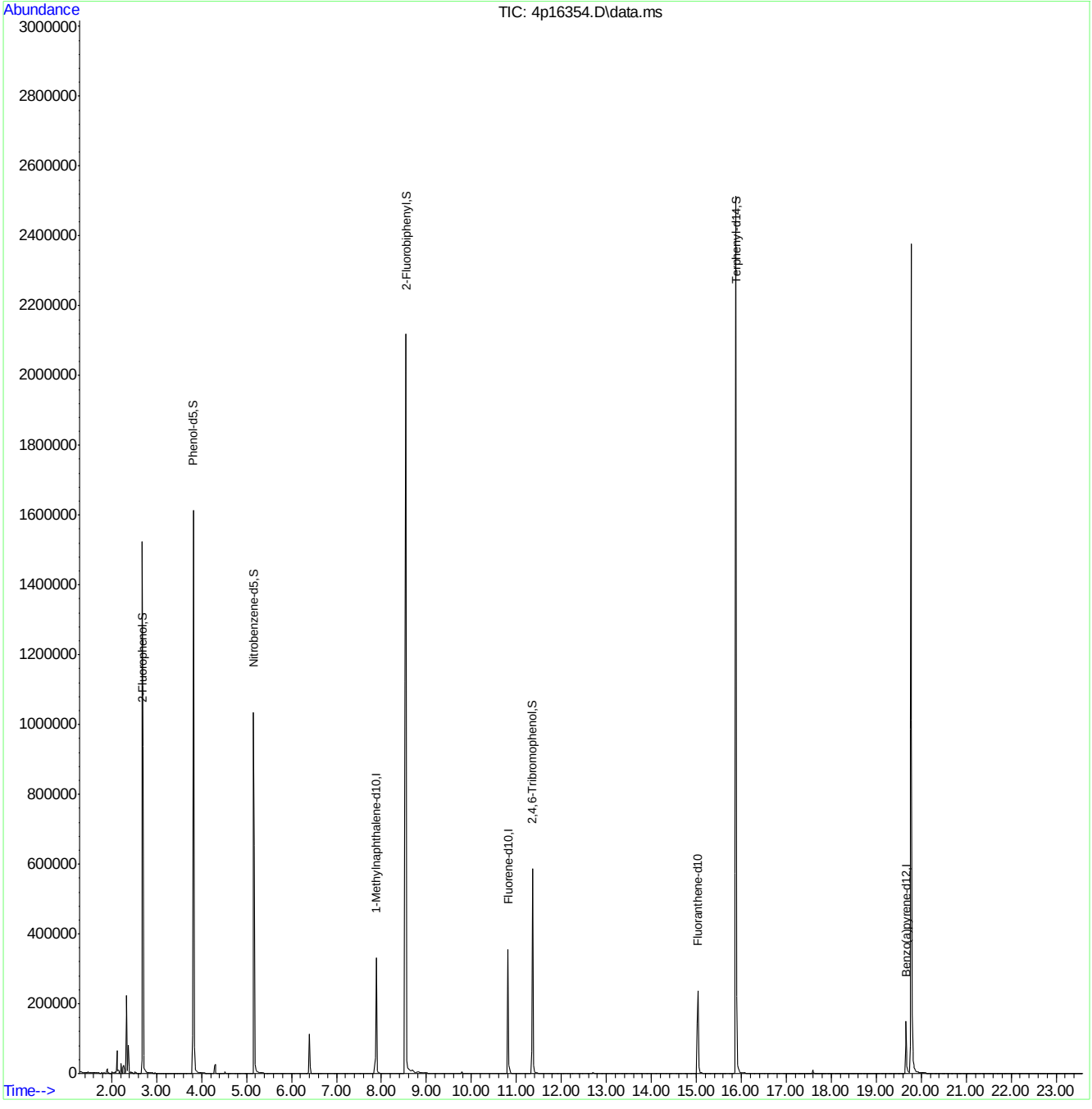
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.881	150	198469	4.00	ppm	0.00
13) Fluorene-d10	10.814	176	287548	4.00	ppm	-0.02
23) Fluoranthene-d10	15.037	212	330261	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.661	264	167704	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.695	112	967341	44.28	ppm	0.00
Spiked Amount 50.000			Recovery = 88.56%			
4) Phenol-d5	3.819	99	1774050	55.16	ppm	0.00
Spiked Amount 50.000			Recovery = 110.32%			
7) Nitrobenzene-d5	5.160	82	1299376	49.29	ppm	-0.02
Spiked Amount 50.000			Recovery = 98.58%			
14) 2-Fluorobiphenyl	8.546	172	2786544	23.75	ppm	0.00
Spiked Amount 50.000			Recovery = 47.50%			
22) 2,4,6-Tribromophenol	11.358	330	348868	33.06	ppm	0.00
Spiked Amount 50.000			Recovery = 66.12%			
30) Terphenyl-d14	15.881	244	2194395	52.93	ppm	-0.02
Spiked Amount 50.000			Recovery = 105.86%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P866\
Data File : 4p16354.D
Acq On : 19 May 2016 8:54 pm
Operator : linseyk
Sample : op93998a-mb1
Misc : op93998a,e4p866,30.0
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 20 12:25:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 13:24:21 2016
Response via : Initial Calibration



M4P863SIM.M Fri May 20 12:25:15 2016 Page: 2

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/18/16 13:32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110701a.D
Acq On : 16 May 2016 12:46 pm
Operator : ariellec
Sample : op93924-bs1
Misc : op93924,ez5530,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 16 14:37:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.208	152	187955	40.00	ppm	0.00
24) Naphthalene-d8	5.132	136	664307	40.00	ppm	0.00
47) Acenaphthene-d10	6.403	164	429924	40.00	ppm	0.00
69) Phenanthrene-d10	8.001	188	684265	40.00	ppm	0.00
83) Chrysene-d12	12.910	240	697173	40.00	ppm	0.00
92) Perylene-d12	15.897	264	642393	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.208	152	187955	40.00	ppm	-0.06
104) Phenanthrene-d10a	8.001	188	684265	40.00	ppm	-0.11
106) Chrysene-d12a	12.910	240	697173	40.00	ppm	-0.15
108) Acenaphthene-d10a	6.403	164	429924	40.00	ppm	-0.07
110) Naphthalene-d8a	5.132	136	664307	40.00	ppm	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	3.289	112	155138	23.90	ppm	0.00
Spiked Amount 50.000			Recovery	=	47.80%	
8) Phenol-d5	4.048	99	199681	26.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	52.52%	
25) Nitrobenzene-d5	4.635	82	208313	38.86	ppm	0.00
Spiked Amount 50.000			Recovery	=	77.72%	
51) 2-Fluorobiphenyl	5.896	172	445961	32.36	ppm	0.01
Spiked Amount 50.000			Recovery	=	64.72%	
73) 2,4,6-Tribromophenol	7.167	330	71508	34.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	68.00%	
86) Terphenyl-d14	10.773	244	641676	43.81	ppm	0.10
Spiked Amount 50.000			Recovery	=	87.62%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.654	88	40601	14.56	ppm	91
4) N-Nitrosodimethylamine	1.975	74	76913m	21.04	ppm	
6) Indene	4.395	116	369356	30.92	ppm	96
7) Cumene	3.588	105	441086	28.95	ppm	98
9) Phenol	4.058	94	166199	21.53	ppm	94
11) bis(2-Chloroethyl)ether	4.031	93	170026	32.16	ppm	96
12) 2-Chlorophenol	4.090	128	207938	29.20	ppm	97
13) Decane	4.069	43	130466	19.89	ppm	92
14) 1,3-Dichlorobenzene	4.165	146	191261	24.69	ppm	94
15) 1,4-Dichlorobenzene	4.218	146	212036	28.86	ppm	95
16) Benzyl alcohol	4.357	108	83137	25.52	ppm #	77
17) 1,2-Dichlorobenzene	4.336	146	193814	27.23	ppm	97
18) Acetophenone	4.523	105	281539	33.98	ppm	99
19) 2-Methylphenol	4.475	108	195356	32.37	ppm	82
20) 2,2'-oxybis(1-Chloropr...	4.416	121	54525	29.50	ppm	87
21) 3&4-Methylphenol	4.587	108	181546	28.84	ppm	97
22) n-Nitroso-di-n-propyla...	4.518	70	140496	32.78	ppm	89
23) Hexachloroethane	4.571	201	67249	31.41	ppm	94
26) Nitrobenzene	4.646	77	225596	41.75	ppm	93
27) Quinoline	5.404	129	33309	2.65	ppm	99
28) Isophorone	4.806	82	395700	42.06	ppm	97
29) 2-Nitrophenol	4.876	139	124329	37.04	ppm #	63

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110701a.D
Acq On : 16 May 2016 12:46 pm
Operator : ariellec
Sample : op93924-bs1
Misc : op93924,ez5530,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 16 14:37:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
30) 2,4-Dimethylphenol	4.945	107	215671	40.84	ppm		96
31) Benzoic Acid	5.079	105	103003	27.04	ppm	#	81
32) bis(2-Chloroethoxy)met...	4.972	93	195266	33.47	ppm		93
33) 2,4-Dichlorophenol	5.073	162	169449	36.43	ppm		95
34) 2,6-Dichlorophenol	5.217	162	173838	38.20	ppm		97
36) 1,2,4-Trichlorobenzene	5.089	180	167599	34.59	ppm		97
38) Naphthalene	5.143	128	569379	31.22	ppm		98
39) 4-Chloroaniline	5.223	127	30673	4.23	ppm		87
40) 2,3-Dichloroaniline	5.859	161	233615	40.01	ppm		95
41) Caprolactam	5.479	55	23422	9.90	ppm	#	74
42) Hexachlorobutadiene	5.228	225	84920	39.45	ppm		84
43) 4-Chloro-3-methylphenol	5.602	107	204353	41.43	ppm		85
44) 2-Methylnaphthalene	5.634	141	355205	34.98	ppm		86
45) 1-Methylnaphthalene	5.704	141	359593	33.09	ppm		100
46) Dimethylnaphthalene	6.072	156	425486	40.51	ppm		90
48) Hexachlorocyclopentadiene	5.741	237	94313	32.91	ppm		80
49) 2,4,6-Trichlorophenol	5.859	196	148884	41.93	ppm		89
50) 2,4,5-Trichlorophenol	5.907	196	145203	37.75	ppm		90
52) 2-Chloronaphthalene	5.976	162	377599	31.00	ppm		98
53) Biphenyl	5.960	154	538986	31.58	ppm		96
54) 2-Nitroaniline	6.094	65	136556	41.58	ppm		97
55) Dimethylphthalate	6.206	163	561737	41.07	ppm		99
56) Acenaphthylene	6.291	152	664034	31.03	ppm		97
57) 2,6-Dinitrotoluene	6.259	165	121636	40.58	ppm		94
58) 3-Nitroaniline	6.430	138	85538	23.61	ppm		97
59) Acenaphthene	6.430	153	429422	33.55	ppm		95
60) 2,4-Dinitrophenol	6.505	184	140786	87.11	ppm		75
61) 4-Nitrophenol	6.676	109	67845m	40.67	ppm		
62) Dibenzofuran	6.585	168	628612	35.55	ppm		99
63) 2,4-Dinitrotoluene	6.606	165	157677	40.43	ppm		77
64) 2,3,4,6-Tetrachlorophenol	6.729	232	120218	39.38	ppm		97
65) Diethylphthalate	6.804	149	560121	39.90	ppm		96
66) Fluorene	6.900	166	555797	38.19	ppm		96
67) 4-Chlorophenyl-phenyle...	6.900	204	262542	43.75	ppm		91
68) 4-Nitroaniline	7.018	138	132899	36.66	ppm		81
70) 4,6-Dinitro-2-methylph...	7.002	198	108416	53.26	ppm		91
71) n-Nitrosodiphenylamine	7.045	169	375037	37.69	ppm		97
72) 1,2-Diphenylhydrazine	7.066	77	484862	40.77	ppm		98
74) 4-Bromophenyl-phenylether	7.429	248	145911	41.10	ppm		87
75) Hexachlorobenzene	7.504	284	156630	39.35	ppm		83
76) Pentachlorophenol	7.808	266	87958	41.62	ppm		97
77) Phenanthrene	8.033	178	777357	39.70	ppm		95
78) Anthracene	8.102	178	779244	38.62	ppm		96
79) Carbazole	8.401	167	801454	41.66	ppm		98
80) Di-n-butylphthalate	8.962	149	1010459	42.68	ppm		97
81) Fluoranthene	9.967	202	942913	46.12	ppm		99
82) Octadecane	7.846	57	264964	31.20	ppm		92
84) Pyrene	10.378	202	948013	40.32	ppm		95
87) Butylbenzylphthalate	11.890	149	452710	40.35	ppm		84
88) Benzo[a]anthracene	12.889	228	892091	43.81	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110701a.D
Acq On : 16 May 2016 12:46 pm
Operator : ariellec
Sample : op93924-bs1
Misc : op93924,ez5530,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 16 14:37:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
89) 3,3'-Dichlorobenzidine	12.996	252	391304	53.22 ppm		98
90) Chrysene	12.964	228	836962	42.11 ppm		93
91) bis(2-Ethylhexyl)phtha...	13.204	149	626485	39.67 ppm		94
93) Di-n-octylphthalate	14.604	149	1161871	46.93 ppm		96
94) Benzo[b]fluoranthene	15.154	252	908353	44.80 ppm		94
95) Benzo[k]fluoranthene	15.207	252	856166	47.03 ppm		84
96) Benzo[a]pyrene	15.774	252	754364	41.80 ppm		91
97) Indeno[1,2,3-cd]pyrene	17.814	276	685709	38.00 ppm		91
99) Dibenz[a,h]anthracene	17.857	278	727161	38.29 ppm		97
100) 7,12-Dimethylbenz(a)an...	15.149	256	397728	43.11 ppm		92
101) Benzo[g,h,i]perylene	18.237	276	738467	38.08 ppm		85
103) Benzaldehyde	3.898	105	175767	35.42 ppm		89
105) Atrazine	7.691	215	95486	56.08 ppm	#	68
109) 1,2,4,5-Tetrachloroben...	5.752	216	171528	31.12 ppm		92

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

7.3.1

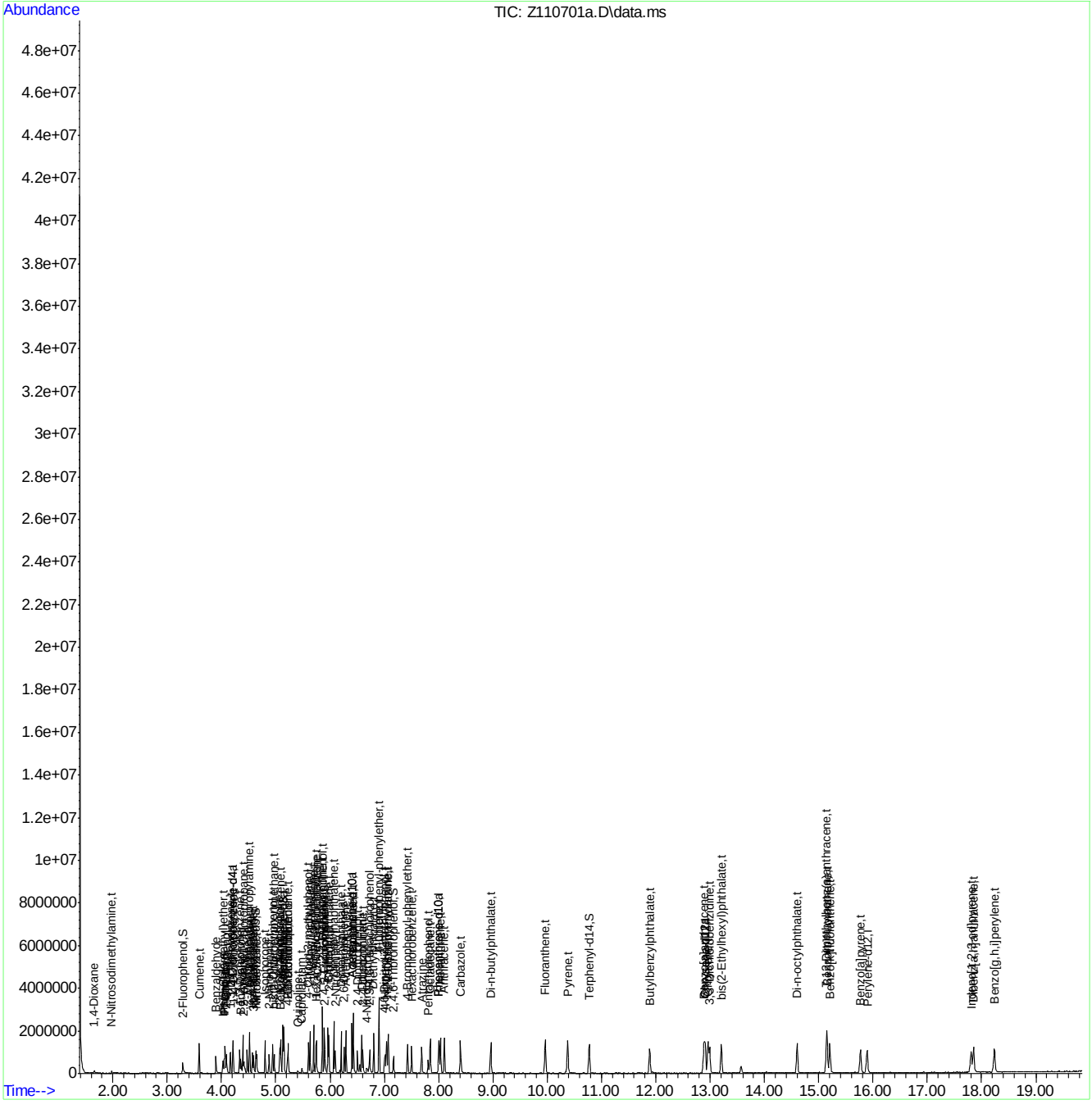
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110701a.D
Acq On : 16 May 2016 12:46 pm
Operator : ariellec
Sample : op93924-bs1
Misc : op93924,ez5530,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 16 14:37:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration



MZ5485.M Mon May 16 14:37:47 2016 RTE

Page: 4

Manual Integration Approval Summary

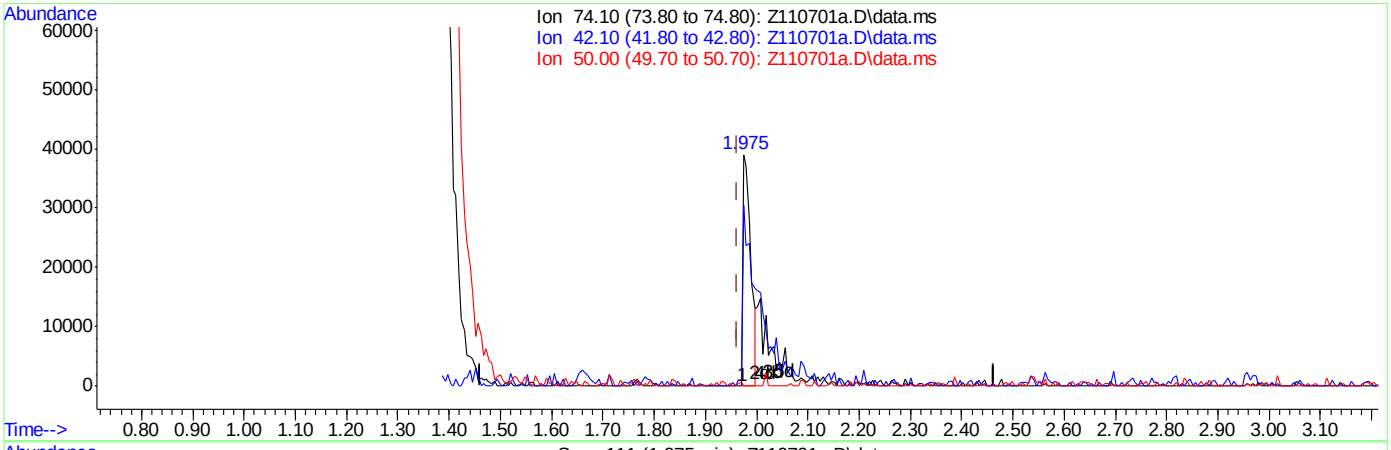
Sample Number:	OP93924-BS1	**Method:**	SW846 8270D
Lab FileID:	Z110701A.D	**Analyst approved:**	05/16/16 15:24 Arielle Cocozza
Injection Time:	05/16/16 12:46	**Supervisor approved:**	05/18/16 13:32 Nina Pandya

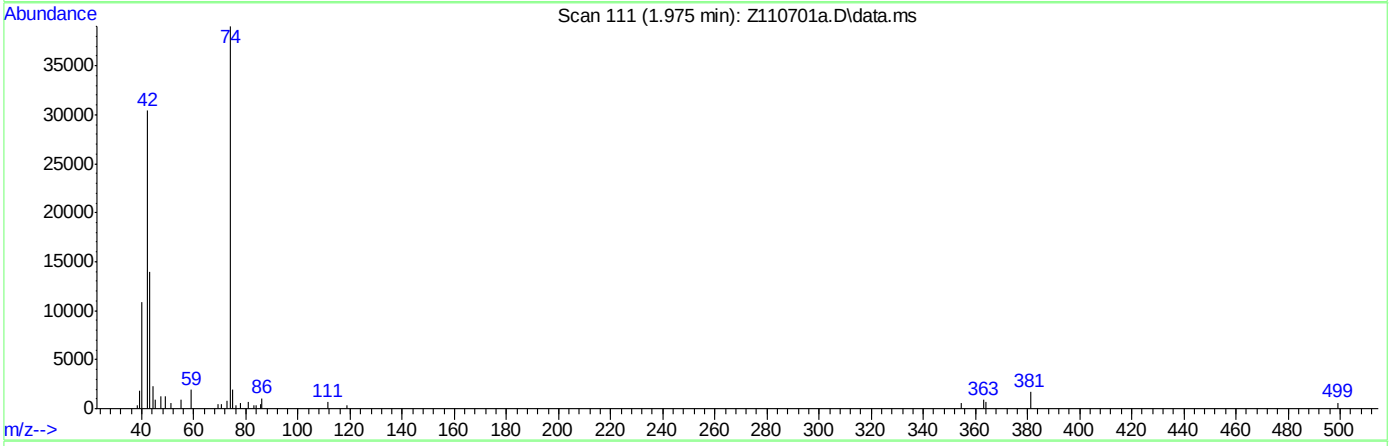
Parameter	CAS	Sig#	R.T. (min.)	Reason
n-Nitrosodimethylamine	62-75-9		1.97	Poor instrument integration
4-Nitrophenol	100-02-7		6.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110701a.D
Acq On : 16 May 2016 12:46 pm
Operator : ariellec
Sample : op93924-bs1
Misc : op93924,ez5530,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 16 14:35:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration





TIC: Z110701a.D\data.ms

(4) N-Nitrosodimethylamine (t)

1.975min (+0.012) 11.78ppm

response 43061

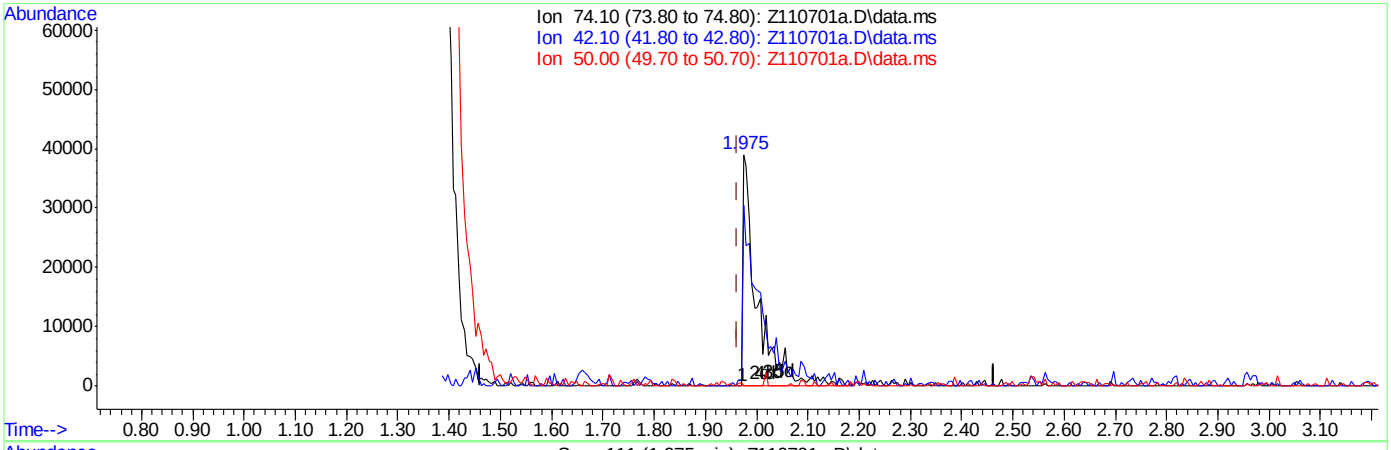
Ion	Exp%	Act%
74.10	100	100
42.10	94.50	66.70
50.00	0.00	0.00
0.00	0.00	0.00

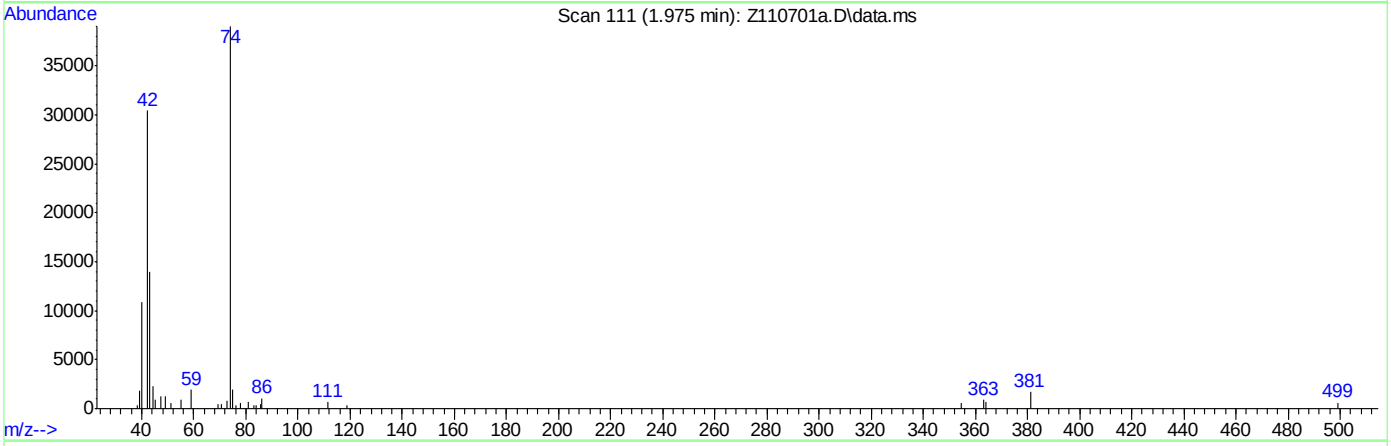
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110701a.D
Acq On : 16 May 2016 12:46 pm
Operator : ariellec
Sample : op93924-bs1
Misc : op93924,ez5530,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 16 14:35:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration





TIC: Z110701a.D\data.ms

(4) N-Nitrosodimethylamine (t)

1.975min (+0.012) 21.04ppm m

response 76913

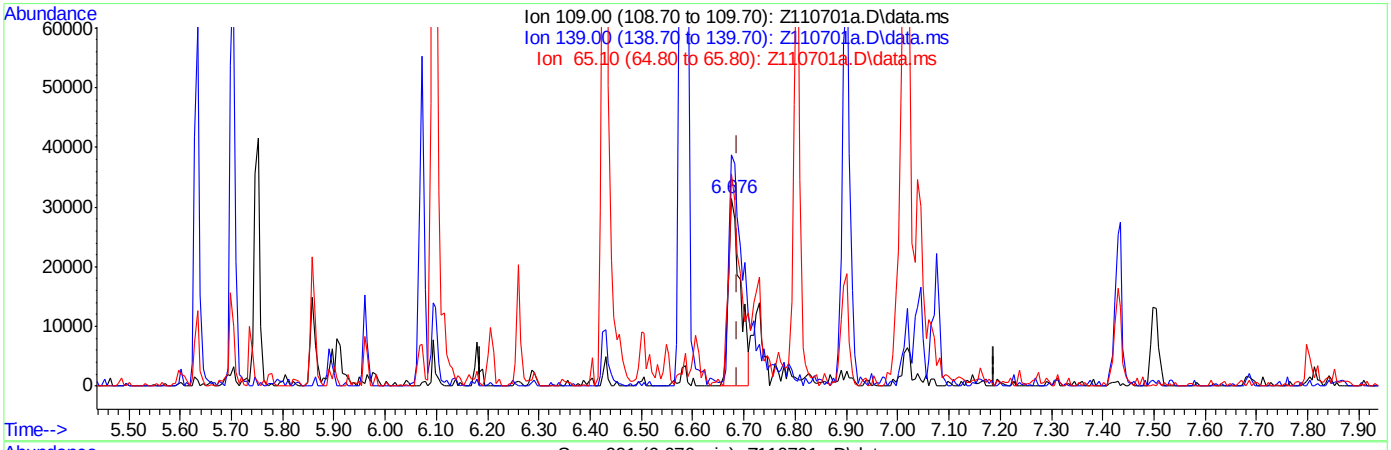
Ion	Exp%	Act%
74.10	100	100
42.10	94.50	77.90
50.00	0.00	0.00
0.00	0.00	0.00

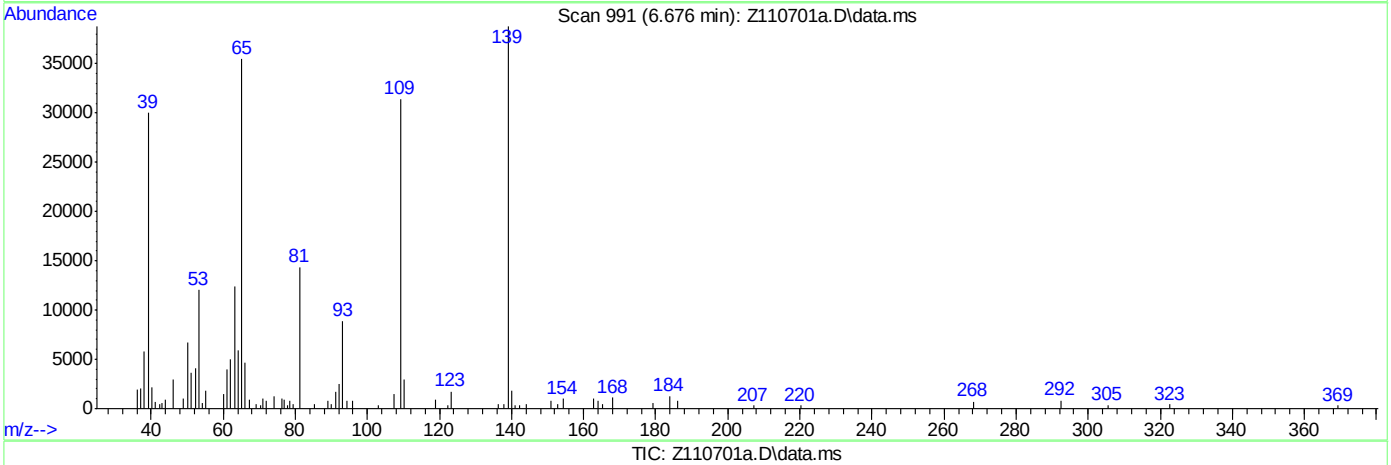
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110701a.D
Acq On : 16 May 2016 12:46 pm
Operator : ariellec
Sample : op93924-bs1
Misc : op93924,ez5530,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 16 14:35:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration





TIC: Z110701a.D\data.ms

(61) 4-Nitrophenol (t)

6.676min (-0.012) 29.36ppm

response 48984

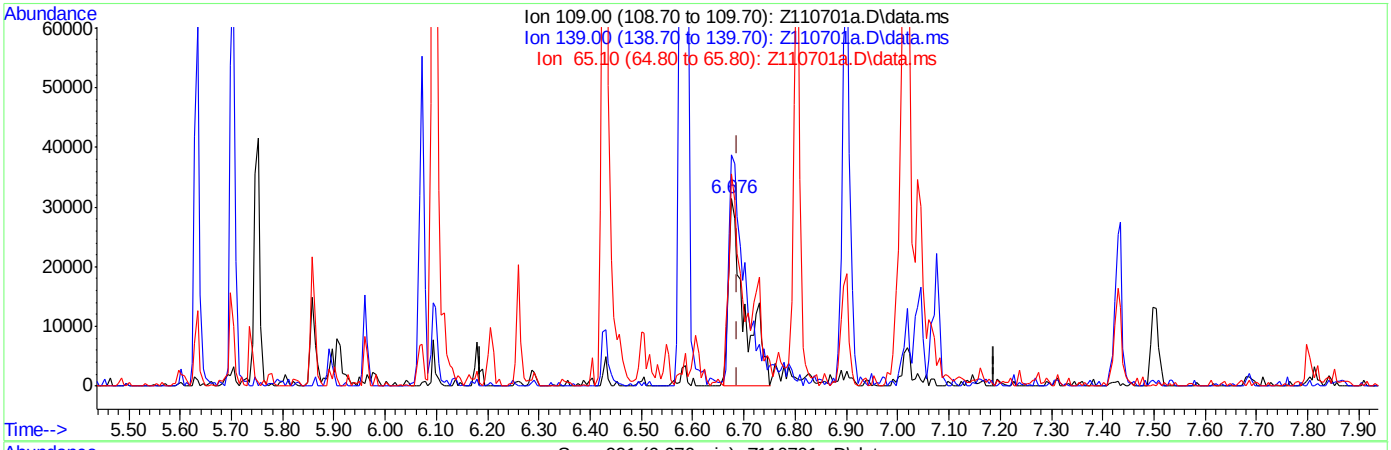
Ion	Exp%	Act%
109.00	100	100
139.00	79.40	113.78#
65.10	84.10	101.32
0.00	0.00	0.00

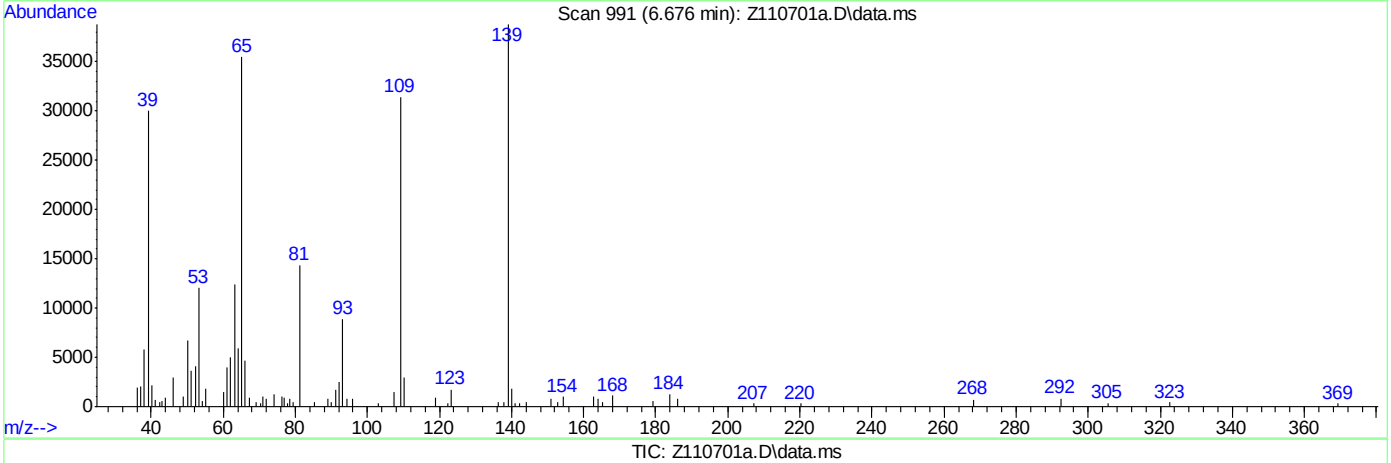
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110701a.D
Acq On : 16 May 2016 12:46 pm
Operator : ariellec
Sample : op93924-bs1
Misc : op93924,ez5530,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 16 14:35:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration





TIC: Z110701a.D\data.ms

(61) 4-Nitrophenol (t)

6.676min (-0.012) 40.67ppm m

response 67845

Ion	Exp%	Act%
109.00	100	100
139.00	79.40	123.32#
65.10	84.10	112.72
0.00	0.00	0.00

SGS ACCUTEST JC20314

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/18/16 13:32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110702.D
Acq On : 16 May 2016 1:15 pm
Operator : ariellec
Sample : op93924-bsd
Misc : op93924,ez5530,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 16 14:39:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.208	152	173153	40.00	ppm	0.00
24) Naphthalene-d8	5.132	136	654357	40.00	ppm	0.00
47) Acenaphthene-d10	6.403	164	429619	40.00	ppm	0.00
69) Phenanthrene-d10	8.001	188	718658	40.00	ppm	0.00
83) Chrysene-d12	12.910	240	721151	40.00	ppm	0.00
92) Perylene-d12	15.891	264	712301	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.208	152	173153	40.00	ppm	-0.06
104) Phenanthrene-d10a	8.001	188	718658	40.00	ppm	-0.11
106) Chrysene-d12a	12.910	240	721151	40.00	ppm	-0.15
108) Acenaphthene-d10a	6.403	164	429619	40.00	ppm	-0.07
110) Naphthalene-d8a	5.132	136	654357	40.00	ppm	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	3.289	112	152481	25.50	ppm	0.00
Spiked Amount 50.000			Recovery	=	51.00%	
8) Phenol-d5	4.048	99	156773	22.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	44.76%	
25) Nitrobenzene-d5	4.635	82	214794	40.67	ppm	0.00
Spiked Amount 50.000			Recovery	=	81.34%	
51) 2-Fluorobiphenyl	5.896	172	423067	30.72	ppm	0.01
Spiked Amount 50.000			Recovery	=	61.44%	
73) 2,4,6-Tribromophenol	7.167	330	70079	31.73	ppm	0.00
Spiked Amount 50.000			Recovery	=	63.46%	
86) Terphenyl-d14	10.773	244	524106	34.59	ppm	0.10
Spiked Amount 50.000			Recovery	=	69.18%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.654	88	41292	16.07	ppm	82
4) N-Nitrosodimethylamine	1.980	74	73022m	21.69	ppm	
6) Indene	4.395	116	346189	31.46	ppm	95
7) Cumene	3.588	105	415650	29.61	ppm	93
9) Phenol	4.058	94	168736	23.73	ppm	88
11) bis(2-Chloroethyl)ether	4.032	93	158079	32.46	ppm	92
12) 2-Chlorophenol	4.090	128	198125	30.21	ppm	98
13) Decane	4.069	43	122646	20.29	ppm	88
14) 1,3-Dichlorobenzene	4.160	146	186876	26.19	ppm	91
15) 1,4-Dichlorobenzene	4.218	146	192546	28.45	ppm	89
16) Benzyl alcohol	4.357	108	92539	30.83	ppm	85
17) 1,2-Dichlorobenzene	4.336	146	178506	27.22	ppm	97
18) Acetophenone	4.518	105	256317	33.58	ppm	90
19) 2-Methylphenol	4.470	108	184325	33.16	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.416	121	54131	31.79	ppm	91
21) 3&4-Methylphenol	4.587	108	161985	27.93	ppm	94
22) n-Nitroso-di-n-propyla...	4.518	70	133715	33.87	ppm	91
23) Hexachloroethane	4.571	201	62215	31.54	ppm	83
26) Nitrobenzene	4.646	77	209945	39.45	ppm	93
27) Quinoline	5.404	129	22957	1.85	ppm	96
28) Isophorone	4.806	82	382534	41.28	ppm	97
29) 2-Nitrophenol	4.876	139	116651	35.28	ppm #	63

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110702.D
Acq On : 16 May 2016 1:15 pm
Operator : ariellec
Sample : op93924-bsd
Misc : op93924,ez5530,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 16 14:39:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
30) 2,4-Dimethylphenol	4.945	107	206941	39.78	ppm	91
31) Benzoic Acid	5.073	105	69915	18.63	ppm	86
32) bis(2-Chloroethoxy)met...	4.972	93	182673	31.78	ppm	95
33) 2,4-Dichlorophenol	5.073	162	163975	35.79	ppm	93
34) 2,6-Dichlorophenol	5.217	162	178951	39.92	ppm	98
36) 1,2,4-Trichlorobenzene	5.089	180	156363	32.76	ppm	97
38) Naphthalene	5.143	128	550982	30.67	ppm	98
39) 4-Chloroaniline	5.223	127	33182	4.64	ppm	87
40) 2,3-Dichloroaniline	5.859	161	220500	38.34	ppm	96
41) Caprolactam	5.474	55	20870	8.96	ppm	86
42) Hexachlorobutadiene	5.228	225	84599	39.90	ppm	95
43) 4-Chloro-3-methylphenol	5.597	107	201557	41.48	ppm	73
44) 2-Methylnaphthalene	5.634	141	340401	34.04	ppm	86
45) 1-Methylnaphthalene	5.704	141	363160	33.92	ppm	99
46) Dimethylnaphthalene	6.072	156	367035	35.47	ppm	93
48) Hexachlorocyclopentadiene	5.741	237	114511	39.99	ppm	84
49) 2,4,6-Trichlorophenol	5.859	196	143483	40.44	ppm	91
50) 2,4,5-Trichlorophenol	5.907	196	130213	33.88	ppm	77
52) 2-Chloronaphthalene	5.976	162	348259	28.61	ppm	98
53) Biphenyl	5.960	154	485495	28.46	ppm	98
54) 2-Nitroaniline	6.094	65	116814	35.59	ppm	91
55) Dimethylphthalate	6.206	163	492873	36.06	ppm	98
56) Acenaphthylene	6.291	152	609936	28.52	ppm	98
57) 2,6-Dinitrotoluene	6.259	165	112517	37.56	ppm	91
58) 3-Nitroaniline	6.430	138	91908	25.39	ppm	84
59) Acenaphthene	6.430	153	406598	31.79	ppm	92
60) 2,4-Dinitrophenol	6.505	184	116005	72.73	ppm	80
61) 4-Nitrophenol	6.681	109	67591m	40.54	ppm	
62) Dibenzofuran	6.580	168	570167	32.27	ppm	96
63) 2,4-Dinitrotoluene	6.606	165	148175	38.02	ppm	66
64) 2,3,4,6-Tetrachlorophenol	6.729	232	110647	36.27	ppm	93
65) Diethylphthalate	6.804	149	481256	34.31	ppm	99
66) Fluorene	6.900	166	464993	31.97	ppm	94
67) 4-Chlorophenyl-phenyle...	6.900	204	222534	37.11	ppm	97
68) 4-Nitroaniline	7.018	138	108601	29.98	ppm	80
70) 4,6-Dinitro-2-methylph...	6.996	198	95404	44.62	ppm	85
71) n-Nitrosodiphenylamine	7.039	169	337067	32.26	ppm	96
72) 1,2-Diphenylhydrazine	7.066	77	427360	34.21	ppm	97
74) 4-Bromophenyl-phenylether	7.429	248	133653	35.85	ppm	99
75) Hexachlorobenzene	7.504	284	141440	33.83	ppm	93
76) Pentachlorophenol	7.808	266	73413	33.08	ppm	97
77) Phenanthrene	8.033	178	706161	34.34	ppm	97
78) Anthracene	8.102	178	690161	32.57	ppm	99
79) Carbazole	8.401	167	682047	33.76	ppm	96
80) Di-n-butylphthalate	8.957	149	884140	35.55	ppm	98
81) Fluoranthene	9.961	202	815084	37.96	ppm	99
82) Octadecane	7.846	57	254936	28.59	ppm	96
84) Pyrene	10.378	202	824865	33.92	ppm	95
87) Butylbenzylphthalate	11.885	149	382676	32.97	ppm	91
88) Benzo[a]anthracene	12.884	228	763889	36.27	ppm	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110702.D
Acq On : 16 May 2016 1:15 pm
Operator : ariellec
Sample : op93924-bsd
Misc : op93924,ez5530,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 16 14:39:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
89)	3,3'-Dichlorobenzidine	12.990	252	380679	50.05 ppm		94
90)	Chrysene	12.958	228	708204	34.44 ppm		94
91)	bis(2-Ethylhexyl)phtha...	13.204	149	548542	33.58 ppm		95
93)	Di-n-octylphthalate	14.598	149	960380	34.99 ppm		98
94)	Benzo[b]fluoranthene	15.154	252	803344	35.73 ppm		93
95)	Benzo[k]fluoranthene	15.202	252	762477	37.77 ppm		91
96)	Benzo[a]pyrene	15.768	252	691391	34.55 ppm		95
97)	Indeno[1,2,3-cd]pyrene	17.804	276	590114	29.49 ppm		92
99)	Dibenz[a,h]anthracene	17.852	278	643807	30.57 ppm		96
100)	7,12-Dimethylbenz(a)an...	15.149	256	345711	33.79 ppm		91
101)	Benzo[g,h,i]perylene	18.237	276	633927	29.48 ppm		93
103)	Benzaldehyde	3.898	105	154705	33.84 ppm		94
105)	Atrazine	7.686	215	68036	38.05 ppm	#	68
109)	1,2,4,5-Tetrachloroben...	5.752	216	175378	31.84 ppm		87

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

7.3.2

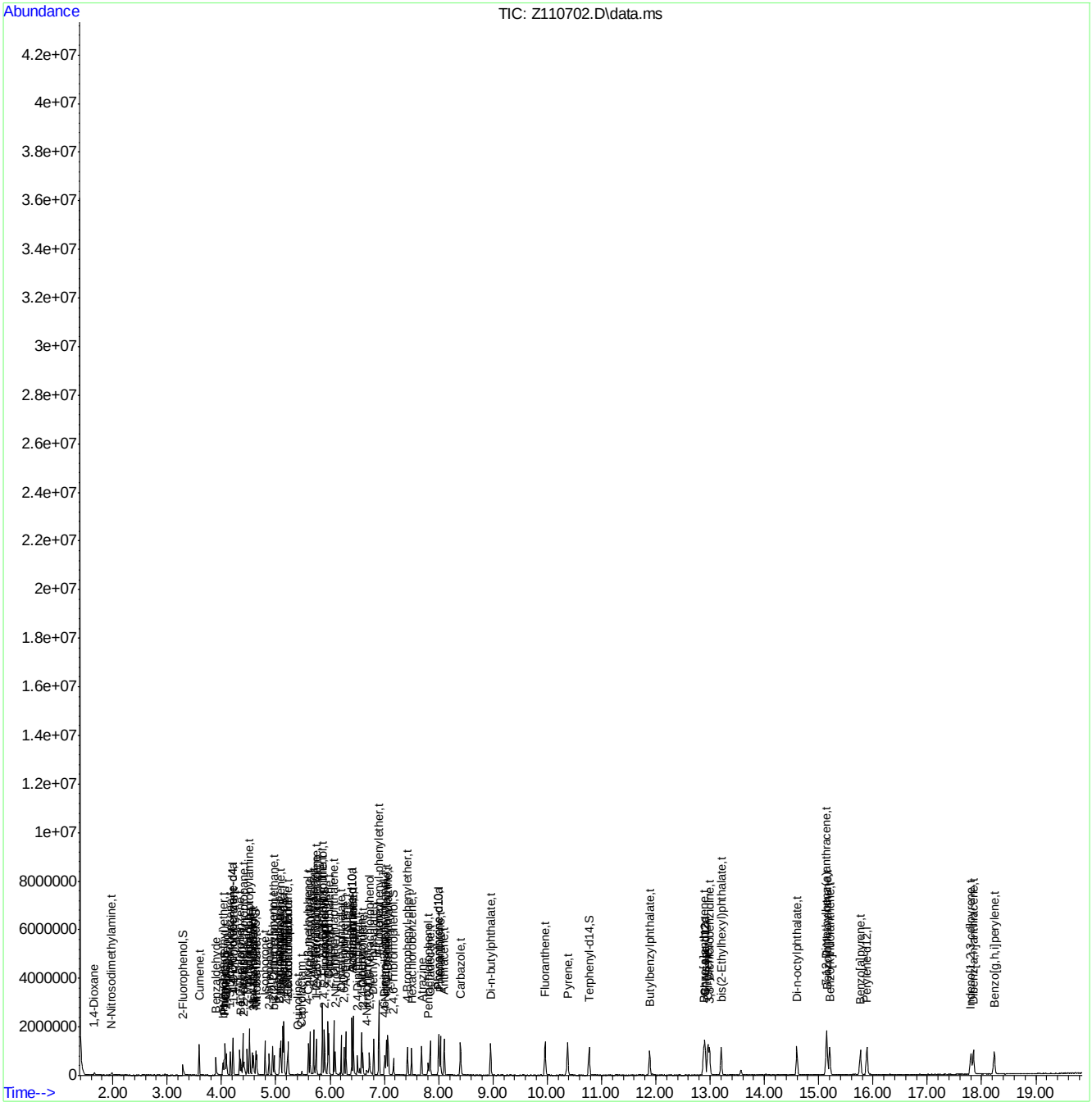
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110702.D
Acq On : 16 May 2016 1:15 pm
Operator : ariellec
Sample : op93924-bsd
Misc : op93924,ez5530,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 16 14:39:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration



MZ5485.M Mon May 16 14:39:34 2016 RTE

Page: 4

SGS ACCUTEST JC20314

Manual Integration Approval Summary

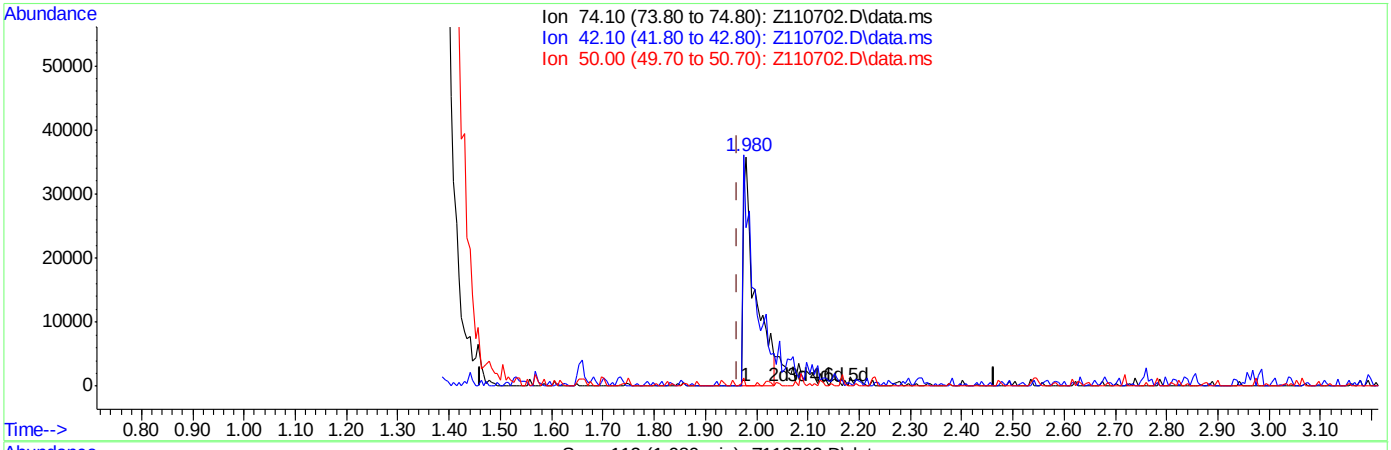
Sample Number:	OP93924-BSD	**Method:**	SW846 8270D
Lab FileID:	Z110702.D	**Analyst approved:**	05/16/16 15:24 Arielle Cocozza
Injection Time:	05/16/16 13:15	**Supervisor approved:**	05/18/16 13:32 Nina Pandya

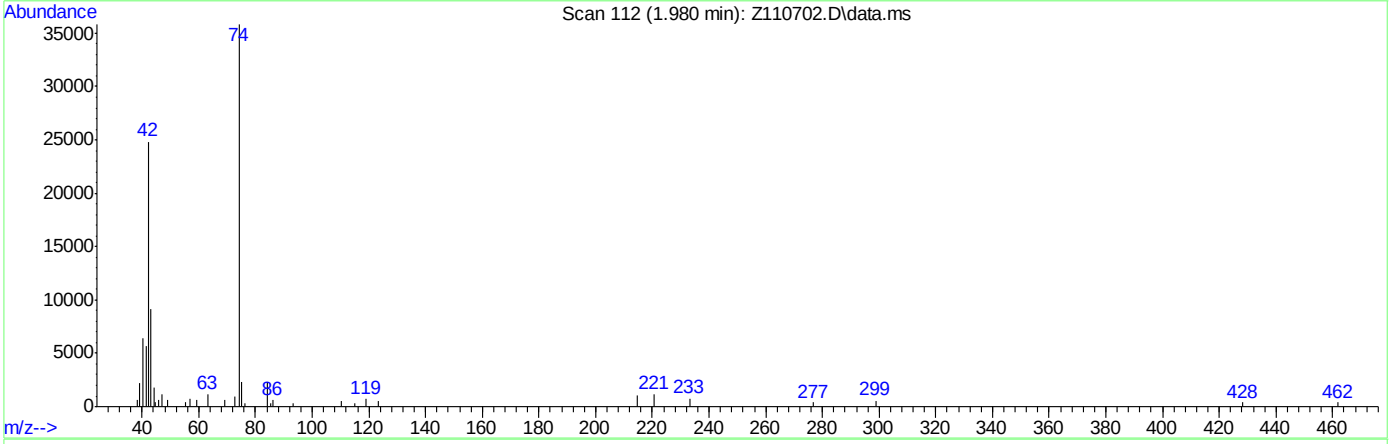
Parameter	CAS	Sig#	R.T. (min.)	Reason
n-Nitrosodimethylamine	62-75-9		1.98	Poor instrument integration
4-Nitrophenol	100-02-7		6.68	Poor instrument integration

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110702.D
Acq On    : 16 May 2016   1:15 pm
Operator  : ariellec
Sample    : op93924-bsd
Misc      : op93924,ez5530,1000
ALS Vial  : 6   Sample Multiplier: 1

Quant Time: May 16 14:37:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title  : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration
```





TIC: Z110702.D\data.ms

(4) N-Nitrosodimethylamine (t)

1.980min (+0.017) 17.23ppm

response 58007

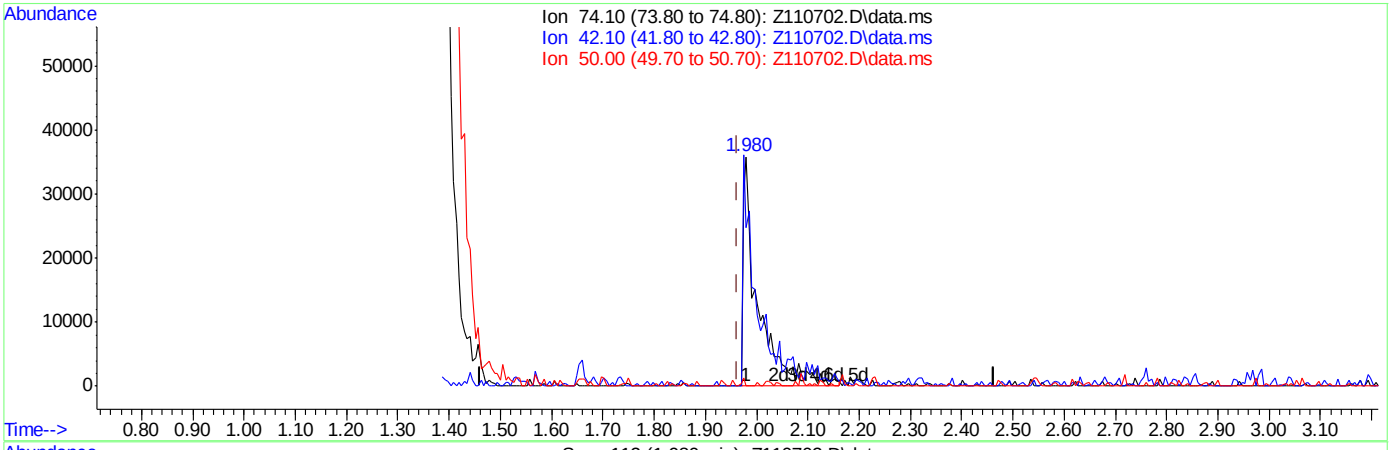
Ion	Exp%	Act%
74.10	100	100
42.10	94.50	66.30
50.00	0.00	0.00
0.00	0.00	0.00

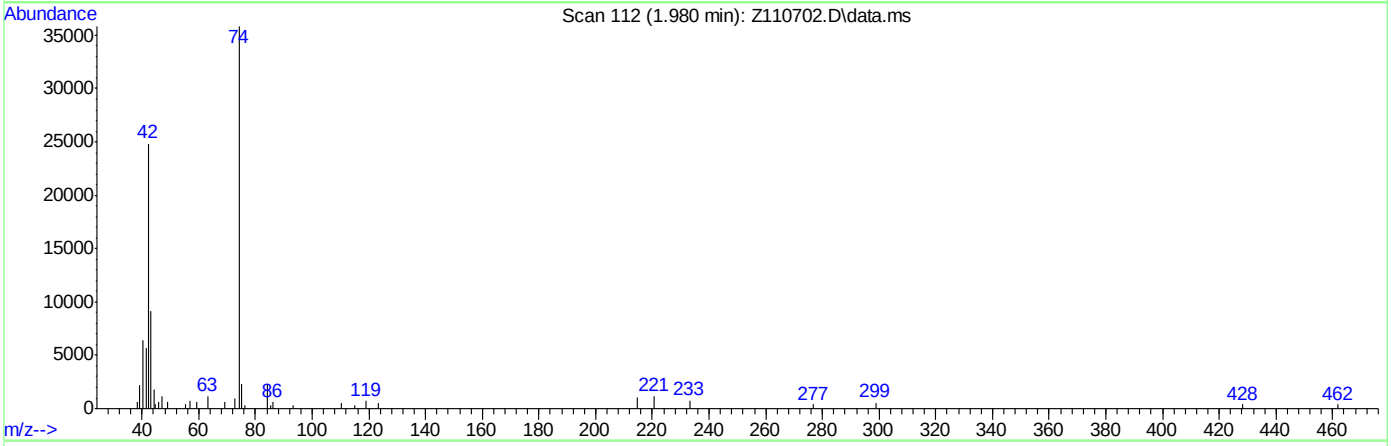
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110702.D
Acq On    : 16 May 2016   1:15 pm
Operator  : ariellec
Sample    : op93924-bsd
Misc      : op93924,ez5530,1000
ALS Vial  : 6   Sample Multiplier: 1

Quant Time: May 16 14:37:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title  : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration
```





TIC: Z110702.D\data.ms

(4) N-Nitrosodimethylamine (t)

1.980min (+0.017) 21.69ppm m

response 73022

Ion	Exp%	Act%
74.10	100	100
42.10	94.50	69.23
50.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST JC20314

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110702.D
Acq On    : 16 May 2016   1:15 pm
Operator  : ariellec
Sample    : op93924-bsd
Misc      : op93924,ez5530,1000
ALS Vial  : 6   Sample Multiplier: 1

Quant Time: May 16 14:37:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title  : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration
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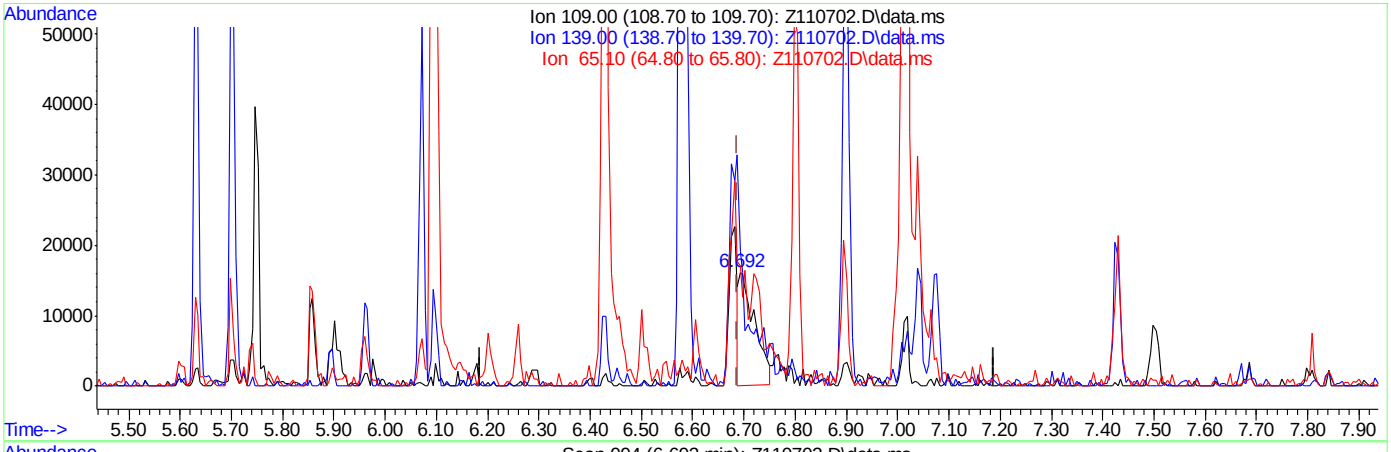
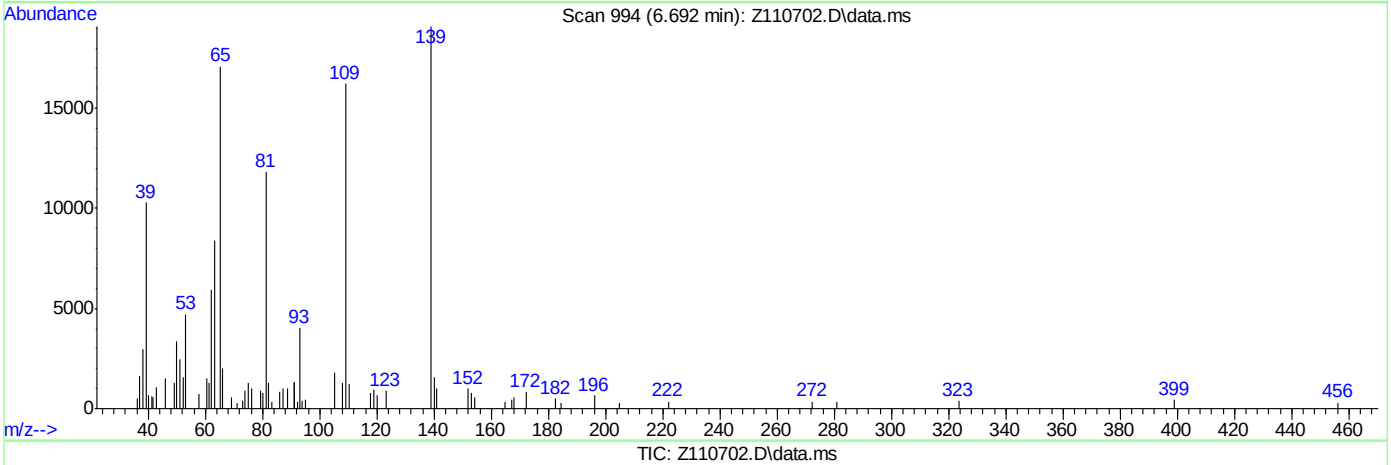




TIC: Z110702.D\data.ms

(61) 4-Nitrophenol (t)

6.692min (+0.004) 20.79ppm

response 34665

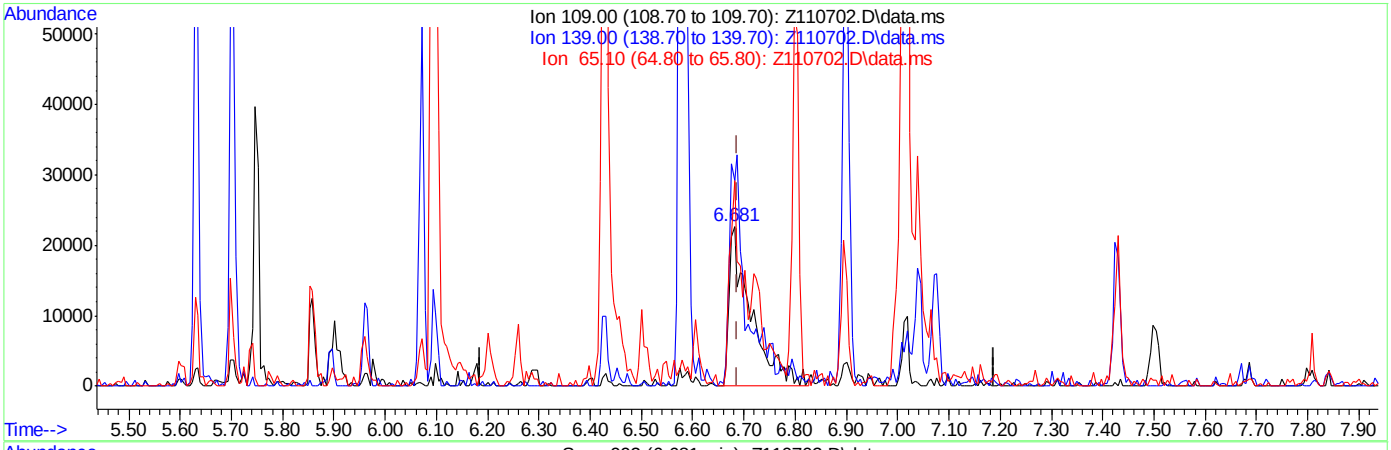
Ion	Exp%	Act%
109.00	100	100
139.00	79.40	0.00#
65.10	84.10	67.67
0.00	0.00	0.00

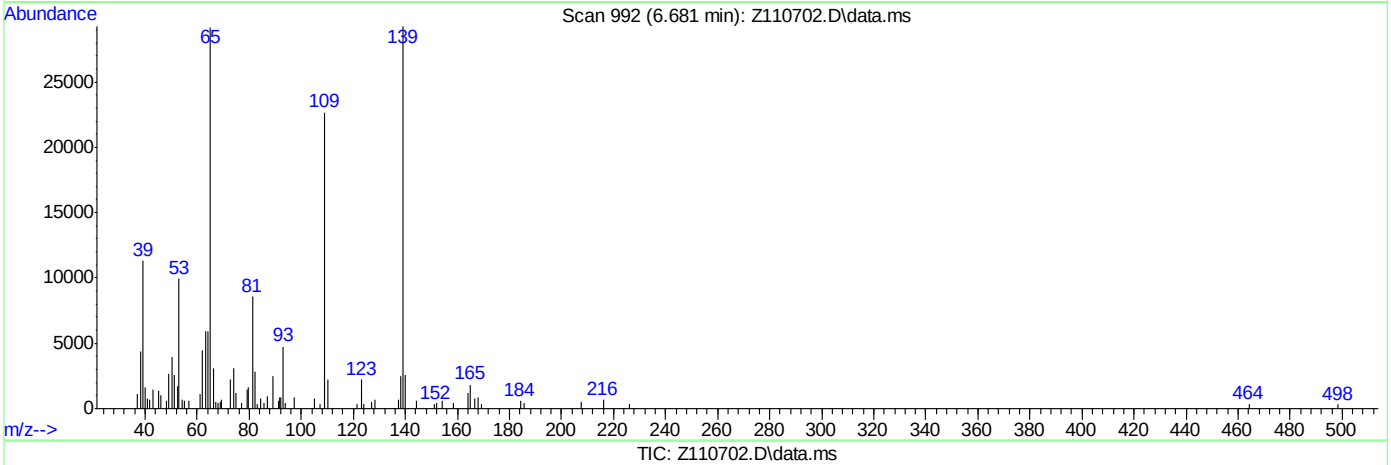
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110702.D
Acq On : 16 May 2016 1:15 pm
Operator : ariellec
Sample : op93924-bsd
Misc : op93924,ez5530,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 16 14:37:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:39:38 2016
Response via : Initial Calibration





TIC: Z110702.D\data.ms

(61) 4-Nitrophenol (t)

6.681min (-0.006) 40.54ppm m

response 67591

Ion	Exp%	Act%
109.00	100	100
139.00	79.40	129.05#
65.10	84.10	128.59#
0.00	0.00	0.00

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110791.D
Acq On : 19 May 2016 10:25 am
Operator : ariellec
Sample : op93998-bs1
Misc : op93998,ez5537,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 19 12:34:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	165672	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	605799	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	360674	40.00	ppm	0.00
69) Phenanthrene-d10	8.831	188	604615	40.00	ppm	-0.01
83) Chrysene-d12	14.067	240	571020	40.00	ppm	-0.03
92) Perylene-d12	17.090	264	506433	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.654	152	165672	40.00	ppm	0.00
104) Phenanthrene-d10a	8.831	188	604615	40.00	ppm	0.00
108) Chrysene-d12a	14.067	240	571020	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	360674	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	605799	40.00	ppm	0.00
114) Chrysene-d12b	14.067	240	571020	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.665	112	229848	41.10	ppm	0.00
Spiked Amount 50.000			Recovery = 82.20%			
8) Phenol-d5	4.381	99	277415	40.21	ppm	0.00
Spiked Amount 50.000			Recovery = 80.42%			
25) Nitrobenzene-d5	5.054	82	239857	42.47	ppm	0.00
Spiked Amount 50.000			Recovery = 84.94%			
51) 2-Fluorobiphenyl	6.368	172	499139	42.34	ppm	0.00
Spiked Amount 50.000			Recovery = 84.68%			
73) 2,4,6-Tribromophenol	7.848	330	69724	45.89	ppm	-0.01
Spiked Amount 50.000			Recovery = 91.78%			
86) Terphenyl-d14	11.871	244	544376	44.46	ppm	-0.02
Spiked Amount 50.000			Recovery = 88.92%			
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	2.212	88	61097	26.29	ppm	98
3) Pyridine	2.538	79	185456	34.59	ppm	96
4) N-Nitrosodimethylamine	2.495	74	118752	39.40	ppm	98
6) Indene	4.841	116	394409	41.39	ppm	99
7) Cumene	4.061	105	554875	40.00	ppm	97
9) Phenol	4.392	94	282515	39.55	ppm	90
10) Aniline	4.408	93	204802	26.59	ppm	70
11) bis(2-Chloroethyl)ether	4.461	93	203252	42.97	ppm	96
12) 2-Chlorophenol	4.499	128	239908	40.87	ppm	95
13) Decane	4.536	43	162120	36.62	ppm	98
14) 1,3-Dichlorobenzene	4.611	146	253535	38.91	ppm	96
15) 1,4-Dichlorobenzene	4.664	146	257969	40.24	ppm	97
16) Benzyl alcohol	4.755	108	136391	39.41	ppm	96
17) 1,2-Dichlorobenzene	4.777	146	243893	40.72	ppm	98
18) Acetophenone	4.947	105	320341	41.25	ppm #	76
19) 2-Methylphenol	4.835	108	204888	41.33	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.851	121	44075	28.03	ppm	95

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110791.D
Acq On : 19 May 2016 10:25 am
Operator : ariellec
Sample : op93998-bs1
Misc : op93998,ez5537,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 19 12:34:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.942	108	219525	41.12	ppm	99
22) n-Nitroso-di-n-propyla...	4.947	70	154543	39.47	ppm	94
23) Hexachloroethane	5.022	201	91266	42.14	ppm	93
26) Nitrobenzene	5.065	77	235449	42.10	ppm	97
27) Quinoline	5.829	129	469370	43.52	ppm	100
28) Isophorone	5.241	82	431035	44.68	ppm	97
29) 2-Nitrophenol	5.295	139	128117	44.70	ppm	96
30) 2,4-Dimethylphenol	5.327	107	214776	43.81	ppm	95
31) Benzoic Acid	5.402	105	157257	44.68	ppm	98
32) bis(2-Chloroethoxy)met...	5.396	93	241664	42.71	ppm	98
33) 2,4-Dichlorophenol	5.466	162	197856	44.30	ppm	96
34) 2,6-Dichlorophenol	5.631	162	183108	42.40	ppm	97
36) 1,2,4-Trichlorobenzene	5.530	180	212957	41.82	ppm	98
38) Naphthalene	5.589	128	667445	41.94	ppm	99
39) 4-Chloroaniline	5.621	127	126343	19.15	ppm	98
40) 2,3-Dichloroaniline	6.299	161	200762	36.28	ppm	97
41) Caprolactam	5.888	55	78081	41.66	ppm	99
42) Hexachlorobutadiene	5.674	225	125018	43.52	ppm	98
43) 4-Chloro-3-methylphenol	5.968	107	222599	45.24	ppm	95
44) 2-Methylnaphthalene	6.085	141	393578	41.96	ppm	97
45) 1-Methylnaphthalene	6.160	141	408445	42.43	ppm	99
46) Dimethylnaphthalene	6.582	156	414634	42.73	ppm	98
48) Hexachlorocyclopentadiene	6.203	237	275718	98.51	ppm	97
49) 2,4,6-Trichlorophenol	6.299	196	145692	44.46	ppm	98
50) 2,4,5-Trichlorophenol	6.331	196	144022	41.11	ppm	95
52) 2-Chloronaphthalene	6.470	162	425260	41.55	ppm	99
53) Biphenyl	6.449	154	565344	42.07	ppm	99
54) 2-Nitroaniline	6.550	65	129833	43.77	ppm	95
55) Dimethylphthalate	6.710	163	524848	43.26	ppm	100
56) Acenaphthylene	6.833	152	693411	39.81	ppm	98
57) 2,6-Dinitrotoluene	6.764	165	113766	48.09	ppm	86
58) 3-Nitroaniline	6.919	138	71801	25.25	ppm	95
59) Acenaphthene	7.004	153	452804	42.56	ppm	96
60) 2,4-Dinitrophenol	7.026	184	119485	112.37	ppm	87
61) 4-Nitrophenol	7.079	109	84635	51.87	ppm	87
62) Dibenzofuran	7.181	168	617608	42.27	ppm	99
63) 2,4-Dinitrotoluene	7.159	165	159671	49.51	ppm	95
64) 2,3,4,6-Tetrachlorophenol	7.303	232	127568	45.70	ppm	97
65) Diethylphthalate	7.437	149	550025	44.91	ppm	99
66) Fluorene	7.560	166	519220	42.70	ppm	99
67) 4-Chlorophenyl-phenyle...	7.560	204	247154	43.54	ppm	93
68) 4-Nitroaniline	7.581	138	127040	44.17	ppm	93
70) 4,6-Dinitro-2-methylph...	7.613	198	87537	52.76	ppm	92
71) n-Nitrosodiphenylamine	7.704	169	375228	45.38	ppm	100
72) 1,2-Diphenylhydrazine	7.752	77	499708	44.24	ppm	100
74) 4-Bromophenyl-phenylether	8.190	248	148346	46.02	ppm	95
75) Hexachlorobenzene	8.260	284	155458	44.70	ppm	94
76) Pentachlorophenol	8.543	266	104539	47.34	ppm	99
77) Phenanthrene	8.869	178	733187	43.74	ppm	98
78) Anthracene	8.949	178	748098	43.94	ppm	99

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110791.D
Acq On : 19 May 2016 10:25 am
Operator : ariellec
Sample : op93998-bs1
Misc : op93998,ez5537,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 19 12:34:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.221	167	727128	45.76	ppm	100
80)	Di-n-butylphthalate	9.937	149	952817	46.56	ppm	99
81)	Fluoranthene	10.990	202	838123	44.32	ppm	99
82)	Octadecane	8.751	57	264944	45.94	ppm	98
84)	Pyrene	11.433	202	862713	45.22	ppm	97
87)	Butylbenzylphthalate	13.057	149	402363	45.16	ppm	98
88)	Benzo[a]anthracene	14.045	228	770644	44.18	ppm	100
89)	3,3'-Dichlorobenzidine	14.099	252	304214	50.26	ppm	97
90)	Chrysene	14.125	228	700366	42.90	ppm	99
91)	bis(2-Ethylhexyl)phtha...	14.473	149	536346	44.49	ppm	99
93)	Di-n-octylphthalate	15.920	149	893811	44.67	ppm	99
94)	Benzo[b]fluoranthene	16.348	252	724423	43.46	ppm	99
95)	Benzo[k]fluoranthene	16.412	252	701795	44.67	ppm	99
96)	Benzo[a]pyrene	16.973	252	664114	44.91	ppm	99
97)	Indeno[1,2,3-cd]pyrene	19.019	276	596252	44.71	ppm	98
99)	Dibenz[a,h]anthracene	19.088	278	604524	43.67	ppm	99
100)	7,12-Dimethylbenz(a)an...	16.375	256	344077	51.67	ppm	98
101)	Benzo[g,h,i]perylene	19.446	276	622667	44.23	ppm	98
103)	Benzaldehyde	4.328	105	161549	38.87	ppm	99
107)	Atrazine	8.447	215	74138	48.21	ppm	92
109)	Benzidine	11.337	184	299322	53.01	ppm	100
111)	1,2,4,5-Tetrachloroben...	6.208	216	217896	44.62	ppm	99

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

7.3.3

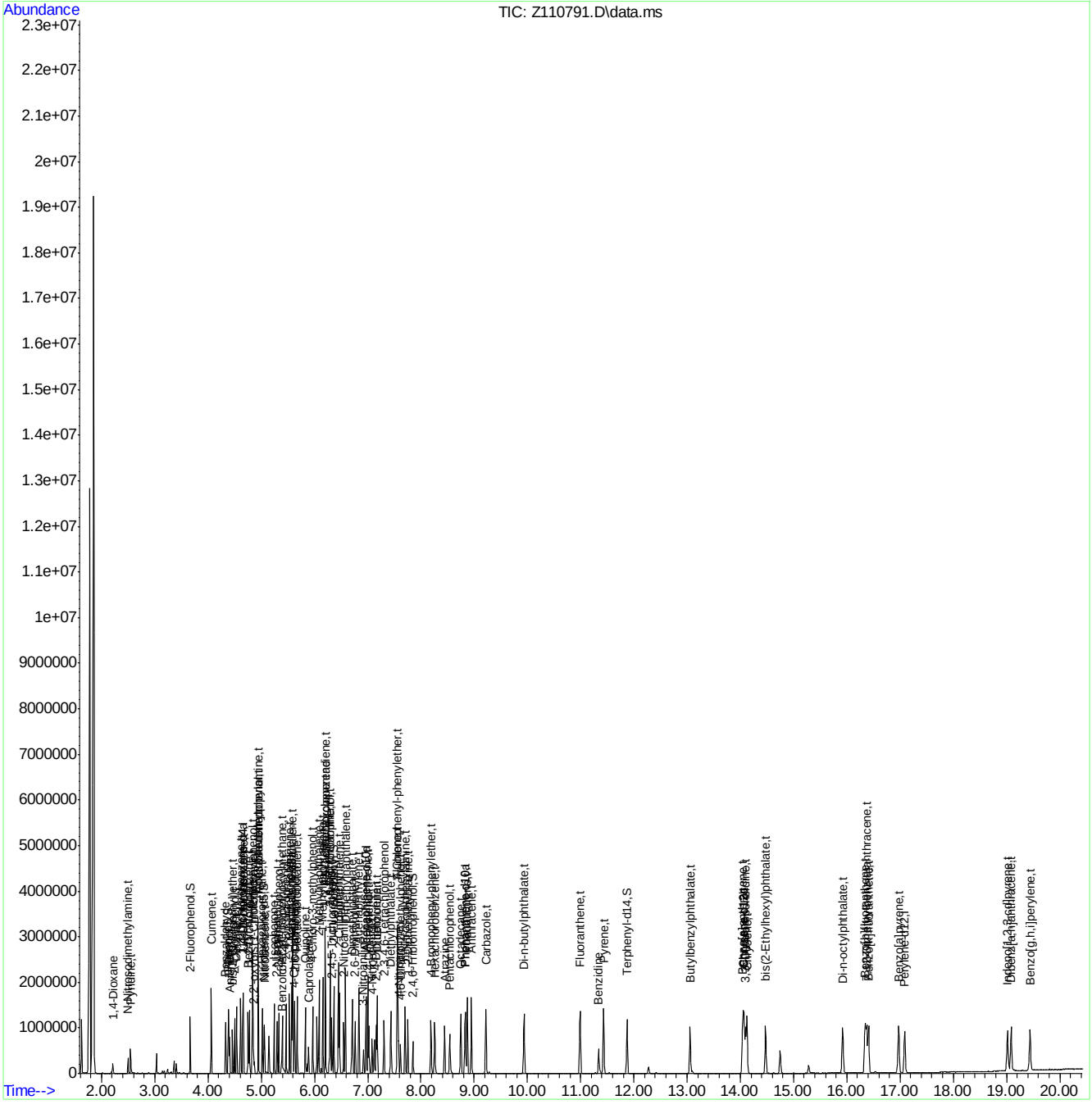
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110791.D
Acq On : 19 May 2016 10:25 am
Operator : ariellec
Sample : op93998-bs1
Misc : op93998,ez5537,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 19 12:34:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2885\
Data File : 3m61364.D
Acq On : 16 May 2016 6:56 pm
Operator : ashleyd
Sample : op93924a-bs12
Misc : op93924a,e3m2885,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 17 10:00:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 16 17:09:16 2016
Response via : Initial Calibration

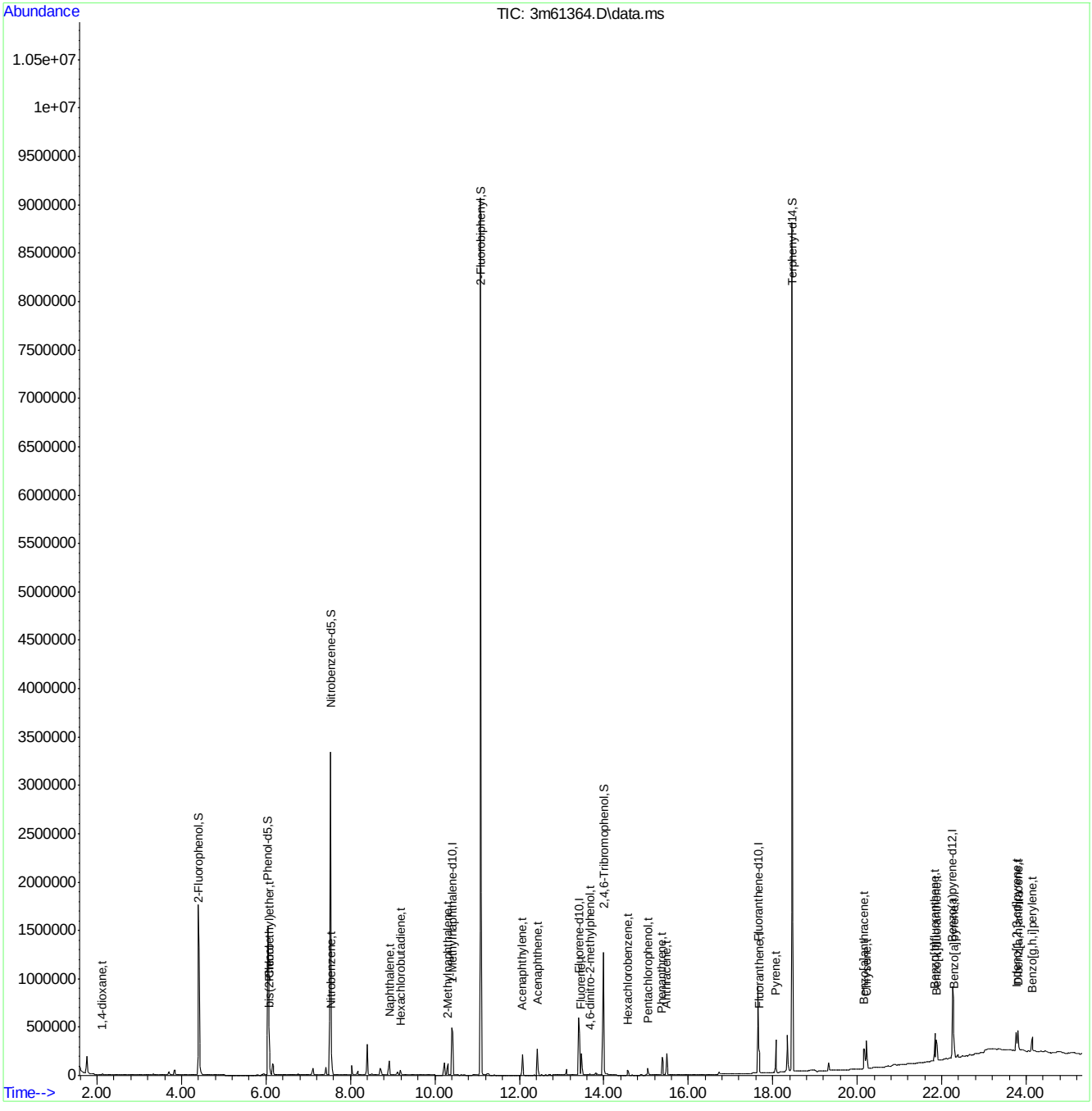
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.406	150	434278	4.00	ppm	0.04
14) Fluorene-d10	13.411	176	620636	4.00	ppm	0.04
21) Fluoranthene-d10	17.654	212	1058428	4.00	ppm	0.06
31) Benzo(a)pyrene-d12	22.259	264	898060	4.00	ppm	0.06
System Monitoring Compounds						
3) 2-Fluorophenol	4.415	112	1697763	31.25	ppm	0.10
Spiked Amount 50.000			Recovery = 62.50%			
4) Phenol-d5	6.048	99	2049120	22.79	ppm	0.12
Spiked Amount 50.000			Recovery = 45.58%			
7) Nitrobenzene-d5	7.531	82	3168178	37.90	ppm	0.04
Spiked Amount 50.000			Recovery = 75.80%			
15) 2-Fluorobiphenyl	11.083	172	6775904	39.73	ppm	0.05
Spiked Amount 50.000			Recovery = 79.46%			
20) 2,4,6-Tribromophenol	13.995	330	798214	41.09	ppm	0.07
Spiked Amount 50.000			Recovery = 82.18%			
28) Terphenyl-d14	18.458	244	7153666	46.59	ppm	0.05
Spiked Amount 50.000			Recovery = 93.18%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.128	88	9998	0.45	ppm	86
5) Phenol	6.073	94	253267	2.61	ppm #	79
6) bis(2-Chloroethyl)ether	6.085	93	63935	0.87	ppm	84
8) Nitrobenzene	7.550	77	71570	0.79	ppm	95
9) Naphthalene	8.924	128	189052	0.78	ppm	88
10) Hexachlorobutadiene	9.188	225	28516	0.68	ppm	78
11) 2-Methylnaphthalene	10.303	141	99523	0.79	ppm #	47
16) Acenaphthylene	12.072	152	203380	0.95	ppm	96
17) Acenaphthene	12.428	153	134088	0.93	ppm	86
18) 4,6-dinitro-2-methylph...	13.675	198	6600	0.95	ppm #	50
19) Fluorene	13.467	166	160448	0.93	ppm	96
22) Hexachlorobenzene	14.563	284	40072	0.80	ppm	86
23) Pentachlorophenol	15.042	266	60897	1.87	ppm	91
24) Phenanthrene	15.382	178	236469	0.91	ppm	95
25) Anthracene	15.490	178	233660	1.02	ppm	93
26) Fluoranthene	17.685	202	289557	0.89	ppm	95
27) Pyrene	18.071	202	304942	1.01	ppm	93
29) Benzo[a]anthracene	20.157	228	264445	0.91	ppm	97
30) Chrysene	20.219	228	255758	0.92	ppm	96
32) Benzo[b]fluoranthene	21.841	252	254893	0.85	ppm	95
33) Benzo[k]fluoranthene	21.872	252	235488	0.85	ppm	93
34) Benzo[a]pyrene	22.289	252	212624	0.76	ppm	99
35) Indeno[1,2,3-cd]pyrene	23.768	276	238782	0.84	ppm	98
36) Dibenz[a,h]anthracene	23.806	278	197236	0.85	ppm	100
37) Benzo[g,h,i]perylene	24.144	276	199383	0.81	ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2885\
Data File : 3m61364.D
Acq On : 16 May 2016 6:56 pm
Operator : ashleyd
Sample : op93924a-bs12
Misc : op93924a,e3m2885,1000
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 17 10:00:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 16 17:09:16 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16390.D
Acq On : 20 May 2016 12:51 pm
Operator : linseyk
Sample : op93998a-bs12
Misc : op93998a,e4p867,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 20 17:03:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 20 11:59:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.856	150	153652	4.00	ppm	-0.02
13) Fluorene-d10	10.812	176	227774	4.00	ppm	-0.02
23) Fluoranthene-d10	15.018	212	317497	4.00	ppm	-0.02
33) Benzo(a)pyrene-d12	19.645	264	200725	4.00	ppm	-0.02
System Monitoring Compounds						
3) 2-Fluorophenol	2.682	112	1015025	60.02	ppm	-0.01
Spiked Amount 50.000			Recovery = 120.04%			
4) Phenol-d5	3.819	99	1352562	54.32	ppm	0.00
Spiked Amount 50.000			Recovery = 108.64%			
7) Nitrobenzene-d5	5.157	82	1366601	66.97	ppm	-0.02
Spiked Amount 50.000			Recovery = 133.94%			
14) 2-Fluorobiphenyl	8.521	172	2575231	27.71	ppm	-0.02
Spiked Amount 50.000			Recovery = 55.42%			
22) 2,4,6-Tribromophenol	11.335	330	345745	41.36	ppm	-0.02
Spiked Amount 50.000			Recovery = 82.72%			
30) Terphenyl-d14	15.861	244	1982768	49.75	ppm	-0.03
Spiked Amount 50.000			Recovery = 99.50%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.475	88	3101	0.31	ppm	84
5) Phenol	3.819	94	197162	6.65	ppm #	30
6) bis(2-Chloroethyl)ether	3.940	93	24242	1.11	ppm #	1
8) Naphthalene	6.438	128	102774	1.21	ppm	97
9) Hexachlorobutadiene	6.744	225	15917	1.16	ppm	68
10) 2-Methylnaphthalene	7.742	141	45346	1.01	ppm	79
12) Hexachlorocyclopentadiene	8.108	237	8774	0.99	ppm	98
15) Acenaphthylene	9.460	152	75716	0.83	ppm	94
16) Acenaphthene	9.827	153	64469	1.00	ppm	88
17) Dibenzofuran	10.171	168	71134	0.71	ppm #	36
18) Fluorene	10.862	166	58564	0.87	ppm #	63
19) 4,6-dinitro-2-methylph...	11.035	198	45136	5.80	ppm	94
20) n-nitrosodiphenylamine	11.184	169	45321	1.21	ppm	71
21) 1,2-Diphenylhydrazine	11.230	77	56523	0.94	ppm	92
24) Hexachlorobenzene	11.955	284	19383	0.86	ppm	98
25) Pentachlorophenol	12.385	266	57578	6.26	ppm	97
26) Phenanthrene	12.729	178	92826	1.04	ppm	98
27) Anthracene	12.832	178	80284	1.03	ppm	98
28) Fluoranthene	15.052	202	95581	0.91	ppm	100
29) Pyrene	15.431	202	93109	1.15	ppm	84
31) Benzo[a]anthracene	17.562	228	62273	1.28	ppm	91
32) Chrysene	17.620	228	78864	1.07	ppm	97
34) Benzo[b]fluoranthene	19.220	252	59959	1.01	ppm	98
35) Benzo[k]fluoranthene	19.266	252	67601	0.88	ppm	99
36) Benzo[a]pyrene	19.668	252	62423	0.81	ppm	99
37) Indeno[1,2,3-cd]pyrene	21.089	276	65001	1.01	ppm	98
38) Dibenz[a,h]anthracene	21.128	278	51528	0.96	ppm	98
39) Benzo[g,h,i]perylene	21.397	276	59252	0.94	ppm	99

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16390.D
Acq On : 20 May 2016 12:51 pm
Operator : linseyk
Sample : op93998a-bs12
Misc : op93998a,e4p867,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 20 17:03:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 20 11:59:02 2016
Response via : Initial Calibration

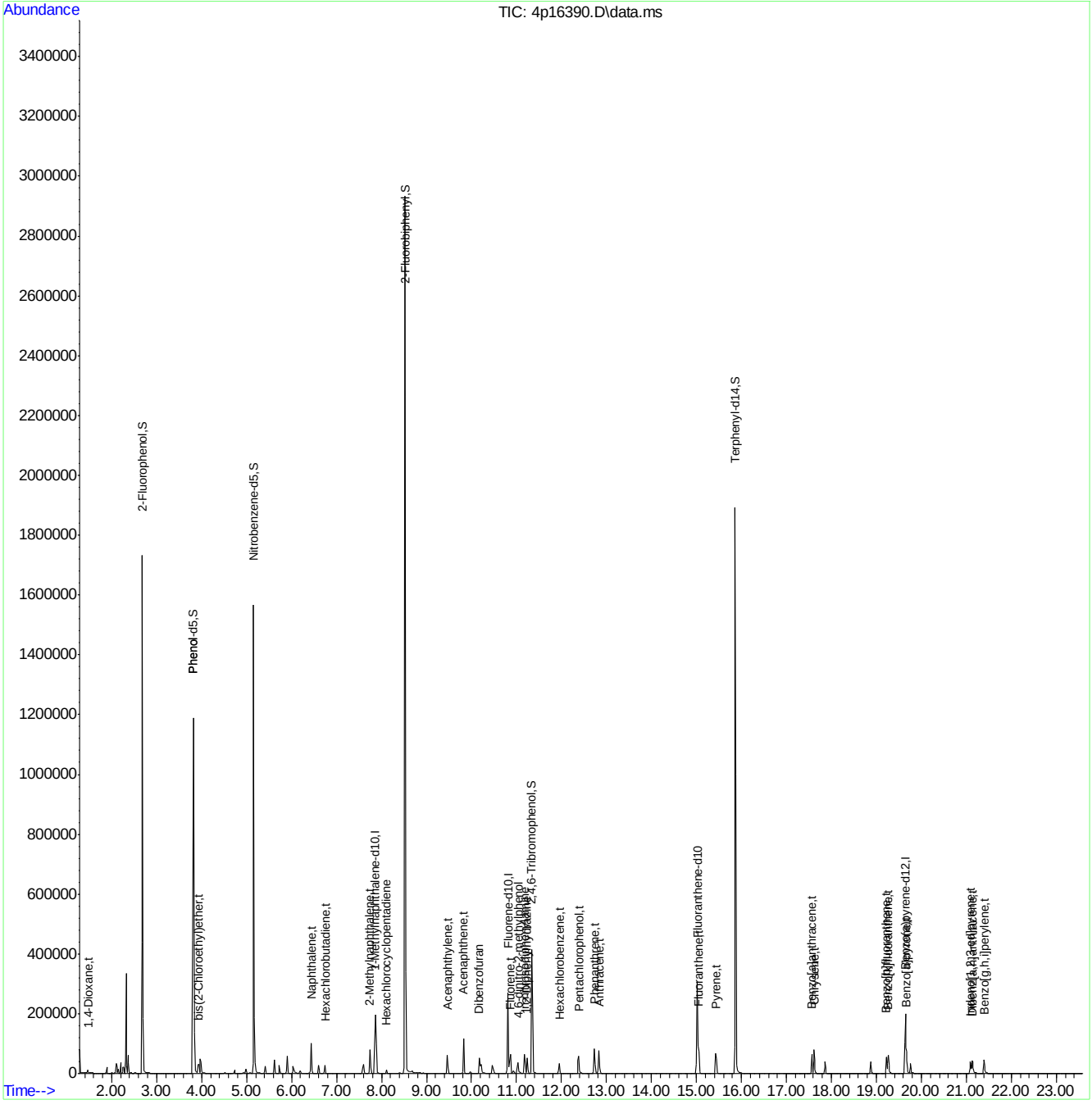
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16390.D
Acq On : 20 May 2016 12:51 pm
Operator : linseyk
Sample : op93998a-bs12
Misc : op93998a,e4p867,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 20 17:03:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 20 11:59:02 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110801.D
Acq On : 19 May 2016 3:23 pm
Operator : ariellec
Sample : op93998-ms
Misc : op93998,ez5537,30.9
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 19 17:03:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.653	152	168632	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	625164	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	364646	40.00	ppm	0.00
69) Phenanthrene-d10	8.831	188	616644	40.00	ppm	-0.01
83) Chrysene-d12	14.072	240	555041	40.00	ppm	-0.02
92) Perylene-d12	17.101	264	501306	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.653	152	168632	40.00	ppm	0.00
104) Phenanthrene-d10a	8.831	188	616644	40.00	ppm	0.00
108) Chrysene-d12a	14.072	240	555041	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	364646	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	625164	40.00	ppm	0.00
114) Chrysene-d12b	14.072	240	555041	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.665	112	213901	37.58	ppm	0.00
Spiked Amount 50.000			Recovery = 75.16%			
8) Phenol-d5	4.381	99	267706	38.12	ppm	0.00
Spiked Amount 50.000			Recovery = 76.24%			
25) Nitrobenzene-d5	5.054	82	232769	39.94	ppm	0.00
Spiked Amount 50.000			Recovery = 79.88%			
51) 2-Fluorobiphenyl	6.368	172	481213	40.37	ppm	0.00
Spiked Amount 50.000			Recovery = 80.74%			
73) 2,4,6-Tribromophenol	7.853	330	65554	42.31	ppm	0.00
Spiked Amount 50.000			Recovery = 84.62%			
86) Terphenyl-d14	11.876	244	490570	41.22	ppm	-0.01
Spiked Amount 50.000			Recovery = 82.44%			
105) 1-chlorooctadecane	11.203	57	1820	0.48	ppm	0.21
Spiked Amount 50.000			Recovery = 0.96%			
106) o-terphenyl	9.510	230	1100	0.12	ppm	0.00
Spiked Amount 50.000			Recovery = 0.24%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.207	88	50948	21.54	ppm	99
3) Pyridine	2.538	79	170092	31.17	ppm	98
4) N-Nitrosodimethylamine	2.490	74	106455	34.70	ppm	94
6) Indene	4.840	116	356851	36.79	ppm	98
7) Cumene	4.060	105	489048	34.64	ppm	98
9) Phenol	4.392	94	264652	36.40	ppm	91
10) Aniline	4.408	93	128823	16.43	ppm	73
11) bis(2-Chloroethyl)ether	4.461	93	190783	39.63	ppm	96
12) 2-Chlorophenol	4.499	128	224900	37.64	ppm	96
13) Decane	4.536	43	146203	32.45	ppm	97
14) 1,3-Dichlorobenzene	4.611	146	241570	36.42	ppm	98
15) 1,4-Dichlorobenzene	4.664	146	235341	36.07	ppm	97
16) Benzyl alcohol	4.755	108	139509	39.60	ppm	99
17) 1,2-Dichlorobenzene	4.776	146	222664	36.52	ppm	99
18) Acetophenone	4.947	105	289969	36.69	ppm	85
19) 2-Methylphenol	4.835	108	192751	38.20	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.851	121	41329	25.83	ppm	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110801.D
Acq On : 19 May 2016 3:23 pm
Operator : ariellec
Sample : op93998-ms
Misc : op93998,ez5537,30.9
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 19 17:03:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.942	108	207210	38.13	ppm	98
22) n-Nitroso-di-n-propyla...	4.947	70	144908	36.36	ppm	95
23) Hexachloroethane	5.022	201	82026	37.21	ppm	94
26) Nitrobenzene	5.070	77	220252	38.16	ppm	91
27) Quinoline	5.829	129	422522	37.96	ppm	99
28) Isophorone	5.241	82	409884	41.17	ppm	98
29) 2-Nitrophenol	5.295	139	118605	40.10	ppm	96
30) 2,4-Dimethylphenol	5.327	107	213581	42.22	ppm	97
31) Benzoic Acid	5.401	105	136263	37.52	ppm	98
32) bis(2-Chloroethoxy)met...	5.396	93	226359	38.76	ppm	99
33) 2,4-Dichlorophenol	5.471	162	187963	40.78	ppm	98
34) 2,6-Dichlorophenol	5.631	162	174724	39.21	ppm	97
36) 1,2,4-Trichlorobenzene	5.530	180	199789	38.02	ppm	98
38) Naphthalene	5.588	128	644487	39.24	ppm	100
39) 4-Chloroaniline	5.620	127	95800	14.07	ppm	97
40) 2,3-Dichloroaniline	6.299	161	183503	32.14	ppm	97
41) Caprolactam	5.882	55	67144	34.71	ppm	98
42) Hexachlorobutadiene	5.674	225	113776	38.38	ppm	98
43) 4-Chloro-3-methylphenol	5.968	107	206770	40.72	ppm	99
44) 2-Methylnaphthalene	6.085	141	372560	38.49	ppm	99
45) 1-Methylnaphthalene	6.160	141	372038	37.45	ppm	98
46) Dimethylnaphthalene	6.582	156	378295	37.78	ppm	96
48) Hexachlorocyclopentadiene	6.203	237	180702	63.86	ppm	99
49) 2,4,6-Trichlorophenol	6.299	196	135632	40.94	ppm	98
50) 2,4,5-Trichlorophenol	6.331	196	132670	37.45	ppm	98
52) 2-Chloronaphthalene	6.470	162	400592	38.72	ppm	98
53) Biphenyl	6.448	154	511628	37.66	ppm	99
54) 2-Nitroaniline	6.550	65	125810	41.95	ppm	98
55) Dimethylphthalate	6.710	163	493363	40.22	ppm	99
56) Acenaphthylene	6.833	152	663240	37.66	ppm	98
57) 2,6-Dinitrotoluene	6.764	165	106430	44.50	ppm	87
58) 3-Nitroaniline	6.924	138	72946	25.38	ppm	96
59) Acenaphthene	7.004	153	427601	39.76	ppm	97
60) 2,4-Dinitrophenol	7.025	184	55933	62.11	ppm	78
61) 4-Nitrophenol	7.084	109	76015	46.08	ppm	92
62) Dibenzofuran	7.180	168	590505	39.97	ppm	100
63) 2,4-Dinitrotoluene	7.159	165	143525	44.02	ppm	92
64) 2,3,4,6-Tetrachlorophenol	7.309	232	115249	40.84	ppm	96
65) Diethylphthalate	7.437	149	507598	41.00	ppm	99
66) Fluorene	7.560	166	483455	39.32	ppm	100
67) 4-Chlorophenyl-phenyle...	7.565	204	229441	39.98	ppm	97
68) 4-Nitroaniline	7.581	138	112365	38.64	ppm	96
70) 4,6-Dinitro-2-methylph...	7.618	198	52046	33.58	ppm	99
71) n-Nitrosodiphenylamine	7.704	169	346179	41.05	ppm	99
72) 1,2-Diphenylhydrazine	7.757	77	467236	40.56	ppm	97
74) 4-Bromophenyl-phenylether	8.190	248	138104	42.01	ppm	95
75) Hexachlorobenzene	8.265	284	141467	39.88	ppm	98
76) Pentachlorophenol	8.548	266	95833	42.56	ppm	98
77) Phenanthrene	8.868	178	671829	39.30	ppm	99
78) Anthracene	8.949	178	670638	38.62	ppm	99

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110801.D
Acq On : 19 May 2016 3:23 pm
Operator : ariellec
Sample : op93998-ms
Misc : op93998,ez5537,30.9
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 19 17:03:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
79) Carbazole	9.226	167	658066	40.61 ppm	98
80) Di-n-butylphthalate	9.937	149	859416	41.18 ppm	99
81) Fluoranthene	10.995	202	768518	39.84 ppm	100
82) Octadecane	8.751	57	238910	40.62 ppm	99
84) Pyrene	11.438	202	793497	42.79 ppm	96
87) Butylbenzylphthalate	13.057	149	356328	41.14 ppm	97
88) Benzo[a]anthracene	14.056	228	666044	39.28 ppm	100
89) 3,3'-Dichlorobenzidine	14.099	252	240741	40.92 ppm	95
90) Chrysene	14.131	228	614117	38.70 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.478	149	476478	40.66 ppm	99
93) Di-n-octylphthalate	15.926	149	779486	39.35 ppm	100
94) Benzo[b]fluoranthene	16.353	252	651116	39.46 ppm	99
95) Benzo[k]fluoranthene	16.417	252	588436	37.84 ppm	99
96) Benzo[a]pyrene	16.983	252	580239	39.64 ppm	99
97) Indeno[1,2,3-cd]pyrene	19.029	276	525606	39.81 ppm	97
99) Dibenz[a,h]anthracene	19.099	278	525723	38.37 ppm	99
100) 7,12-Dimethylbenz(a)an...	16.380	256	259887	39.43 ppm	96
101) Benzo[g,h,i]perylene	19.457	276	544780	39.09 ppm	98
103) Benzaldehyde	4.328	105	172023	40.66 ppm	98
107) Atrazine	8.452	215	61854	39.44 ppm	99
109) Benzidine	11.342	184	159799	31.27 ppm	99
111) 1,2,4,5-Tetrachloroben...	6.213	216	206024	41.73 ppm	98

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

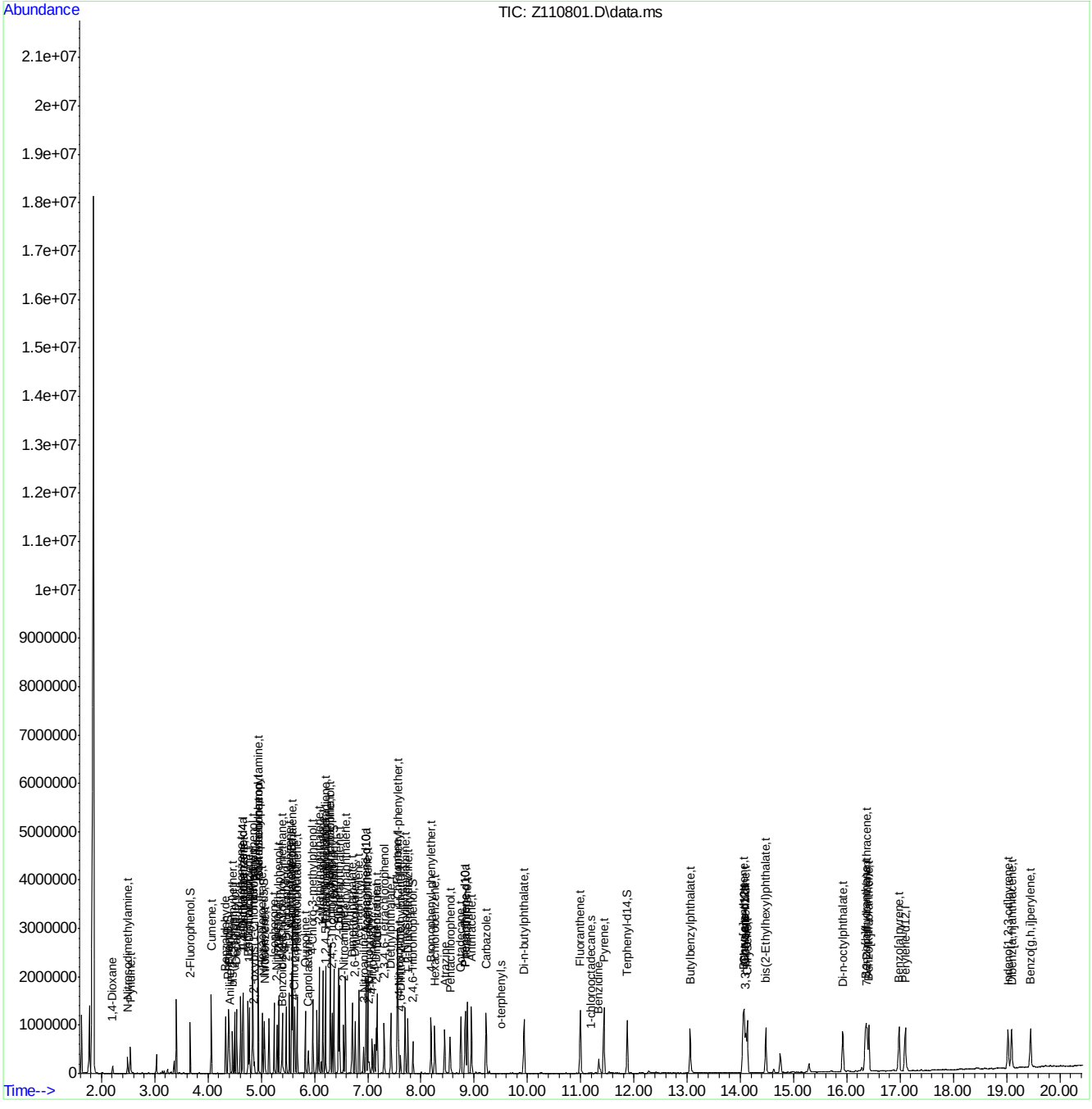
7.4.1

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110801.D
Acq On : 19 May 2016 3:23 pm
Operator : ariellec
Sample : op93998-ms
Misc : op93998,ez5537,30.9
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 19 17:03:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



MZ5533.M Thu May 19 17:03:50 2016 RTE

Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110802.D
Acq On : 19 May 2016 3:53 pm
Operator : ariellec
Sample : op93998-msd
Misc : op93998,ez5537,30.8
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 19 17:02:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	164049	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	601981	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	345677	40.00	ppm	0.00
69) Phenanthrene-d10	8.831	188	585127	40.00	ppm	-0.01
83) Chrysene-d12	14.077	240	534968	40.00	ppm	-0.02
92) Perylene-d12	17.096	264	484976	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.654	152	164049	40.00	ppm	0.00
104) Phenanthrene-d10a	8.831	188	585127	40.00	ppm	0.00
108) Chrysene-d12a	14.077	240	534968	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	345677	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	601981	40.00	ppm	0.00
114) Chrysene-d12b	14.077	240	534968	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.665	112	195015	35.22	ppm	0.00
Spiked Amount 50.000			Recovery = 70.44%			
8) Phenol-d5	4.381	99	240209	35.16	ppm	0.00
Spiked Amount 50.000			Recovery = 70.32%			
25) Nitrobenzene-d5	5.054	82	208543	37.16	ppm	0.00
Spiked Amount 50.000			Recovery = 74.32%			
51) 2-Fluorobiphenyl	6.368	172	437230	38.69	ppm	0.00
Spiked Amount 50.000			Recovery = 77.38%			
73) 2,4,6-Tribromophenol	7.848	330	59432	40.42	ppm	-0.01
Spiked Amount 50.000			Recovery = 80.84%			
86) Terphenyl-d14	11.876	244	444713	38.77	ppm	-0.01
Spiked Amount 50.000			Recovery = 77.54%			
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	2.207	88	45125	19.61	ppm	98
3) Pyridine	2.538	79	160585	30.25	ppm	99
4) N-Nitrosodimethylamine	2.490	74	98903	33.14	ppm	94
6) Indene	4.840	116	306886	32.52	ppm	99
7) Cumene	4.061	105	418364	30.46	ppm	97
9) Phenol	4.392	94	247379	34.98	ppm	94
10) Aniline	4.408	93	138854	18.20	ppm	89
11) bis(2-Chloroethyl)ether	4.461	93	171509	36.62	ppm	95
12) 2-Chlorophenol	4.499	128	201820	34.72	ppm	97
13) Decane	4.536	43	126717	28.91	ppm	97
14) 1,3-Dichlorobenzene	4.611	146	217966	33.78	ppm	97
15) 1,4-Dichlorobenzene	4.664	146	220792	34.79	ppm	96
16) Benzyl alcohol	4.755	108	129776	37.87	ppm	95
17) 1,2-Dichlorobenzene	4.776	146	206742	34.85	ppm	98
18) Acetophenone	4.947	105	248981	32.38	ppm	82
19) 2-Methylphenol	4.835	108	177847	36.23	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.851	121	38303	24.60	ppm	92

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110802.D
Acq On : 19 May 2016 3:53 pm
Operator : ariellec
Sample : op93998-msd
Misc : op93998,ez5537,30.8
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 19 17:02:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.942	108	192759	36.46	ppm	98
22) n-Nitroso-di-n-propyla...	4.947	70	134165	34.60	ppm	96
23) Hexachloroethane	5.022	201	74192	34.59	ppm	93
26) Nitrobenzene	5.065	77	202054	36.36	ppm	98
27) Quinoline	5.823	129	377124	35.19	ppm	98
28) Isophorone	5.241	82	377492	39.38	ppm	98
29) 2-Nitrophenol	5.295	139	106373	37.35	ppm	94
30) 2,4-Dimethylphenol	5.327	107	197445	40.53	ppm	96
31) Benzoic Acid	5.396	105	127573	36.48	ppm	97
32) bis(2-Chloroethoxy)met...	5.396	93	203501	36.19	ppm	98
33) 2,4-Dichlorophenol	5.471	162	171337	38.61	ppm	97
34) 2,6-Dichlorophenol	5.631	162	159902	37.26	ppm	97
36) 1,2,4-Trichlorobenzene	5.530	180	187981	37.15	ppm	98
38) Naphthalene	5.588	128	583624	36.91	ppm	99
39) 4-Chloroaniline	5.620	127	112787	17.20	ppm	97
40) 2,3-Dichloroaniline	6.299	161	168423	30.63	ppm	98
41) Caprolactam	5.882	55	61646	33.10	ppm	98
42) Hexachlorobutadiene	5.674	225	104393	36.57	ppm	99
43) 4-Chloro-3-methylphenol	5.968	107	188615	38.58	ppm	97
44) 2-Methylnaphthalene	6.085	141	341675	36.66	ppm	99
45) 1-Methylnaphthalene	6.160	141	319527	33.41	ppm	99
46) Dimethylnaphthalene	6.582	156	331196	34.35	ppm	98
48) Hexachlorocyclopentadiene	6.203	237	157765	58.81	ppm	98
49) 2,4,6-Trichlorophenol	6.299	196	123668	39.38	ppm	99
50) 2,4,5-Trichlorophenol	6.331	196	120207	35.80	ppm	99
52) 2-Chloronaphthalene	6.470	162	367843	37.50	ppm	100
53) Biphenyl	6.449	154	444954	34.55	ppm	98
54) 2-Nitroaniline	6.550	65	114125	40.14	ppm	98
55) Dimethylphthalate	6.710	163	456502	39.26	ppm	99
56) Acenaphthylene	6.838	152	616136	36.91	ppm	99
57) 2,6-Dinitrotoluene	6.764	165	96278	42.46	ppm	87
58) 3-Nitroaniline	6.924	138	76609	28.11	ppm	94
59) Acenaphthene	7.004	153	392791	38.53	ppm	99
60) 2,4-Dinitrophenol	7.025	184	48596	58.03	ppm	82
61) 4-Nitrophenol	7.084	109	68144	43.57	ppm	96
62) Dibenzofuran	7.180	168	541169	38.64	ppm	100
63) 2,4-Dinitrotoluene	7.159	165	131160	42.43	ppm	92
64) 2,3,4,6-Tetrachlorophenol	7.309	232	106731	39.89	ppm	92
65) Diethylphthalate	7.437	149	463425	39.48	ppm	99
66) Fluorene	7.560	166	441041	37.84	ppm	100
67) 4-Chlorophenyl-phenyle...	7.560	204	208830	38.38	ppm	94
68) 4-Nitroaniline	7.576	138	103409	37.51	ppm	96
70) 4,6-Dinitro-2-methylph...	7.618	198	46187	31.74	ppm	96
71) n-Nitrosodiphenylamine	7.704	169	320978	40.11	ppm	99
72) 1,2-Diphenylhydrazine	7.757	77	433796	39.69	ppm	95
74) 4-Bromophenyl-phenylether	8.190	248	126866	40.67	ppm	97
75) Hexachlorobenzene	8.260	284	128075	38.05	ppm	92
76) Pentachlorophenol	8.548	266	85683	40.10	ppm	98
77) Phenanthrene	8.869	178	624838	38.52	ppm	99
78) Anthracene	8.949	178	618299	37.52	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110802.D
Acq On : 19 May 2016 3:53 pm
Operator : ariellec
Sample : op93998-msd
Misc : op93998,ez5537,30.8
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 19 17:02:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79) Carbazole	9.226	167	606139	39.42	ppm	99
80) Di-n-butylphthalate	9.942	149	789646	39.87	ppm	99
81) Fluoranthene	10.995	202	711310	38.86	ppm	99
82) Octadecane	8.751	57	211114	37.83	ppm	99
84) Pyrene	11.438	202	729527	40.82	ppm	97
87) Butylbenzylphthalate	13.057	149	328985	39.41	ppm	94
88) Benzo[a]anthracene	14.051	228	628225	38.44	ppm	99
89) 3,3'-Dichlorobenzidine	14.099	252	271552	47.89	ppm	99
90) Chrysene	14.131	228	571954	37.39	ppm	98
91) bis(2-Ethylhexyl)phtha...	14.478	149	441453	39.09	ppm	98
93) Di-n-octylphthalate	15.926	149	723311	37.74	ppm	99
94) Benzo[b]fluoranthene	16.353	252	603550	37.81	ppm	99
95) Benzo[k]fluoranthene	16.417	252	556437	36.98	ppm	98
96) Benzo[a]pyrene	16.983	252	542266	38.29	ppm	99
97) Indeno[1,2,3-cd]pyrene	19.029	276	495177	38.77	ppm	99
99) Dibenz[a,h]anthracene	19.094	278	494075	37.27	ppm	97
100) 7,12-Dimethylbenz(a)an...	16.374	256	226400	35.50	ppm	96
101) Benzo[g,h,i]perylene	19.457	276	509285	37.78	ppm	98
103) Benzaldehyde	4.328	105	148304	36.03	ppm	98
107) Atrazine	8.447	215	53687	36.07	ppm	91
109) Benzidine	11.342	184	143613	29.44	ppm	99
111) 1,2,4,5-Tetrachloroben...	6.208	216	193515	41.35	ppm	99

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

7.4.2

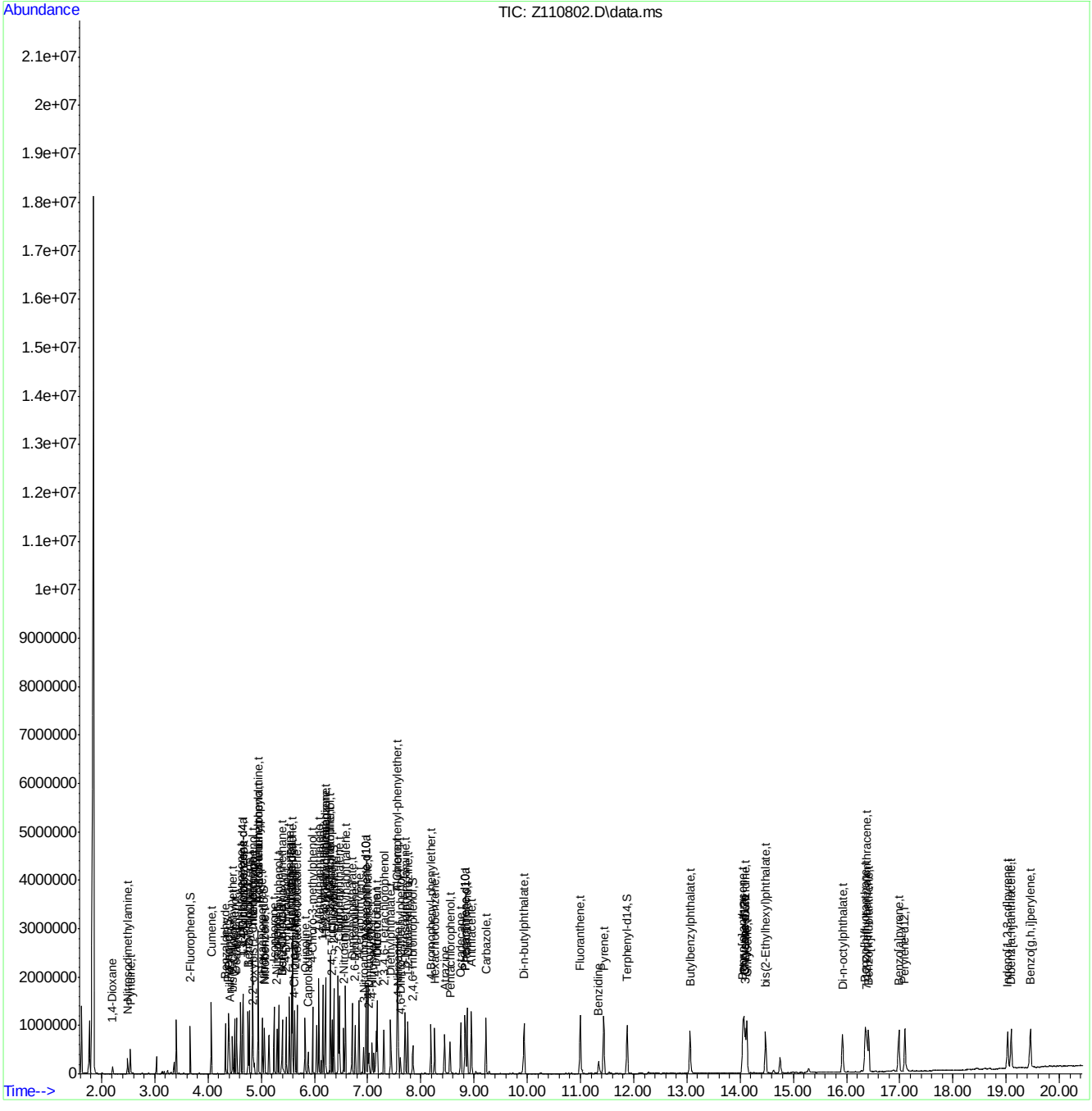
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110802.D
Acq On : 19 May 2016 3:53 pm
Operator : ariellec
Sample : op93998-msd
Misc : op93998,ez5537,30.8
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 19 17:02:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



MZ5533.M Thu May 19 17:02:59 2016 RTE Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P866\
Data File : 4p16356.D
Acq On : 19 May 2016 9:54 pm
Operator : linseyk
Sample : op93998a-ms
Misc : op93998a,e4p866,30.8
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 20 12:25:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 13:24:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.879	150	226336	4.00	ppm	0.00
13) Fluorene-d10	10.812	176	324976	4.00	ppm	-0.02
23) Fluoranthene-d10	15.035	212	425932	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.657	264	202597	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	2.695	112	1014850	40.74	ppm	0.00
Spiked Amount 50.000			Recovery = 81.48%			
4) Phenol-d5	3.819	99	1810602	49.36	ppm	0.00
Spiked Amount 50.000			Recovery = 98.72%			
7) Nitrobenzene-d5	5.158	82	1236121	41.12	ppm	-0.02
Spiked Amount 50.000			Recovery = 82.24%			
14) 2-Fluorobiphenyl	8.544	172	2936658	22.15	ppm	0.00
Spiked Amount 50.000			Recovery = 44.30%			
22) 2,4,6-Tribromophenol	11.356	330	408673	34.27	ppm	0.00
Spiked Amount 50.000			Recovery = 68.54%			
30) Terphenyl-d14	15.879	244	2293402	42.89	ppm	-0.02
Spiked Amount 50.000			Recovery = 85.78%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.475	88	7051	0.48	ppm #	1
5) Phenol	3.836	94	219802	5.03	ppm #	72
6) bis(2-Chloroethyl)ether	3.940	93	34899	1.09	ppm #	31
8) Naphthalene	6.438	128	112821	0.90	ppm	89
9) Hexachlorobutadiene	6.744	225	17641	0.87	ppm	68
10) 2-Methylnaphthalene	7.765	141	50851	0.77	ppm	75
12) Hexachlorocyclopentadiene	8.108	237	3459	0.46	ppm	84
15) Acenaphthylene	9.483	152	85403	0.66	ppm	92
16) Acenaphthene	9.827	153	67664	0.74	ppm #	65
17) Dibenzofuran	10.194	168	103441	0.73	ppm #	58
18) Fluorene	10.862	166	89888	0.93	ppm	80
19) 4,6-dinitro-2-methylph...	11.060	198	11210	1.96	ppm	98
20) n-nitrosodiphenylamine	11.184	169	23280	0.44	ppm #	28
21) 1,2-Diphenylhydrazine	11.251	77	50524	0.59	ppm #	59
24) Hexachlorobenzene	11.955	284	21691	0.71	ppm	79
25) Pentachlorophenol	12.385	266	58233	4.89	ppm	84
26) Phenanthrene	12.746	178	118448	0.99	ppm	92
27) Anthracene	12.850	178	92393	0.84	ppm	92
28) Fluoranthene	15.053	202	122823	0.87	ppm	92
29) Pyrene	15.448	202	115137	1.06	ppm	91
31) Benzo[a]anthracene	17.572	228	57788	0.92	ppm	90
32) Chrysene	17.629	228	85262	0.86	ppm	98
34) Benzo[b]fluoranthene	19.243	252	46641	0.79	ppm	85
35) Benzo[k]fluoranthene	19.277	252	63396	0.82	ppm	98
36) Benzo[a]pyrene	19.680	252	62084	0.80	ppm	99
37) Indeno[1,2,3-cd]pyrene	21.099	276	45492	0.72	ppm	99
38) Dibenz[a,h]anthracene	21.147	278	35914	0.68	ppm	100
39) Benzo[g,h,i]perylene	21.406	276	48895	0.77	ppm	99

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P866\
Data File : 4p16356.D
Acq On : 19 May 2016 9:54 pm
Operator : linseyk
Sample : op93998a-ms
Misc : op93998a,e4p866,30.8
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 20 12:25:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 13:24:21 2016
Response via : Initial Calibration

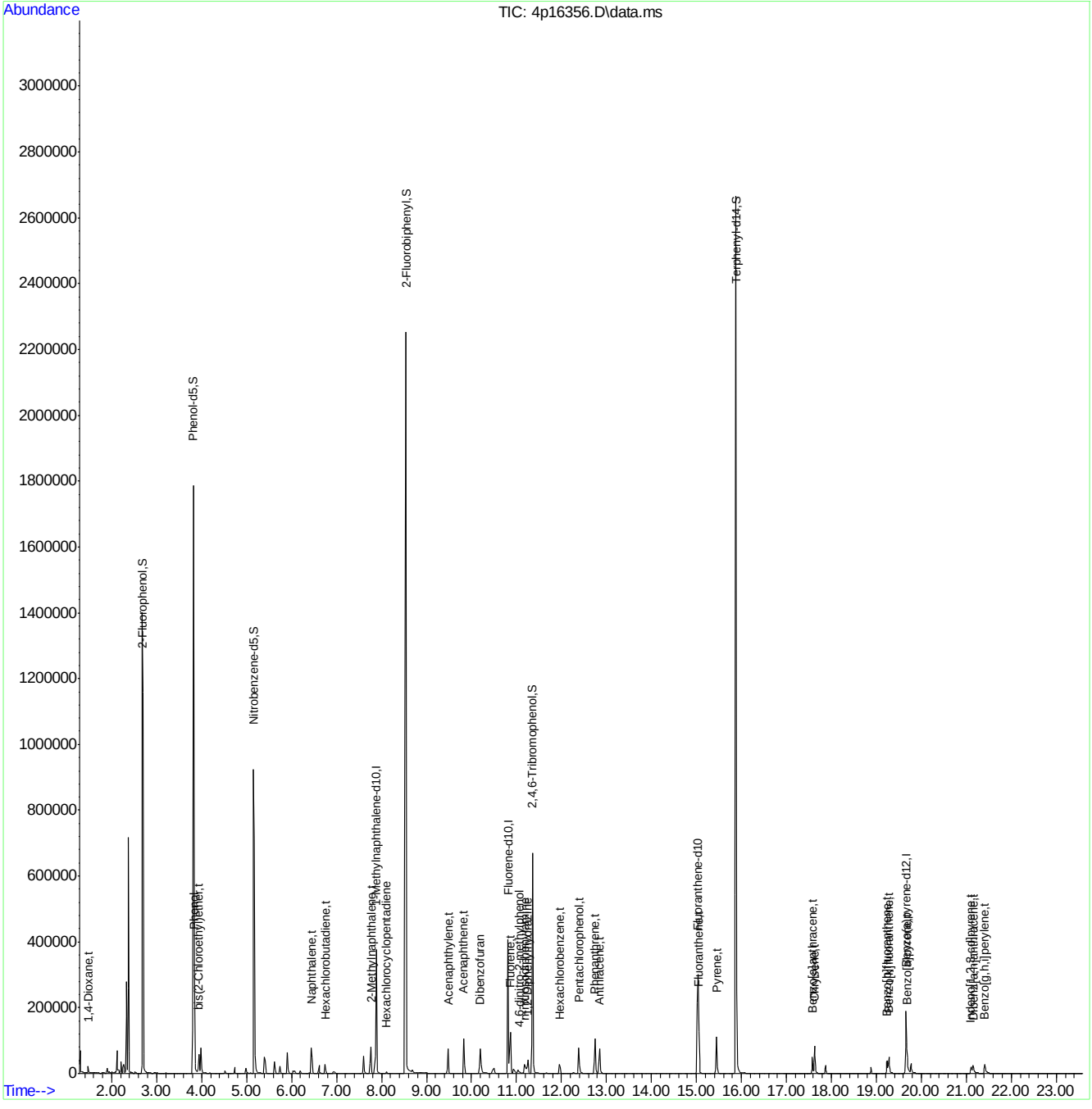
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P866\
Data File : 4p16356.D
Acq On : 19 May 2016 9:54 pm
Operator : linseyk
Sample : op93998a-ms
Misc : op93998a,e4p866,30.8
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 20 12:25:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 13:24:21 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P866\
Data File : 4p16357.D
Acq On : 19 May 2016 10:24 pm
Operator : linseyk
Sample : op93998a-msd
Misc : op93998a,e4p866,30.7
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 20 12:26:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 13:24:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.881	150	197487	4.00	ppm	0.00
13) Fluorene-d10	10.814	176	336158	4.00	ppm	-0.02
23) Fluoranthene-d10	15.020	212	407588	4.00	ppm	-0.02
33) Benzo(a)pyrene-d12	19.657	264	195742	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	2.695	112	995913	45.82	ppm	0.00
Spiked Amount 50.000			Recovery = 91.64%			
4) Phenol-d5	3.819	99	1807245	56.47	ppm	0.00
Spiked Amount 50.000			Recovery = 112.94%			
7) Nitrobenzene-d5	5.159	82	1373317	52.36	ppm	-0.02
Spiked Amount 50.000			Recovery = 104.72%			
14) 2-Fluorobiphenyl	8.546	172	2679816	19.54	ppm	0.00
Spiked Amount 50.000			Recovery = 39.08%			
22) 2,4,6-Tribromophenol	11.358	330	364800	29.57	ppm	0.00
Spiked Amount 50.000			Recovery = 59.14%			
30) Terphenyl-d14	15.880	244	2207221	43.14	ppm	-0.02
Spiked Amount 50.000			Recovery = 86.28%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.475	88	7273	0.57	ppm #	1
5) Phenol	3.836	94	212602	5.58	ppm #	72
6) bis(2-Chloroethyl)ether	3.940	93	35150	1.26	ppm #	33
8) Naphthalene	6.440	128	110429	1.01	ppm	91
9) Hexachlorobutadiene	6.746	225	18201	1.03	ppm	73
10) 2-Methylnaphthalene	7.767	141	45069	0.78	ppm #	69
12) Hexachlorocyclopentadiene	8.110	237	5364	0.61	ppm	85
15) Acenaphthylene	9.485	152	75910	0.56	ppm	90
16) Acenaphthene	9.829	153	65373	0.69	ppm #	69
17) Dibenzofuran	10.195	168	91351	0.62	ppm #	55
18) Fluorene	10.864	166	87461	0.88	ppm	74
19) 4,6-dinitro-2-methylph...	11.062	198	14149	2.15	ppm	92
20) n-nitrosodiphenylamine	11.186	169	24470	0.44	ppm #	33
21) 1,2-Diphenylhydrazine	11.232	77	50102	0.56	ppm	81
24) Hexachlorobenzene	11.957	284	21395	0.74	ppm	84
25) Pentachlorophenol	12.387	266	53583	4.73	ppm	91
26) Phenanthrene	12.748	178	103063	0.90	ppm	90
27) Anthracene	12.852	178	89254	0.85	ppm	91
28) Fluoranthene	15.054	202	115897	0.86	ppm	93
29) Pyrene	15.450	202	105748	1.01	ppm	92
31) Benzo[a]anthracene	17.571	228	59343	0.98	ppm	91
32) Chrysene	17.629	228	82465	0.87	ppm	97
34) Benzo[b]fluoranthene	19.243	252	47628	0.83	ppm	86
35) Benzo[k]fluoranthene	19.277	252	64077	0.86	ppm	98
36) Benzo[a]pyrene	19.680	252	60092	0.80	ppm	99
37) Indeno[1,2,3-cd]pyrene	21.101	276	45126	0.74	ppm	99
38) Dibenz[a,h]anthracene	21.149	278	35606	0.70	ppm	99
39) Benzo[g,h,i]perylene	21.408	276	48578	0.79	ppm	99

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P866\
Data File : 4p16357.D
Acq On : 19 May 2016 10:24 pm
Operator : linseyk
Sample : op93998a-msd
Misc : op93998a,e4p866,30.7
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 20 12:26:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 13:24:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.4.4

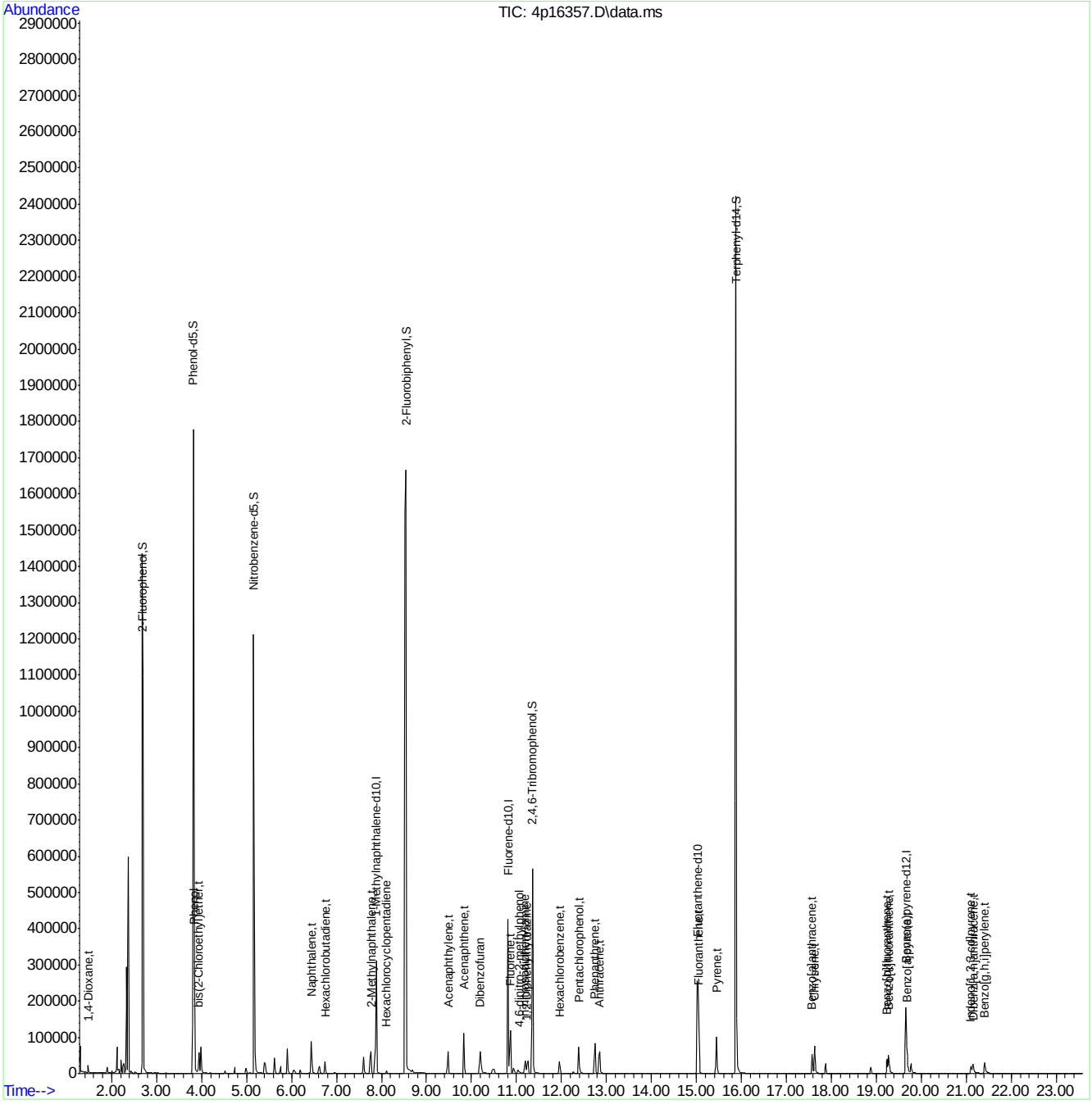
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P866\
Data File : 4p16357.D
Acq On : 19 May 2016 10:24 pm
Operator : linseyk
Sample : op93998a-msd
Misc : op93998a,e4p866,30.7
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 20 12:26:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 13:24:21 2016
Response via : Initial Calibration

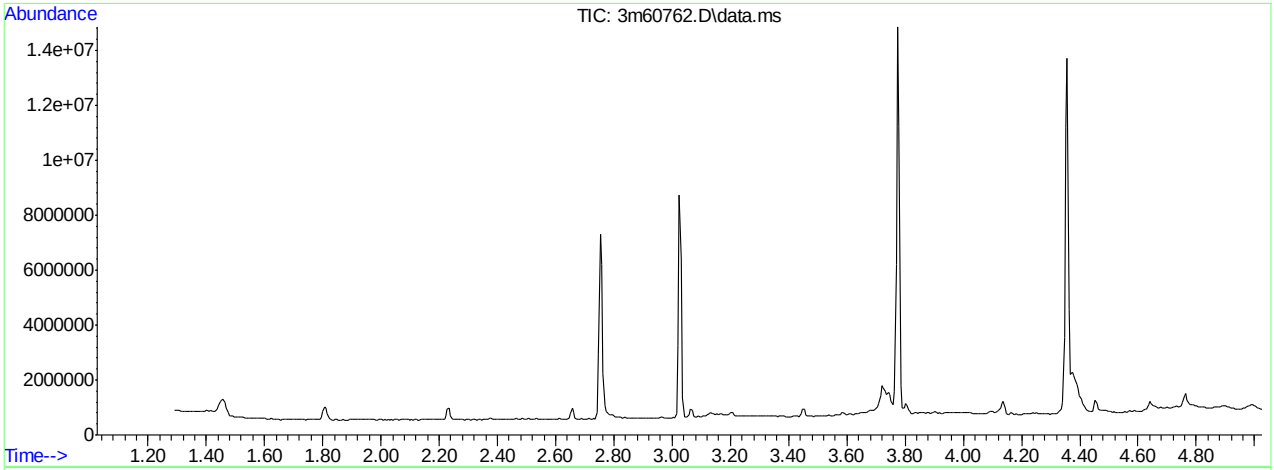


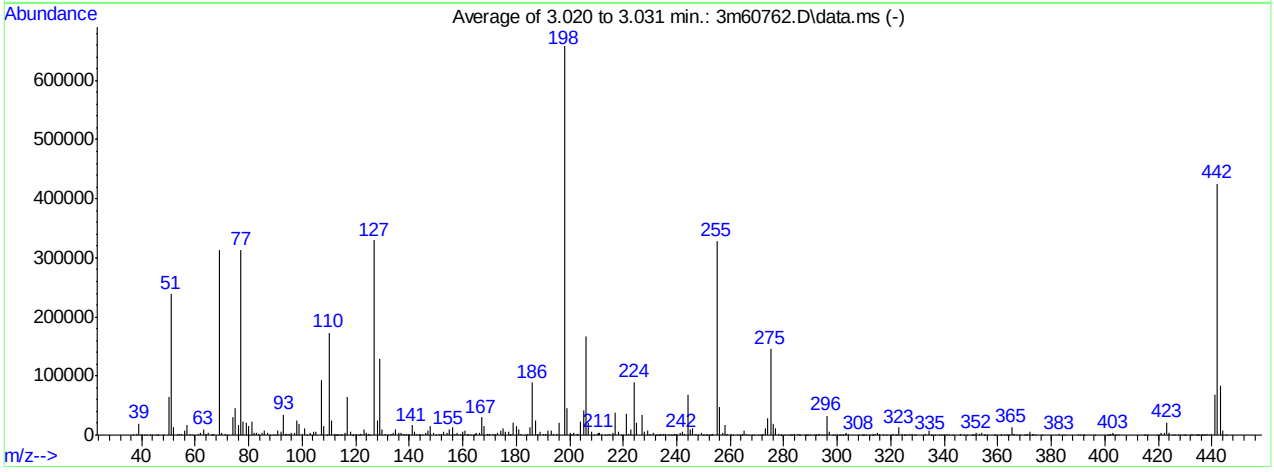
SGS ACCUTEST JC20314

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

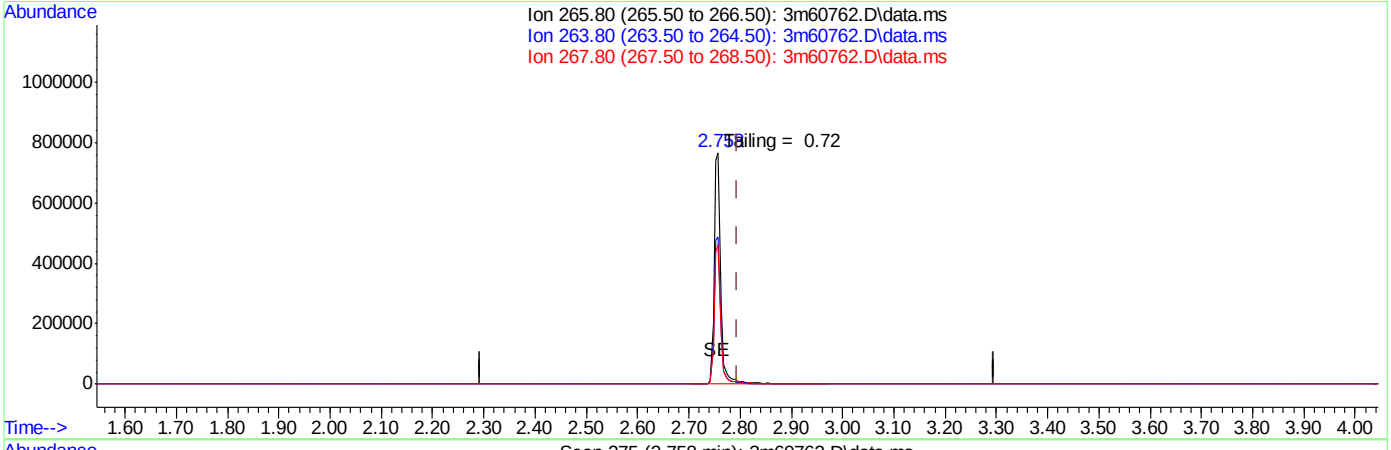
dftpp
Modified:subtracted

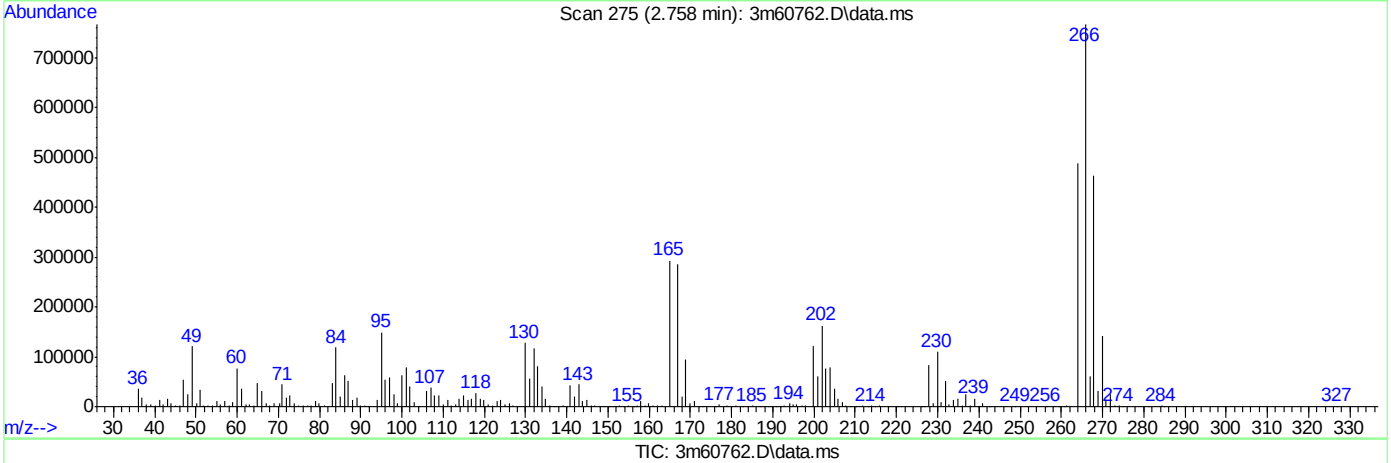
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.10	21736	432.90	494	438.80	912		
424.10	4461	433.85	400	439.90	2031		
425.00	512	434.50	189	441.10	68134		
426.10	183	434.80	226	442.10	425304		
427.20	203	435.40	731	443.10	83298		
428.30	259	435.90	455	444.10	7637		
429.50	82	436.25	476	445.10	306		
429.70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

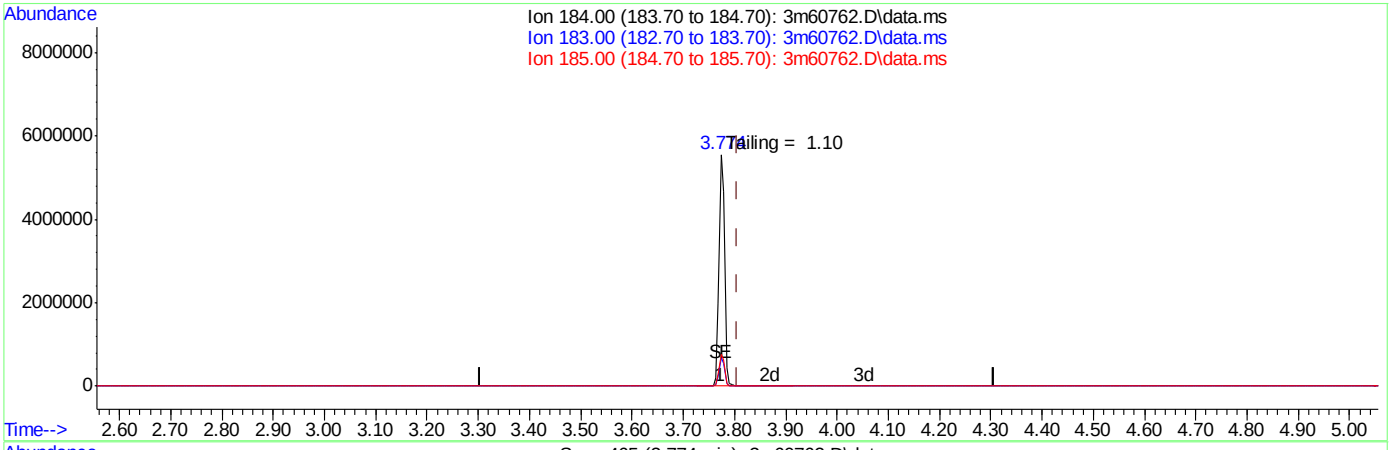
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	63.64
267.80	64.10	60.34
0.00	0.00	0.00

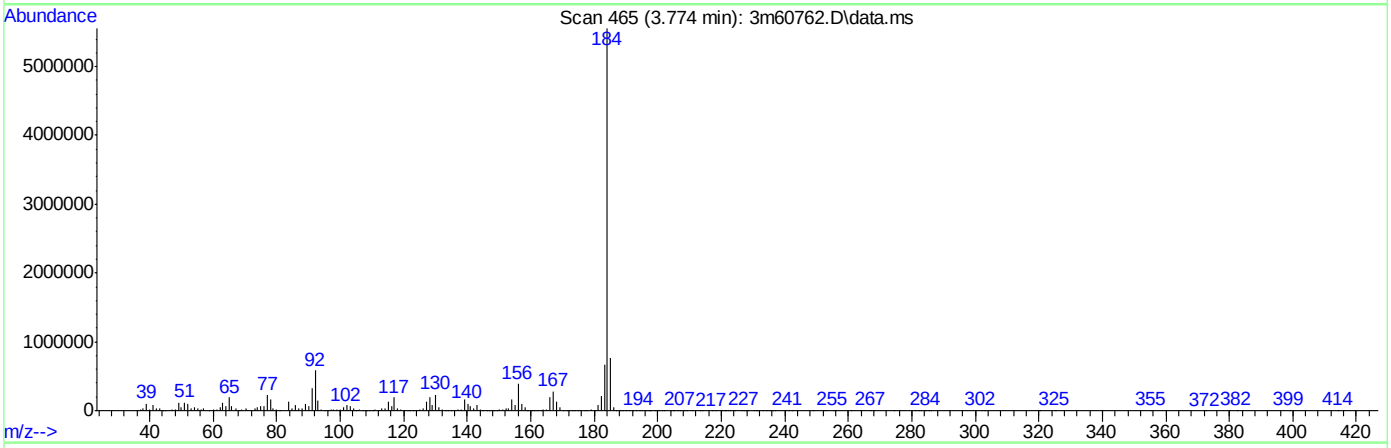
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60762.D
Acq On : 21 Apr 2016 1:31 pm
Operator : linseyk
Sample : dftpp
Misc : op93052a,e3m2855
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 13:36:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m60762.D\data.ms

(2) Benzidine (t)

3.774min (-0.032) 229.17ppb

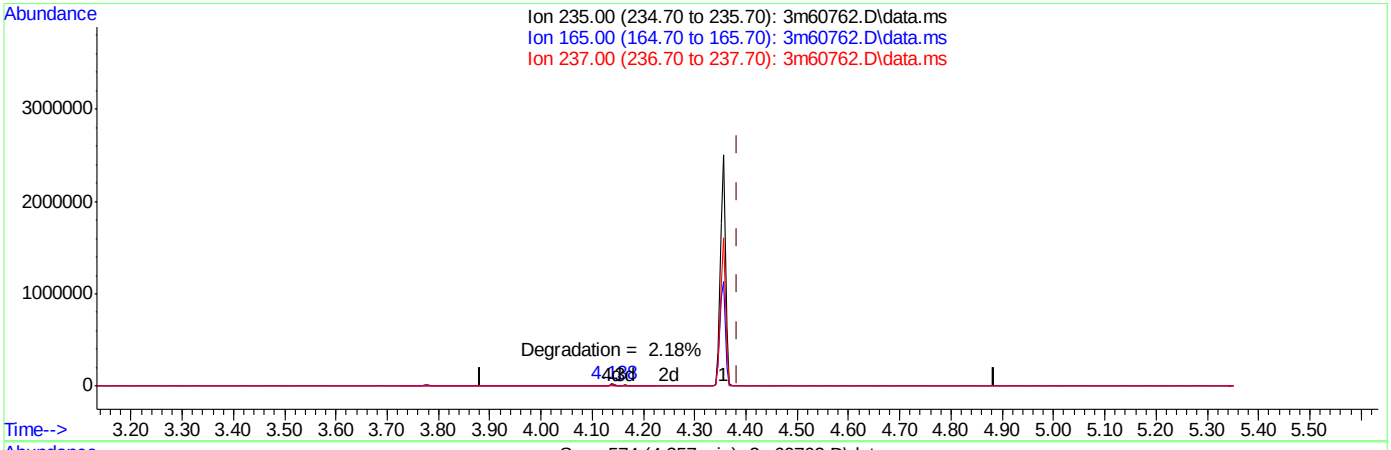
response 4170192

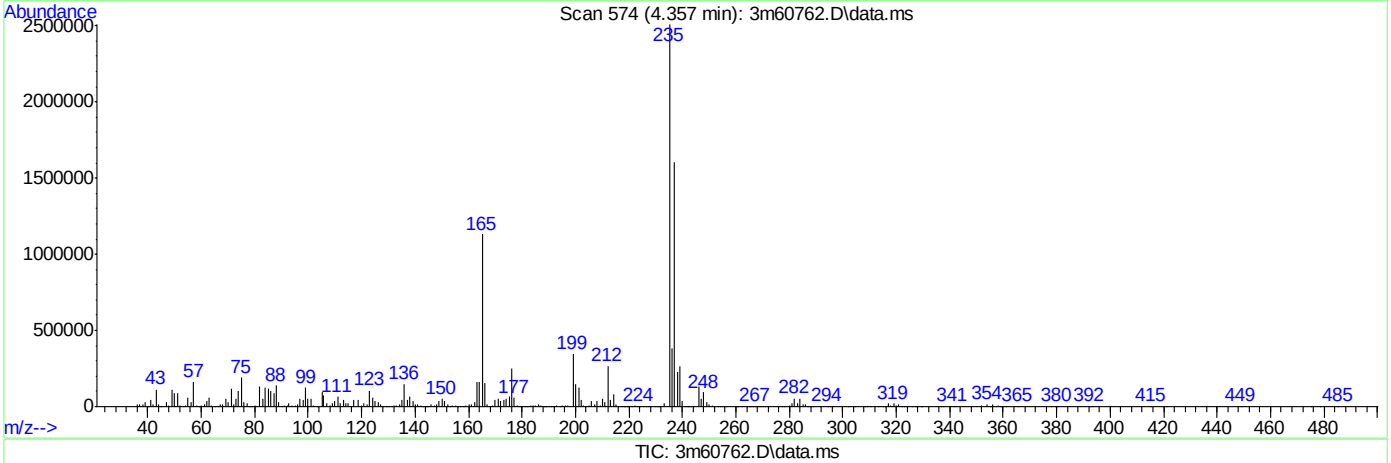
Ion	Exp%	Act%
184.00	100	100
183.00	11.50	12.07
185.00	14.40	13.67
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60762.D
Acq On : 21 Apr 2016 1:31 pm
Operator : linseyk
Sample : dftpp
Misc : op93052a,e3m2855
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 13:36:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m60762.D\data.ms

(3) PP-DDT (t)

4.357min (-0.027) 229.70ppb

response 1710972

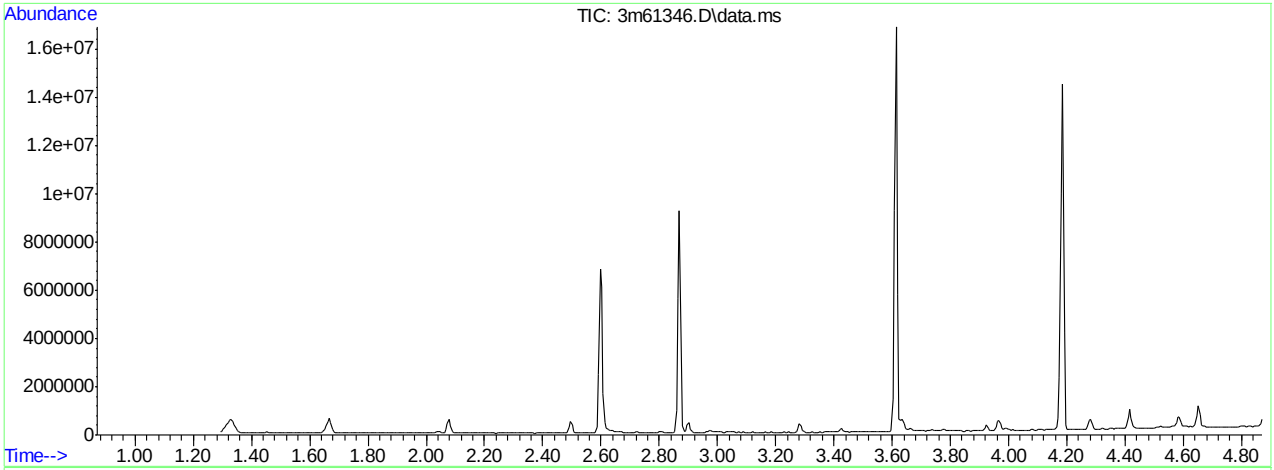
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	48.45#
237.00	0.00	63.48#
0.00	0.00	0.00

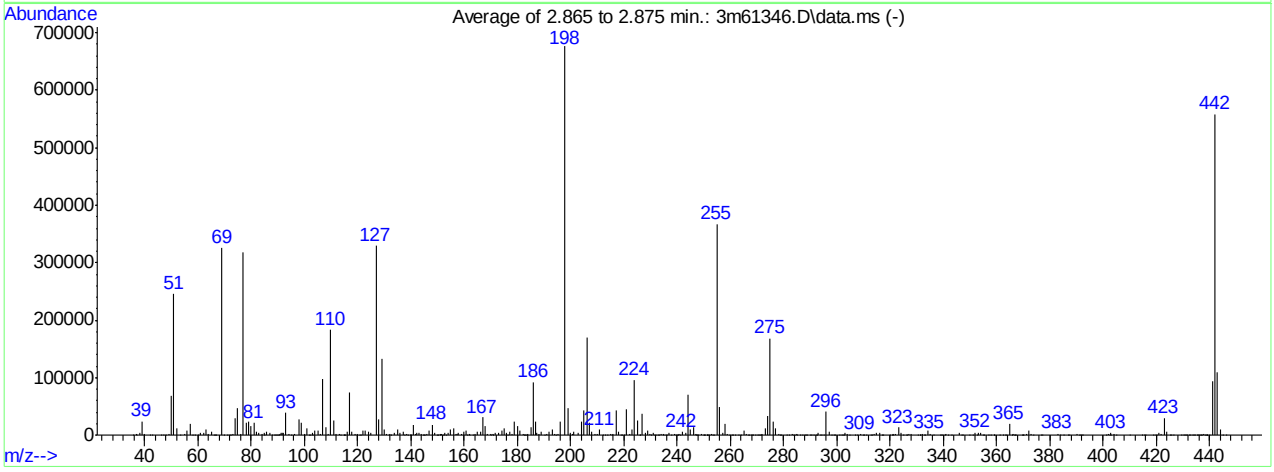
SGS ACCUTEST JC20314

DFTPP

Data File : C:\msdchem\1\DATA\E3M2885\3m61346.D Vial: 1
Acq On : 16 May 2016 9:31 am Operator: ashleyd
Sample : dftpp Inst : MS3M
Misc : op93756a,e3m2885 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 295, 296, 297; Background Corrected with Scan 289

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.2	244935	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	48.0	324951	PASS
70	69	0.00	2	0.3	858	PASS
127	198	40	60	48.7	329520	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	676352	PASS
199	198	5	9	6.8	45920	PASS
275	198	10	30	24.9	168085	PASS
365	198	1	100	2.8	19236	PASS
441	443	0.10	100	85.4	93331	PASS
442	198	40	100	82.6	558571	PASS
443	442	17	23	19.6	109304	PASS

3m61346.D DFTPP3M.M Mon May 16 13:04:05 2016 RPT1

Average of 2.865 to 2.875 min.: 3m61346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	378	49.00	1945	61.05	3538	72.00	401
36.80	341	50.00	67968	62.05	4268	72.20	198
37.00	1164	51.05	244935	63.00	9955	73.05	2695
38.05	4153	52.05	12305	64.05	1699	74.00	29597
39.00	23850	53.25	124	65.00	6133	75.00	47403
40.00	1452	55.10	2403	66.00	629	76.10	2451
41.95	566	56.00	8749	66.60	190	77.00	317387
43.00	268	57.00	19688	67.05	528	78.05	21313
46.20	122	58.00	809	69.00	324951	79.00	23718
46.95	257	58.75	252	70.00	858	79.95	15978
48.00	389	60.20	682	71.00	398	81.00	20989

Average of 2.865 to 2.875 min.: 3m61346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
82.00	5565	90.10	112	99.00	21490	108.00	14607
83.00	4457	90.30	221	99.95	2168	108.95	2141
84.20	1731	90.90	1999	101.00	12391	109.95	182563
84.80	927	91.10	4080	101.85	795	111.00	25884
85.00	4431	91.85	3225	102.20	310	111.95	2649
86.00	6760	92.10	3377	102.95	4229	113.05	1463
87.00	3931	93.00	38605	103.25	165	113.80	20
87.95	870	94.05	1286	104.00	8367	114.70	225
88.90	140	95.20	681	105.00	8016	115.00	109
89.15	706	96.15	1251	105.90	2441	115.40	260
89.80	81	98.00	27429	107.00	98002	116.05	6647

Average of 2.865 to 2.875 min.: 3m61346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
117.00	74499	128.00	27580	137.75	884	144.90	301
118.00	5656	129.00	133240	138.25	1120	145.20	429
119.05	1228	130.00	10652	138.95	811	145.95	2800
119.95	1527	131.05	2156	139.90	441	147.00	8391
120.80	376	131.85	458	140.10	1047	148.00	18371
121.10	450	132.10	1773	141.00	16722	149.05	3553
122.05	6929	132.65	907	141.90	2201	149.90	939
123.00	8467	134.00	4119	142.10	4415	150.10	533
123.95	5490	135.00	10425	142.90	4107	150.90	1205
125.10	4467	136.05	4594	144.05	1224	151.20	850
127.00	329520	137.05	5281	144.70	604	151.65	1703

Average of 2.865 to 2.875 min.: 3m61346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
151.90	374	160.05	5264	168.95	2685	177.00	6522
152.20	572	160.90	7347	169.90	235	177.85	1168
152.85	3607	161.40	463	170.15	1381	178.95	24277
153.20	728	161.85	1801	170.80	600	180.00	15585
154.05	4701	162.10	162	171.05	1560	181.05	7784
155.05	9418	163.10	218	171.90	3323	182.05	1595
156.00	12515	163.95	1385	173.05	3718	182.50	764
156.95	1720	165.00	5595	174.10	7728	182.85	701
157.30	2417	166.15	6441	175.05	11646	183.20	428
157.95	3101	167.00	31194	176.00	3595	183.40	152
158.95	2379	168.00	15785	176.20	704	183.95	2251

Average of 2.865 to 2.875 min.: 3m61346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
185.10	13007	194.60	727	206.05	169309	216.00	2365
186.05	92283	195.10	1252	207.10	22494	217.00	42973
186.95	23369	196.05	24296	208.05	6271	218.00	6179
187.20	3747	198.00	676352	209.05	1572	218.95	877

188.05	2698	199.00	45920	209.95	1614	219.50	439
189.05	5959	200.00	3990	211.05	8868	219.95	339
190.05	1042	200.65	1280	212.10	839	221.05	45192
191.10	2890	201.40	5039	213.05	546	222.20	2252
192.00	6547	202.95	4507	213.95	615	223.10	10737
193.00	8982	204.05	22875	214.95	1794	224.00	96408
194.05	2589	205.10	43320	215.70	680	225.05	24835

Average of 2.865 to 2.875 min.: 3m61346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
225.90	909	233.30	164	240.20	989	248.00	537
226.10	555	234.05	2428	240.95	2179	249.00	2809
227.00	36640	234.80	509	241.20	485	249.90	255
228.00	4534	235.05	2335	242.05	5668	250.10	472
228.95	7943	235.80	1008	243.10	3019	250.50	324
229.90	1131	236.20	686	244.10	70832	251.10	341
230.10	431	236.90	3123	245.10	10689	251.40	213
231.00	3492	237.90	571	246.05	13353	251.70	884
231.70	433	238.95	1805	246.90	972	252.30	839
232.00	692	239.70	235	247.05	2141	253.05	2746
232.75	559	239.90	148	247.70	127	253.30	835

Average of 2.865 to 2.875 min.: 3m61346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
253.70	820	264.00	691	271.00	312	281.20	656
255.00	367659	265.05	8431	271.35	746	282.15	537
256.10	49647	265.85	1810	272.00	1543	283.15	1766
257.05	4912	266.70	165	273.10	11945	283.85	686
258.05	20347	266.95	435	274.05	33109	284.10	843
258.95	2968	267.60	524	275.05	168085	284.95	2660
259.90	840	268.30	100	276.05	22633	285.20	828
260.65	603	268.70	287	277.05	12297	286.05	836
261.10	1000	269.60	142	278.05	2748	287.20	104
262.00	93	270.15	812	278.80	132	288.10	140
263.30	165	270.80	599	279.05	392	288.50	151

Average of 2.865 to 2.875 min.: 3m61346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
288.90	709	297.10	5466	306.80	213	316.85	329
289.90	292	297.95	356	307.90	328	317.25	213
290.30	256	299.00	143	308.95	1171	320.00	266
291.35	226	299.40	85	309.95	731	320.60	265
292.20	227	300.90	860	310.20	268	321.00	336
292.50	256	302.00	180	311.20	88	321.15	1216
292.95	3425	302.20	1012	312.80	112	321.95	1426
293.90	491	302.80	661	313.30	387	323.10	13567
294.10	766	303.05	4506	314.15	2416	324.00	3220
294.90	913	304.00	1705	315.00	4671	325.20	123
296.05	40557	304.90	215	316.05	3009	326.10	254

Average of 2.865 to 2.875 min.: 3m61346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
326.40	279	336.25	566	350.00	185	359.30	195
327.00	2847	338.80	210	351.05	426	361.00	425
327.95	1275	339.30	95	352.05	4372	362.60	84
330.30	87	339.65	368	352.70	416	363.10	314
331.10	191	340.60	268	353.10	3317	363.55	308
331.40	183	341.15	1509	354.05	4825	365.00	19236
332.00	1257	341.70	200	354.80	322	365.80	340
332.90	211	342.90	149	355.10	787	366.05	1953
333.20	885	346.05	3405	357.20	93	366.70	100
334.15	8363	346.90	440	358.00	85	366.95	272
335.05	2352	347.10	247	359.00	94	367.20	80

Average of 2.865 to 2.875 min.: 3m61346.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
369.65	346	385.10	78	402.70	241	421.10	4506
369.90	259	386.90	88	403.05	3858	422.00	2212
370.20	165	387.20	101	404.15	1470	423.10	29340
371.15	1381	390.15	1207	404.95	430	424.15	6347
372.10	7176	391.10	887	410.00	104	425.05	935
373.10	2572	391.70	358	414.60	251	425.60	299
374.00	112	392.00	127	415.40	211	426.50	320
376.75	205	392.25	384	416.10	110	429.40	146
377.20	166	401.25	717	419.05	347	430.20	94
383.05	2122	402.10	2628	419.60	119	430.60	134
384.10	479	402.30	871	420.20	580	431.10	353

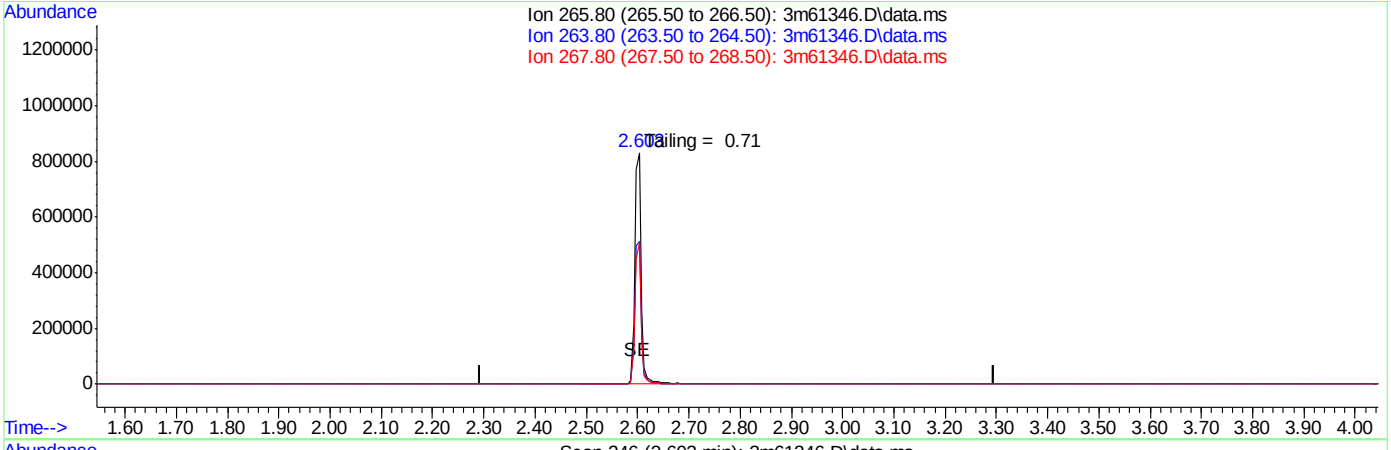
Average of 2.865 to 2.875 min.: 3m61346.D\data.ms
dftpp
Modified:subtracted

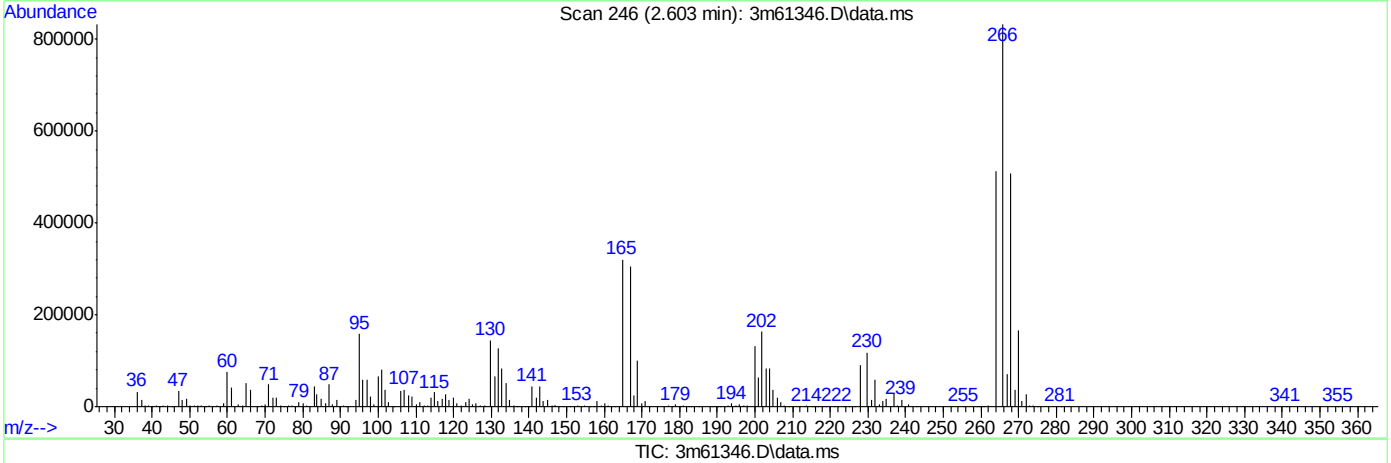
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
431.70	157	437.20	345	445.20	763		
432.20	341	437.85	1498	446.10	87		
432.80	99	438.30	93				
433.50	170	438.80	798				
434.10	331	439.00	504				
434.65	224	439.30	210				
435.25	549	439.80	407				
435.65	651	441.10	93331				
436.35	512	442.10	558571				
436.70	215	443.10	109304				
436.90	337	444.05	10404				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2885\
Data File : 3m61346.D
Acq On : 16 May 2016 9:31 am
Operator : ashleyd
Sample : dftpp
Misc : op93756a,e3m2885
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 16 09:35:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m61346.D\data.ms

(1) Pentachlorophenol (t)

2.795min 0.00ppb d

response 0

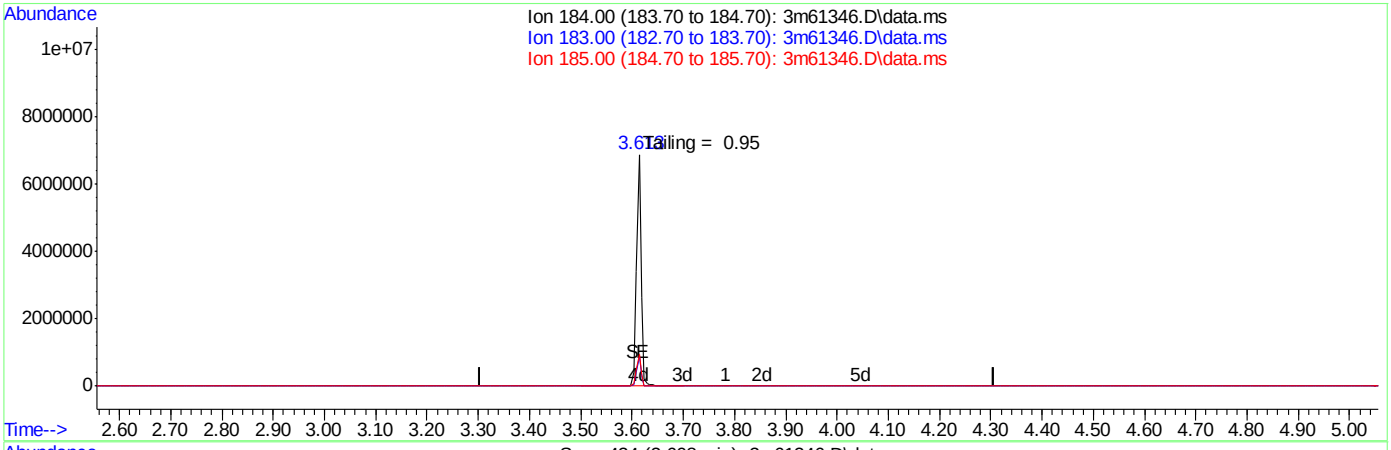
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.80	0.00
267.80	64.10	0.00
0.00	0.00	0.00

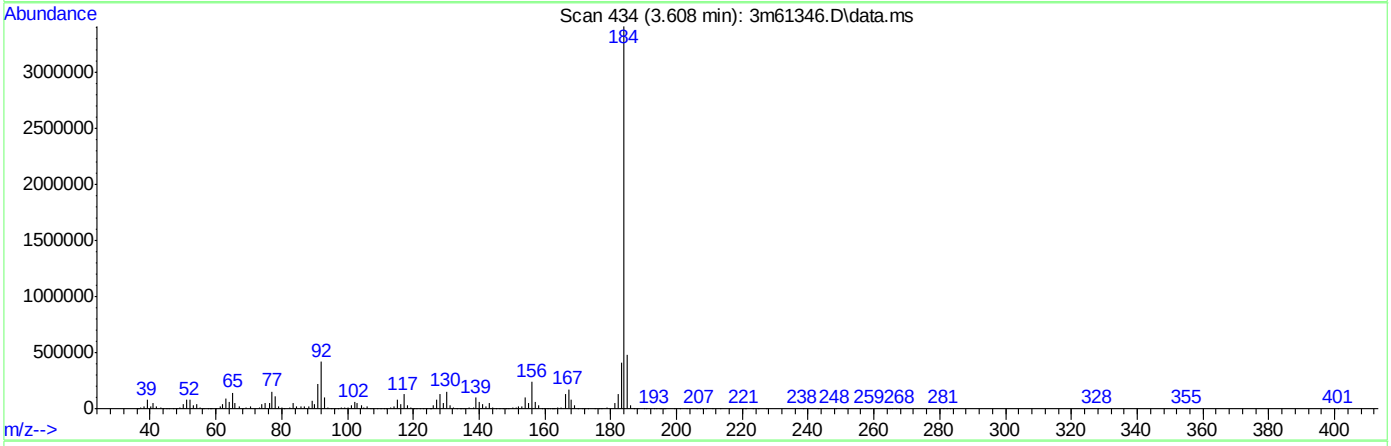
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2885\
Data File : 3m61346.D
Acq On : 16 May 2016 9:31 am
Operator : ashleyd
Sample : dftpp
Misc : op93756a,e3m2885
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 16 09:35:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m61346.D\data.ms

(2) Benzidine (t)

3.806min 0.00ppb d

response 0

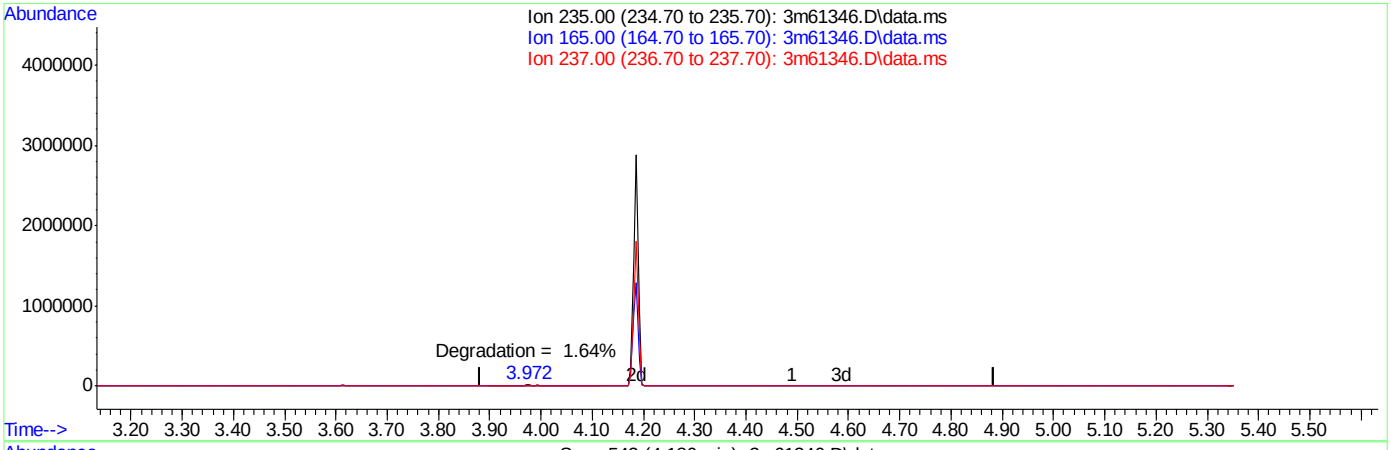
Ion	Exp%	Act%
184.00	100	0.00
183.00	11.50	0.00
185.00	14.40	0.00
0.00	0.00	0.00

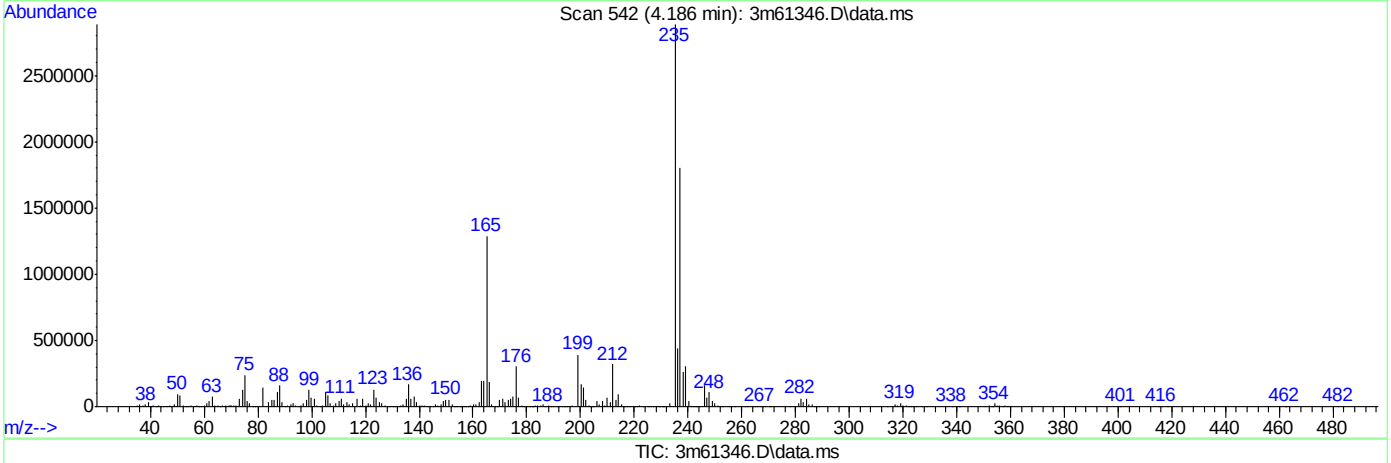
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2885\
Data File : 3m61346.D
Acq On : 16 May 2016 9:31 am
Operator : ashleyd
Sample : dftpp
Misc : op93756a,e3m2885
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 16 09:35:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m61346.D\data.ms

(3) PP-DDT (t)

4.384min 0.00ppb d

response 0

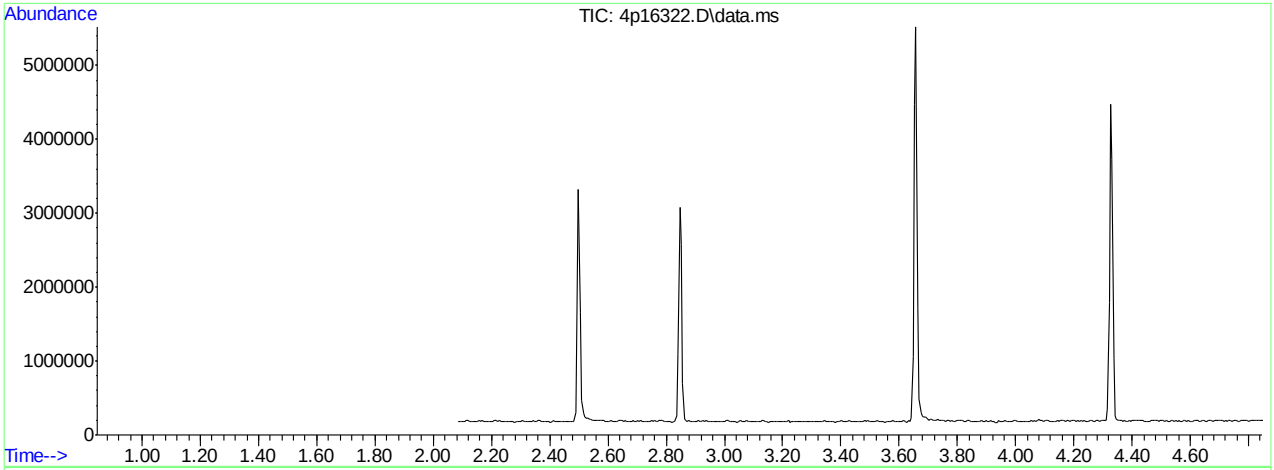
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
237.00	0.00	0.00
0.00	0.00	0.00

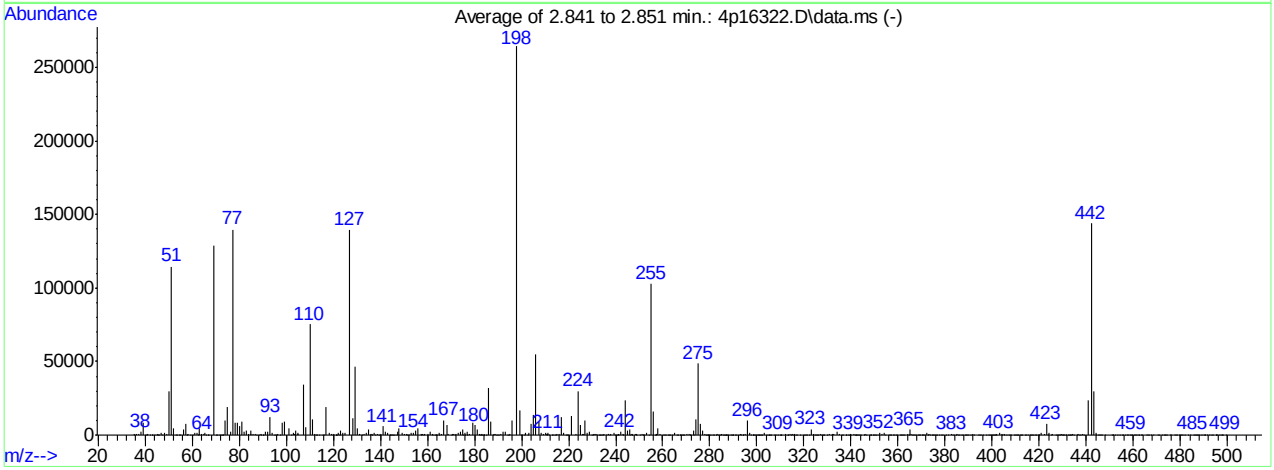
SGS ACCUTEST JC20314

DFTPPR

Data File : C:\msdchem\1\DATA\E4P863\4p16322.D Vial: 1
Acq On : 18 May 2016 10:31 am Operator: linseyk
Sample : dftpp Inst : MS4P
Misc : op93791,e4p863 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS





AutoFind: Scans 142, 143, 144; Background Corrected with Scan 138

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	43.3	114372	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	48.9	129119	PASS
70	69	0.00	2	0.1	161	PASS
127	198	40	60	52.7	139120	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	264137	PASS
199	198	5	9	6.5	17146	PASS
275	198	10	30	18.4	48518	PASS
365	198	1	100	1.4	3668	PASS
441	443	0.10	100	80.7	23869	PASS
442	198	40	100	54.4	143801	PASS
443	442	17	23	20.6	29562	PASS

4p16322.D DFTPP4P.M Wed May 18 12:33:09 2016

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	625	43.15	363	51.10	114372	59.10	62
35.30	203	44.00	316	51.95	1159	60.05	77
36.10	499	44.80	251	52.15	4884	61.10	1679
37.10	725	45.10	631	53.10	406	62.05	1173
38.10	2080	45.30	90	53.45	49	62.30	388
39.10	8663	46.00	139	54.40	268	63.00	1088
40.00	39	46.90	1290	55.00	240	63.15	4237
40.40	240	47.15	30	56.05	3946	64.05	621
41.15	1031	48.25	1466	57.10	7791	64.90	457
41.95	96	49.00	654	57.80	121	65.10	1666
42.70	119	50.10	29476	58.10	599	66.05	30

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
66.70	238	75.00	18848	85.10	3031	93.10	12391
67.00	219	76.10	2241	86.00	1053	93.95	1392
69.00	129119	77.10	139749	86.95	676	95.10	136
70.10	161	78.10	8711	87.20	283	95.50	207
70.40	90	78.95	8256	88.10	286	96.00	315
71.40	43	80.00	6176	89.00	458	96.25	733
72.05	216	81.00	9196	89.30	164	97.10	53
72.40	129	82.10	2469	89.95	251	98.10	8639
72.80	305	83.05	3130	90.30	144	99.05	8885
73.00	214	84.00	877	91.00	2135	101.05	4780
74.05	9973	84.90	873	92.05	2504	102.25	259

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
103.05	1803	112.95	336	121.80	198	131.25	529
103.50	593	113.90	54	122.05	1925	132.05	47
104.00	2939	115.30	157	122.30	353	132.85	625
104.90	526	115.95	386	123.15	2944	133.95	1587
105.05	1930	117.00	19280	124.05	1717	135.05	3856
107.05	34376	118.00	1914	125.10	1930	136.00	973
108.05	5377	118.95	699	127.05	139120	136.20	825
110.00	75429	119.75	222	128.05	11695	136.45	18
111.05	10364	120.15	450	129.05	46574	137.15	1913
112.10	1032	120.90	306	130.10	4278	137.80	308
112.30	145	121.15	87	131.05	637	138.70	437

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
139.00	293	145.90	408	154.15	1536	162.20	388
139.70	167	146.90	279	155.00	2781	162.80	150
140.05	965	147.10	2553	156.05	4377	163.40	128
141.05	5914	148.00	4746	157.10	798	163.70	206
142.05	2265	149.00	1347	157.40	155	164.00	369
143.00	1676	150.25	475	158.00	636	164.80	385
143.85	100	150.90	376	158.30	208	165.10	1351
144.10	311	151.20	816	158.95	905	166.00	506
144.35	160	151.55	20	160.15	1095	167.05	10227
144.90	212	152.15	245	161.05	2700	168.05	7104
145.40	161	153.10	1882	162.00	566	168.85	920

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
170.10	276	176.90	402	183.50	290	190.00	180
170.65	671	177.05	2224	183.85	97	191.10	727
171.05	522	177.70	715	184.10	297	192.15	2564
171.80	173	179.05	8528	185.00	400	193.05	2402

172.00	868	180.05	6664	186.10	32168	194.20	117
173.05	1301	181.00	3843	187.05	9384	194.50	346
174.10	2410	182.00	791	187.95	132	195.10	583
174.80	365	182.30	268	188.20	1070	196.05	10147
175.15	4104	182.70	215	188.90	1160	198.00	264137
175.90	369	183.00	78	189.30	213	199.05	17146
176.10	1847	183.20	416	189.70	161	199.95	409

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
200.30	29	210.20	1204	216.10	1115	226.20	652
200.95	55	210.45	52	217.00	12423	227.10	9615
201.70	1553	210.70	904	218.05	1480	227.95	1538
202.40	133	210.95	978	219.00	200	229.00	2363
203.05	1597	211.20	1417	219.10	322	229.60	42
204.10	7536	211.75	339	219.70	347	230.00	415
205.10	13790	212.90	253	221.05	13084	230.90	623
206.05	55198	213.10	137	223.00	513	231.20	565
207.15	9210	214.05	138	224.10	30070	231.70	458
208.10	1711	214.60	319	225.00	6992	232.20	292
209.25	848	215.10	448	225.90	761	232.90	226

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
233.25	226	239.55	261	246.10	3593	252.30	93
233.80	176	240.00	340	246.70	421	253.10	1619
234.00	370	240.50	194	246.90	440	253.85	86
234.45	206	241.00	313	247.10	268	255.10	102589
235.05	1034	241.20	461	248.15	517	256.10	15874
235.90	300	242.05	1941	248.70	284	256.80	343
236.80	744	242.90	200	249.00	969	257.10	413
237.00	430	243.10	1075	250.25	120	257.30	912
237.20	182	244.10	23600	251.05	440	257.60	593
237.80	524	245.10	2880	251.55	217	258.05	4472
239.10	1223	245.80	242	251.90	135	259.00	1063

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
260.15	406	267.40	204	274.10	10449	281.25	279
260.90	53	268.00	100	275.10	48518	281.90	68
261.15	187	268.20	195	276.05	7525	282.50	110
262.20	173	268.60	151	277.05	3159	283.15	586
262.80	143	269.00	14	278.00	619	283.60	54
263.10	213	270.30	662	278.40	75	284.00	404
263.85	310	271.10	714	278.90	62	284.70	80
265.05	1657	271.50	92	279.10	164	285.10	516
266.00	350	271.70	225	279.35	235	285.40	74
266.30	171	272.90	415	279.95	66	286.20	99
267.20	94	273.10	3368	280.20	78	286.50	175

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
286.70	89	292.90	283	299.30	64	305.10	116
287.00	96	293.15	678	299.60	258	305.40	53
287.55	250	293.90	212	300.20	114	305.85	210
287.90	74	294.15	175	300.60	96	307.30	50
288.70	266	295.10	837	300.85	93	307.70	39
289.15	235	296.10	9628	301.40	317	309.00	390
289.75	137	297.10	1494	301.60	91	309.70	196
289.95	137	297.50	93	301.95	173	310.10	127
290.55	83	298.30	56	303.05	1618	310.35	88
291.25	254	298.50	86	304.15	69	312.15	535
292.10	109	298.90	118	304.90	106	313.00	378

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
313.30	136	320.85	44	327.80	106	336.70	246
314.05	862	321.20	264	328.20	394	337.70	62
314.65	315	322.10	315	328.50	99	337.90	145
315.00	1015	323.10	4051	329.70	174	338.90	113
315.60	207	324.00	575	330.60	532	339.20	306
316.10	659	324.70	50	331.65	337	339.60	95
316.60	80	325.10	54	332.30	455	339.90	457
317.15	408	325.60	120	332.90	488	341.15	741
318.50	97	325.85	212	334.15	2388	341.60	72
319.85	299	327.10	902	335.05	831	342.15	131
320.30	167	327.60	209	336.15	210	342.40	187

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
342.70	168	349.70	272	357.90	29	365.05	3668
343.25	2	350.40	101	358.55	290	365.70	808
343.65	312	350.75	73	359.40	155	366.10	288
344.15	19	351.60	137	359.60	200	366.50	106
345.45	322	352.15	1436	360.60	199	367.10	163
345.95	827	353.15	811	361.25	164	367.35	247
346.55	42	354.05	1686	361.90	368	368.60	116
347.90	161	354.75	315	362.20	62	368.90	4
348.30	44	355.85	196	362.60	369	369.20	294
348.55	76	356.45	352	364.05	519	370.10	142
349.20	258	357.05	307	364.65	262	370.30	151

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
370.80	230	376.60	135	385.80	110	394.00	183
371.20	278	377.70	277	386.30	144	394.60	53
372.05	1832	378.40	139	387.05	9	395.20	232
372.80	262	379.00	172	387.65	195	395.90	33
373.20	738	380.30	341	388.40	120	397.30	244
373.70	62	381.50	68	388.75	211	398.45	227
374.40	28	382.80	621	389.40	108	399.00	351
374.80	182	383.15	414	389.95	347	399.20	191
375.30	18	383.90	149	390.90	401	400.10	57
375.65	255	384.40	25	391.65	448	400.30	30
376.25	174	384.90	438	392.10	302	400.85	88

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
401.30	389	407.90	269	415.10	77	422.10	615
401.60	107	409.30	80	415.90	81	423.10	7428
402.00	901	409.85	18	416.65	60	423.90	316
403.00	1370	410.20	66	417.20	114	424.10	1924
404.05	546	410.70	172	417.70	89	424.95	246
404.40	70	411.00	218	418.35	196	425.40	455
405.05	432	411.70	19	418.60	59	426.90	53
405.30	64	412.30	98	419.40	152	427.40	160
406.20	315	412.70	141	419.80	91	428.10	140
406.85	132	414.15	180	420.05	158	428.35	94
407.30	69	414.40	156	421.05	1668	428.85	383

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
429.45	487	433.90	204	443.10	29562	452.15	89
429.80	158	434.20	549	444.00	1863	453.05	162
430.00	339	434.90	128	444.40	229	454.30	86
430.25	301	436.15	118	445.05	297	455.30	184
430.60	386	436.50	689	445.85	155	455.60	60

431.30	166	437.20	46	446.30	180	456.55	190
431.55	173	437.50	185	446.60	86	457.40	76
432.10	111	438.30	436	447.90	277	457.60	64
432.70	177	439.10	90	450.70	113	458.45	166
433.10	70	441.10	23869	451.30	28	458.90	44
433.30	250	442.10	143801	451.45	138	459.35	387

Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
460.25	174	468.30	122	478.00	39	486.60	218
461.00	154	470.50	115	478.75	115	486.90	193
461.40	174	471.00	294	479.40	205	487.40	255
462.10	38	472.20	71	480.10	27	488.10	119
462.30	60	473.10	130	480.40	153	489.10	205
463.20	247	473.50	20	480.95	231	489.80	95
463.75	306	473.70	205	481.90	169	490.20	198
465.60	72	474.45	252	483.10	279	490.65	195
465.95	202	475.75	89	484.15	152	491.40	375
466.80	101	476.10	53	485.55	411	492.30	119
467.40	197	477.65	141	486.20	86	493.40	189

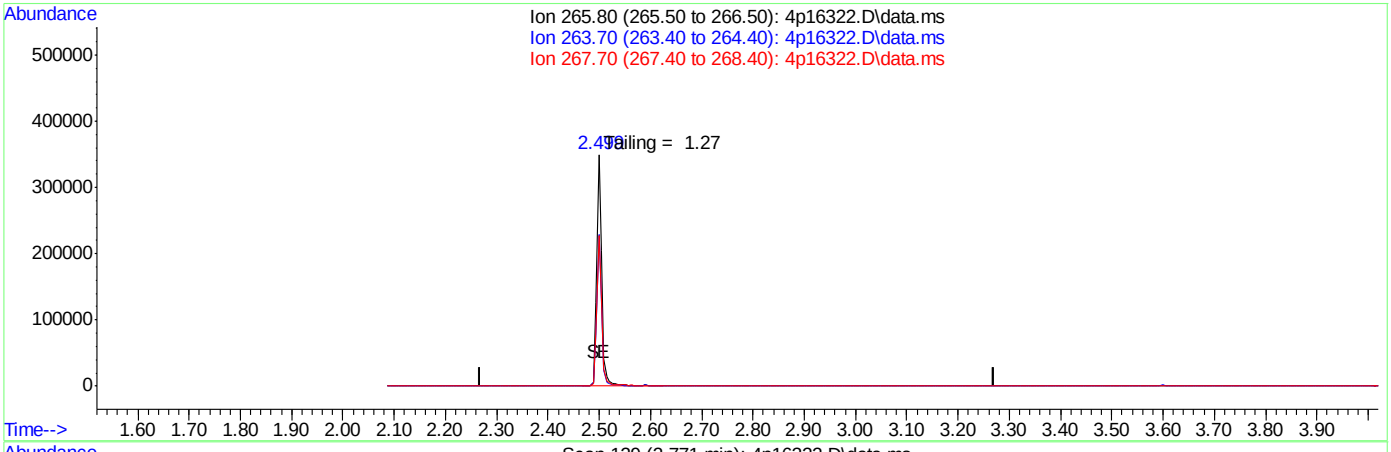
Average of 2.841 to 2.851 min.: 4p16322.D\data.ms
dftpp
Modified:subtracted

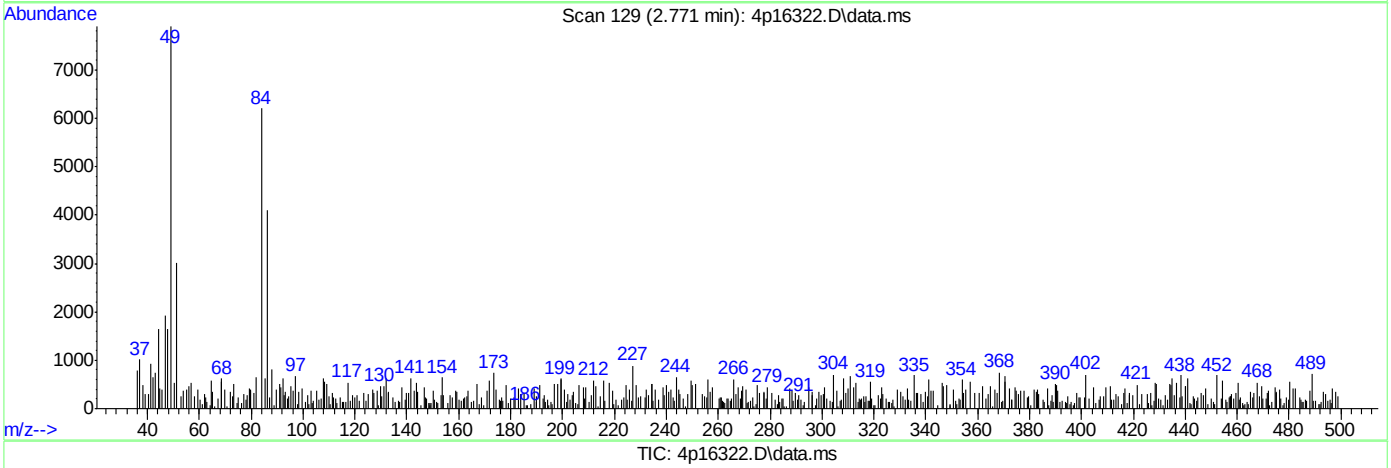
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
493.70	33						
495.10	110						
495.40	150						
495.70	30						
496.55	345						
497.40	117						
497.70	109						
498.20	158						
499.30	258						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16322.D
Acq On : 18 May 2016 10:31 am
Operator : linseyk
Sample : dftpp
Misc : op93791,e4p863
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 18 10:37:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





TIC: 4p16322.D\data.ms

(1) Pentachlorophenol (MC)

2.770min (-2.770) 0.00ng

response 0

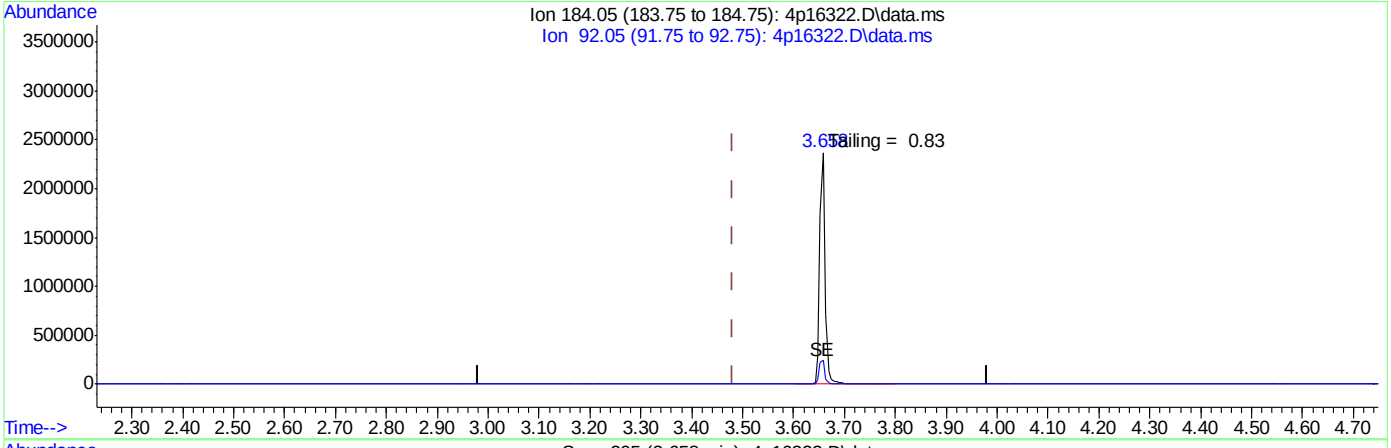
Ion	Exp%	Act%
265.80	100	0.00
263.70	64.70	0.00#
267.70	64.60	0.00#
0.00	0.00	0.00

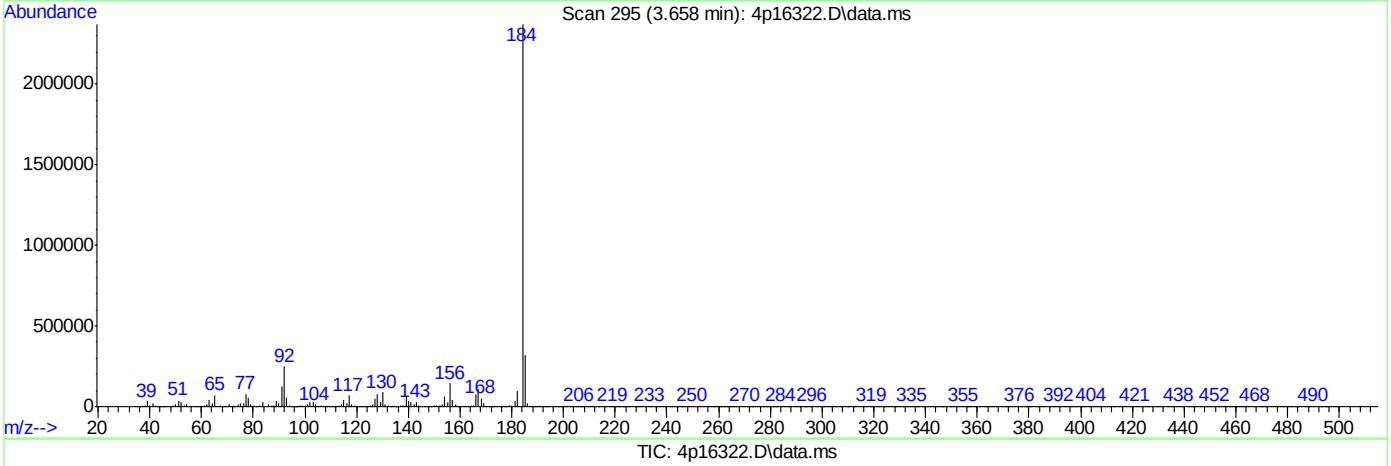
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16322.D
Acq On : 18 May 2016 10:31 am
Operator : linseyk
Sample : dftpp
Misc : op93791,e4p863
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 18 10:37:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





TIC: 4p16322.D\data.ms

(2) Benzidine (M)

3.658min (+0.177) 376.06ng

response 1751311

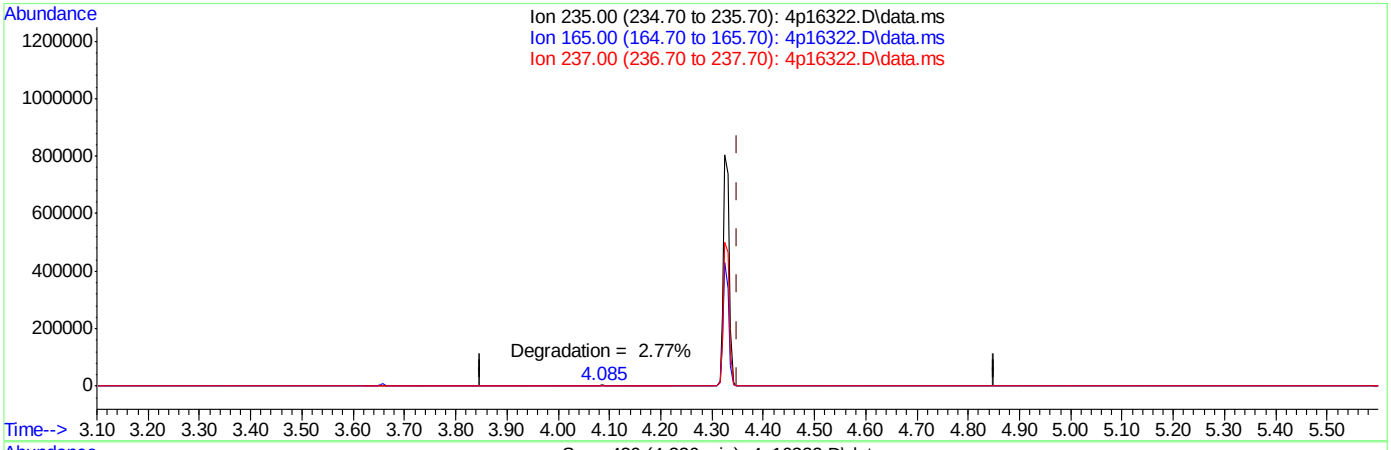
Ion	Exp%	Act%
184.05	100	100
92.05	11.10	10.46
0.00	0.00	0.00
0.00	0.00	0.00

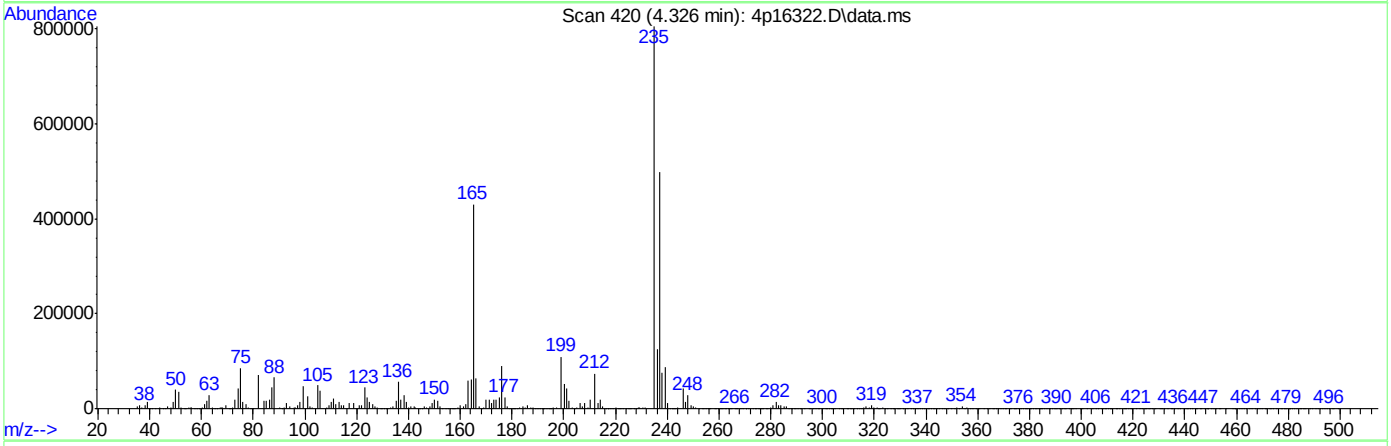
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16322.D
Acq On : 18 May 2016 10:31 am
Operator : linseyk
Sample : dftpp
Misc : op93791,e4p863
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 18 10:37:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





TIC: 4p16322.D\data.ms

(3) PP-DDT (MC)

4.326min (-0.024) 347.30ppb

response 649401

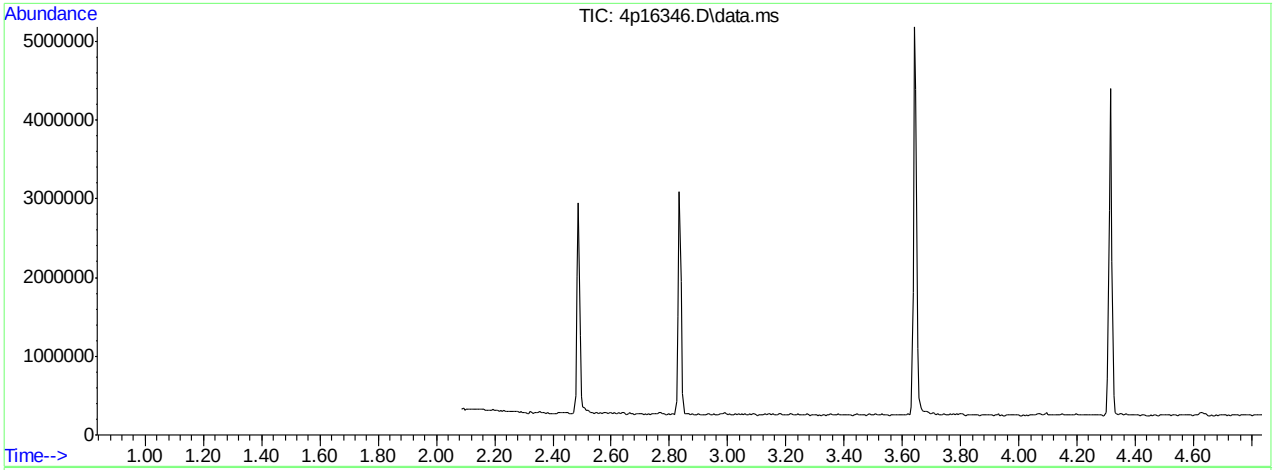
Ion	Exp%	Act%
235.00	100	100
165.00	58.00	53.36
237.00	62.20	61.88
0.00	0.00	0.00

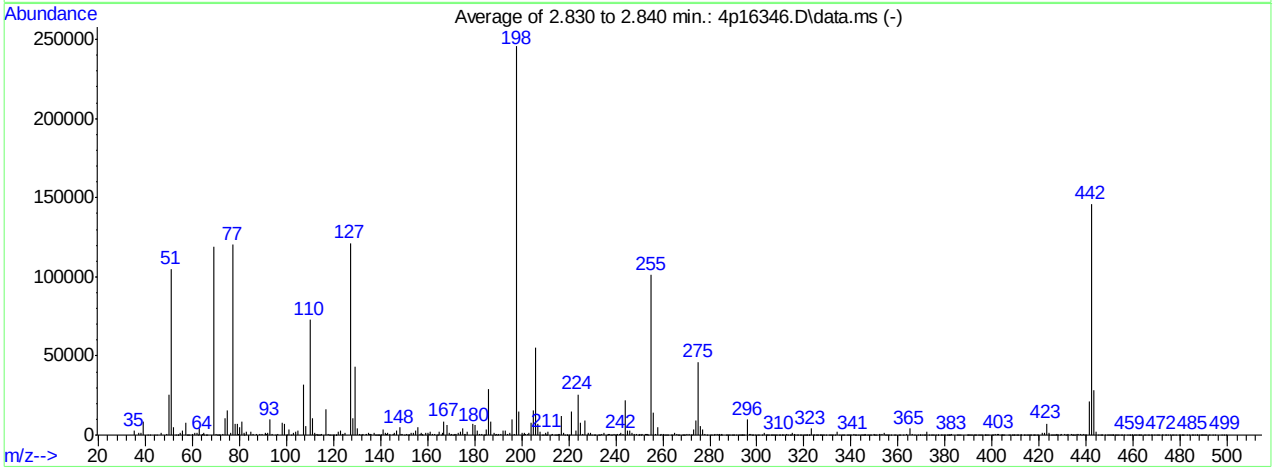
SGS ACCUTEST JC20314

DFTPPR

Data File : C:\msdchem\1\DATA\E4P866\4p16346.D Vial: 1
Acq On : 19 May 2016 2:31 pm Operator: linseyk
Sample : dftpp Inst : MS4P
Misc : op93984a,e4p866 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS





AutoFind: Scans 140, 141, 142; Background Corrected with Scan 134

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.7	104847	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	48.4	118801	PASS
70	69	0.00	2	0.5	560	PASS
127	198	40	60	49.4	121237	PASS
197	198	0.00	1	0.3	653	PASS
198	198	100	100	100.0	245568	PASS
199	198	5	9	6.1	14880	PASS
275	198	10	30	18.8	46141	PASS
365	198	1	100	1.6	4017	PASS
441	443	0.10	100	74.3	21035	PASS
442	198	40	100	59.6	146288	PASS
443	442	17	23	19.4	28311	PASS

4p16346.D DFTPP4P.M Thu May 19 17:51:11 2016

Average of 2.830 to 2.840 min.: 4p16346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.15	2580	51.05	104847	60.00	451	69.05	118801
37.20	1134	52.05	4839	61.05	1193	70.10	560
38.15	1746	53.20	350	62.05	1220	70.50	138
39.05	8304	53.70	102	62.50	342	71.30	91
41.10	205	54.05	157	63.15	4356	71.50	123
41.90	371	54.95	1130	63.80	234	71.80	82
44.05	170	56.00	2961	64.25	615	73.00	1074
44.95	126	57.05	7886	64.75	274	74.05	10844
47.00	1648	57.80	332	65.10	1689	75.10	15312
49.05	813	58.10	172	66.00	329	76.10	1427
50.05	25828	58.85	211	66.20	148	77.10	120168

Average of 2.830 to 2.840 min.: 4p16346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
78.00	7234	88.95	483	99.05	6979	111.05	10381
79.00	6786	89.80	391	100.00	199	111.95	1258
79.80	875	90.90	905	100.20	329	112.20	263
80.10	4641	91.10	1113	101.05	3538	112.90	325
81.05	8800	91.40	486	102.10	269	113.10	496
81.90	1517	92.10	1576	102.95	1317	113.70	89
82.10	301	93.00	9731	103.95	2239	113.90	154
83.00	1909	94.05	1083	104.95	2614	114.40	72
85.10	2369	95.15	347	107.10	31983	115.15	672
86.00	776	96.30	421	108.05	5608	117.05	16517
87.05	575	98.10	8161	110.05	72728	118.00	985

Average of 2.830 to 2.840 min.: 4p16346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
118.20	274	127.10	121237	135.20	752	141.05	3704
118.75	226	128.05	10516	135.80	421	142.00	1433
119.50	197	129.05	42932	136.10	1031	142.40	483
120.25	292	129.95	3973	137.10	1752	143.05	1309
120.90	229	130.90	439	137.80	190	144.05	667
121.20	157	131.40	288	138.15	280	145.20	481
121.90	2213	132.10	120	138.70	61	146.05	1288
123.05	2905	132.75	434	139.05	149	147.05	2696
123.85	751	134.00	741	139.40	245	148.10	4799
124.10	465	134.20	386	139.95	361	148.80	491
125.10	1610	135.00	1715	140.20	227	149.15	633

Average of 2.830 to 2.840 min.: 4p16346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
149.95	144	157.90	241	165.90	377	173.05	1373
151.15	768	158.00	894	166.15	1601	173.80	394
151.80	186	159.15	1358	167.05	8732	174.05	1821
152.10	122	160.10	1561	168.10	6066	175.10	4573
152.30	133	160.80	611	169.00	1532	175.80	397
153.00	1480	161.10	1825	169.70	3	176.05	1035
154.00	1697	162.25	529	170.20	590	176.95	2076
155.05	2717	163.10	434	170.70	146	179.05	7220
156.05	5096	163.80	21	171.05	164	180.00	6256
157.00	398	164.35	197	171.85	419	181.05	2946
157.15	1280	165.05	1940	172.15	660	182.05	773

Average of 2.830 to 2.840 min.: 4p16346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
183.00	438	191.10	965	201.10	1250	210.00	326
184.00	242	192.05	2871	201.55	818	210.25	1241
184.40	230	193.10	3127	202.60	427	210.90	304
185.15	3334	194.05	459	203.10	1636	211.15	1951

186.05	29371	195.15	1598	204.10	7602	212.70	144
187.05	8855	196.10	9628	205.05	15633	213.15	443
188.05	1392	196.80	653	206.05	55394	213.85	199
188.80	290	198.00	245568	207.10	7263	214.30	102
189.05	1073	199.00	14880	208.05	1974	214.85	354
189.80	118	200.05	1218	208.90	89	215.50	125
190.20	446	200.60	173	209.05	370	215.85	629

Average of 2.830 to 2.840 min.: 4p16346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
216.10	393	226.00	618	233.30	127	240.90	540
216.95	12152	227.10	8938	234.10	975	241.85	1060
218.00	1215	228.00	214	235.05	1298	242.15	1275
218.35	195	228.15	1216	236.20	382	243.10	1084
219.05	299	228.70	106	236.85	394	244.10	22167
219.40	114	229.10	1566	237.20	538	245.15	3118
220.10	134	229.70	45	237.95	184	246.00	3190
221.05	15045	230.60	143	238.45	344	247.10	1378
223.10	2919	231.10	287	239.15	435	248.05	458
224.00	25818	232.45	199	239.80	196	248.95	806
225.05	7764	233.10	264	240.05	365	249.70	355

Average of 2.830 to 2.840 min.: 4p16346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
249.90	157	258.05	4835	266.00	512	273.10	3847
250.40	467	258.85	89	266.40	50	274.10	9379
250.70	49	259.10	937	266.70	80	275.10	46141
251.40	389	260.20	457	268.10	59	276.05	5862
252.40	636	260.70	108	268.70	52	277.10	3280
253.20	861	261.30	149	268.90	206	277.95	579
253.40	555	261.65	176	269.40	250	278.70	168
253.75	130	262.20	78	270.00	686	280.30	221
255.10	101266	263.50	153	271.15	703	280.75	342
256.10	14002	264.10	268	271.90	262	281.50	35
257.00	807	264.95	1695	272.10	236	282.25	413

Average of 2.830 to 2.840 min.: 4p16346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
283.05	441	289.70	178	296.90	576	304.40	373
283.55	48	290.20	211	297.15	1074	305.05	275
284.05	667	291.30	182	297.90	213	305.85	261
284.30	138	291.95	174	298.40	239	306.35	8
284.95	420	292.70	246	299.10	63	306.75	86
285.20	234	293.00	364	300.10	212	307.50	107
287.00	116	293.35	59	300.70	97	307.90	215
287.60	108	293.80	276	302.00	194	308.30	256
287.90	301	294.10	192	303.05	1102	309.40	86
288.55	173	294.70	355	303.85	137	309.70	192
289.40	103	296.00	9739	304.20	125	310.60	7

Average of 2.830 to 2.840 min.: 4p16346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
310.85	171	317.30	332	324.00	382	330.70	159
311.40	71	318.50	45	324.20	89	331.45	193
312.00	19	318.85	116	325.10	217	331.85	64
312.85	542	319.55	328	325.60	25	332.25	229
313.30	254	320.35	140	326.10	85	333.05	282
313.90	246	320.70	121	326.70	205	334.00	2341
314.60	182	321.00	151	327.05	119	334.95	241
315.15	1279	321.35	280	327.60	55	336.05	174
315.80	232	322.00	92	328.00	3	336.55	131
316.05	407	322.30	190	328.15	377	337.10	275
316.90	188	323.10	4141	329.35	151	338.25	167

Average of 2.830 to 2.840 min.: 4p16346.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
338.90	116	345.80	329	352.25	435	360.80	143
339.40	109	346.05	608	352.90	983	362.30	277
339.95	337	346.70	190	353.95	1222	363.65	404
341.00	687	347.30	85	354.70	174	365.05	4017
341.70	92	347.70	117	355.05	217	365.95	707
342.10	116	348.30	327	355.30	247	367.10	112
343.20	212	349.65	435	356.15	112	368.40	87
343.85	119	349.90	333	357.10	316	369.10	110
344.55	121	350.50	64	358.30	168	369.50	253
345.00	62	350.80	19	358.95	333	370.20	171
345.50	236	351.95	666	360.25	173	371.10	30

Average of 2.830 to 2.840 min.: 4p16346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
371.30	380	379.10	35	386.55	97	394.65	62
372.05	2411	379.75	212	389.30	48	395.00	127
373.05	374	380.80	6	389.60	59	395.50	67
374.30	307	381.10	23	389.90	83	396.90	107
374.70	89	381.60	85	390.10	140	397.10	22
375.05	102	381.90	136	390.55	76	397.45	229
376.05	243	382.40	44	391.20	372	398.00	7
376.80	147	382.75	711	392.10	247	398.50	175
377.00	130	385.00	49	392.80	54	399.80	112
378.30	30	385.50	325	393.30	103	400.20	83
378.50	59	386.15	72	394.20	56	401.35	434

Average of 2.830 to 2.840 min.: 4p16346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
402.00	859	409.20	114	415.20	230	423.10	7158
402.90	874	409.50	91	415.40	151	423.90	370
403.70	285	410.35	141	415.85	92	424.05	1526
404.05	238	410.60	203	416.50	67	425.15	363
404.30	334	411.00	94	417.25	242	425.70	99
404.70	124	411.65	263	417.90	51	426.00	107
405.20	203	412.10	120	418.05	167	426.35	197
407.05	141	412.30	115	419.10	134	427.10	82
407.30	128	413.50	194	419.45	81	427.40	521
408.30	57	413.80	77	421.10	1525	427.60	152
408.90	85	414.65	61	422.00	1331	428.00	256

Average of 2.830 to 2.840 min.: 4p16346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
428.90	182	436.10	663	444.90	34	451.30	47
429.40	473	436.50	631	445.95	136	452.30	168
431.00	467	437.35	558	446.40	64	452.80	23
431.40	324	437.80	44	446.70	174	453.05	293
431.70	151	439.00	503	447.80	108	453.60	45
432.40	575	439.30	187	449.00	115	454.60	94
433.70	591	439.60	113	449.25	130	455.00	139
434.00	263	441.10	21035	450.00	69	455.90	135
434.30	160	442.10	146288	450.20	72	457.45	134
434.55	243	443.10	28311	450.90	24	458.30	93
434.90	192	444.05	2412	451.10	90	458.65	260

Average of 2.830 to 2.840 min.: 4p16346.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
459.30	75	466.15	134	473.90	41	482.60	85
459.60	56	466.75	96	474.60	165	483.85	214
460.40	229	467.25	183	475.60	54	484.90	18
460.65	101	467.95	162	476.60	82	485.25	166
461.30	141	469.10	144	476.95	14	486.00	61

462.05	78	469.80	151	478.10	240	486.80	118
462.30	153	470.40	99	479.35	40	487.05	228
462.50	144	471.00	295	479.80	240	487.85	63
463.10	139	472.00	300	480.70	123	488.80	38
464.60	73	472.25	55	481.00	186	489.05	118
465.25	177	473.45	138	481.45	133	489.50	79

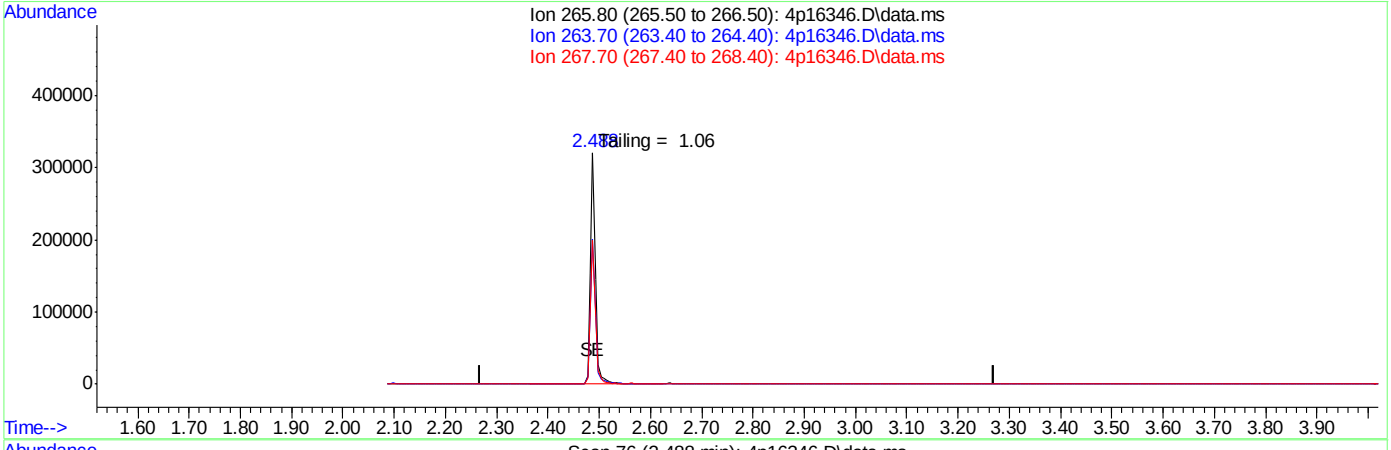
Average of 2.830 to 2.840 min.: 4p16346.D\data.ms
dftpp
Modified:subtracted

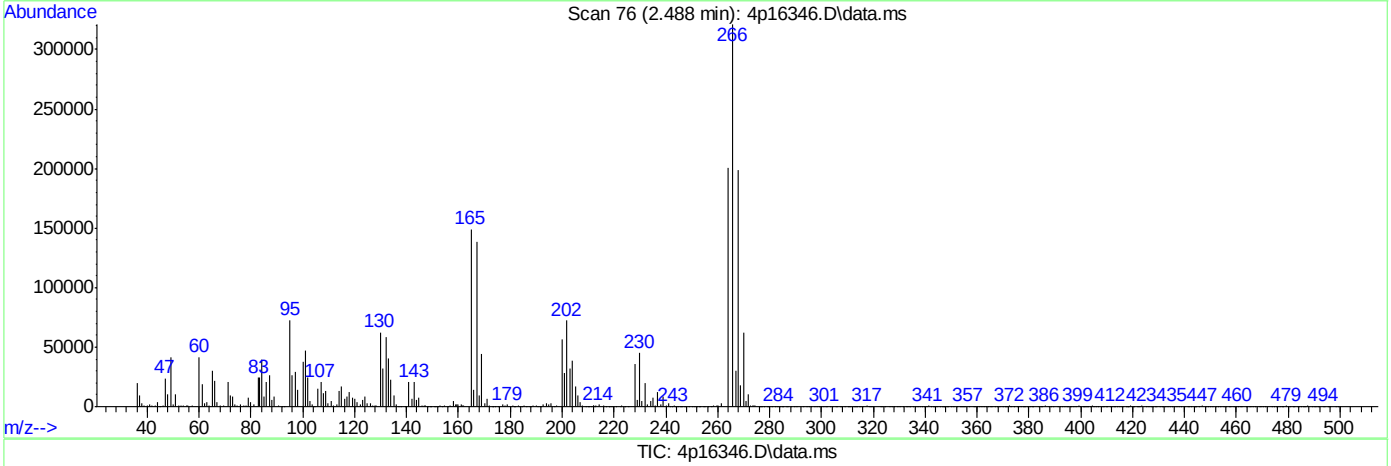
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
489.80	134						
490.10	17						
490.90	166						
492.10	26						
493.50	56						
494.50	16						
497.40	17						
498.60	71						
499.20	306						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P866\
Data File : 4p16346.D
Acq On : 19 May 2016 2:31 pm
Operator : linseyk
Sample : dftpp
Misc : op93984a,e4p866
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 19 14:37:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





(1) Pentachlorophenol (MC)

2.770min (-2.770) 0.00ng

response 0

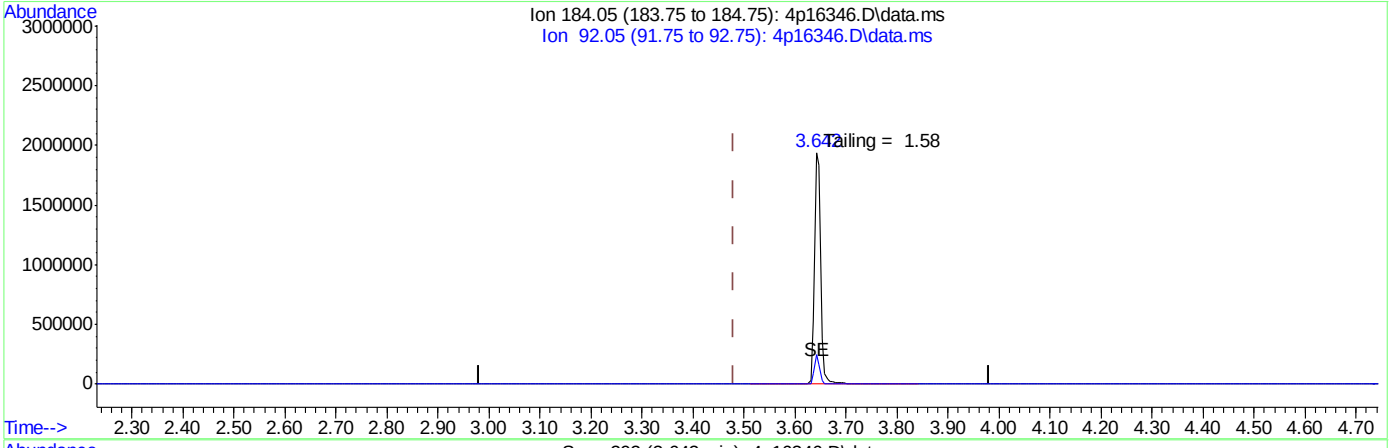
Ion	Exp%	Act%
265.80	100	0.00
263.70	64.70	0.00#
267.70	64.60	0.00#
0.00	0.00	0.00

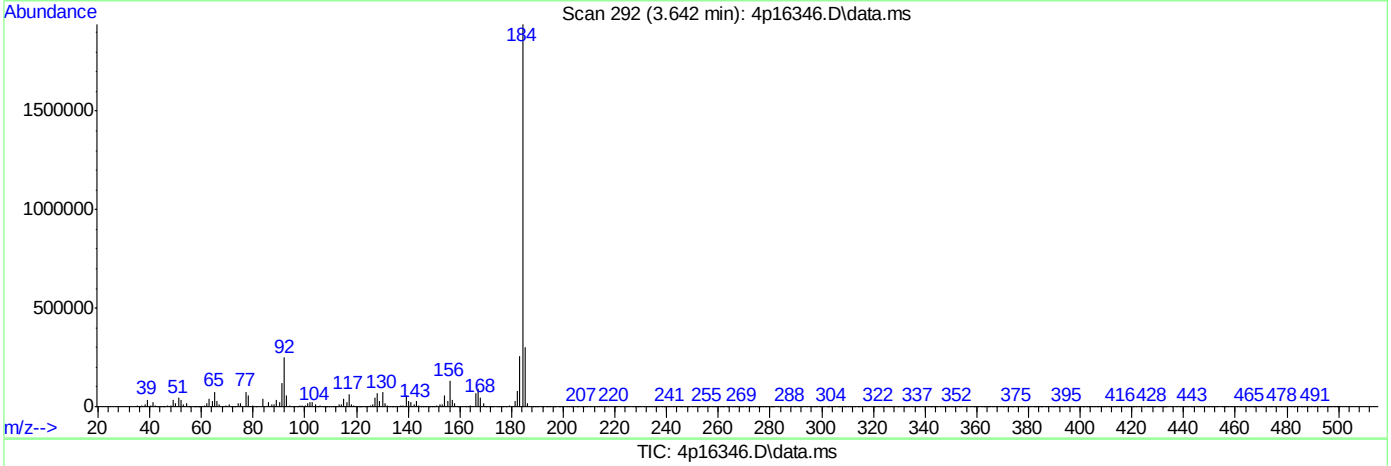
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P866\
Data File : 4p16346.D
Acq On : 19 May 2016 2:31 pm
Operator : linseyk
Sample : dftpp
Misc : op93984a,e4p866
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 19 14:37:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





TIC: 4p16346.D\data.ms

(2) Benzidine (M)

3.642min (+0.160) 342.03ng

response 1592820

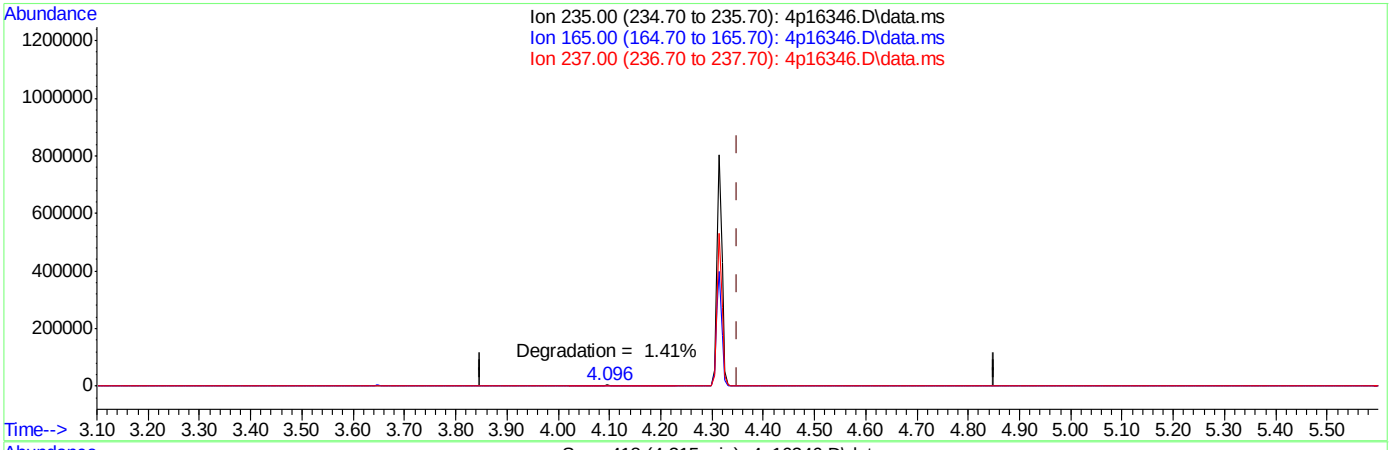
Ion	Exp%	Act%
184.05	100	100
92.05	11.10	12.80
0.00	0.00	0.00
0.00	0.00	0.00

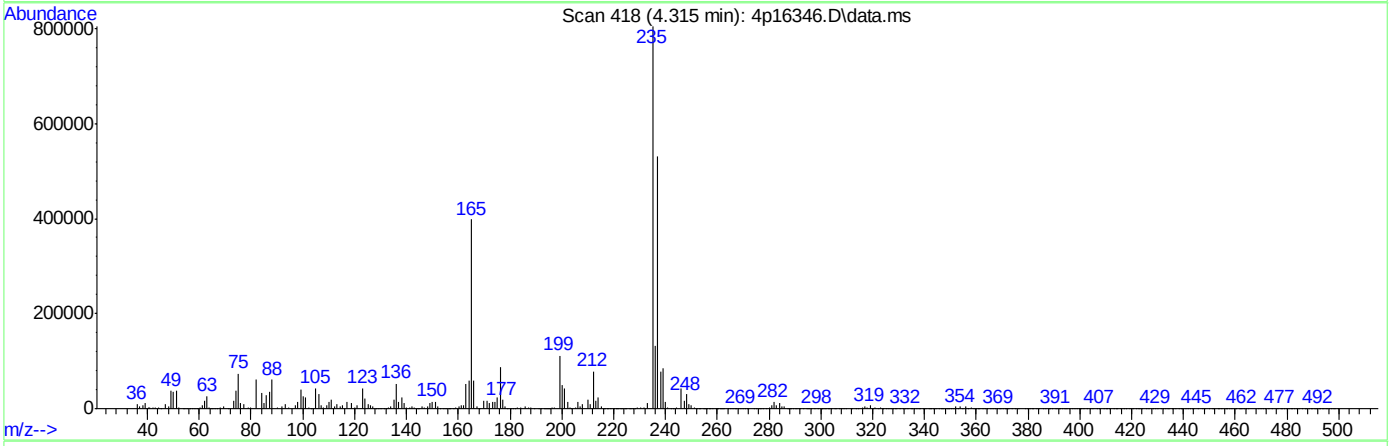
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P866\
Data File : 4p16346.D
Acq On : 19 May 2016 2:31 pm
Operator : linseyk
Sample : dftpp
Misc : op93984a,e4p866
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 19 14:37:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





TIC: 4p16346.D\data.ms

(3) PP-DDT (MC)

4.315min (-0.035) 306.40ppb

response 572912

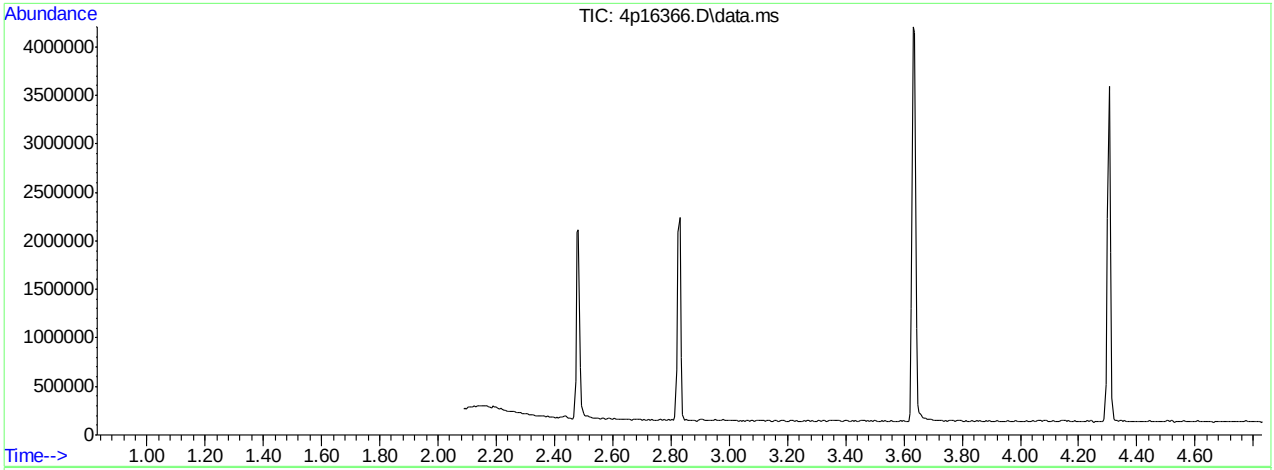
Ion	Exp%	Act%
235.00	100	100
165.00	58.00	49.42
237.00	62.20	65.91
0.00	0.00	0.00

SGS ACCUTEST JC20314

DFTPPR

Data File : C:\msdchem\1\DATA\E4P867\4p16366.D Vial: 1
Acq On : 20 May 2016 9:29 am Operator: linseyk
Sample : dftpp Inst : MS4P
Misc : op94042a,e4p867 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS



AutoFind: Scans 139, 140, 141; Background Corrected with Scan 132

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.8	79510	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	46.0	91799	PASS
70	69	0.00	2	0.1	107	PASS
127	198	40	60	48.8	97344	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	199674	PASS
199	198	5	9	6.6	13231	PASS
275	198	10	30	19.7	39426	PASS
365	198	1	100	1.7	3394	PASS
441	443	0.10	100	59.0	16146	PASS
442	198	40	100	69.9	139666	PASS
443	442	17	23	19.6	27364	PASS

4p16366.D DFTPP4P.M Fri May 20 16:28:39 2016

Average of 2.824 to 2.835 min.: 4p16366.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	241	50.10	19105	59.90	113	70.70	107
37.15	129	51.05	79510	61.20	1209	70.90	107
38.20	1291	52.10	3897	62.10	1087	72.00	109
39.05	6688	52.80	240	63.05	2932	73.10	46
40.10	439	53.70	98	63.90	45	73.30	667
42.30	376	55.30	475	64.10	499	74.05	7327
44.10	132	56.10	2920	65.05	951	75.05	12167
45.05	477	57.10	5058	66.05	287	76.10	2674
45.40	30	57.95	281	67.05	1048	77.05	92952
46.05	152	58.20	178	69.00	91799	78.05	6669
49.00	412	58.95	320	70.40	39	79.05	5951

Average of 2.824 to 2.835 min.: 4p16366.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.10	4110	87.30	174	98.05	6206	107.10	24151
81.10	6933	88.60	32	99.10	5158	108.10	4922
82.00	1634	89.00	319	100.05	477	110.05	55750
83.05	1527	90.15	108	101.05	2856	111.05	7960
84.00	109	91.05	1004	102.20	590	112.05	654
84.90	614	92.05	1081	102.80	898	113.10	57
85.10	172	92.30	185	103.20	23	113.70	113
85.40	273	93.05	7642	104.00	1882	114.00	175
86.00	1221	94.00	527	104.15	985	114.30	38
86.80	200	95.35	358	105.00	1697	114.90	309
87.05	374	96.05	41	106.05	744	115.80	210

Average of 2.824 to 2.835 min.: 4p16366.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
117.00	12456	127.10	97344	135.05	2440	141.05	2909
118.05	883	128.15	7182	135.85	834	141.80	181
118.70	126	129.05	33769	136.20	283	142.10	812
119.90	214	130.05	3101	136.70	178	142.80	131
120.15	244	130.85	448	137.00	925	143.05	606
121.05	297	131.05	369	137.40	127	144.20	640
122.10	1554	132.10	316	138.10	68	145.10	417
123.00	2458	132.40	250	138.30	51	145.80	13
123.95	389	132.70	278	138.80	99	146.10	610
124.20	588	134.00	891	139.05	3	146.50	63
125.15	2105	134.20	165	139.80	135	147.05	2340

Average of 2.824 to 2.835 min.: 4p16366.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
148.05	4152	156.10	3656	164.00	536	173.80	186
149.00	918	156.95	1020	165.05	1837	174.10	1923
150.10	726	157.55	64	166.20	1011	175.10	3807
150.90	320	157.80	330	167.05	7583	176.05	1365
151.20	176	158.05	734	168.05	3603	177.10	1560
151.40	271	159.05	698	169.05	575	178.00	46
151.60	157	159.95	902	170.55	446	179.05	6201
152.15	802	161.05	1514	171.60	120	180.05	4018
153.00	1382	161.80	534	172.05	814	181.00	2617
153.80	907	162.40	320	172.60	139	181.85	79
155.10	2683	162.85	293	173.05	946	182.25	631

Average of 2.824 to 2.835 min.: 4p16366.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
182.95	282	190.10	93	198.95	13231	208.00	1156
183.20	47	190.45	249	200.10	1302	209.20	309
183.90	183	191.20	402	200.90	309	209.70	86
184.20	32	191.40	263	201.20	149	210.30	360

185.10	501	191.95	1420	201.45	989	210.60	719
186.10	25130	193.15	2205	201.90	240	210.90	1670
187.05	6805	193.90	79	203.05	1422	211.15	476
188.05	311	194.20	740	204.10	6558	212.40	165
188.80	291	195.00	189	205.10	10413	212.90	124
189.05	1071	196.05	7503	206.10	43682	213.20	75
189.65	47	198.00	199674	207.10	6846	213.65	227

Average of 2.824 to 2.835 min.: 4p16366.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
214.90	120	227.05	7754	233.90	345	240.15	238
215.40	224	228.10	1329	234.10	218	240.70	246
215.80	4	229.00	1811	235.10	1078	241.10	799
217.00	9964	230.05	284	236.05	493	242.10	905
218.10	1218	230.25	144	236.75	471	243.10	866
221.05	10874	231.05	1113	237.05	604	244.10	17250
221.80	704	231.70	197	237.30	234	245.10	2540
223.05	3174	232.10	59	237.70	100	246.05	2802
224.10	22041	232.40	129	238.70	77	246.80	619
225.10	5649	233.10	212	239.00	338	247.15	525
226.00	231	233.35	61	239.20	29	248.35	434

Average of 2.824 to 2.835 min.: 4p16366.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
249.05	1002	256.00	13511	265.00	1612	271.90	214
249.80	240	257.00	1176	265.85	334	273.00	2767
250.15	465	257.40	159	266.30	193	274.05	7065
250.70	43	258.10	3887	266.70	20	275.10	39426
251.05	489	259.00	469	268.50	249	276.05	5683
251.60	322	259.90	9	269.20	121	277.05	3445
251.90	418	260.20	423	269.70	76	278.00	299
252.10	313	261.20	508	270.25	265	279.10	26
252.85	162	262.60	16	270.60	163	279.30	99
253.30	212	262.90	47	271.20	356	279.60	42
255.10	82810	264.05	505	271.60	226	280.75	214

Average of 2.824 to 2.835 min.: 4p16366.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
281.40	145	287.85	119	294.70	465	303.20	297
281.60	73	288.50	148	296.00	7887	304.20	300
282.20	109	289.15	102	297.05	1169	305.05	415
283.05	611	289.70	96	298.60	40	306.10	101
284.00	362	290.00	42	299.20	26	306.35	122
284.90	271	290.85	167	299.90	156	307.15	228
285.10	276	291.50	156	300.10	97	307.70	246
285.60	147	292.35	100	301.20	28	308.30	143
286.40	39	293.00	531	301.50	81	308.50	44
287.00	255	293.90	44	302.10	99	309.30	167
287.20	40	294.15	369	303.00	1016	310.10	95

Average of 2.824 to 2.835 min.: 4p16366.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
310.80	133	317.80	129	324.80	144	334.10	1611
311.70	65	318.10	19	325.80	194	335.10	628
312.05	125	318.90	88	327.00	811	336.25	139
312.90	264	319.75	179	328.25	185	337.10	151
314.10	511	320.50	150	328.80	156	337.70	25
314.80	222	321.10	226	329.60	195	337.95	157
315.15	860	322.00	276	330.70	26	338.90	53
315.70	123	322.30	57	331.00	111	340.20	77
316.15	476	323.10	3536	331.50	33	340.60	192
316.90	129	324.10	454	332.35	273	341.00	554
317.30	108	324.60	112	333.00	602	342.10	120

Average of 2.824 to 2.835 min.: 4p16366.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
344.20	68	352.05	1234	359.70	54	367.70	47
344.40	71	353.20	954	360.00	57	368.00	117
345.10	196	354.10	1058	360.25	79	368.70	110
345.70	194	354.95	459	361.25	300	369.10	66
346.10	561	355.20	75	362.65	162	369.40	95
346.75	211	356.25	156	363.20	215	369.65	97
347.30	67	356.85	197	363.80	283	370.00	114
348.30	382	358.10	93	364.35	175	370.70	132
349.60	45	358.80	131	364.95	3394	372.05	1747
350.70	93	359.00	59	365.95	656	373.00	592
351.05	230	359.40	177	367.30	162	373.20	53

Average of 2.824 to 2.835 min.: 4p16366.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
374.60	94	380.65	129	388.75	49	396.35	89
375.35	151	381.35	77	389.20	79	396.65	3
375.70	88	382.50	90	390.05	358	397.20	80
376.00	36	382.95	394	390.80	318	397.90	95
377.00	179	383.90	141	391.55	267	398.10	61
377.60	31	384.45	271	391.90	40	399.00	137
378.10	34	385.10	177	392.25	178	399.40	57
378.35	119	385.50	36	392.60	67	399.90	32
378.75	104	386.00	125	393.85	102	401.30	161
379.20	22	386.70	102	395.60	52	401.60	306
380.05	95	388.50	19	396.10	76	402.25	153

Average of 2.824 to 2.835 min.: 4p16366.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
402.60	426	413.90	135	420.40	144	428.20	103
403.00	1210	414.95	84	420.95	574	429.15	10
404.60	134	415.30	12	422.05	1392	429.50	188
406.10	71	415.90	126	423.00	6071	429.95	458
406.80	165	416.15	23	424.05	1690	430.40	120
407.15	37	416.75	153	425.10	18	430.70	57
407.95	207	417.05	95	425.75	208	431.00	39
410.20	98	417.90	263	426.35	126	431.15	278
410.85	301	418.15	258	426.90	126	431.70	169
412.00	237	418.80	127	427.50	122	431.90	154
412.90	136	419.75	374	427.75	157	432.60	138

Average of 2.824 to 2.835 min.: 4p16366.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
433.20	314	437.30	109	446.10	112	454.65	123
433.40	52	437.60	124	446.40	154	455.70	85
433.70	205	437.80	93	447.45	134	456.70	64
433.90	30	438.50	304	449.00	75	457.00	84
434.20	378	438.90	66	450.15	300	457.20	159
434.60	224	439.75	633	451.25	115	457.50	96
435.25	415	441.10	16146	452.25	134	458.15	121
435.50	170	442.10	139666	452.90	68	459.40	62
435.80	298	443.05	27364	453.55	168	459.70	51
436.10	62	444.00	2521	454.05	3	459.95	97
436.70	355	445.10	214	454.40	73	460.60	122

Average of 2.824 to 2.835 min.: 4p16366.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
461.80	2	472.90	59	481.80	11	489.20	166
462.55	23	473.80	67	482.20	115	490.20	44
462.85	138	474.10	36	483.40	76	491.30	21
463.60	70	474.60	85	484.30	142	492.55	123
464.30	180	475.50	33	484.90	43	493.05	157

466.85	64	476.45	141	486.25	103	493.95	147
467.30	42	477.80	19	486.80	194	495.30	109
468.90	100	478.55	158	487.20	161	495.95	77
469.70	33	479.30	34	487.90	17	496.65	92
470.30	23	479.50	144	488.30	109	497.40	82
471.25	182	480.50	69	488.95	113	498.10	208

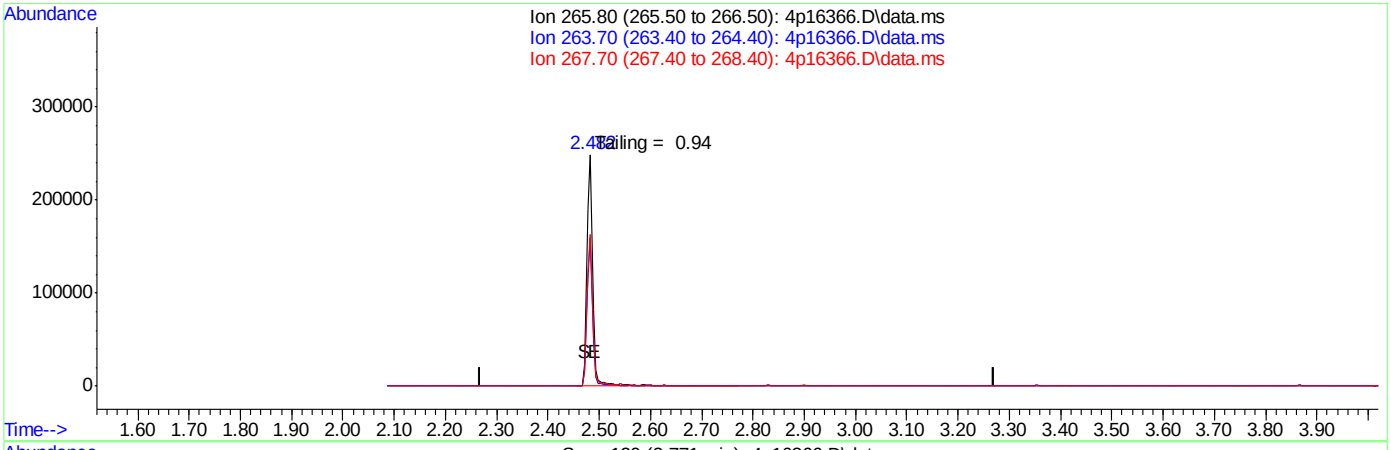
Average of 2.824 to 2.835 min.: 4p16366.D\data.ms
dftpp
Modified:subtracted

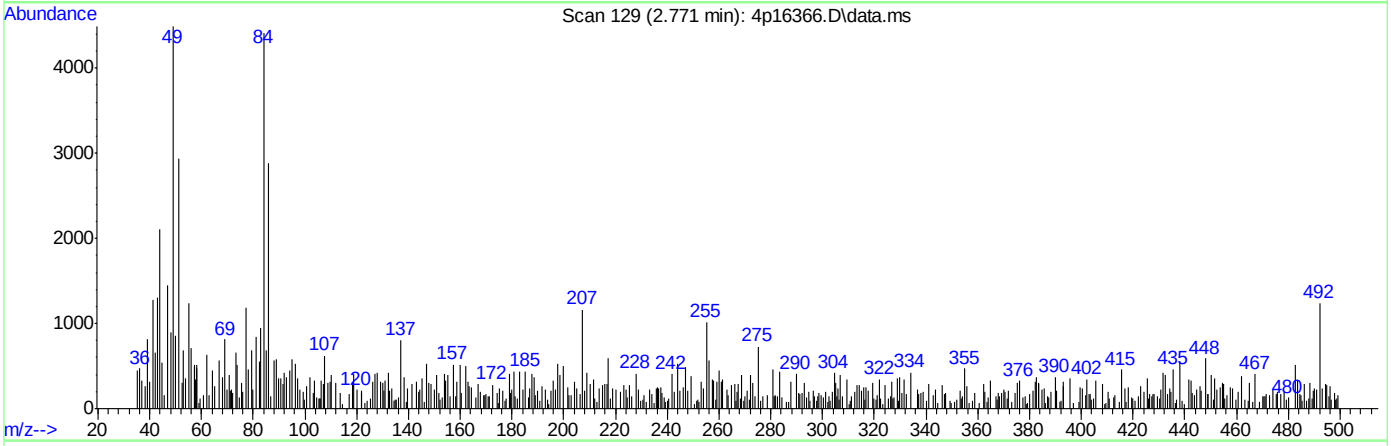
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
498.30	99						
498.80	51						
499.20	123						
499.80	53						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16366.D
Acq On : 20 May 2016 9:29 am
Operator : linseyk
Sample : dftpp
Misc : op94042a,e4p867
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 09:35:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





TIC: 4p16366.D\data.ms

(1) Pentachlorophenol (MC)

2.770min (-2.770) 0.00ng

response 0

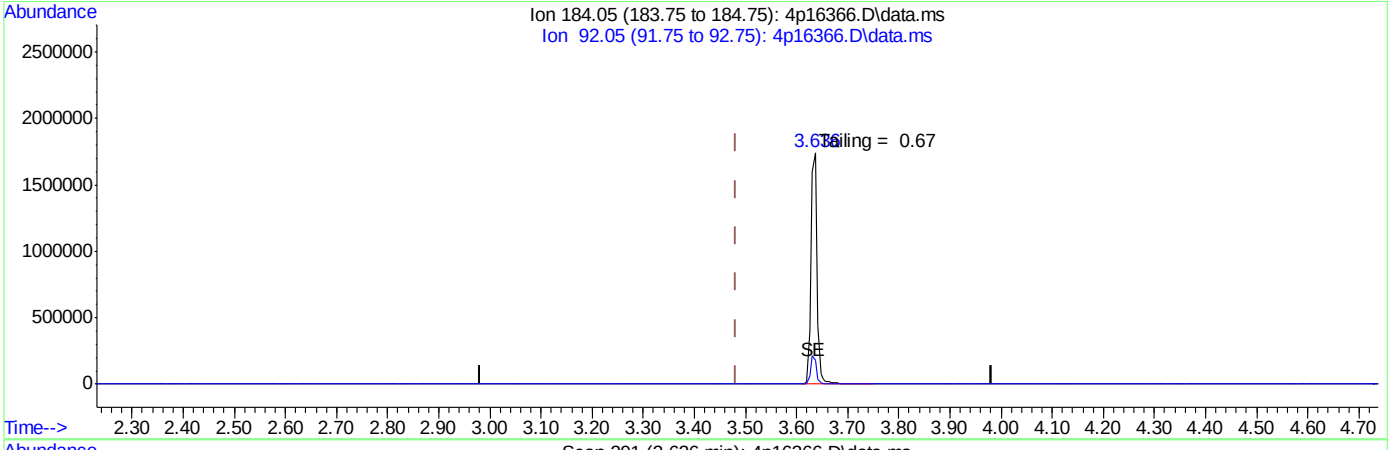
Ion	Exp%	Act%
265.80	100	0.00
263.70	64.70	0.00#
267.70	64.60	0.00#
0.00	0.00	0.00

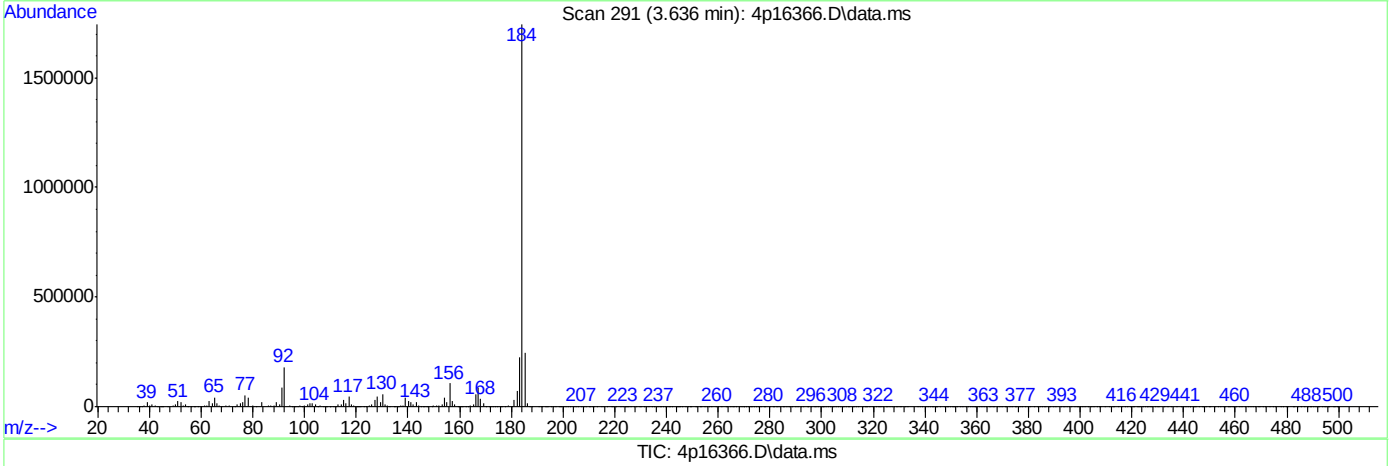
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16366.D
Acq On : 20 May 2016 9:29 am
Operator : linseyk
Sample : dftpp
Misc : op94042a,e4p867
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 09:35:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





TIC: 4p16366.D\data.ms

(2) Benzidine (M)

3.636min (+0.155) 306.18ng

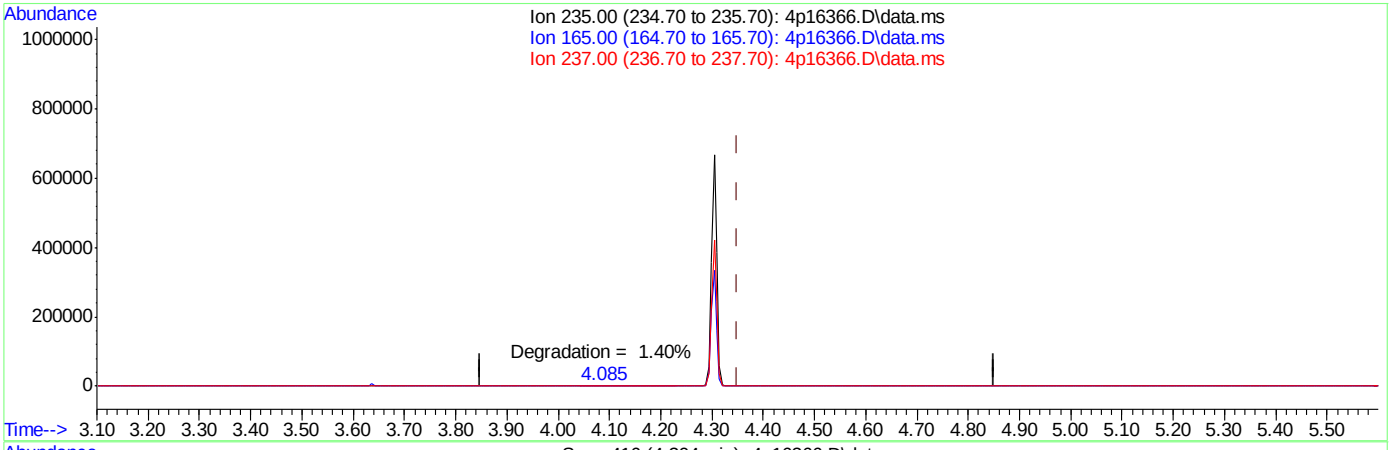
response 1425886

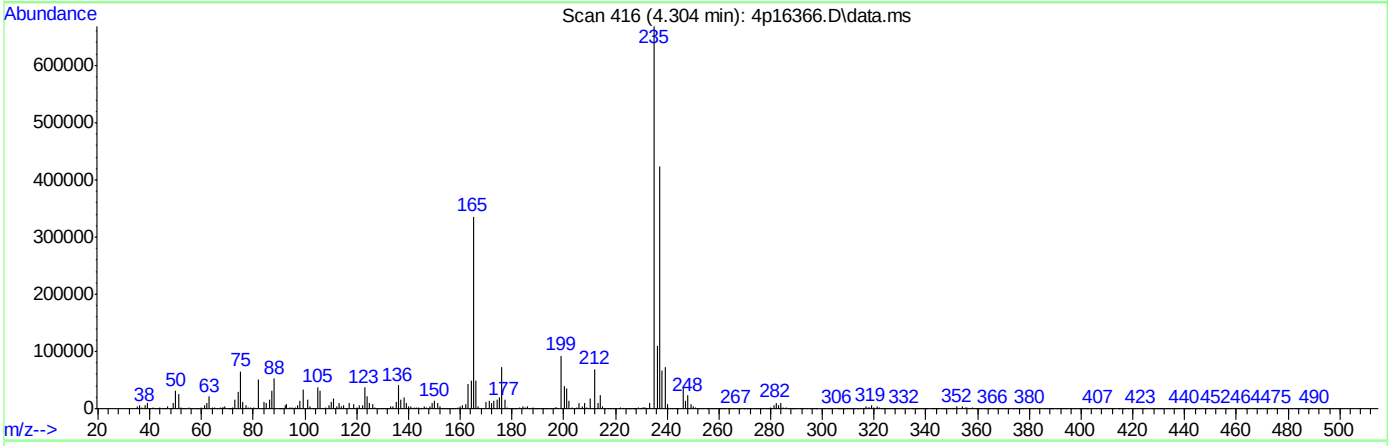
Ion	Exp%	Act%
184.05	100	100
92.05	11.10	10.27
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16366.D
Acq On : 20 May 2016 9:29 am
Operator : linseyk
Sample : dftpp
Misc : op94042a,e4p867
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 09:35:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4P.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Mar 22 10:34:19 2016
Response via : Initial Calibration





TIC: 4p16366.D\data.ms

(3) PP-DDT (MC)

4.304min (-0.046) 262.62ppb

response 491064

Ion	Exp%	Act%
235.00	100	100
165.00	58.00	50.18
237.00	62.20	63.30
0.00	0.00	0.00

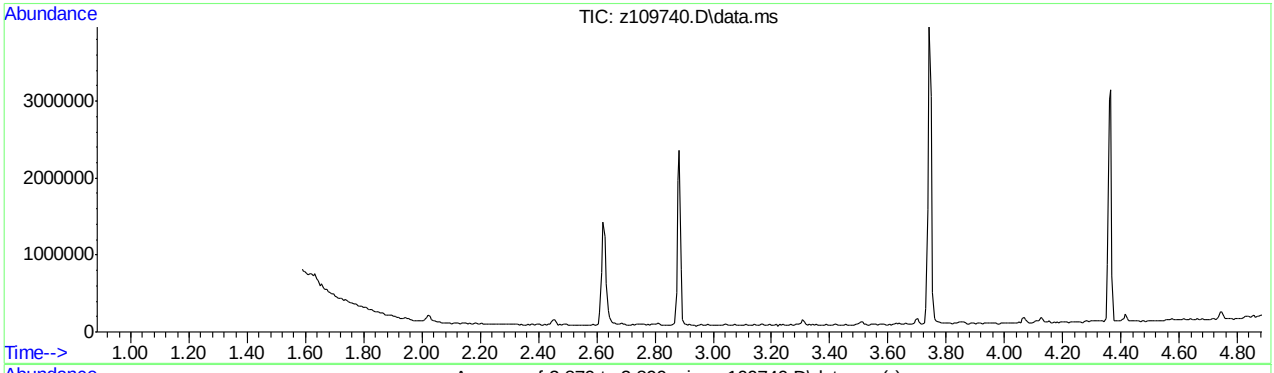
SGS ACCUTEST JC20314

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

SGS ACCUTEST JC20314

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

DFTPPZ.M Thu Apr 14 15:04:59 2016 RTE Page: 2

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

DFTPPZ.M Thu Apr 14 15:04:59 2016 RTE Page: 3

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

DFTPPZ.M Thu Apr 14 15:04:59 2016 RTE Page: 4

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

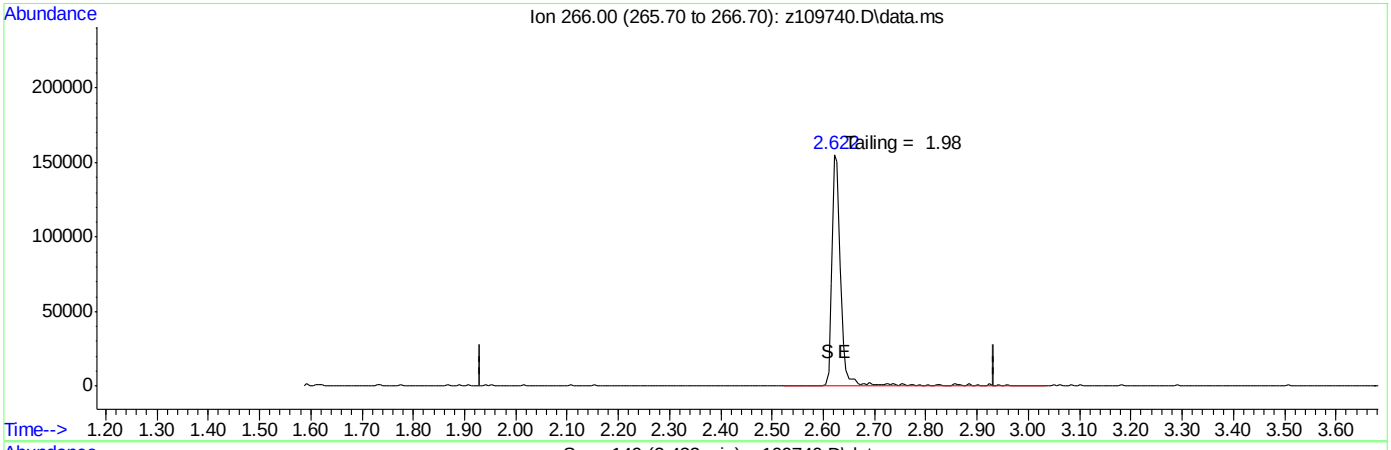
Average of 2.879 to 2.890 min.: z109740.D\data.ms
dftpp
Modified:subtracted

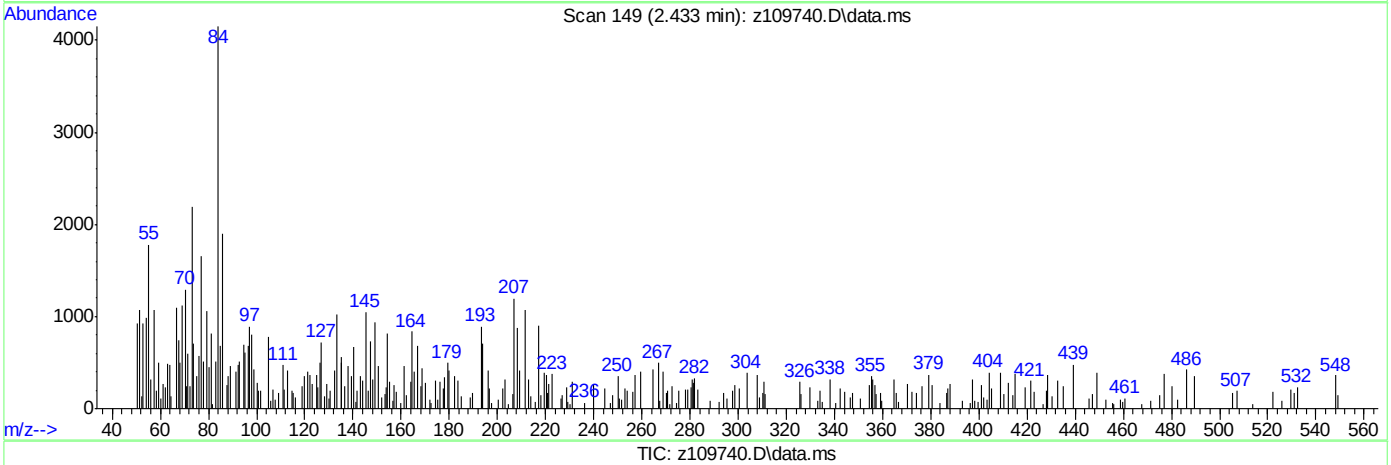
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
502.40	30	515.05	50	522.80	55	536.30	22
502.70	62	515.90	19	524.30	63	538.30	46
503.30	381	516.30	31	524.80	35	539.60	28
504.35	104	517.10	36	527.90	90	541.70	105
504.90	31	517.70	25	528.90	77	542.50	37
505.15	125	518.20	26	530.40	39	545.70	221
507.20	25	518.40	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

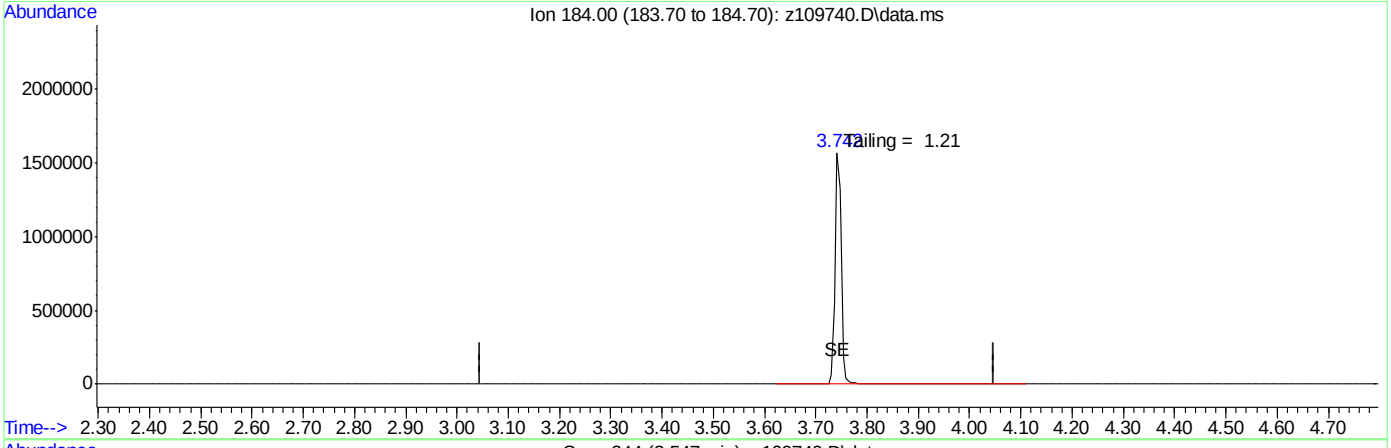
Ion	Exp%	Act%
266.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

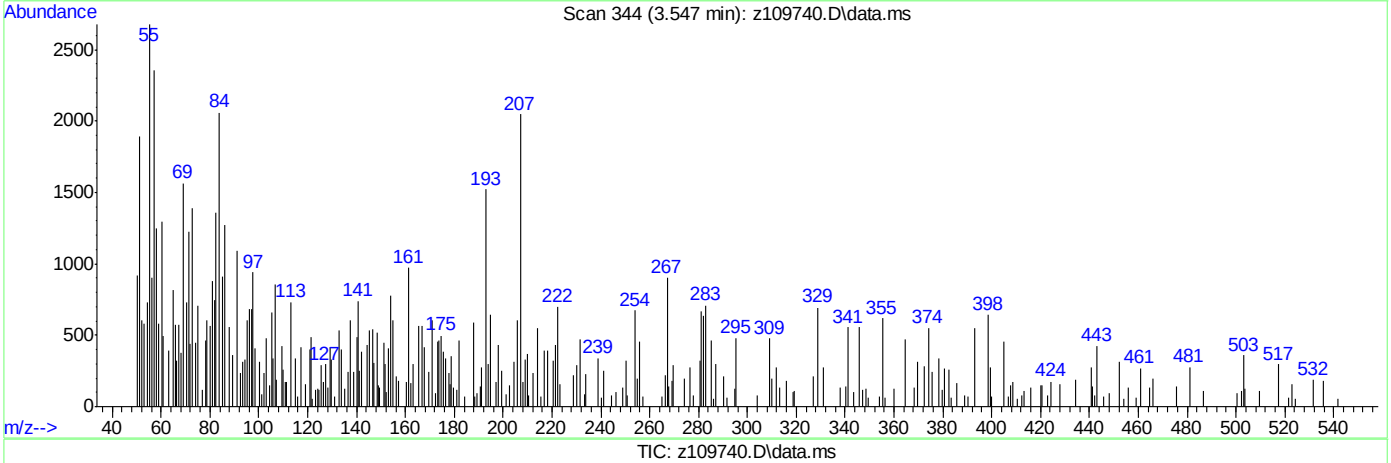
SGS ACCUTEST JC20314

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

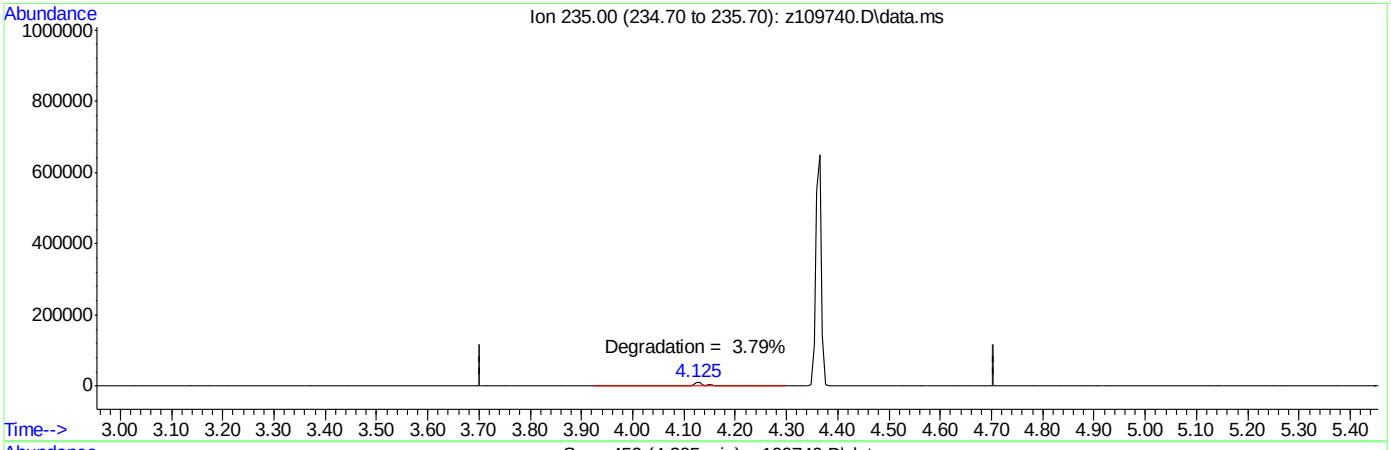
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

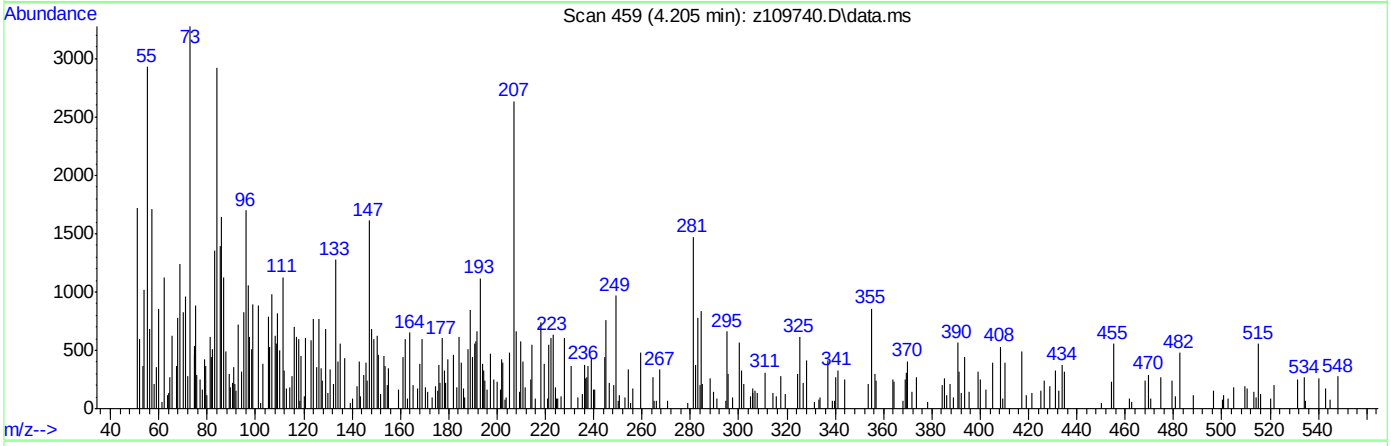
SGS ACCUTEST JC20314

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

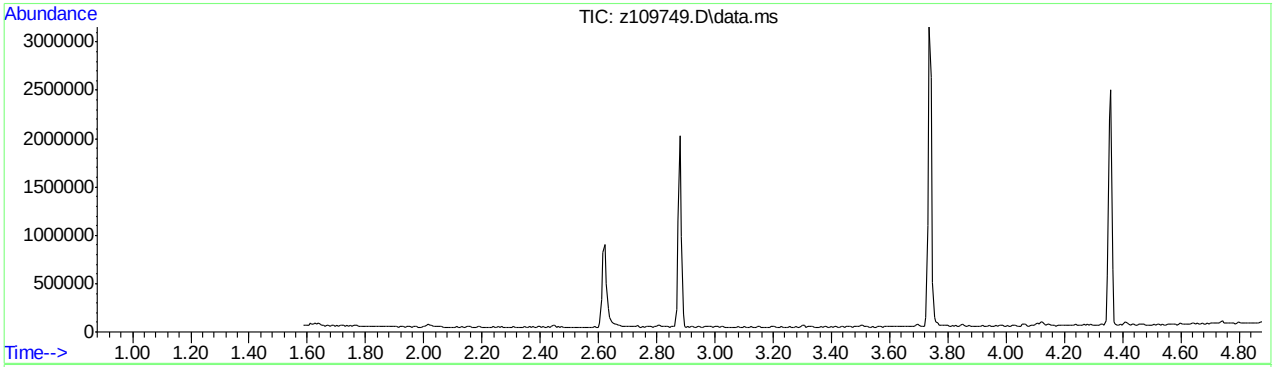
SGS ACCUTEST JC20314

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 JC20314

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

DFTPPZ.M Thu Apr 14 09:33:45 2016 RTE Page: 2

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

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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

DFTPPZ.M Thu Apr 14 09:33:45 2016 RTE Page: 4

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						

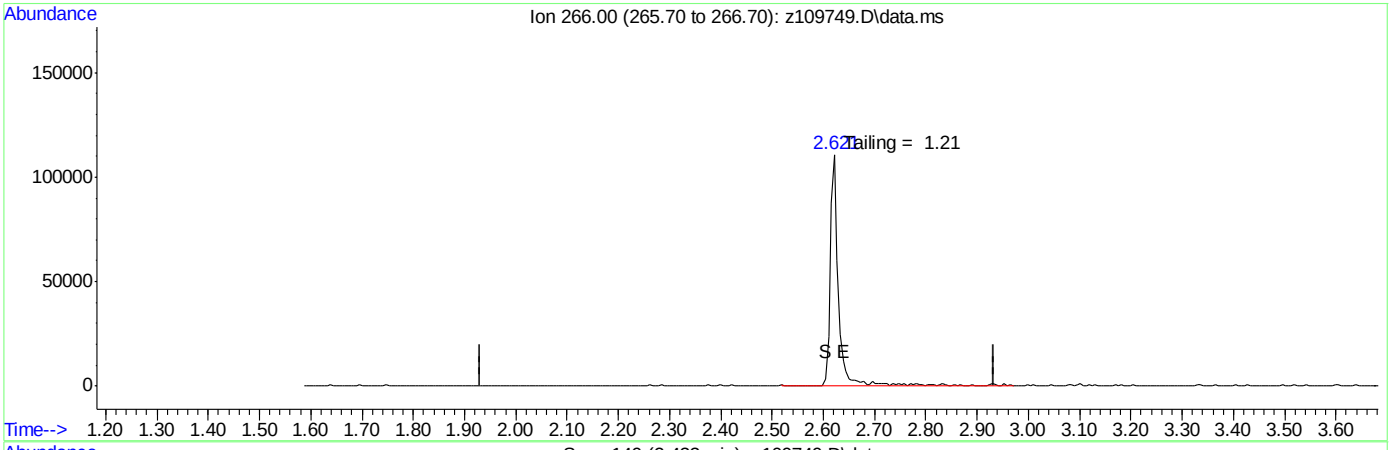
7.5.7

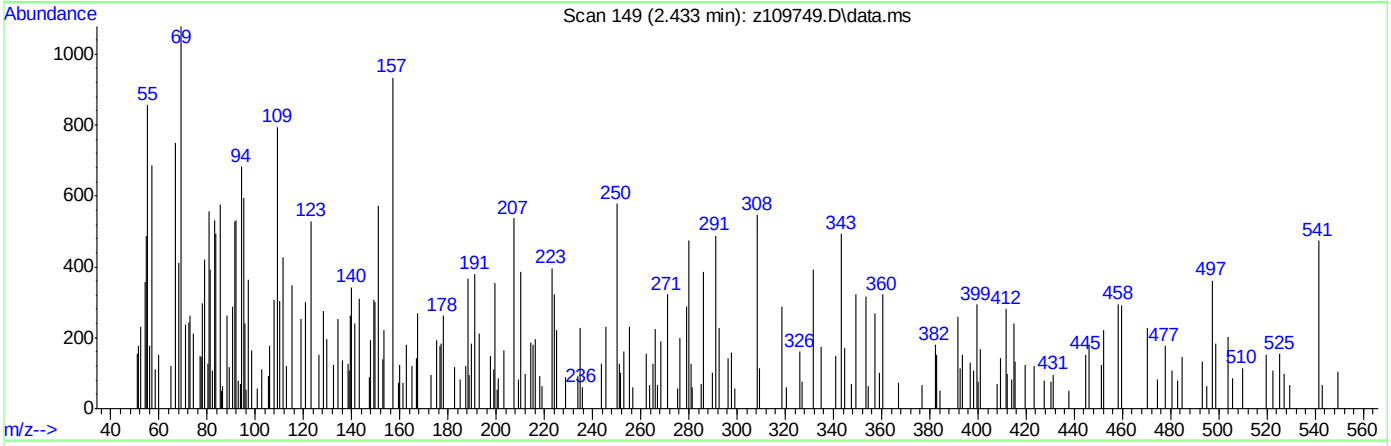
7

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

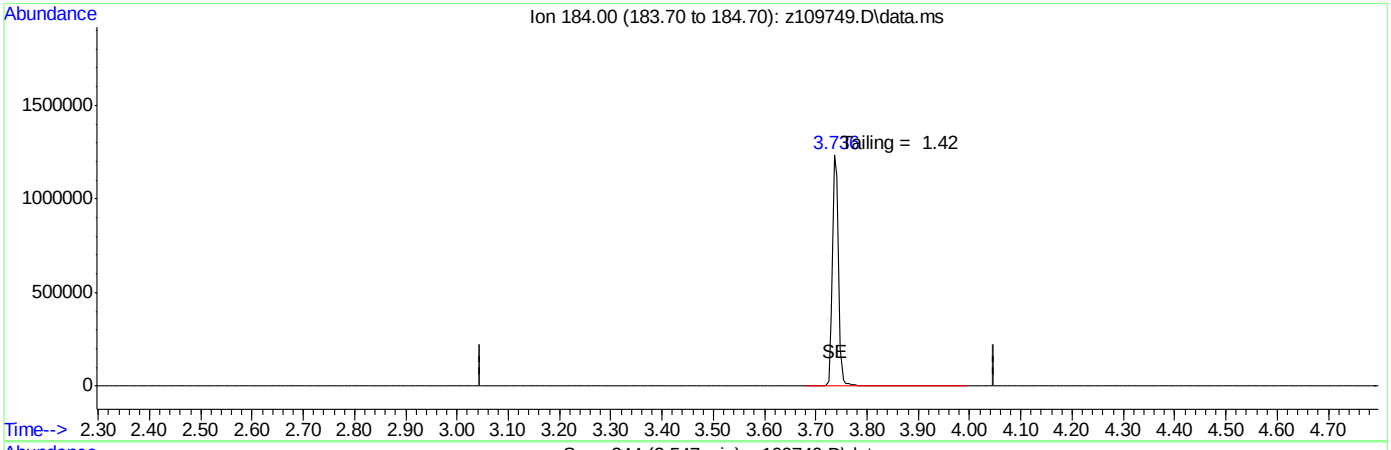
Ion	Exp%	Act%
266.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

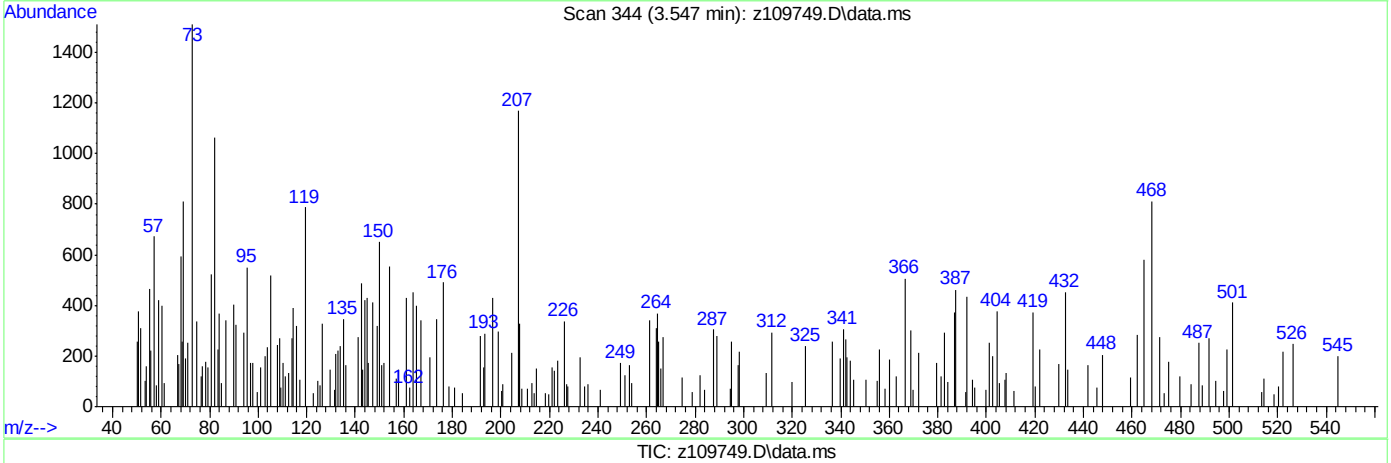
SGS ACCUTEST JC20314

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

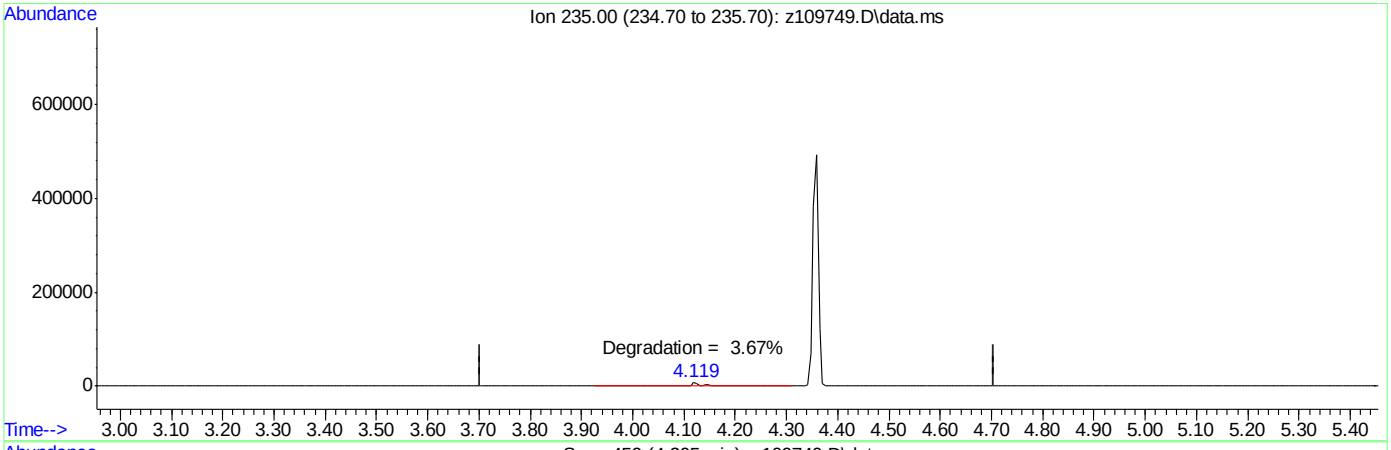
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

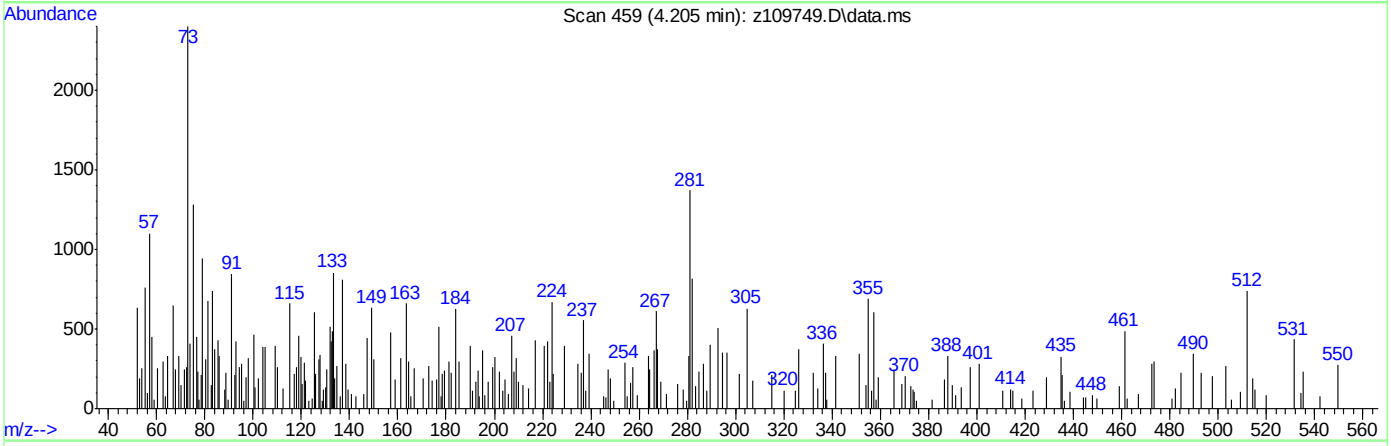
SGS ACCUTEST JC20314

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

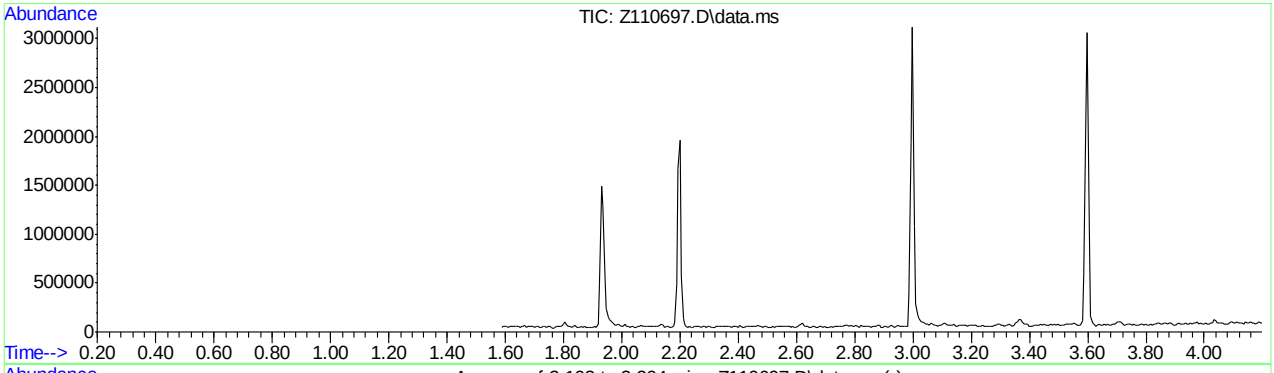
SGS ACCUTEST JC20314

DFTPP

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110697.D
Acq On : 16 May 2016 10:58 am
Operator : ariellec
Sample : dftpp
Misc : op93793,ez5530
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 107, 108, 109; Background Corrected with Scan 102

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.4	49566	PASS
68	69	0.00	2	0.8	523	PASS
69	198	0.00	100	48.4	69681	PASS
70	69	0.00	2	0.5	347	PASS
127	198	40	60	50.6	72782	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	143978	PASS
199	198	5	9	6.3	9128	PASS
275	198	10	30	26.3	37930	PASS
365	198	1	100	3.4	4831	PASS
441	443	0.01	100	76.4	19240	PASS
442	198	40	100	91.9	132352	PASS
443	442	17	23	19.0	25170	PASS

DFTPPZ.M Mon May 16 12:41:33 2016 RTE

Page: 1

Average of 2.193 to 2.204 min.: Z110697.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.20	19544	59.95	536	67.70	130	73.95	6448
51.10	49566	61.10	1630	68.30	523	74.20	564
52.25	1796	61.60	203	69.05	69681	75.10	9467
52.80	135	61.95	824	70.00	347	76.10	2930
53.20	64	62.20	190	70.20	152	77.10	57530
53.70	133	63.05	2069	70.90	239	78.00	117
54.40	345	64.10	644	71.10	160	78.25	5216
55.30	464	65.05	1368	71.25	57	79.05	6818
56.10	1648	65.90	362	71.90	244	80.05	3602
57.00	2914	67.00	80	72.30	512	81.05	6650
57.85	350	67.50	509	73.15	3313	82.10	2111

Average of 2.193 to 2.204 min.: Z110697.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
82.80	104	91.05	1069	98.70	259	107.05	22860
84.10	991	91.40	335	99.05	3878	108.15	3523
84.60	211	92.10	193	99.85	609	109.00	1671
85.10	824	93.05	8144	100.30	388	110.10	38935
86.10	2097	93.95	688	101.00	1958	111.00	5819
87.15	1834	94.85	170	101.20	255	111.95	405
87.90	41	96.00	366	102.60	573	112.30	564
88.40	221	96.60	137	103.20	581	113.05	376
88.90	81	97.00	783	103.40	662	113.90	391
89.10	95	97.70	289	104.00	1361	114.15	180
90.40	63	98.10	5281	105.15	2242	115.10	951

Average of 2.193 to 2.204 min.: Z110697.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
115.30	130	124.20	460	132.20	62	139.10	462
116.15	1387	124.90	107	132.80	65	140.00	763
117.00	16460	125.20	178	133.00	145	141.05	6439
118.05	1544	125.50	636	133.50	411	141.70	182
119.50	77	126.40	782	134.95	2204	142.20	350
120.05	579	127.10	72782	135.95	1330	142.60	228
121.40	236	128.10	2442	136.20	274	143.20	278
122.10	1307	129.00	26723	136.90	170	143.85	115
123.10	819	130.05	2559	137.20	514	145.35	525
123.40	665	130.60	446	138.00	257	146.40	851
124.00	696	131.70	53	138.70	483	146.80	557

Average of 2.193 to 2.204 min.: Z110697.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
147.15	2103	154.85	1187	163.00	310	169.00	1062
148.05	3054	155.20	429	163.30	130	169.95	195
148.95	1543	156.10	1807	163.80	328	170.50	121
149.90	207	156.30	1955	164.10	620	172.05	1364
150.80	268	157.05	1327	164.45	333	172.80	558
151.00	300	158.25	1267	165.10	2159	174.05	2610
151.30	177	159.15	166	166.05	1487	174.85	2070
151.75	399	159.80	516	166.95	6725	175.30	423
152.90	284	160.20	812	167.15	1291	176.10	1160
153.10	579	161.05	2072	167.70	387	176.80	1543
154.05	1077	162.00	400	168.05	2818	177.00	201

Average of 2.193 to 2.204 min.: Z110697.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
177.20	268	184.10	705	189.90	562	198.00	143978
177.90	321	184.40	546	190.90	156	198.85	9128
178.10	545	184.90	587	191.30	740	199.20	176
179.05	3176	185.15	2237	192.20	1812	200.10	600

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180.05	4680	185.90	2644	193.00	1787	201.05	218
181.00	631	186.15	17828	193.60	144	201.70	668
181.30	729	186.90	274	194.00	161	202.60	370
182.15	420	187.15	5039	194.30	227	204.10	6516
182.40	152	188.15	1167	194.70	213	205.00	4085
183.20	192	188.60	869	196.00	6599	205.20	4190
183.85	217	189.25	1116	196.30	1248	206.10	39485

Average of 2.193 to 2.204 min.: Z110697.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
207.15	4530	214.75	469	222.90	345	231.15	872
208.05	805	215.00	214	223.20	389	231.95	86
208.30	438	215.60	86	224.10	22285	232.60	199
208.80	506	216.10	700	225.15	4093	233.50	52
210.10	423	217.10	7702	226.15	893	234.00	272
210.50	621	218.00	1114	227.00	9379	234.80	366
210.90	767	218.40	104	228.00	1215	235.10	537
211.15	1423	219.10	81	229.00	2197	236.20	491
211.50	419	220.10	778	229.80	681	237.05	712
212.20	30	221.05	10666	230.00	173	238.80	120
213.40	138	222.10	510	230.30	33	239.30	188

Average of 2.193 to 2.204 min.: Z110697.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
239.80	414	247.10	618	255.95	12089	265.00	2147
241.30	909	248.10	247	257.10	1826	265.40	366
241.70	451	248.30	61	258.05	5821	265.65	591
241.90	445	249.15	860	258.70	826	266.30	259
242.15	1034	250.30	247	259.10	601	266.70	231
243.00	246	250.80	357	259.30	324	268.00	68
243.30	1481	251.25	474	259.90	23	268.40	62
244.05	15489	252.20	45	262.10	141	270.90	513
245.00	1909	253.20	234	263.30	245	271.80	563
246.00	988	253.50	560	263.60	98	272.90	1155
246.20	1763	255.10	87474	264.40	405	273.15	1786

Average of 2.193 to 2.204 min.: Z110697.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
274.15	6287	284.95	223	296.90	3013	304.20	57
275.10	37930	287.30	136	297.20	932	305.20	289
276.10	6591	289.10	371	297.90	221	306.00	211
277.05	2980	289.60	25	298.40	131	306.60	101
278.15	923	291.50	118	298.80	38	308.10	194
281.10	420	292.15	462	300.80	242	308.90	55
282.20	515	292.85	133	301.10	122	309.90	385
282.50	164	293.20	255	301.60	176	311.00	25
283.20	436	294.20	362	302.80	1350	312.30	92
284.05	31	294.70	340	303.00	315	313.80	173
284.40	68	296.15	9166	303.65	561	314.30	986

Average of 2.193 to 2.204 min.: Z110697.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
314.65	1075	322.00	351	332.70	739	344.50	20
315.00	396	323.05	3744	332.90	132	345.10	73
315.30	77	324.00	364	333.95	2637	345.70	449
315.60	584	324.60	94	334.90	747	346.20	866
316.00	253	325.20	340	335.30	435	347.00	736
316.20	460	327.00	523	336.20	264	347.30	164
316.70	61	327.90	70	337.40	78	348.50	145
317.30	19	328.30	135	338.20	25	350.60	237
318.20	176	328.90	22	339.95	580	351.20	190
320.30	84	331.00	148	340.85	493	351.50	152
320.80	183	332.20	261	341.25	458	351.90	1072

Average of 2.193 to 2.204 min.: Z110697.D\data.ms

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dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
352.30	540	363.05	384	373.15	309	385.00	111
353.15	454	363.60	80	373.40	43	388.70	21
353.95	763	364.10	479	373.90	128	389.70	17
354.85	418	365.00	4831	374.50	163	391.30	391
355.20	193	366.20	680	377.90	94	392.10	135
356.30	222	366.90	165	381.70	28	392.30	18
358.70	265	369.30	170	382.80	65	394.70	170
360.00	159	369.90	476	383.10	720	397.00	97
360.60	142	371.00	53	383.80	147	398.65	267
361.00	26	371.50	205	384.40	170	400.70	161
362.00	179	372.15	2429	384.70	70	401.30	24

Average of 2.193 to 2.204 min.: Z110697.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
401.90	588	413.10	28	423.10	6566	435.20	189
402.20	75	415.10	115	423.80	1003	436.50	753
402.60	66	416.20	105	424.15	1018	437.05	422
403.00	764	418.90	23	426.50	316	437.95	703
403.30	540	419.40	132	427.60	198	438.40	409
404.00	709	420.10	121	429.00	21	438.90	1648
405.10	40	420.90	319	430.70	234	439.30	877
407.60	36	421.15	811	432.60	226	440.00	525
408.30	42	421.40	676	433.10	344	441.15	19240
409.00	170	421.80	333	433.30	202	442.10	132352
412.90	29	422.00	494	434.40	302	443.05	25170

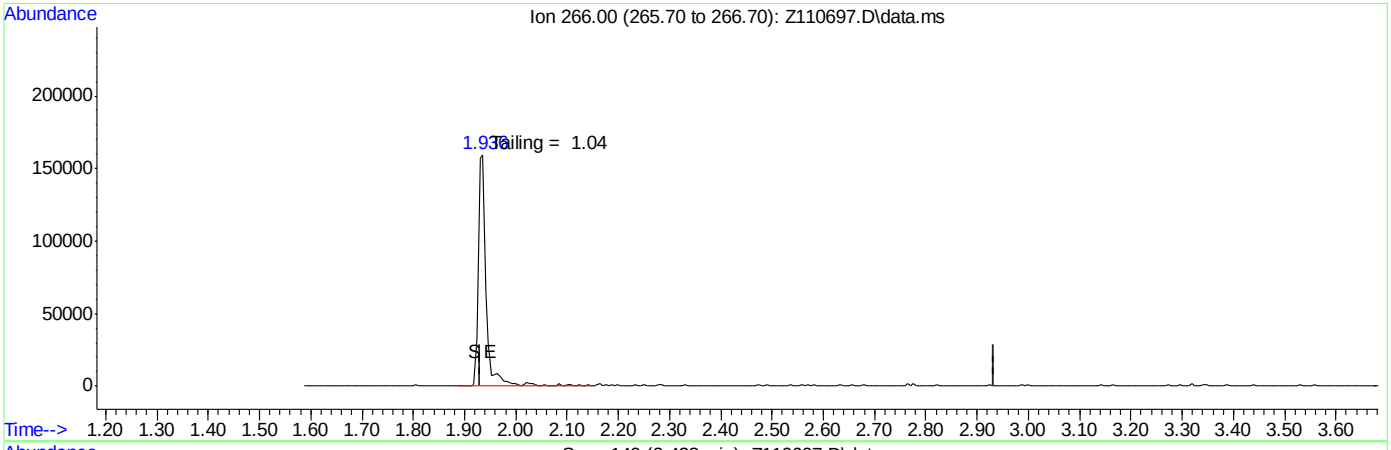
Average of 2.193 to 2.204 min.: Z110697.D\data.ms
dftpp
Modified:subtracted

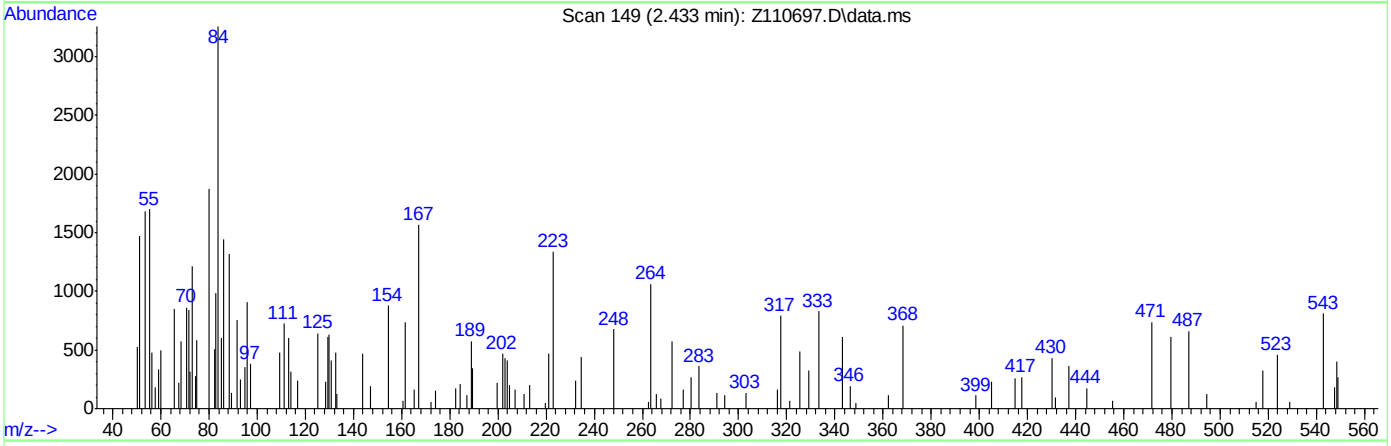
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
443.80	430	467.90	146	505.15	74	537.30	151
444.05	2163	471.40	392	505.70	71	539.60	170
444.40	702	479.30	224	509.70	34	546.20	145
444.90	91	480.90	152	510.90	17	548.50	182
448.30	88	487.40	102	517.70	108	549.20	34
449.80	42	489.00	78	519.80	28		
451.50	44	492.80	101	523.00	39		
452.70	156	496.10	46	526.10	229		
460.00	55	500.60	37	528.50	233		
460.90	49	501.60	48	533.20	75		
461.80	67	504.20	98	533.70	44		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110697.D
Acq On : 16 May 2016 10:58 am
Operator : ariellec
Sample : dftpp
Misc : op93793,ez5530
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 16 11:04:05 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: Z110697.D\data.ms

(1) Pentachlorophenol

2.433min (-2.433) 0.00

response 0

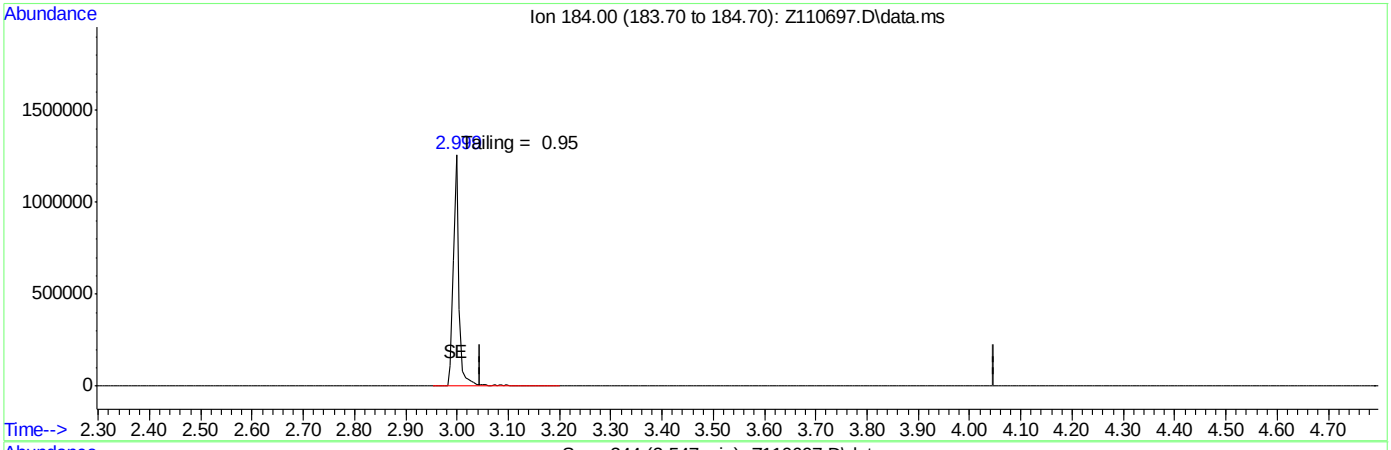
Ion	Exp%	Act%
266.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

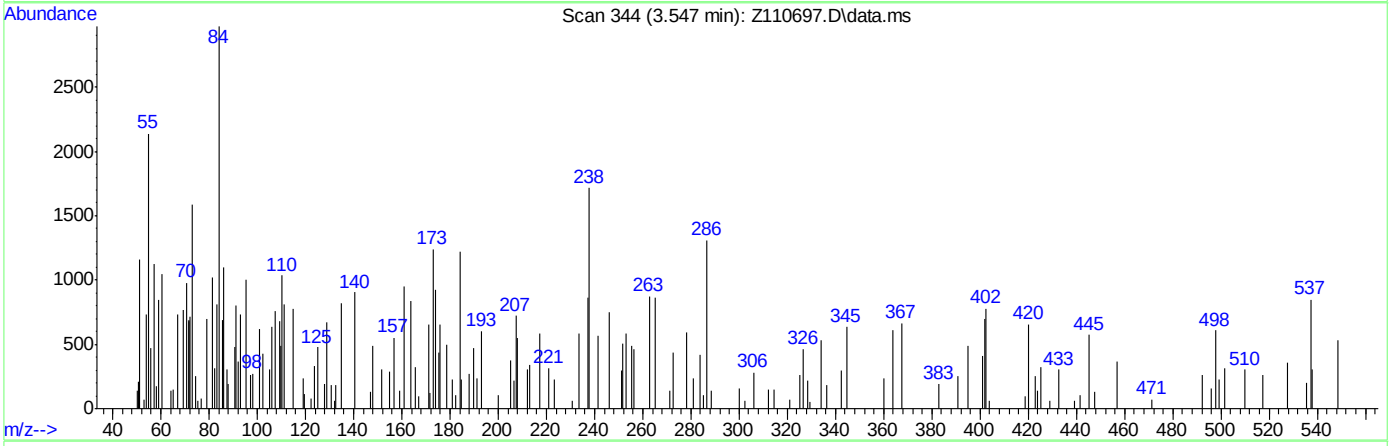
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110697.D
Acq On : 16 May 2016 10:58 am
Operator : ariellec
Sample : dftpp
Misc : op93793,ez5530
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 16 11:04:05 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: Z110697.D\data.ms

(2) Benzidine

3.547min (-3.547) 0.00

response 0

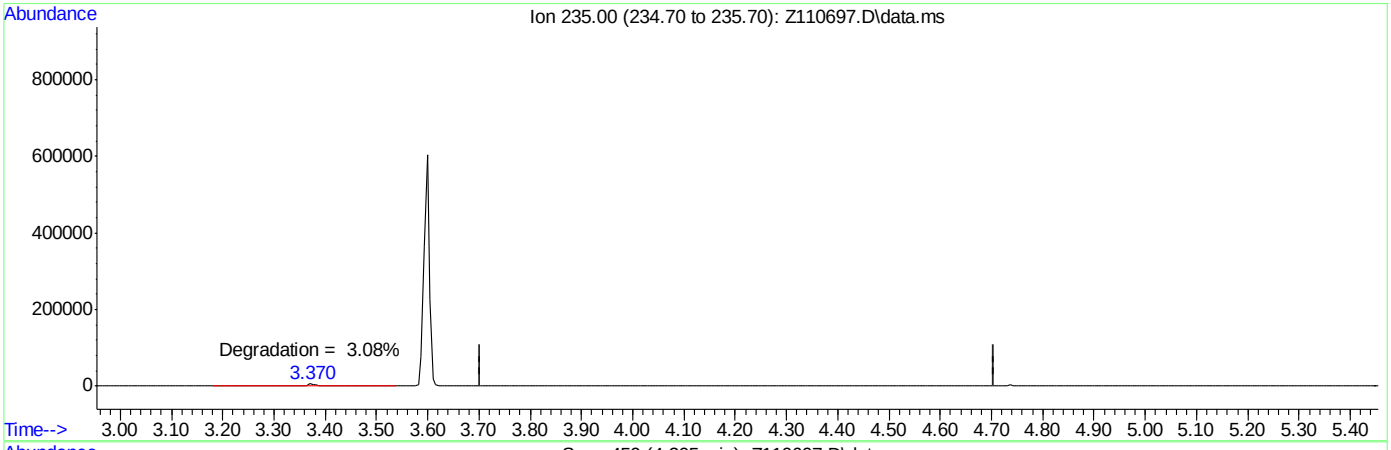
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

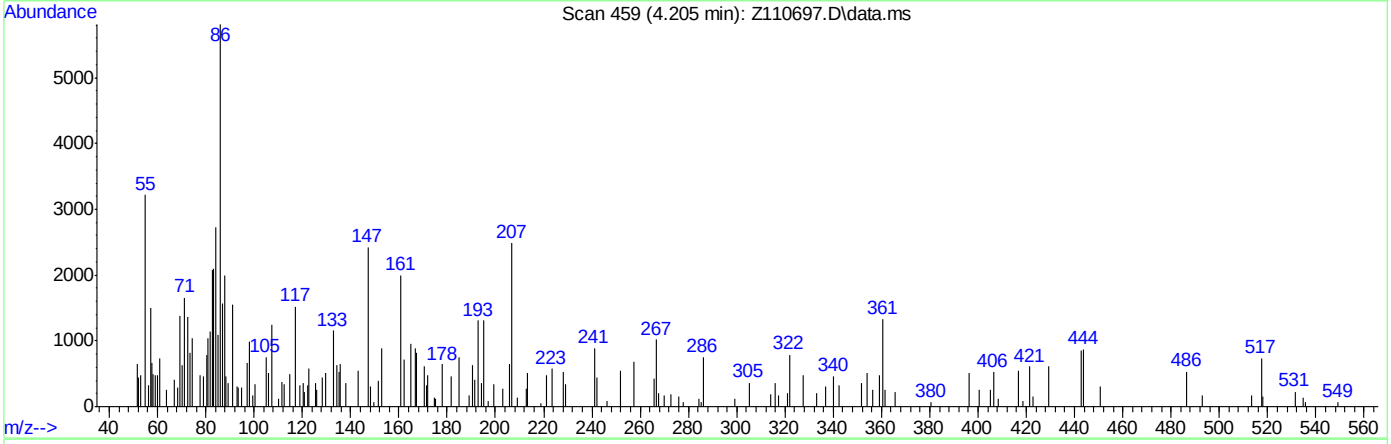
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110697.D
Acq On : 16 May 2016 10:58 am
Operator : ariellec
Sample : dftpp
Misc : op93793,ez5530
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 16 11:04:05 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





(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

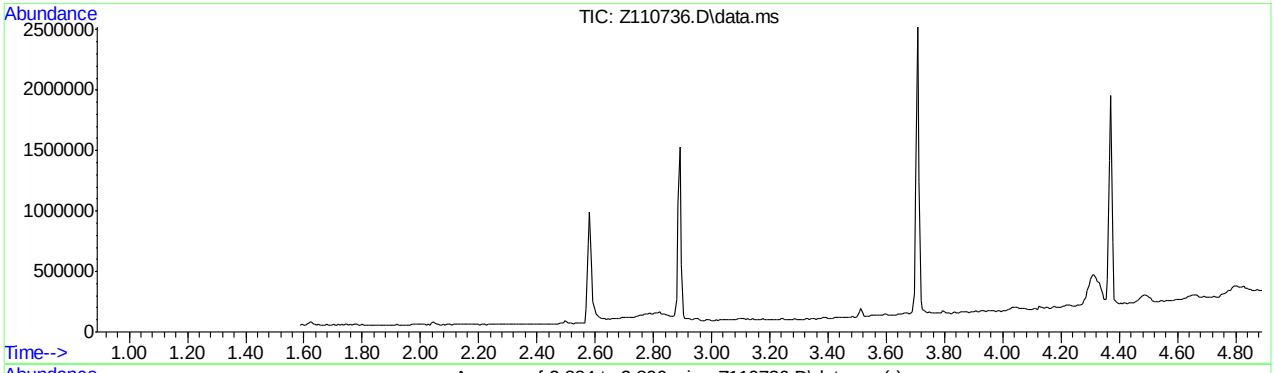
SGS ACCUTEST JC20314

DFTPP

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110736.D
Acq On : 17 May 2016 4:44 pm
Operator : ariellec
Sample : dftpp
Misc : op93924,ez5533,1000
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 228, 229, 230; Background Corrected with Scan 224

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.1	37322	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.5	51066	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	53.2	54952	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	103253	PASS
199	198	5	9	6.9	7138	PASS
275	198	10	30	26.7	27598	PASS
365	198	1	100	3.2	3275	PASS
441	443	0.01	100	86.0	11504	PASS
442	198	40	100	67.8	69957	PASS
443	442	17	23	19.1	13382	PASS

DFTPPZ.M Wed May 18 16:49:15 2016 RTE

Page: 1

Average of 2.884 to 2.896 min.: Z110736.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	11253	66.25	271	81.10	4046	93.10	6458
51.10	37322	69.10	51066	82.10	748	94.05	253
52.05	1926	72.10	13	83.15	155	95.15	163
56.10	797	73.10	288	86.00	850	96.10	229
58.15	164	74.10	5079	87.10	476	98.10	4676
59.00	143	75.10	7722	88.00	198	99.10	2498
61.10	451	76.10	219	89.10	95	100.05	537
62.05	730	77.10	47933	89.50	19	101.10	2197
63.10	1766	78.15	3567	89.95	93	102.05	225
64.10	346	79.10	4294	91.10	985	103.10	1031
65.05	710	80.05	2844	92.10	1202	104.05	1629

Average of 2.884 to 2.896 min.: Z110736.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
105.05	1255	117.10	12842	127.10	54952	137.95	216
106.00	93	117.80	99	128.05	4234	139.25	328
107.10	16087	118.05	607	129.05	22499	140.05	136
108.10	2451	119.00	268	130.05	1756	141.10	2786
110.10	29442	119.80	114	131.00	222	142.05	992
111.10	4253	120.05	104	132.15	328	143.00	554
112.10	532	121.10	179	133.05	22	143.95	240
113.15	43	122.10	1334	134.00	697	144.50	61
114.10	125	123.10	1760	135.05	1737	145.10	85
115.10	116	124.05	745	136.00	746	146.00	472
116.15	925	125.00	797	137.05	834	146.40	105

Average of 2.884 to 2.896 min.: Z110736.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
147.05	1422	156.10	2223	166.10	729	177.00	1026
148.05	2954	157.15	423	167.10	5168	178.15	349
149.10	575	158.00	627	168.00	2404	179.05	4190
149.90	79	159.00	174	169.10	389	180.05	2678
150.15	17	160.10	826	170.05	405	181.10	1243
151.05	434	161.05	1362	171.10	22	182.10	265
152.20	291	161.90	185	172.10	632	183.10	115
152.50	115	163.05	244	173.05	592	184.05	282
153.10	929	163.40	80	174.10	1126	185.05	2296
154.05	954	164.20	236	175.10	2261	186.10	14996
155.10	1349	165.00	938	176.05	759	187.00	3976

Average of 2.884 to 2.896 min.: Z110736.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
188.00	449	199.00	7138	208.05	864	216.05	668
189.00	980	200.00	527	209.05	209	217.00	6524
189.95	389	200.50	97	210.00	244	218.10	1011
191.10	658	201.20	107	210.30	273	219.00	30
192.10	1195	201.40	129	210.90	778	219.30	175
193.05	1449	201.70	506	211.15	611	220.00	52
194.10	363	203.10	767	211.70	57	221.10	5863
195.10	268	204.10	4312	213.05	189	221.90	96
195.30	84	205.10	6981	213.80	34	223.05	1920
196.10	3144	206.05	27902	214.25	125	224.10	15770
198.00	103253	207.10	4150	214.90	353	225.10	3743

Average of 2.884 to 2.896 min.: Z110736.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
227.10	6289	237.05	486	246.05	2558	257.10	593
228.05	920	237.80	68	247.00	531	258.00	3597
229.00	1251	238.15	82	248.00	111	259.05	517
230.10	156	239.10	250	249.00	526	260.10	137

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231.05	583	240.00	95	250.70	36	260.85	5
231.90	35	240.20	124	251.00	93	261.25	106
232.15	127	241.10	491	251.80	69	261.80	51
233.05	183	242.05	855	252.20	72	263.05	169
234.05	440	243.20	684	253.20	310	263.90	240
235.05	468	244.10	11365	255.10	61423	265.05	1617
236.00	396	245.10	1550	256.05	9057	266.00	155

Average of 2.884 to 2.896 min.: Z110736.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
267.10	134	274.10	5357	284.05	148	293.05	627
267.95	156	275.10	27598	285.10	377	293.95	144
268.30	65	276.05	3458	286.20	127	294.75	98
269.30	29	277.00	2465	287.40	54	296.05	7761
270.00	59	278.05	349	288.10	83	297.00	1004
270.30	34	279.00	62	288.60	46	298.05	45
270.90	52	279.15	146	289.15	157	299.05	74
271.20	304	280.10	63	290.00	126	300.30	83
271.90	124	281.00	113	290.20	11	301.10	187
272.20	198	281.85	70	291.50	23	302.10	310
273.05	2012	283.05	457	292.10	83	303.10	1267

Average of 2.884 to 2.896 min.: Z110736.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
304.05	340	311.20	53	321.20	116	332.10	182
304.80	75	312.50	52	321.90	102	333.00	409
305.20	93	314.05	503	322.05	178	334.05	1881
306.60	34	315.05	1042	323.05	2720	335.10	527
307.40	22	316.10	443	324.15	359	336.00	55
307.85	77	317.20	130	326.20	180	336.50	26
308.10	65	317.40	36	326.95	511	337.10	95
308.70	33	318.40	104	328.10	324	337.70	30
309.25	215	318.80	27	329.15	99	339.90	32
310.20	37	319.20	18	330.40	31	340.90	51
311.00	55	319.60	22	330.90	38	341.15	133

Average of 2.884 to 2.896 min.: Z110736.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
341.95	164	353.05	487	362.15	4	371.10	95
343.20	29	354.05	942	363.00	33	372.05	1456
343.70	27	354.70	71	365.00	3275	373.05	418
344.20	22	355.00	94	365.95	510	374.00	75
346.00	602	355.20	25	367.40	59	376.15	51
347.05	132	356.40	37	368.10	51	377.05	81
347.80	23	357.30	25	368.30	33	378.25	46
348.40	59	357.85	47	369.20	32	380.20	25
349.00	28	358.10	42	369.70	19	380.70	25
352.00	696	358.90	53	370.15	131	382.20	61
352.20	220	359.90	24	370.80	26	382.80	49

Average of 2.884 to 2.896 min.: Z110736.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
383.10	219	391.10	145	403.05	703	411.70	30
383.60	44	391.50	43	403.90	46	413.50	32
384.05	73	392.10	96	404.05	162	414.65	57
385.00	77	392.80	25	405.10	21	416.00	17
386.30	37	395.15	42	405.35	89	417.60	35
386.45	46	395.70	33	406.00	17	418.60	26
386.90	19	399.30	45	407.00	20	419.40	52
387.60	19	399.85	89	407.40	19	420.00	31
390.05	192	400.50	20	409.50	24	420.50	64
390.60	21	402.05	329	410.40	38	421.05	613
390.80	34	402.30	151	411.30	39	422.10	450

Average of 2.884 to 2.896 min.: Z110736.D\data.ms

DFTPPZ.M Wed May 18 16:49:15 2016 RTE Page: 3

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.10	4006	433.40	25	438.40	183	458.95	62
424.05	650	434.20	40	438.85	211	460.10	16
425.05	76	434.75	70	439.40	235	462.60	24
425.30	22	435.20	40	441.10	11504	464.60	20
426.30	30	435.40	22	442.10	69957	469.30	36
427.50	21	435.75	101	443.05	13382	472.00	21
428.60	34	436.10	45	443.95	1142	476.20	18
429.40	39	436.85	118	445.15	79	477.40	19
430.50	38	437.40	109	446.60	39	481.90	23
431.05	53	437.75	136	447.20	61	483.50	18
433.00	71	438.15	162	449.20	21	486.20	23

Average of 2.884 to 2.896 min.: Z110736.D\data.ms
dftpp
Modified:subtracted

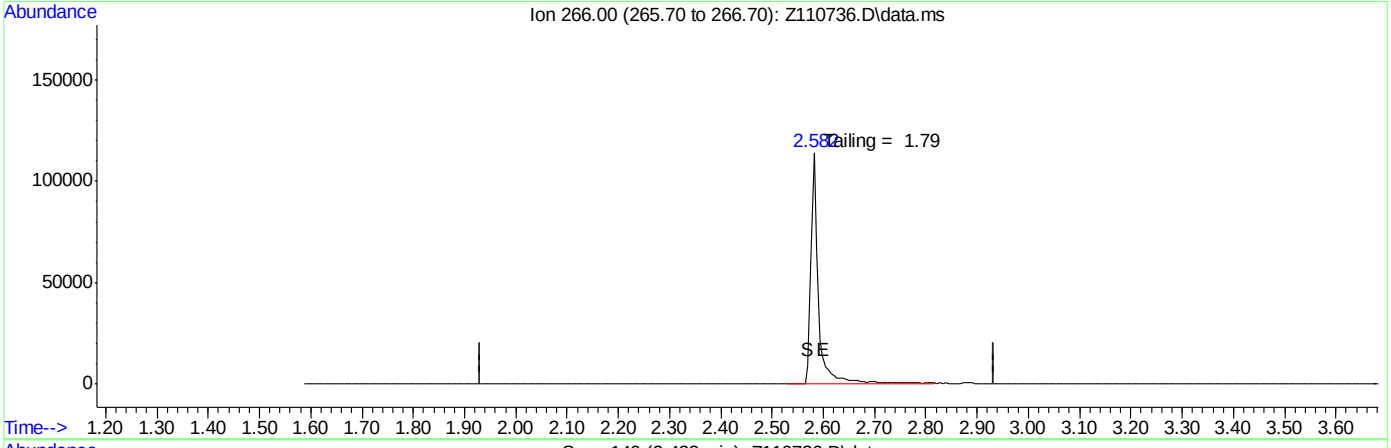
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
499.30	19						
512.00	20						
535.10	22						
540.70	21						
545.30	28						
549.50	20						

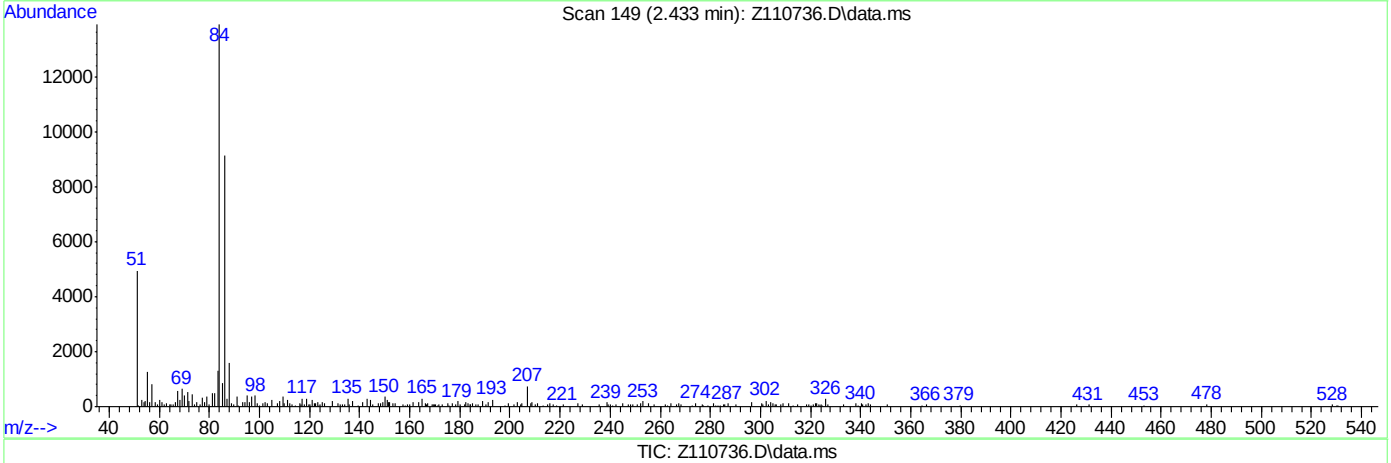
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110736.D
Acq On : 17 May 2016 4:44 pm
Operator : ariellec
Sample : dftpp
Misc : op93924,ez5533,1000
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 16:50:23 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: Z110736.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

7.5.9.1

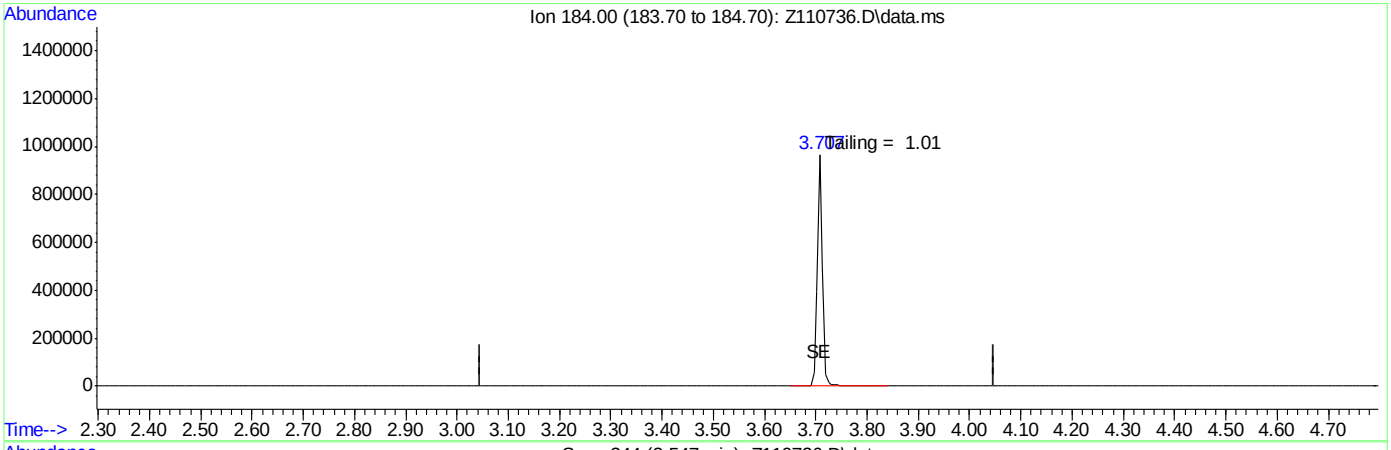
7

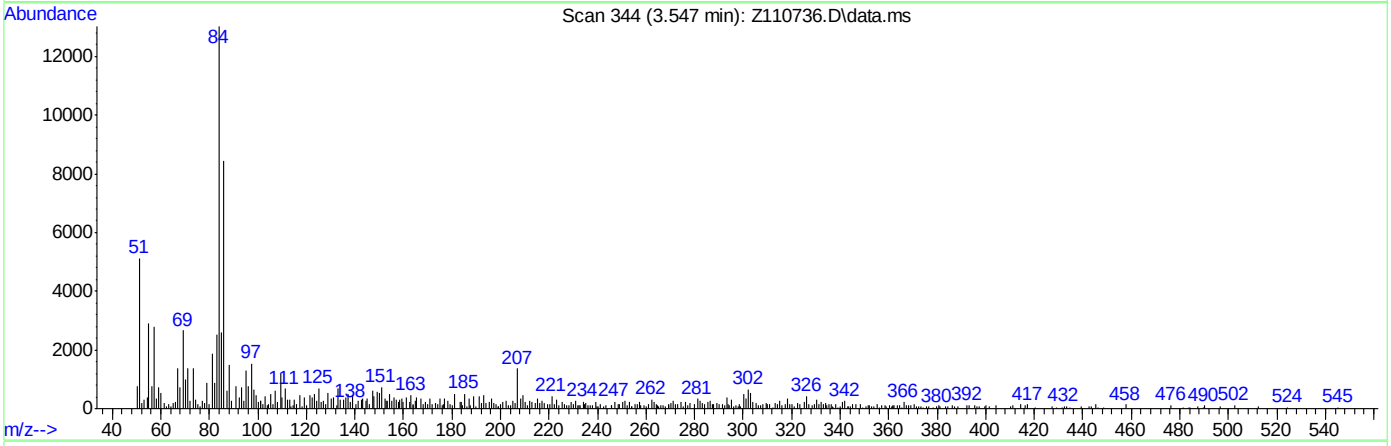
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110736.D
Acq On : 17 May 2016 4:44 pm
Operator : ariellec
Sample : dftpp
Misc : op93924,ez5533,1000
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 16:50:23 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: Z110736.D\data.ms

(2) Benzidine

3.547min (-3.547) 0.00

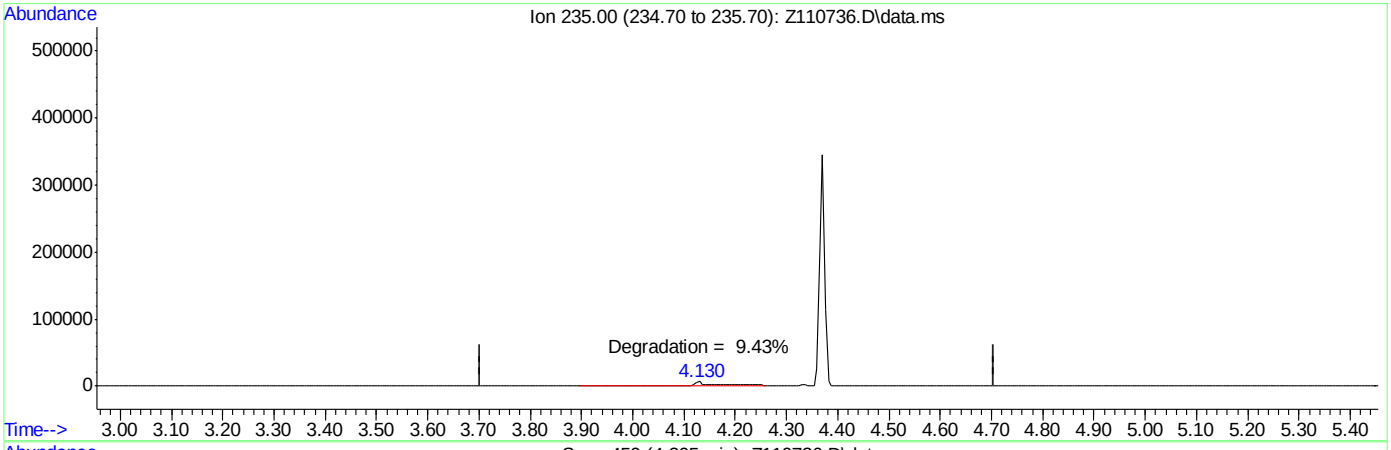
response 0

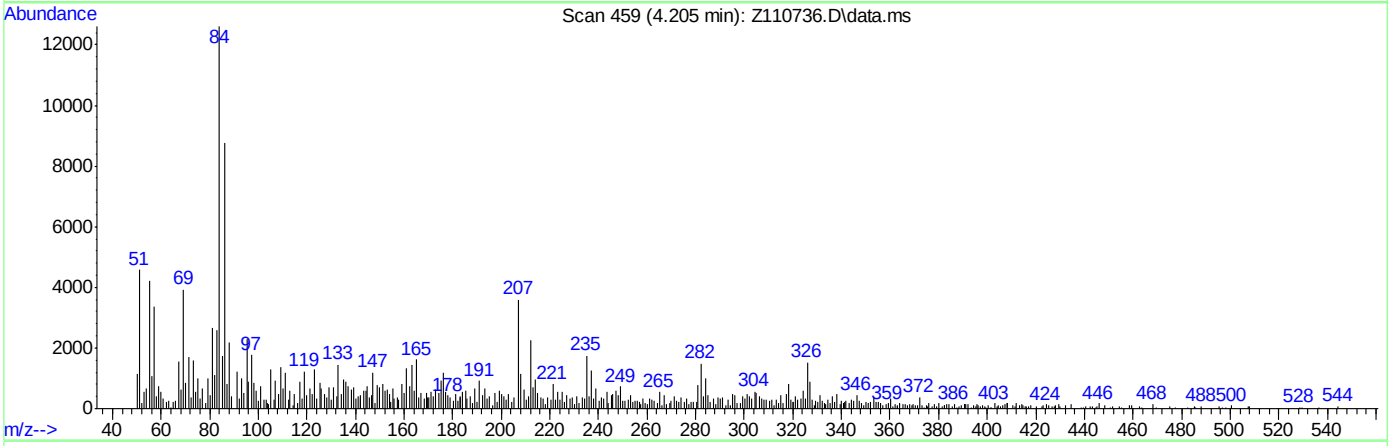
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110736.D
Acq On    : 17 May 2016   4:44 pm
Operator  : ariellec
Sample    : dftpp
Misc      : op93924,ez5533,1000
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: May 17 16:50:23 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: Z110736.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

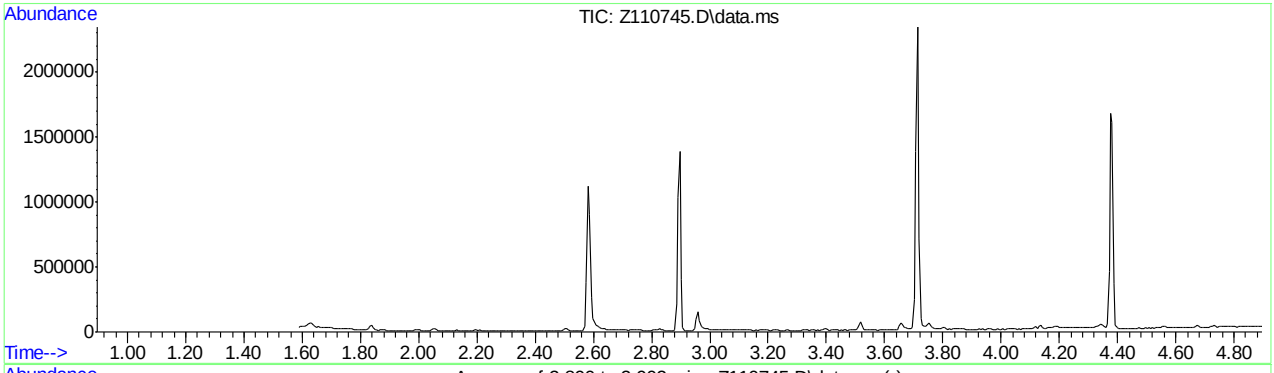
SGS ACCUTEST JC20314

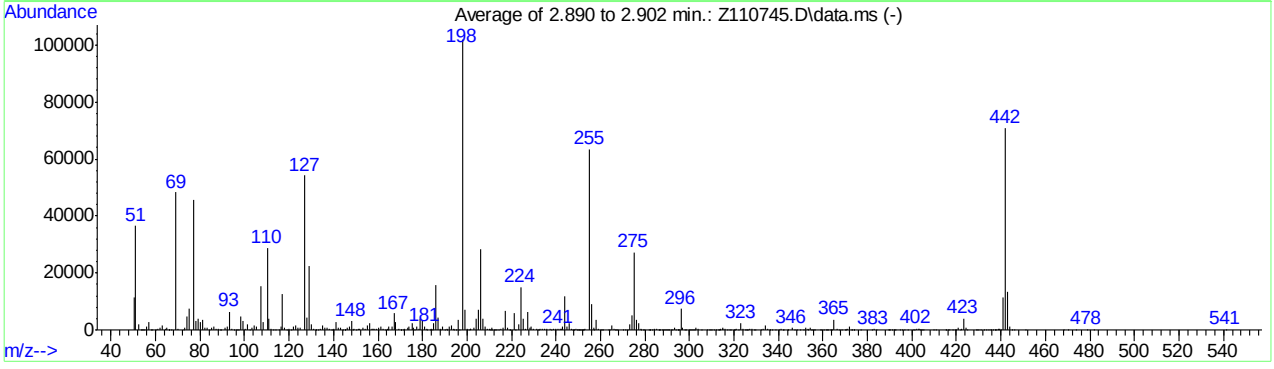
DFTPP

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110745.D
Acq On : 17 May 2016 10:38 pm
Operator : seanb1
Sample : dftpp
Misc : op93924,ez5534
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 229, 230, 231; Background Corrected with Scan 224

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.8	36533	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.4	48266	PASS
70	69	0.00	2	1.0	478	PASS
127	198	40	60	53.1	54108	PASS
197	198	0.00	1	0.2	156	PASS
198	198	100	100	100.0	101906	PASS
199	198	5	9	7.0	7122	PASS
275	198	10	30	26.7	27206	PASS
365	198	1	100	3.5	3615	PASS
441	443	0.01	100	84.5	11332	PASS
442	198	40	100	69.6	70888	PASS
443	442	17	23	18.9	13417	PASS

DFTPPZ.M Wed May 18 09:00:51 2016 RTE

Page: 1

Average of 2.890 to 2.902 min.: Z110745.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.15	11264	60.00	121	72.40	19	84.00	156
51.05	36533	61.10	594	73.15	716	85.05	835
52.15	2030	62.20	737	74.05	4833	86.05	1221
53.15	91	63.10	1733	75.10	7324	87.00	560
53.90	22	64.25	353	77.10	45794	88.05	261
54.15	64	65.10	885	78.10	3234	88.95	85
55.10	143	65.90	26	79.10	3944	89.40	21
56.05	1168	66.10	9	80.10	2685	91.10	843
57.10	2814	67.20	53	81.10	3743	92.10	1019
57.90	42	69.10	48266	82.10	806	93.05	6296
58.20	69	70.00	478	83.10	835	94.05	482

Average of 2.890 to 2.902 min.: Z110745.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	102	105.10	1185	118.05	978	130.10	1998
96.10	204	107.10	15191	119.10	74	131.00	299
96.50	57	108.10	2857	120.15	245	131.95	113
97.40	63	110.10	28790	121.10	157	132.20	135
98.10	4732	111.05	3934	122.10	1198	133.00	197
99.05	3224	112.05	379	123.10	1409	134.05	579
100.10	277	113.00	90	124.00	637	135.05	1726
101.10	1904	114.10	44	125.10	686	136.00	627
102.05	60	115.30	54	127.10	54108	137.05	964
103.10	923	116.15	1042	128.10	4312	138.15	299
104.05	1418	117.10	12466	129.05	22505	138.90	153

Average of 2.890 to 2.902 min.: Z110745.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
139.80	38	148.80	83	158.10	430	168.00	2811
140.20	368	149.10	583	159.10	322	169.10	474
141.10	2893	150.10	193	160.10	709	170.15	128
142.05	975	151.00	473	161.05	1169	170.50	136
143.10	624	151.90	319	162.00	433	171.15	151
144.15	123	153.05	877	163.15	184	172.05	546
144.90	50	154.05	532	164.10	249	173.10	731
145.15	163	155.10	1614	164.40	38	174.00	1090
146.05	627	156.10	2488	165.00	1039	175.10	2204
147.05	1347	157.20	421	166.10	1021	175.95	737
148.05	3055	157.80	270	167.10	5813	176.20	119

Average of 2.890 to 2.902 min.: Z110745.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
177.15	1116	186.05	15724	194.20	45	203.15	908
178.15	422	187.10	4431	195.10	198	204.10	4059
179.00	4021	187.90	153	196.10	3645	205.10	7121
180.10	3156	188.10	330	196.70	156	206.10	28214
181.10	1225	189.05	1011	197.95	101906	207.10	3796
181.90	40	189.90	177	199.00	7122	208.05	998
182.05	271	190.95	217	200.00	441	209.00	301
183.20	200	191.20	201	200.20	65	209.90	2
184.00	290	192.05	1032	200.90	63	210.15	421
184.20	48	193.10	1421	201.40	281	210.40	41
185.10	2190	193.90	228	201.70	439	211.00	937

Average of 2.890 to 2.902 min.: Z110745.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
211.20	203	221.10	5895	231.90	56	241.90	229
212.00	44	221.90	201	232.10	2	242.15	548
212.80	59	223.10	1844	232.95	236	243.10	1052
213.20	29	224.10	15099	234.05	443	244.10	11677

DFTPPZ.M Wed May 18 09:00:51 2016 RTE Page: 2

213.90	37	225.05	3985	235.05	472	245.10	1338
215.05	446	226.10	507	236.05	351	246.05	2387
216.05	773	227.10	6488	237.10	543	247.10	509
217.00	6614	228.05	989	238.05	72	247.60	28
218.05	980	229.00	1128	238.95	333	247.90	41
219.00	67	229.95	282	240.00	287	248.10	55
219.40	44	231.05	553	241.00	473	249.00	297

Average of 2.890 to 2.902 min.: Z110745.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
249.60	32	256.10	9023	265.90	267	277.00	2454
250.15	74	256.95	797	266.40	44	277.95	401
250.30	20	257.20	122	267.05	84	278.20	104
250.50	43	258.10	3405	267.60	42	278.95	78
250.85	98	259.00	438	269.90	183	279.90	20
251.20	96	259.90	82	271.15	170	281.80	52
251.70	56	260.70	54	272.05	105	282.10	26
252.15	168	261.15	90	273.05	1869	282.35	81
252.60	64	263.30	36	274.10	5194	283.00	172
253.10	317	263.95	161	275.10	27206	284.05	238
255.10	63394	265.10	1574	276.10	3632	285.15	437

Average of 2.890 to 2.902 min.: Z110745.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
286.10	122	292.10	57	300.30	28	310.10	59
286.30	23	293.10	620	300.90	97	310.80	21
286.90	18	293.95	145	301.40	28	312.00	39
287.95	33	294.55	77	301.95	102	313.00	55
288.40	19	294.90	138	302.20	59	313.20	40
288.60	19	295.10	97	303.05	816	313.50	44
289.15	125	296.10	7346	304.10	319	314.10	513
289.60	22	297.00	977	305.50	27	314.90	268
290.15	101	298.00	30	308.05	79	315.10	642
290.90	23	298.30	60	308.90	50	316.10	541
291.80	57	299.90	31	309.15	82	317.20	103

Average of 2.890 to 2.902 min.: Z110745.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
318.10	17	326.20	17	337.10	24	349.80	20
318.70	28	327.00	421	338.70	26	351.25	49
319.90	18	328.05	249	340.10	32	352.00	710
320.30	17	329.10	49	341.10	259	353.00	192
321.05	216	329.30	23	341.90	19	353.20	382
322.05	116	332.20	182	342.15	84	354.05	803
323.10	2518	333.10	216	343.95	9	354.80	55
324.15	452	334.10	1612	344.40	16	355.10	198
325.20	52	335.10	463	346.00	680	356.00	22
325.70	17	335.90	33	347.20	128	356.20	21
325.90	55	336.10	64	348.10	20	358.65	51

Average of 2.890 to 2.902 min.: Z110745.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
359.05	66	368.40	35	382.95	313	396.60	27
360.30	34	370.00	45	384.10	97	397.90	31
361.40	24	370.20	110	389.30	22	400.60	17
362.00	25	371.10	238	389.70	28	401.10	69
362.30	34	372.05	1268	390.10	131	402.00	447
363.20	27	372.80	49	391.10	125	402.95	317
363.60	21	373.00	209	391.80	31	403.20	289
364.00	41	373.70	36	392.10	24	403.80	87
365.05	3615	374.10	18	392.30	39	404.10	203
366.10	469	376.80	43	394.70	21	404.70	18
367.10	38	381.90	33	395.50	17	405.20	24

Average of 2.890 to 2.902 min.: Z110745.D\data.ms

DFTPPZ.M Wed May 18 09:00:51 2016 RTE Page: 3

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
409.50	17	422.20	262	435.25	51	442.10	70888
410.70	22	423.10	4140	435.60	38	443.10	13417
415.00	24	424.15	962	436.20	108	444.10	1372
415.15	55	424.95	116	437.20	103	445.05	92
416.00	24	428.65	35	437.40	62	446.15	38
416.70	22	429.40	28	437.70	64	450.80	18
418.40	26	429.90	21	438.70	433	468.30	18
419.30	17	430.60	20	439.10	139	470.10	17
419.80	58	432.50	18	439.50	289	473.70	18
420.95	643	433.20	64	439.70	159	478.50	26
421.90	131	434.50	21	441.10	11332	481.60	18

Average of 2.890 to 2.902 min.: Z110745.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
541.00	48						

7.5.10

7

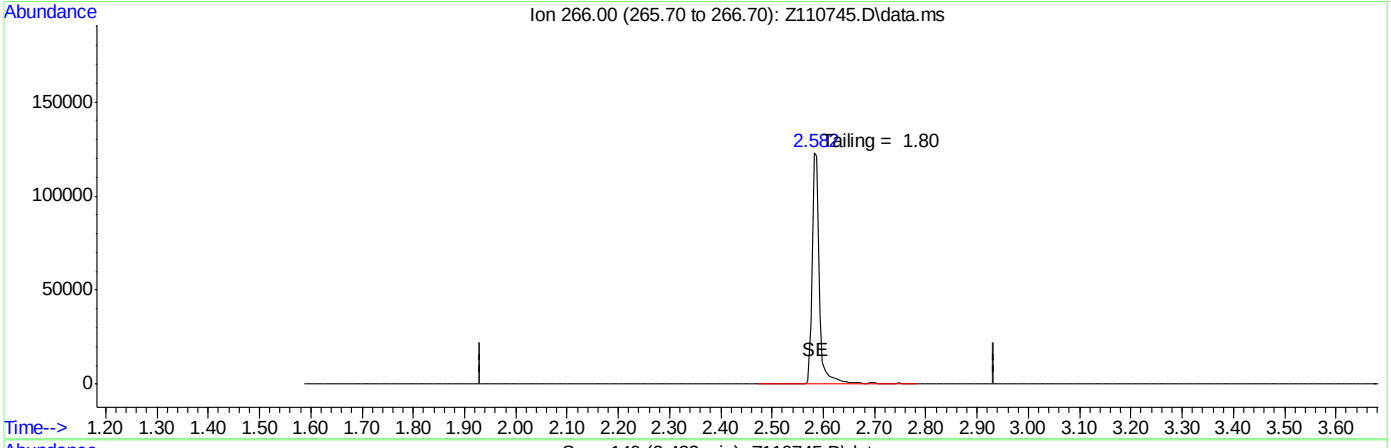
DFTPPZ.M Wed May 18 09:00:51 2016 RTE

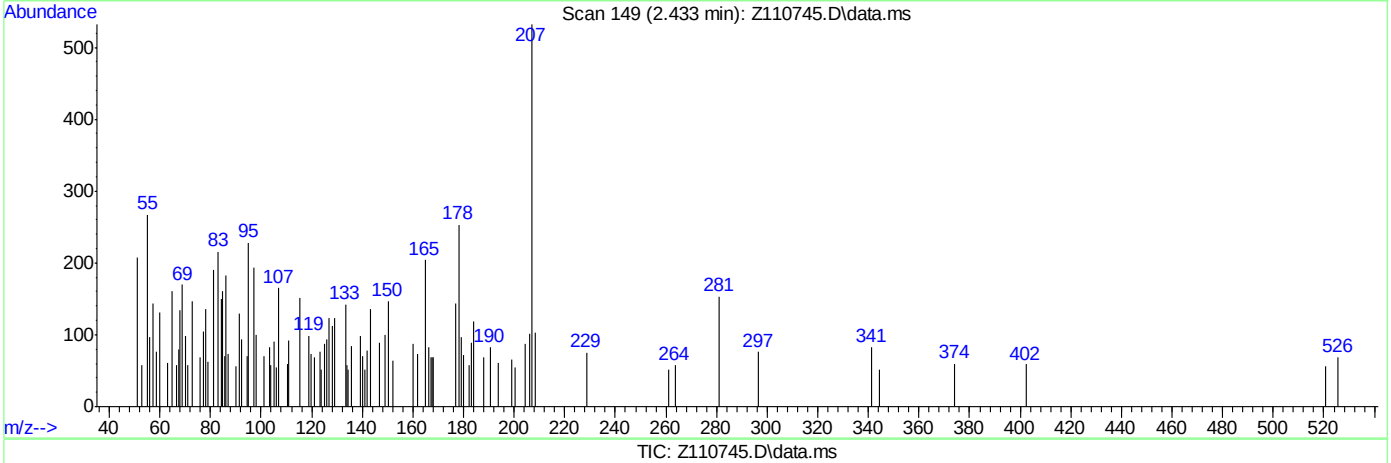
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110745.D
Acq On : 17 May 2016 10:38 pm
Operator : seanb1
Sample : dftpp
Misc : op93924,ez5534
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 22:44:26 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





(1) Pentachlorophenol

2.433min (-2.433) 0.00

response 0

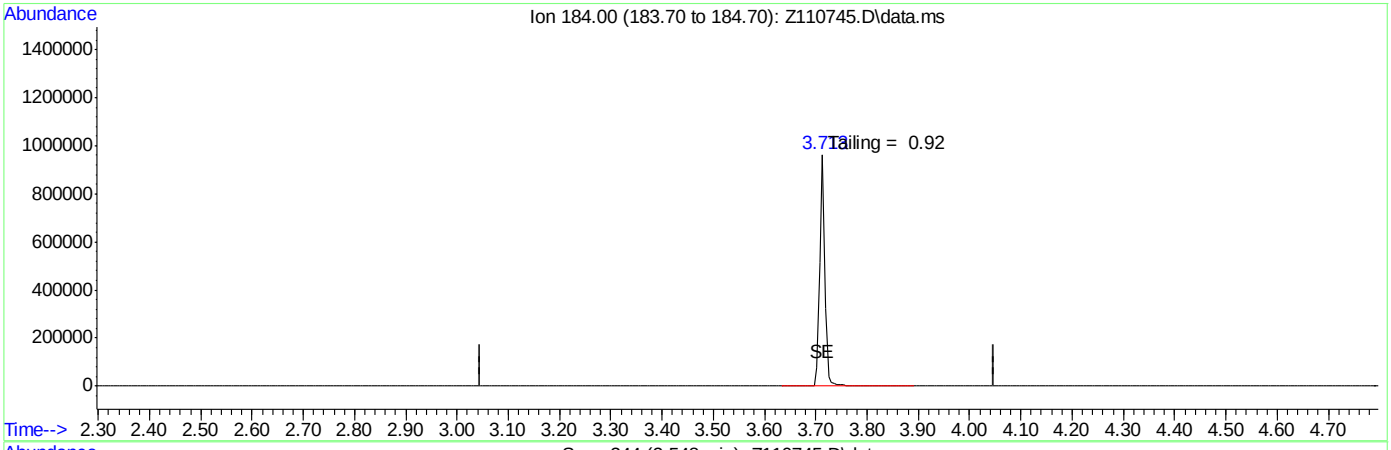
Ion	Exp%	Act%
266.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

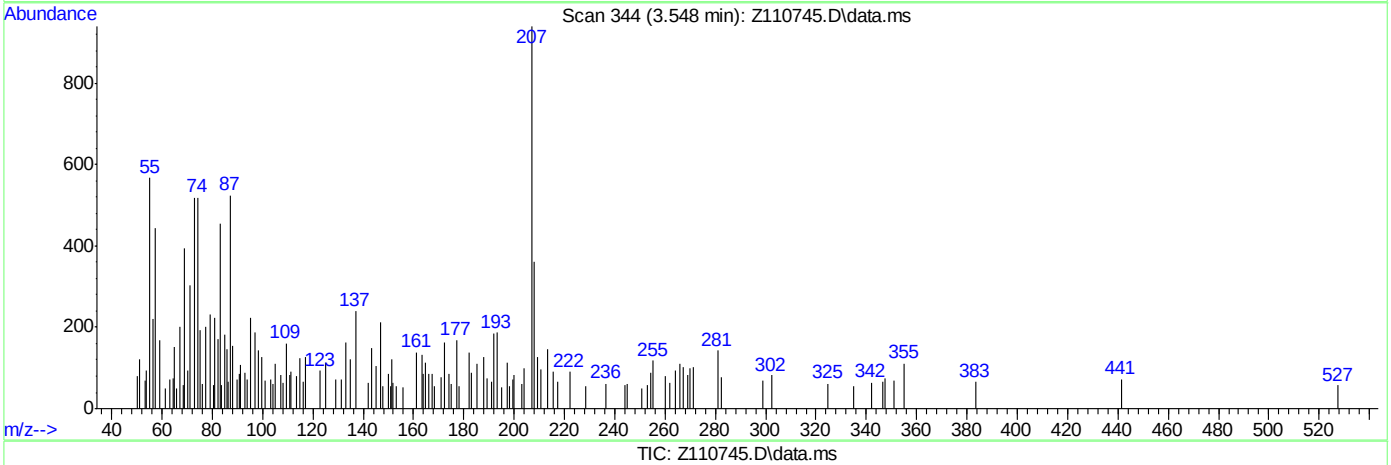
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110745.D
Acq On : 17 May 2016 10:38 pm
Operator : seanb1
Sample : dftpp
Misc : op93924,ez5534
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 22:44:26 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: Z110745.D\data.ms

(2) Benzidine

3.547min (-3.547) 0.00

response 0

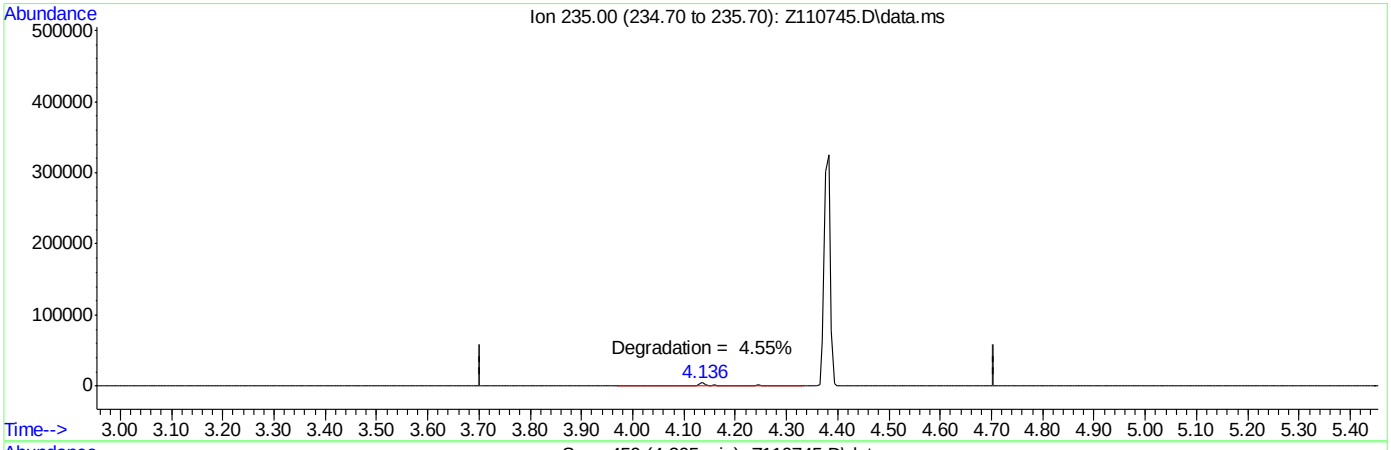
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

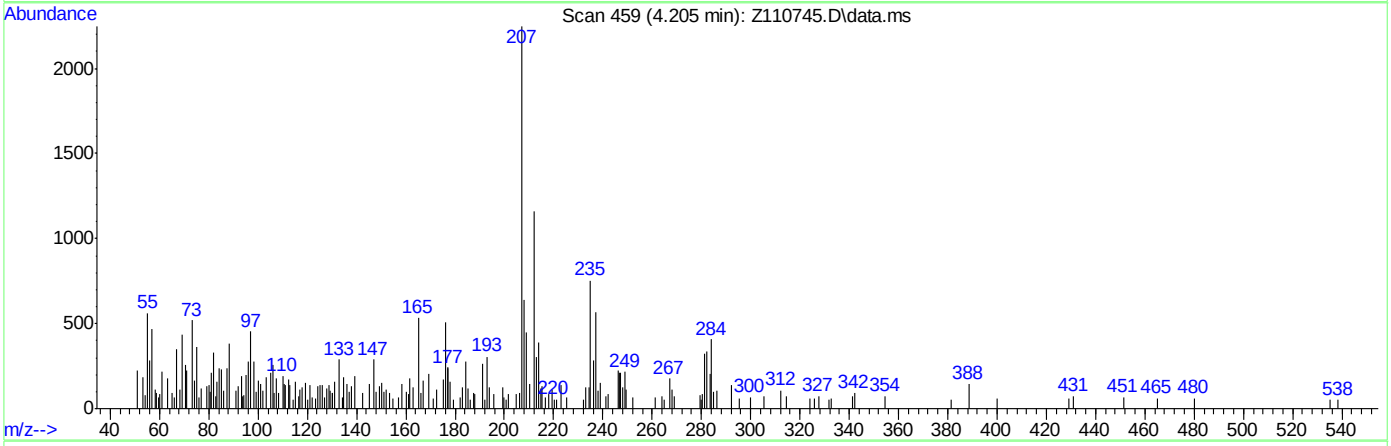
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110745.D
Acq On : 17 May 2016 10:38 pm
Operator : seanb1
Sample : dftpp
Misc : op93924,ez5534
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 22:44:26 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: Z110745.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

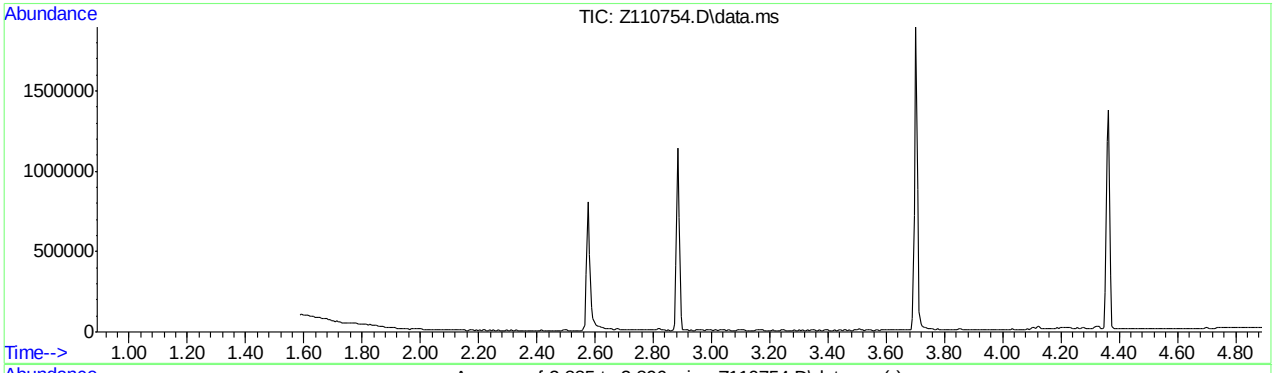
SGS ACCUTEST JC20314

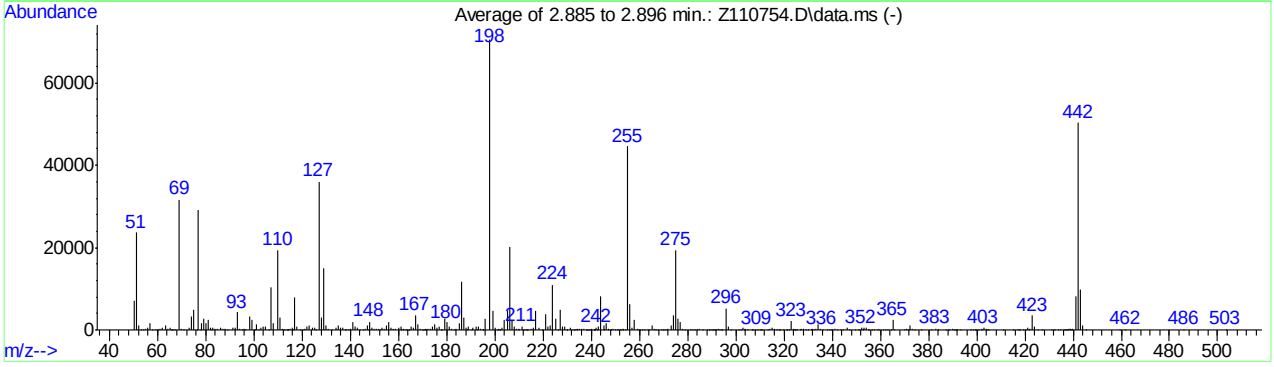
DFTPP

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110754.D
Acq On : 18 May 2016 8:38 am
Operator : ariellec
Sample : dftpp
Misc : op93924,ez5535
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 228, 229, 230; 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	33.6	23680	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.9	31692	PASS
70	69	0.00	2	1.2	384	PASS
127	198	40	60	51.1	36039	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	70562	PASS
199	198	5	9	6.5	4556	PASS
275	198	10	30	27.6	19456	PASS
365	198	1	100	3.3	2354	PASS
441	443	0.01	100	83.3	8279	PASS
442	198	40	100	71.4	50381	PASS
443	442	17	23	19.7	9940	PASS

DFTPPZ.M Wed May 18 08:51:54 2016 RTE

Page: 1

Average of 2.885 to 2.896 min.: Z110754.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.15	7005	61.05	249	71.00	4	82.00	591
51.10	23680	62.10	487	73.15	513	82.60	27
52.10	1230	63.20	1014	74.10	3394	83.10	428
53.20	70	64.10	172	75.10	4836	84.05	212
54.10	78	65.05	603	76.30	63	85.00	336
55.10	206	65.70	32	77.05	29066	86.05	680
56.05	594	66.10	70	77.90	50	87.05	343
57.05	1691	66.35	72	78.10	1777	88.00	156
58.00	24	66.90	83	79.10	2645	89.00	131
58.95	55	69.05	31692	80.05	1666	91.10	598
60.05	106	70.05	384	81.05	2431	92.05	641

Average of 2.885 to 2.896 min.: Z110754.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.10	4270	103.05	472	113.40	51	122.10	819
94.10	272	104.05	804	114.10	23	122.95	1167
95.15	125	105.00	912	114.30	16	124.10	591
96.00	236	106.00	26	115.00	161	125.05	503
96.20	22	107.05	10253	116.10	686	125.80	25
98.05	3182	108.10	1644	116.50	97	127.10	36039
99.10	2344	110.10	19477	117.10	7823	128.10	2873
99.95	103	111.05	2916	118.00	693	129.10	15093
100.70	18	111.90	359	119.05	7	130.05	1017
101.05	1383	112.30	33	119.95	140	131.00	196
102.10	44	112.60	37	121.15	164	132.20	124

Average of 2.885 to 2.896 min.: Z110754.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
134.05	493	144.05	79	153.10	541	162.20	201
135.10	1101	145.15	146	154.05	292	163.00	134
136.10	426	146.05	344	155.10	1166	163.30	57
137.10	603	147.05	967	156.10	1837	164.10	69
137.90	78	147.80	91	157.05	431	164.40	18
138.50	34	148.05	1933	157.95	414	165.10	875
139.10	126	149.10	515	158.90	250	166.10	552
140.00	213	150.05	151	160.05	568	167.05	3587
141.05	1841	151.00	215	161.05	945	168.00	1462
142.05	836	151.75	221	161.30	34	169.05	369
143.05	530	152.30	86	161.90	123	170.00	96

Average of 2.885 to 2.896 min.: Z110754.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
170.20	17	178.00	97	188.40	18	198.00	70562
170.70	72	179.10	2741	188.95	783	199.00	4556
171.10	172	180.10	1796	190.20	41	200.05	431
171.30	47	181.05	920	191.05	489	201.00	46
172.05	309	181.85	184	192.10	859	201.40	406
173.15	385	183.00	145	192.90	59	201.80	39
174.10	744	184.05	360	193.10	870	202.15	32
175.10	1465	185.10	1647	194.15	221	203.05	575
176.05	600	186.10	11709	194.90	39	204.10	2517
177.10	946	187.10	2983	195.10	19	205.05	4578
177.60	29	188.05	501	196.10	2870	206.10	20047

Average of 2.885 to 2.896 min.: Z110754.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
207.10	2483	214.90	206	227.05	4869	234.95	402
208.00	859	216.10	640	228.05	734	236.05	396
209.05	200	217.00	4512	229.00	768	237.10	347
209.80	26	218.10	597	229.90	136	237.90	54

DFTPPZ.M Wed May 18 08:51:54 2016 RTE Page: 2

210.05	308	219.90	43	230.10	59	238.30	36
211.10	889	221.10	3865	231.10	440	238.90	132
212.00	144	222.05	817	231.95	103	239.10	49
212.20	30	223.05	1178	232.80	26	239.50	37
213.00	34	224.10	11028	233.05	114	240.05	200
213.20	24	225.10	2735	233.95	301	240.90	112
213.80	17	226.10	31	234.30	16	241.10	81

Average of 2.885 to 2.896 min.: Z110754.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
241.70	20	248.30	41	256.00	6274	266.00	199
242.05	588	249.00	408	257.05	614	266.90	60
242.30	25	249.85	94	258.05	2477	267.80	42
243.05	736	250.80	31	259.10	415	268.95	68
244.10	8285	251.20	79	259.90	36	269.80	61
245.10	1122	251.90	35	260.10	61	270.10	71
245.30	24	252.20	87	261.05	98	271.05	125
246.05	1639	253.10	239	262.20	16	272.00	200
247.05	293	253.40	134	263.50	39	273.05	1204
247.30	21	253.90	22	263.90	96	274.05	3609
248.05	82	255.10	44554	265.10	1002	275.10	19456

Average of 2.885 to 2.896 min.: Z110754.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
276.10	2665	288.80	68	296.10	5274	308.05	57
277.10	1841	289.05	74	297.10	876	309.00	101
278.05	369	290.00	26	298.00	40	309.85	94
279.00	35	290.30	22	301.05	81	310.20	28
281.05	68	290.80	18	302.20	70	310.95	55
282.20	116	291.20	29	303.10	689	313.00	65
283.05	32	292.00	143	303.30	28	314.05	325
284.10	110	292.90	234	304.10	160	314.95	462
285.00	338	293.10	121	304.90	23	316.05	415
286.00	29	293.90	81	306.80	18	316.90	17
288.30	52	294.20	53	307.30	19	317.85	44

Average of 2.885 to 2.896 min.: Z110754.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
318.50	20	326.80	26	336.00	39	349.70	34
319.90	21	327.00	282	337.70	21	350.90	23
320.95	123	328.00	257	338.80	24	351.20	128
321.20	57	329.20	34	339.60	25	352.10	515
322.00	142	330.00	20	339.90	56	352.80	25
323.10	2090	331.20	28	341.10	192	353.10	441
324.00	178	331.85	158	341.90	74	354.10	678
324.20	35	332.20	51	343.40	17	354.95	5
324.40	17	333.05	195	344.20	51	355.20	21
324.90	28	334.10	1367	346.05	453	356.30	21
325.10	37	335.00	226	347.10	47	357.20	18

Average of 2.885 to 2.896 min.: Z110754.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
358.60	33	371.80	94	388.80	20	400.90	92
359.10	36	372.10	1042	390.05	155	401.95	313
361.00	52	373.10	257	390.30	17	402.20	107
362.20	26	374.20	16	390.90	32	402.95	446
363.10	39	377.05	86	391.20	44	404.00	171
364.30	78	381.30	27	392.00	81	404.20	36
365.10	2354	383.00	302	393.30	35	405.00	38
366.00	136	383.90	51	397.20	29	411.00	22
369.95	95	384.10	31	398.50	34	415.10	32
371.00	191	387.10	22	399.10	17	416.80	21
371.20	89	387.90	16	399.80	21	417.40	19

Average of 2.885 to 2.896 min.: Z110754.D\data.ms

DFTPPZ.M Wed May 18 08:51:54 2016 RTE Page: 3

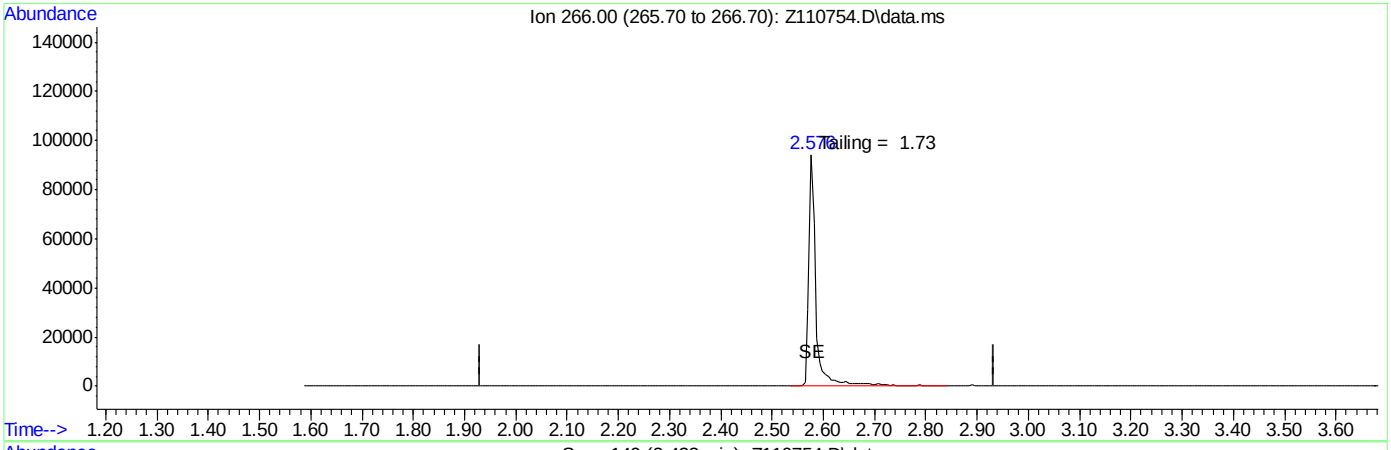
dftpp
Modified:subtracted

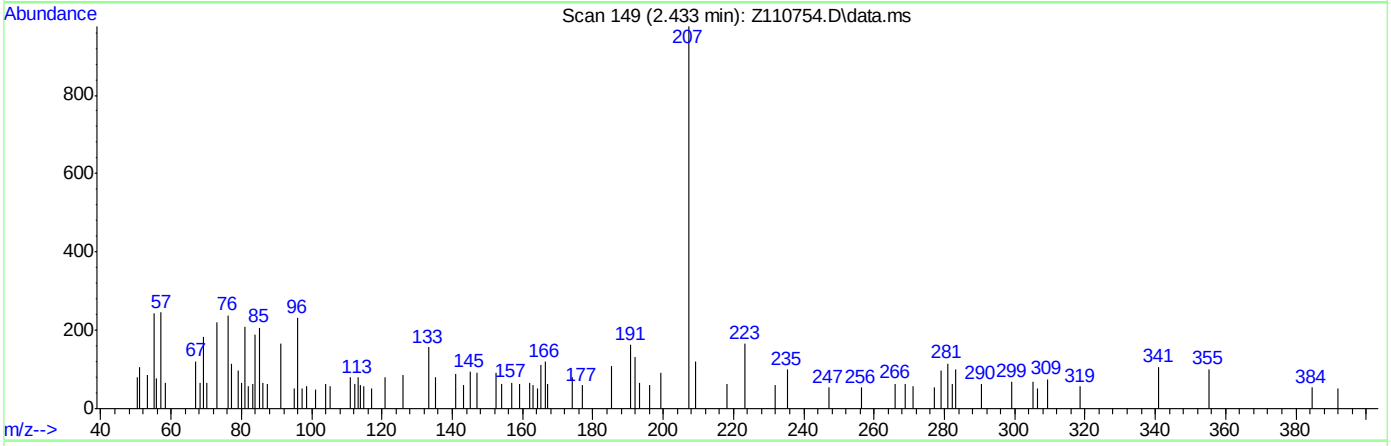
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
417.80	56	431.80	21	438.90	76	503.30	21
419.40	25	432.50	41	439.30	43		
420.00	24	433.80	54	439.90	267		
421.05	610	434.45	60	441.10	8279		
421.70	119	435.95	49	442.10	50381		
422.10	381	436.40	59	443.10	9940		
423.05	3520	436.80	44	444.10	1023		
424.10	773	437.20	82	445.20	39		
425.20	94	437.80	45	459.50	18		
427.40	18	438.15	179	461.70	25		
431.10	39	438.65	188	485.90	16		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110754.D
Acq On : 18 May 2016 8:38 am
Operator : ariellec
Sample : dftpp
Misc : op93924,ez5535
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 18 08:44:08 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: Z110754.D\data.ms

(1) Pentachlorophenol

2.433min (-2.433) 0.00

response 0

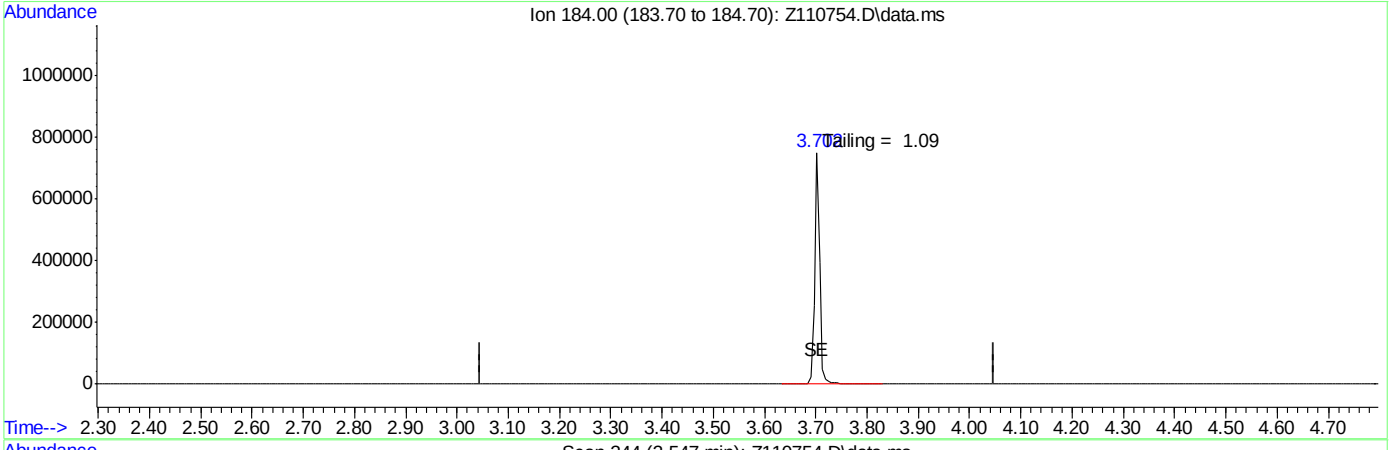
Ion	Exp%	Act%
266.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

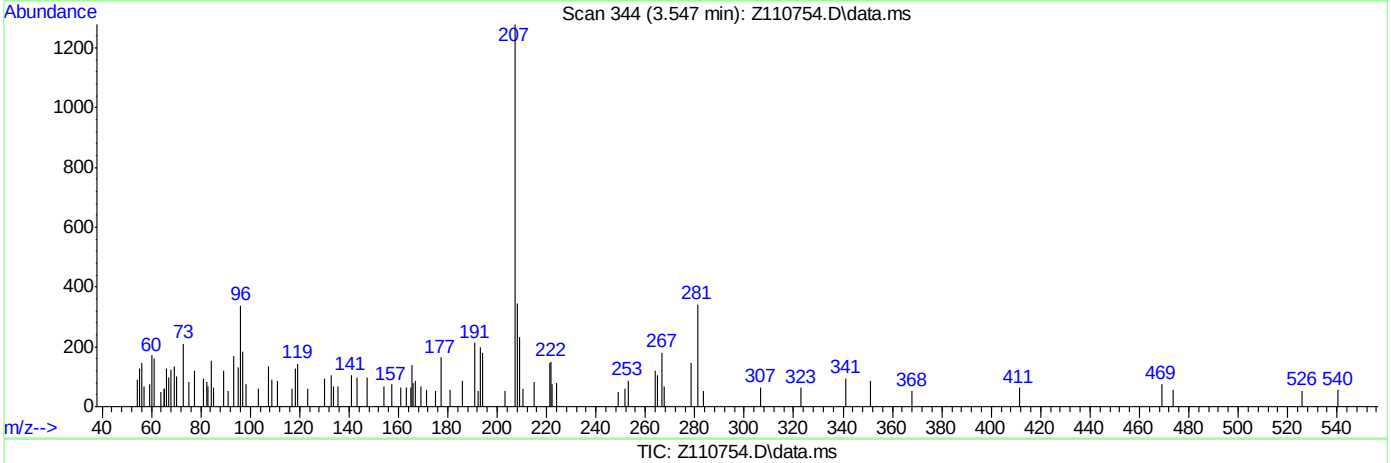
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110754.D
Acq On : 18 May 2016 8:38 am
Operator : ariellec
Sample : dftpp
Misc : op93924,ez5535
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 18 08:44:08 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: Z110754.D\data.ms

(2) Benzidine

3.547min (-3.547) 0.00

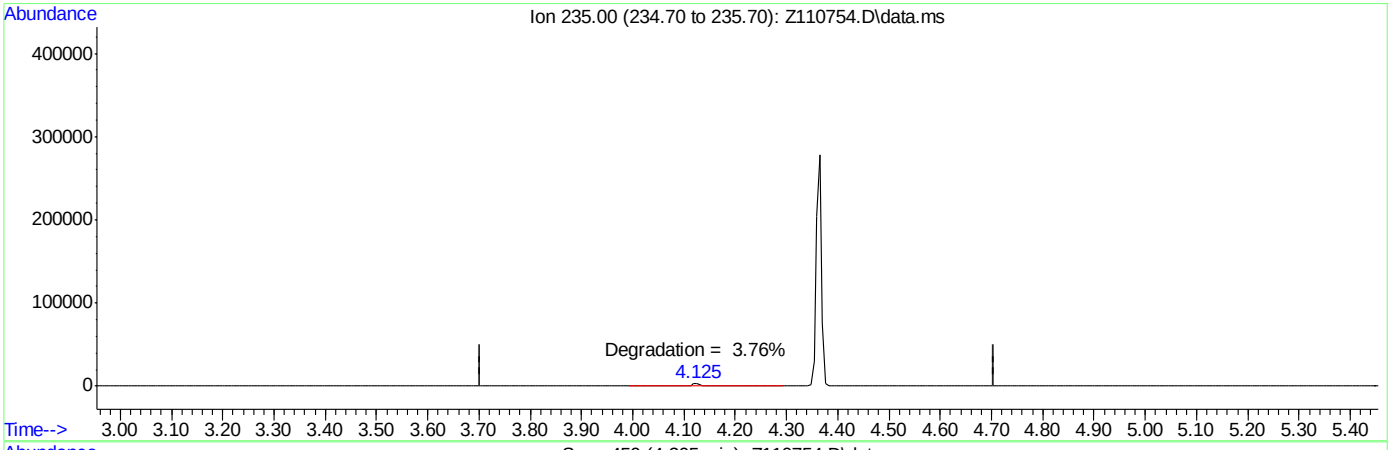
response 0

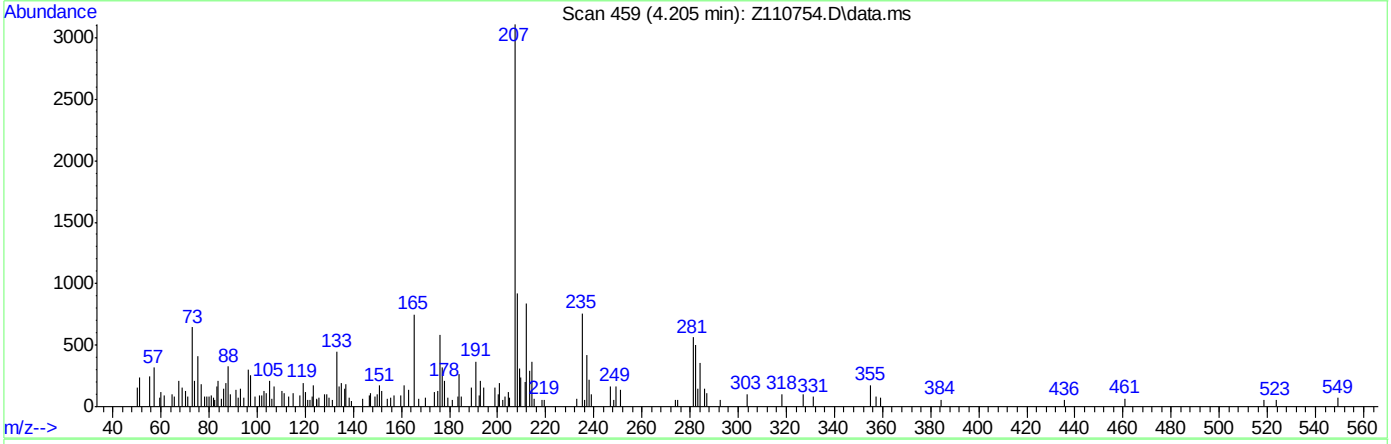
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110754.D
Acq On : 18 May 2016 8:38 am
Operator : ariellec
Sample : dftpp
Misc : op93924,ez5535
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 18 08:44:08 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





(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

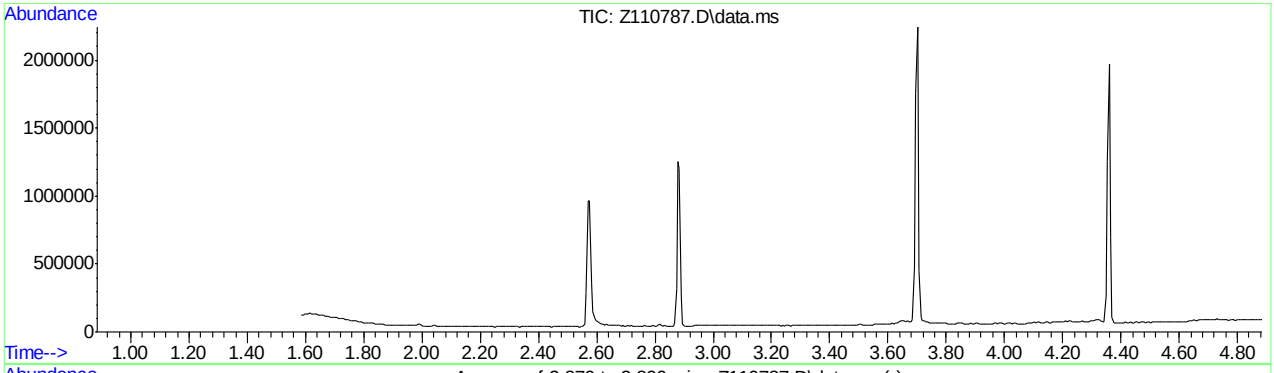
SGS ACCUTEST JC20314

DFTPP

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110787.D
Acq On : 19 May 2016 8:42 am
Operator : ariellec
Sample : dftpp
Misc : op93962,ez5537
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	36.2	34035	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	50.0	47077	PASS
70	69	0.00	2	0.5	216	PASS
127	198	40	60	53.2	50089	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	94122	PASS
199	198	5	9	7.2	6730	PASS
275	198	10	30	27.8	26121	PASS
365	198	1	100	3.4	3206	PASS
441	443	0.01	100	78.9	10619	PASS
442	198	40	100	71.1	66896	PASS
443	442	17	23	20.1	13453	PASS

Average of 2.879 to 2.890 min.: Z110787.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	9866	64.50	128	78.15	3002	89.85	81
51.10	34035	65.10	643	79.10	3548	91.10	920
52.10	1792	67.05	337	80.10	2462	92.15	1175
56.10	1334	69.10	47077	81.10	3190	93.10	5672
57.10	2313	70.10	216	82.05	848	94.10	514
58.05	122	71.95	132	83.15	403	94.50	49
59.15	73	72.20	99	85.10	547	95.15	220
61.00	420	73.10	347	86.00	450	96.15	326
62.10	584	74.05	4284	87.00	266	97.10	560
63.10	1557	75.10	6950	88.05	77	98.10	4212
64.05	188	77.05	42427	89.00	89	99.05	2738

Average of 2.879 to 2.890 min.: Z110787.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
100.10	319	112.05	362	120.95	82	131.30	23
101.05	1678	113.10	137	121.20	85	132.05	166
102.15	267	114.00	70	122.05	1057	134.00	475
103.00	652	115.00	71	123.05	1711	134.20	197
104.05	1401	115.30	105	124.05	658	135.10	1471
105.10	1222	115.90	279	125.10	653	136.00	201
107.10	14107	116.10	73	127.10	50089	136.20	381
108.10	2055	117.10	11545	128.05	4331	137.10	673
108.80	62	118.05	953	129.05	20492	137.80	128
110.10	26686	119.05	272	130.10	1911	138.30	95
111.05	3969	120.00	279	131.05	249	139.00	235

Average of 2.879 to 2.890 min.: Z110787.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
139.30	29	149.00	443	157.15	627	166.30	97
140.05	312	150.00	110	158.10	552	167.10	5432
141.10	2996	150.15	129	159.10	303	168.10	2416
142.10	907	151.10	366	160.05	760	169.05	469
143.00	484	151.40	151	161.10	1289	169.90	25
144.10	103	152.00	203	161.70	17	170.35	128
144.40	113	152.20	184	162.00	334	171.05	365
145.05	205	153.05	900	162.95	109	172.05	461
146.05	566	154.05	771	164.00	61	173.10	758
147.10	1280	155.00	1425	165.05	1102	174.05	883
148.05	3026	156.10	2061	166.10	854	175.10	1978

Average of 2.879 to 2.890 min.: Z110787.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.05	600	186.10	14559	196.10	3613	207.10	2848
177.05	1195	187.10	4395	198.00	94122	208.05	950
178.15	232	188.10	255	199.05	6730	209.20	290
179.00	3795	189.00	1083	200.05	557	210.00	544
180.10	2521	190.10	215	201.40	360	211.05	1259
181.10	1212	191.00	286	201.60	383	212.05	219
182.00	184	191.20	90	202.20	29	213.10	73
182.30	35	192.05	1170	203.10	702	213.40	17
183.05	191	193.05	1560	204.10	3747	215.05	320
184.05	270	194.05	308	205.10	6608	216.10	757
185.10	1743	195.00	363	206.10	27744	217.10	6225

Average of 2.879 to 2.890 min.: Z110787.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
218.05	881	229.00	1316	239.00	212	249.05	370
218.80	57	229.60	41	240.10	208	250.20	103
219.20	24	230.10	185	240.95	403	251.05	118
221.10	5581	231.05	411	242.10	887	251.70	37

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222.40	37	232.00	97	243.05	886	252.30	179
223.10	1597	233.05	145	244.10	10953	252.95	339
224.10	14089	234.05	426	245.10	1662	253.20	80
225.10	3913	235.00	557	246.10	2182	255.10	57824
226.05	456	235.95	319	247.05	534	256.05	8333
227.00	5991	237.05	369	248.00	87	257.05	773
228.10	917	238.05	118	248.40	34	258.10	3087

Average of 2.879 to 2.890 min.: Z110787.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
259.05	671	267.20	152	276.05	3430	284.20	193
260.10	79	267.90	35	277.00	2410	285.15	451
260.40	54	268.30	53	278.05	259	286.15	66
260.95	181	269.30	24	279.05	94	288.95	84
261.95	59	270.10	185	279.30	32	290.00	52
262.60	21	271.20	165	280.00	18	291.20	66
263.10	54	271.80	17	281.00	211	292.10	190
263.95	2	272.15	267	281.20	34	292.95	455
264.40	46	273.10	1991	282.40	28	294.00	80
265.00	1320	274.10	5172	283.10	260	295.10	107
265.95	167	275.10	26121	283.80	34	296.10	6441

Average of 2.879 to 2.890 min.: Z110787.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
297.05	1068	309.10	51	319.20	33	330.20	19
298.10	69	310.00	111	319.95	69	331.00	18
298.80	26	310.30	28	321.05	287	331.20	19
301.10	117	311.00	19	322.00	193	332.05	167
302.20	188	311.60	20	323.10	2380	333.10	309
303.00	630	312.90	78	324.10	539	334.05	1294
303.95	231	313.10	57	325.10	35	334.80	168
306.10	26	314.05	420	325.80	25	335.10	159
306.50	26	315.00	958	326.10	92	336.10	52
308.00	118	316.10	483	327.00	352	338.50	18
308.80	63	317.20	59	328.00	326	339.00	27

Average of 2.879 to 2.890 min.: Z110787.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
340.25	125	349.90	35	361.40	44	372.05	1287
340.95	35	352.05	780	363.00	36	373.05	243
341.30	109	353.05	508	364.00	35	374.15	70
341.90	60	353.90	290	365.05	3206	374.90	22
342.20	65	354.10	413	366.05	353	376.70	20
343.10	30	355.10	134	366.80	19	377.20	21
343.40	24	356.20	20	367.20	33	381.40	17
345.90	188	357.10	22	369.90	25	383.00	406
346.10	252	358.90	22	370.85	121	384.05	153
347.05	110	359.10	22	371.10	153	385.20	99
348.20	30	359.95	39	371.40	56	387.00	33

Average of 2.879 to 2.890 min.: Z110787.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
388.20	18	403.10	598	422.20	475	431.50	62
390.20	213	404.10	275	423.05	4352	432.60	60
390.90	63	408.80	19	424.05	771	433.00	19
391.10	160	414.40	23	425.00	21	433.90	19
392.00	55	418.70	31	425.25	93	434.40	25
395.90	41	419.00	23	427.40	18	434.60	60
396.90	19	419.20	31	428.00	22	435.30	47
398.60	26	419.80	26	429.20	25	435.90	42
400.80	68	420.30	30	429.40	27	436.20	49
401.15	88	421.10	475	430.10	49	436.60	18
402.00	593	422.00	183	430.60	34	436.90	36

Average of 2.879 to 2.890 min.: Z110787.D\data.ms

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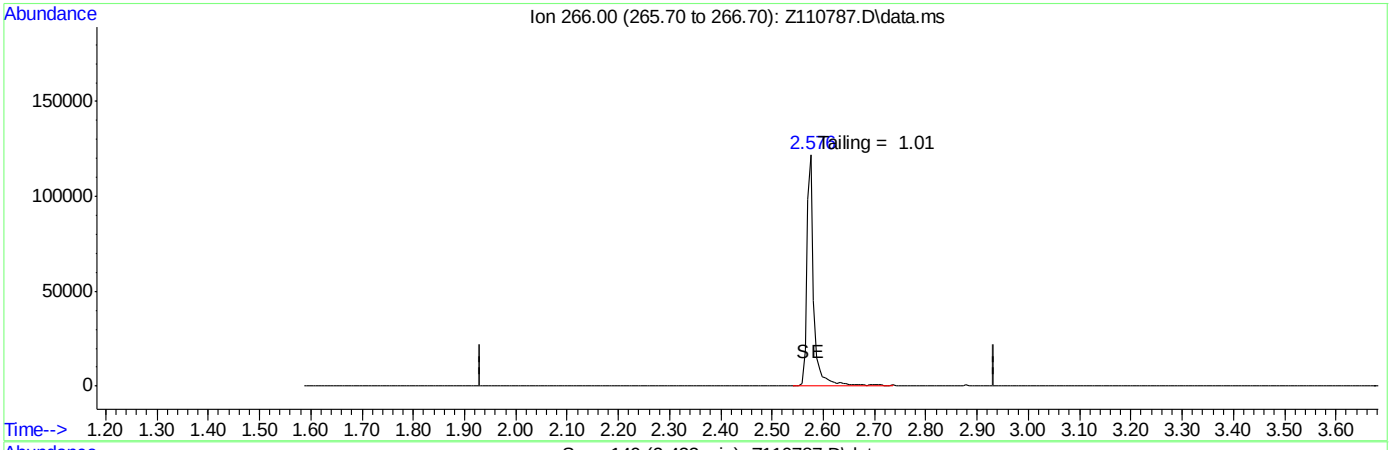
dftpp
Modified:subtracted

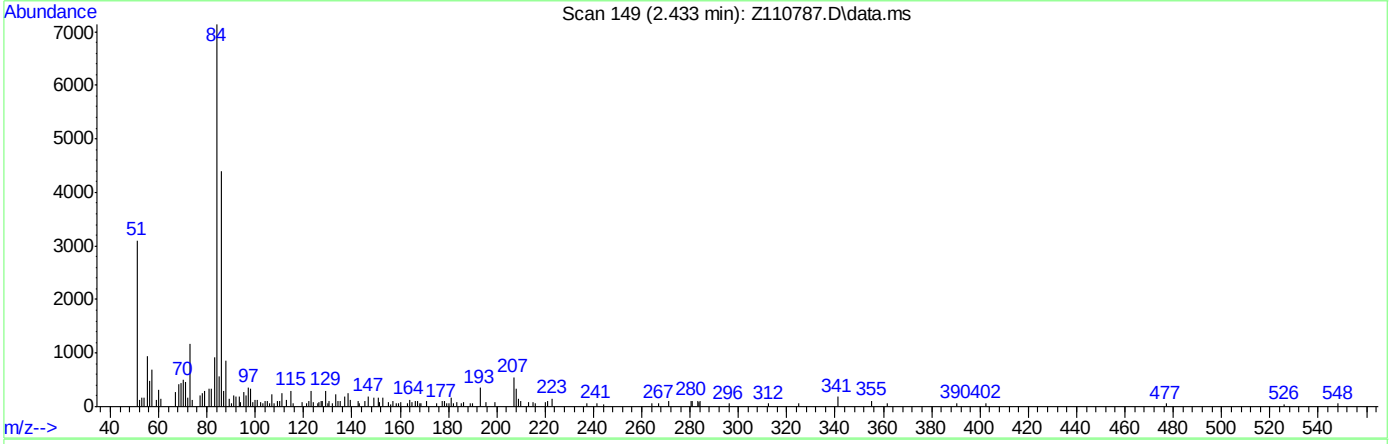
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
437.20	42	444.10	1141				
437.40	44	445.10	63				
437.70	170	446.20	37				
438.20	135	448.40	19				
438.70	73	462.50	18				
438.85	278	474.90	23				
439.50	200	499.50	17				
439.80	523						
441.10	10619						
442.10	66896						
443.10	13453						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110787.D
Acq On : 19 May 2016 8:42 am
Operator : ariellec
Sample : dftpp
Misc : op93962,ez5537
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 19 08:47:46 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





(1) Pentachlorophenol

2.433min (-2.433) 0.00

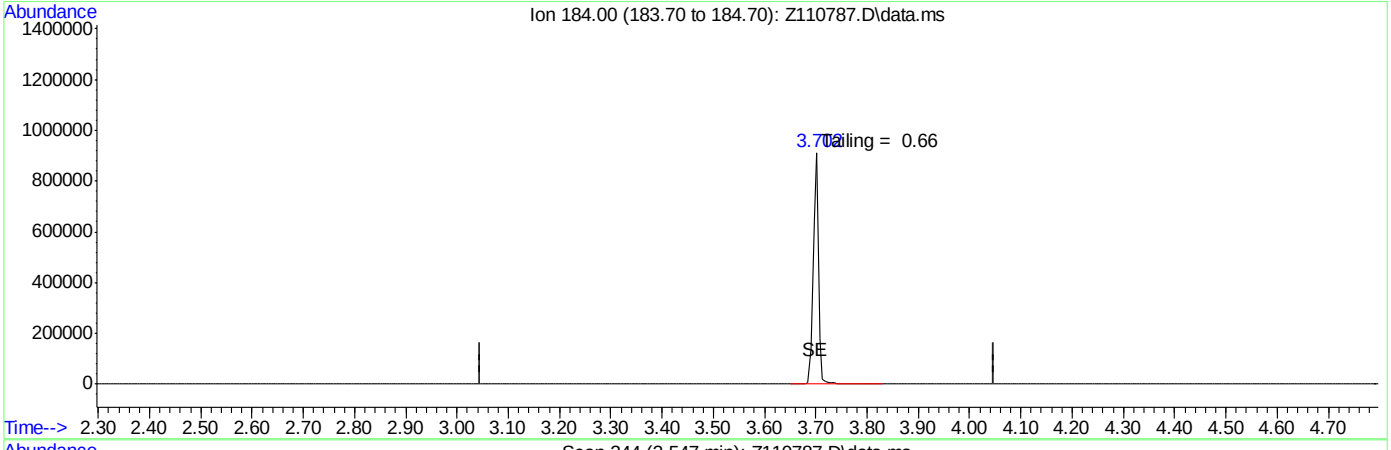
response 0

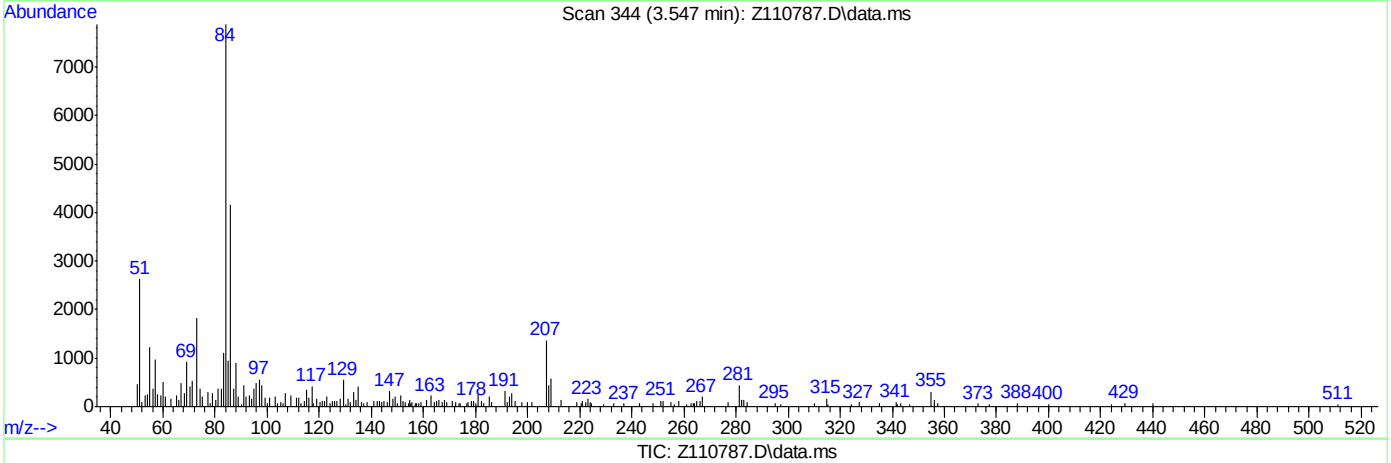
Ion	Exp%	Act%
266.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110787.D
Acq On : 19 May 2016 8:42 am
Operator : ariellec
Sample : dftpp
Misc : op93962,ez5537
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 19 08:47:46 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: Z110787.D\data.ms

(2) Benzidine

3.547min (-3.547) 0.00

response 0

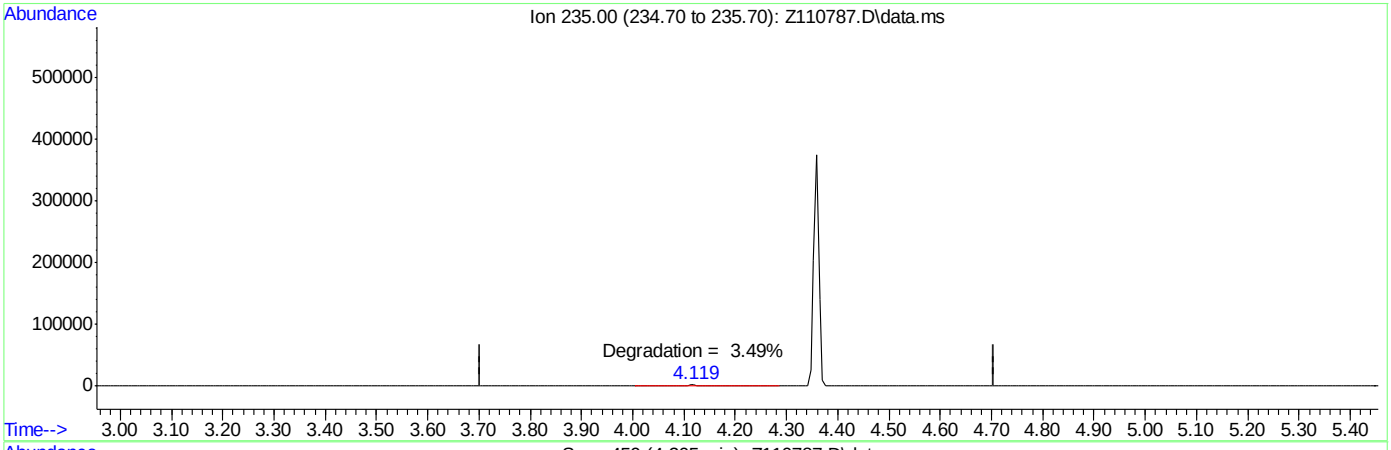
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

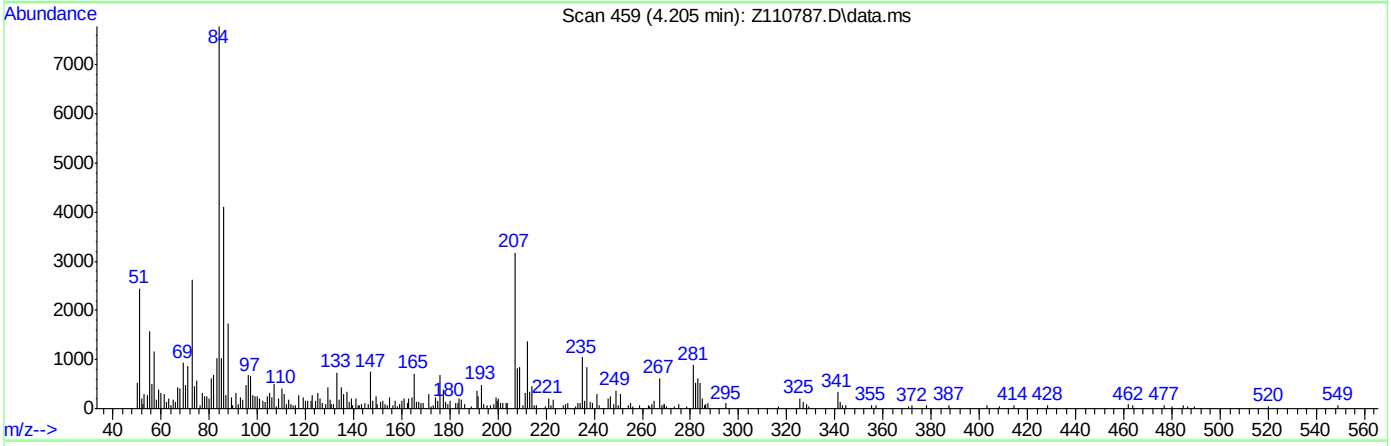
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110787.D
Acq On : 19 May 2016 8:42 am
Operator : ariellec
Sample : dftpp
Misc : op93962,ez5537
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 19 08:47:46 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: Z110787.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

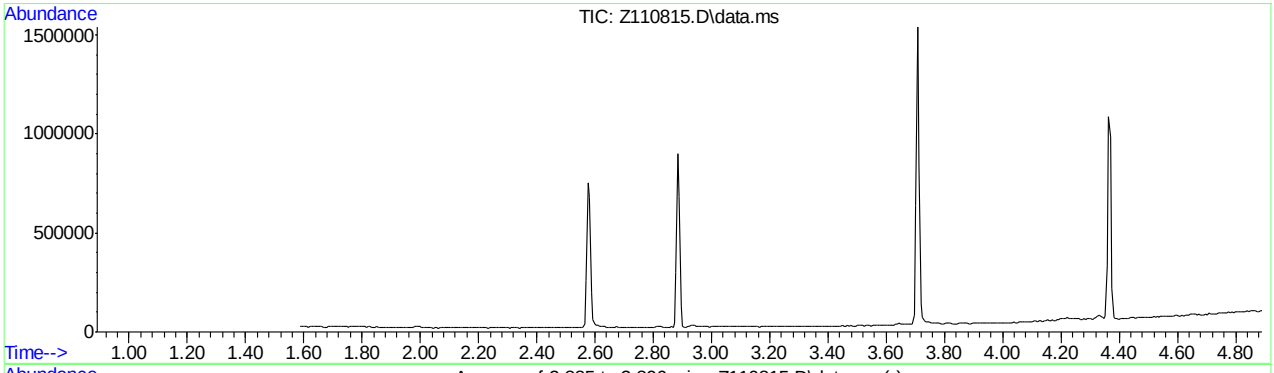
SGS ACCUTEST JC20314

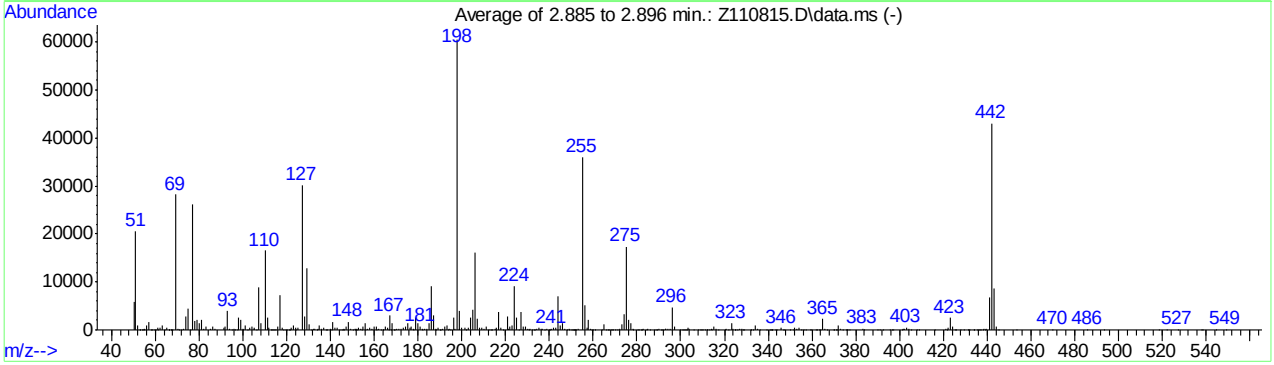
DFTPP

Data Path : C:\msdchem\1\DATA\ez5538\
Data File : Z110815.D
Acq On : 20 May 2016 8:13 am
Operator : ariellec
Sample : dftpp
Misc : op93962,ez5538
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 228, 229, 230; Background Corrected with Scan 224
AUTOFIND via AUTOINTEGRATE

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.2	20676	PASS
68	69	0.00	2	0.2	55	PASS
69	198	0.00	100	46.7	28246	PASS
70	69	0.00	2	0.8	238	PASS
127	198	40	60	50.0	30237	PASS
197	198	0.00	1	0.6	347	PASS
198	198	100	100	100.0	60518	PASS
199	198	5	9	6.7	4046	PASS
275	198	10	30	28.6	17332	PASS
365	198	1	100	3.7	2262	PASS
441	443	0.01	100	79.6	6867	PASS
442	198	40	100	71.2	43069	PASS
443	442	17	23	20.0	8632	PASS

SGS ACCUTEST JC20314

Average of 2.885 to 2.896 min.: Z110815.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	5787	58.10	53	66.20	19	76.10	7
51.10	20676	58.30	27	67.00	51	77.05	26171
52.10	1057	59.30	63	67.40	6	78.10	1798
52.70	33	60.05	24	67.90	55	79.10	2159
53.05	19	61.05	367	69.05	28246	80.00	1411
54.00	34	61.30	30	70.15	238	81.05	2069
54.20	18	62.10	374	70.95	108	82.15	335
55.00	235	63.10	987	72.10	8	83.10	670
55.10	78	64.05	31	73.10	248	85.10	228
56.10	926	65.15	516	74.15	2862	86.00	790
57.10	1613	66.00	44	75.10	4399	87.05	232

Average of 2.885 to 2.896 min.: Z110815.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
91.10	429	100.10	207	111.10	2545	119.70	30
92.05	753	101.00	995	112.05	361	120.15	70
93.10	3872	102.25	96	112.90	46	121.10	58
93.95	294	103.00	483	113.20	52	121.40	23
95.00	69	104.10	747	113.90	27	122.05	574
96.15	158	105.00	492	114.20	77	123.05	871
96.50	18	105.20	269	115.00	96	124.00	403
97.30	41	106.00	18	116.15	706	124.30	24
98.05	2559	107.10	8914	117.10	7168	125.05	396
99.05	2068	108.05	1363	118.00	572	127.10	30237
99.80	19	110.10	16505	118.20	36	128.10	2839

Average of 2.885 to 2.896 min.: Z110815.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
129.05	12767	138.40	56	147.15	825	154.30	27
130.00	1259	140.05	210	148.10	1727	155.05	803
131.05	108	140.40	24	149.05	327	155.60	35
132.05	237	141.05	1716	150.10	108	156.05	1393
133.00	175	142.20	445	151.15	218	157.10	194
133.60	30	142.95	404	151.35	119	157.90	412
134.15	310	144.05	11	151.80	115	159.05	224
135.05	905	145.10	98	152.00	139	160.05	637
136.00	297	145.70	45	152.40	72	160.80	58
137.05	374	146.00	191	153.00	475	161.10	616
137.80	77	146.30	54	154.05	348	162.10	195

Average of 2.885 to 2.896 min.: Z110815.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
163.15	90	170.15	193	180.10	1408	189.00	543
163.80	40	171.05	275	181.05	768	190.10	94
164.00	95	172.05	354	182.00	261	190.30	70
165.00	598	173.05	413	182.20	17	191.00	260
166.05	433	174.05	718	183.00	157	192.10	707
166.70	78	175.10	1312	184.25	280	193.05	838
167.05	3034	176.15	389	185.05	1384	194.00	98
167.80	66	177.00	686	186.10	9132	194.20	150
168.05	1370	177.85	133	187.05	2989	195.00	104
169.00	113	178.10	101	187.90	17	196.10	2588
169.10	72	179.00	2533	188.15	152	196.75	347

Average of 2.885 to 2.896 min.: Z110815.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
198.00	60518	208.05	439	219.00	57	229.90	130
198.80	262	209.05	398	221.10	2815	230.80	61
199.05	4046	210.05	303	221.60	157	231.05	288
200.10	402	211.05	718	222.00	634	232.10	87

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201.55	359	212.40	64	223.05	973	233.00	52
201.90	96	213.05	93	224.10	9148	233.30	26
203.05	463	213.70	17	225.10	2638	234.00	273
204.05	2510	215.10	159	226.00	124	235.05	361
205.10	4157	216.00	385	227.00	3654	236.00	160
206.10	16090	217.00	3758	228.10	603	237.00	168
207.05	2233	218.05	582	229.05	811	237.85	71

Average of 2.885 to 2.896 min.: Z110815.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
239.05	156	249.00	353	256.05	5231	267.20	26
239.90	81	249.20	48	257.05	487	267.90	18
240.10	81	249.90	81	258.00	2189	268.40	42
241.10	305	250.50	29	258.95	350	269.15	75
242.05	460	250.90	30	259.20	25	270.20	57
243.10	442	251.20	21	260.00	79	271.10	53
244.10	6960	251.50	43	261.05	104	272.15	174
245.10	947	251.80	44	263.90	58	273.00	1132
246.10	1414	252.20	11	265.05	1157	274.10	3232
247.10	271	253.05	227	265.95	28	275.10	17332
247.95	118	255.10	35989	267.00	50	276.05	2120

Average of 2.885 to 2.896 min.: Z110815.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
277.10	1471	288.00	37	296.00	4763	307.95	107
278.00	163	289.00	17	297.00	759	308.90	42
278.20	103	289.20	30	299.60	25	309.50	20
280.20	20	290.10	170	300.95	40	309.95	90
281.05	48	291.05	47	301.20	45	310.90	40
281.80	21	291.70	24	301.90	40	311.90	16
282.40	52	292.10	55	302.20	104	312.10	19
283.05	147	292.90	152	302.90	36	313.00	63
284.15	58	293.05	287	303.20	511	313.90	215
285.15	250	294.05	146	304.10	133	314.20	110
286.00	82	295.05	130	305.95	75	315.05	691

Average of 2.885 to 2.896 min.: Z110815.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
316.00	320	328.00	154	341.00	124	353.20	310
317.05	86	328.70	37	341.60	18	354.15	502
320.30	30	329.20	9	342.00	30	355.25	104
321.00	191	332.00	75	343.30	19	356.10	20
321.95	79	332.20	50	344.00	27	357.20	17
323.10	1443	333.00	46	346.00	393	358.95	54
323.95	317	334.05	872	347.10	36	359.70	16
324.90	62	335.05	308	347.30	25	361.70	18
325.10	16	336.20	27	350.20	36	362.40	17
325.70	21	339.10	20	351.30	24	363.10	17
327.00	343	340.80	71	352.05	566	364.00	17

Average of 2.885 to 2.896 min.: Z110815.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
365.05	2262	376.00	33	401.00	36	422.15	536
366.05	355	376.30	22	401.90	149	423.05	2555
366.90	21	377.05	57	402.10	144	424.05	654
369.70	45	383.05	316	403.05	476	425.05	47
370.10	23	384.00	29	404.05	218	425.80	18
370.90	111	390.00	119	405.10	38	428.00	24
371.35	77	391.10	79	408.00	31	429.60	24
372.10	894	392.25	47	408.90	27	431.15	50
373.10	203	395.50	16	416.20	29	431.60	28
374.20	22	396.50	24	421.10	310	431.90	25
375.80	34	397.00	19	421.80	44	433.70	38

Average of 2.885 to 2.896 min.: Z110815.D\data.ms

DFTPPZ.M Fri May 20 09:02:28 2016 RTE

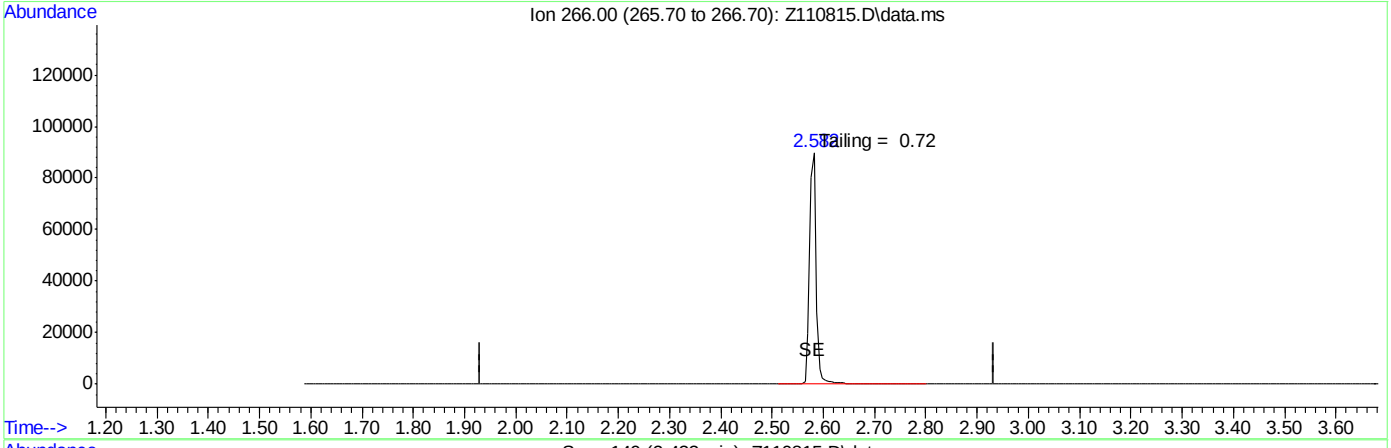
dftpp
Modified:subtracted

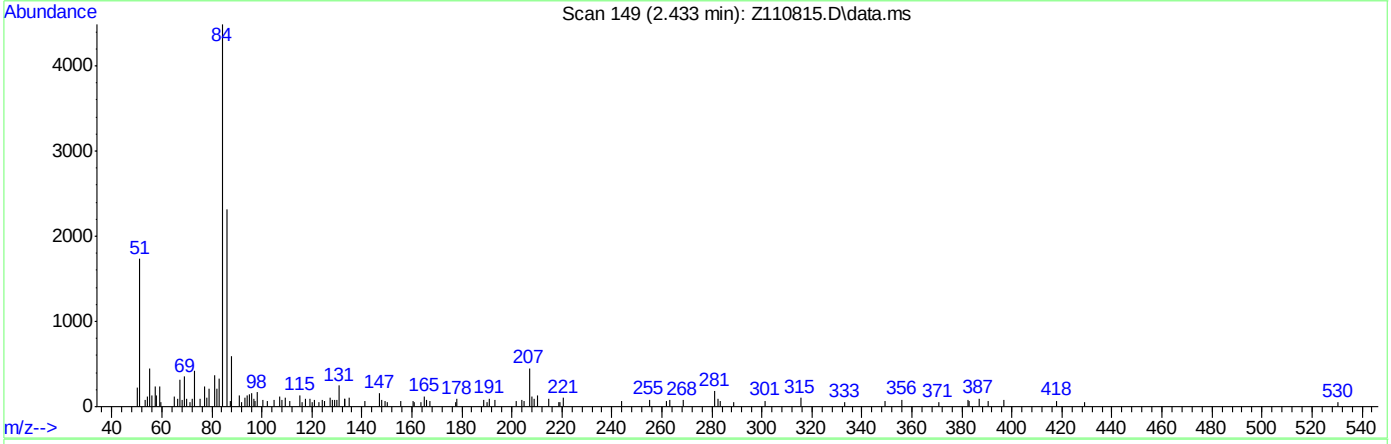
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
433.90	22	443.10	8632	538.60	18		
435.40	79	444.10	824	544.70	19		
435.85	85	445.20	69	549.00	23		
436.70	110	453.20	21				
437.15	115	469.90	21				
437.80	59	485.80	20				
438.40	243	493.20	18				
439.30	105	518.60	20				
439.65	290	521.80	20				
441.10	6867	527.00	47				
442.10	43069	537.90	20				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5538\
Data File : Z110815.D
Acq On : 20 May 2016 8:13 am
Operator : ariellec
Sample : dftpp
Misc : op93962,ez5538
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 08:18:51 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: Z110815.D\data.ms

(1) Pentachlorophenol

2.433min (-2.433) 0.00

response 0

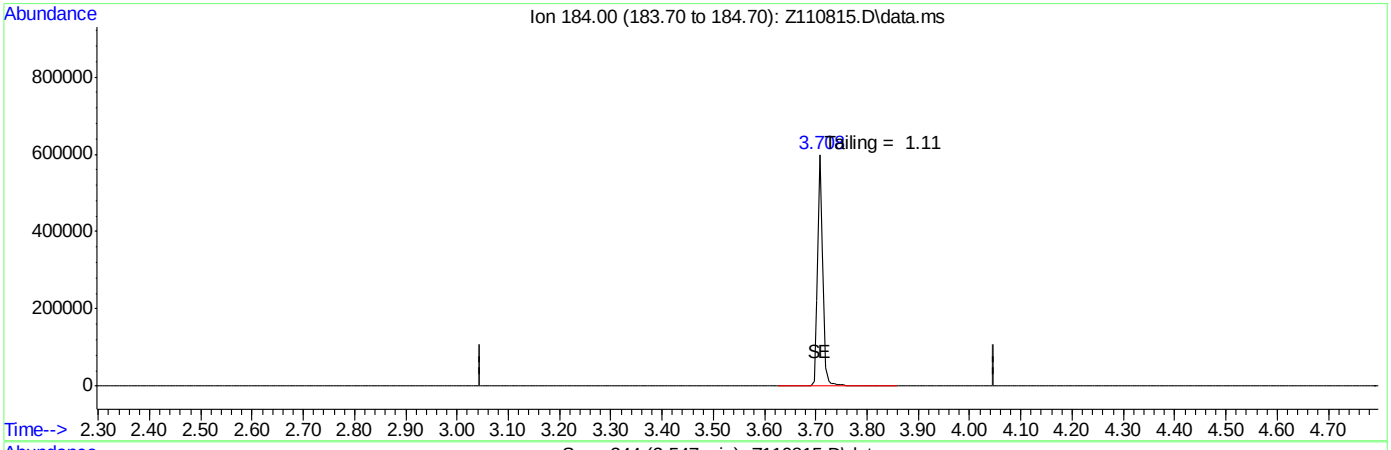
Ion	Exp%	Act%
266.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

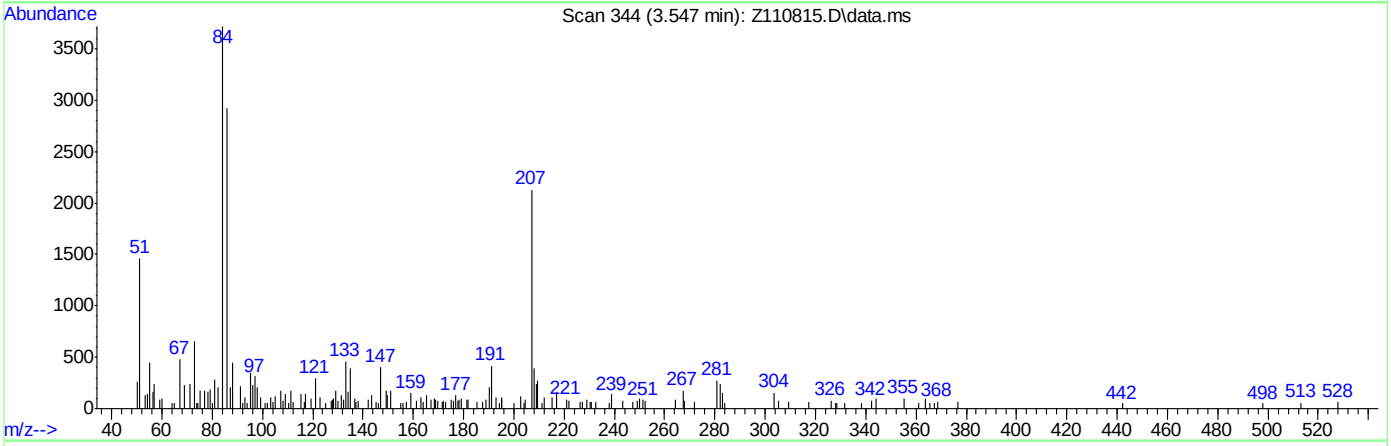
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5538\
Data File : Z110815.D
Acq On : 20 May 2016 8:13 am
Operator : ariellec
Sample : dftpp
Misc : op93962,ez5538
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 08:18:51 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: Z110815.D\data.ms

(2) Benzidine

3.547min (-3.547) 0.00

response 0

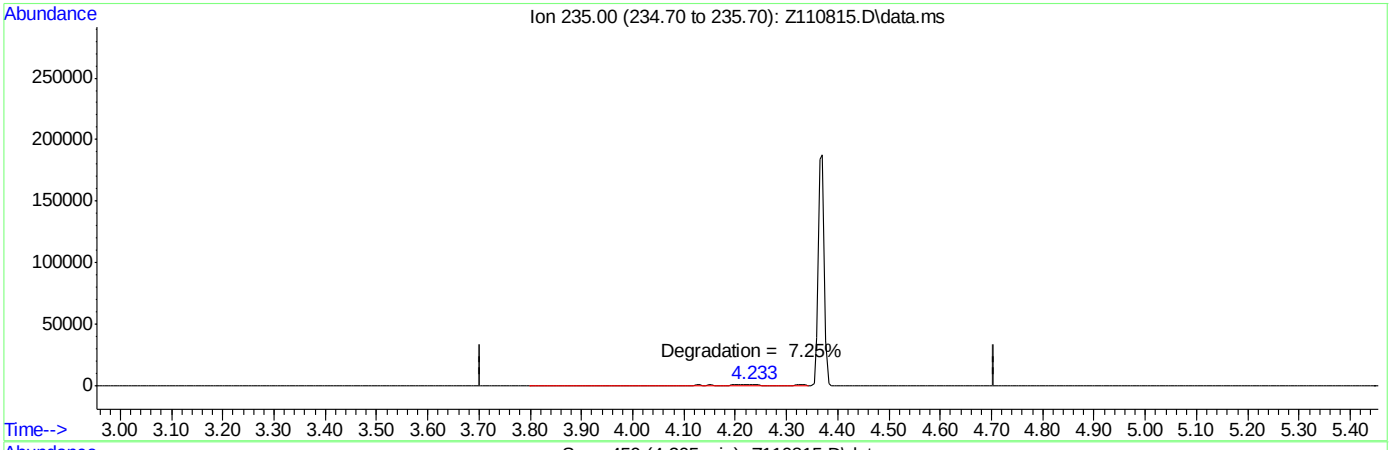
Ion	Exp%	Act%
184.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

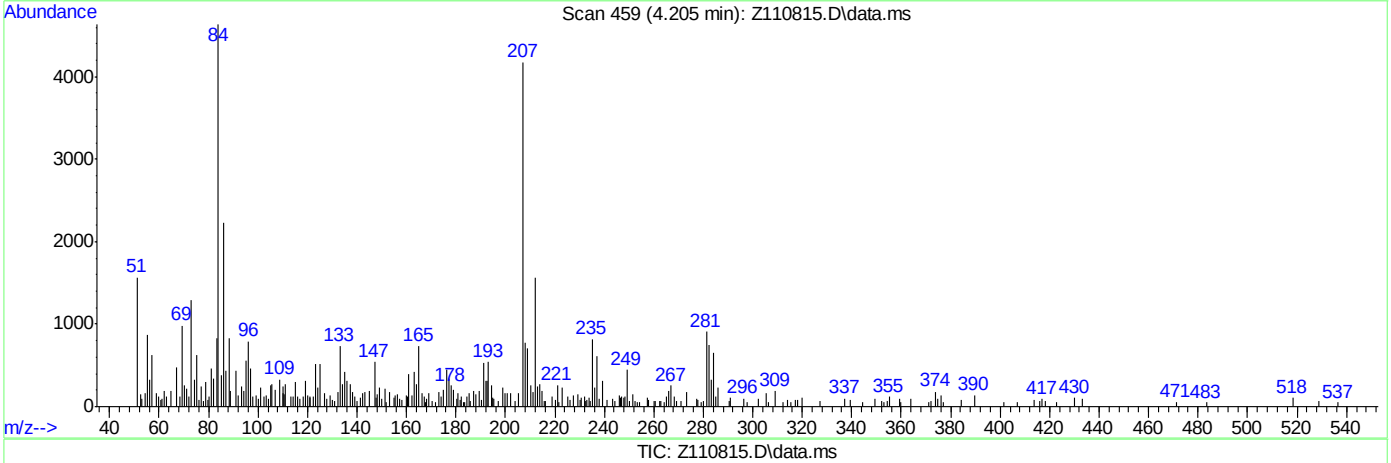
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5538\
Data File : Z110815.D
Acq On : 20 May 2016 8:13 am
Operator : ariellec
Sample : dftpp
Misc : op93962,ez5538
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 20 08:18:51 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: Z110815.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 JC20314

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60763a.D
Acq On : 21 Apr 2016 2:34 pm
Operator : linseyk
Sample : icc2855-1
Misc : op93052a,e3m2855
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 08:25:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:25:42 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.1

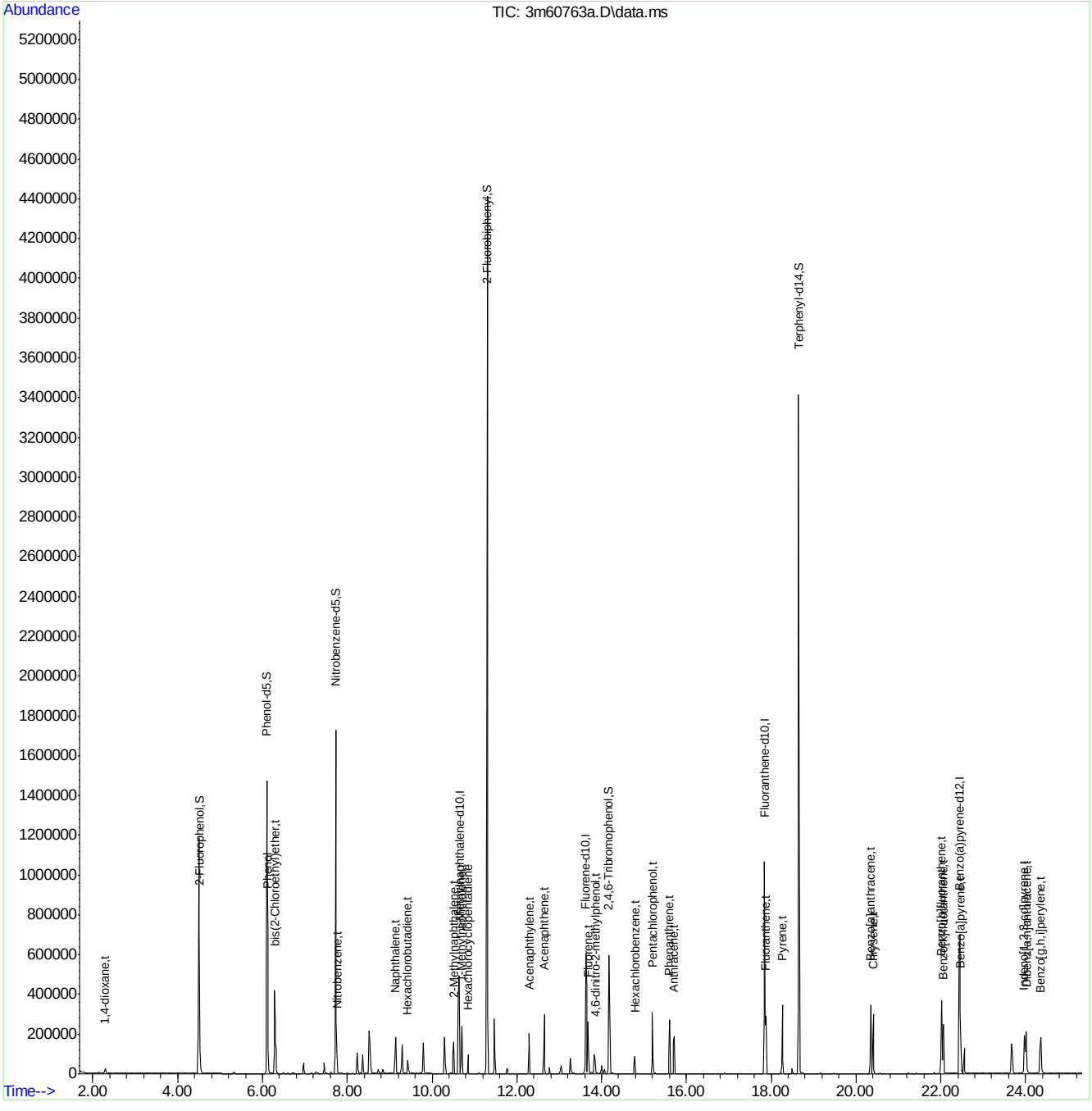
7

SGS ACCUTEST JC20314

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 JC20314

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 JC20314

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

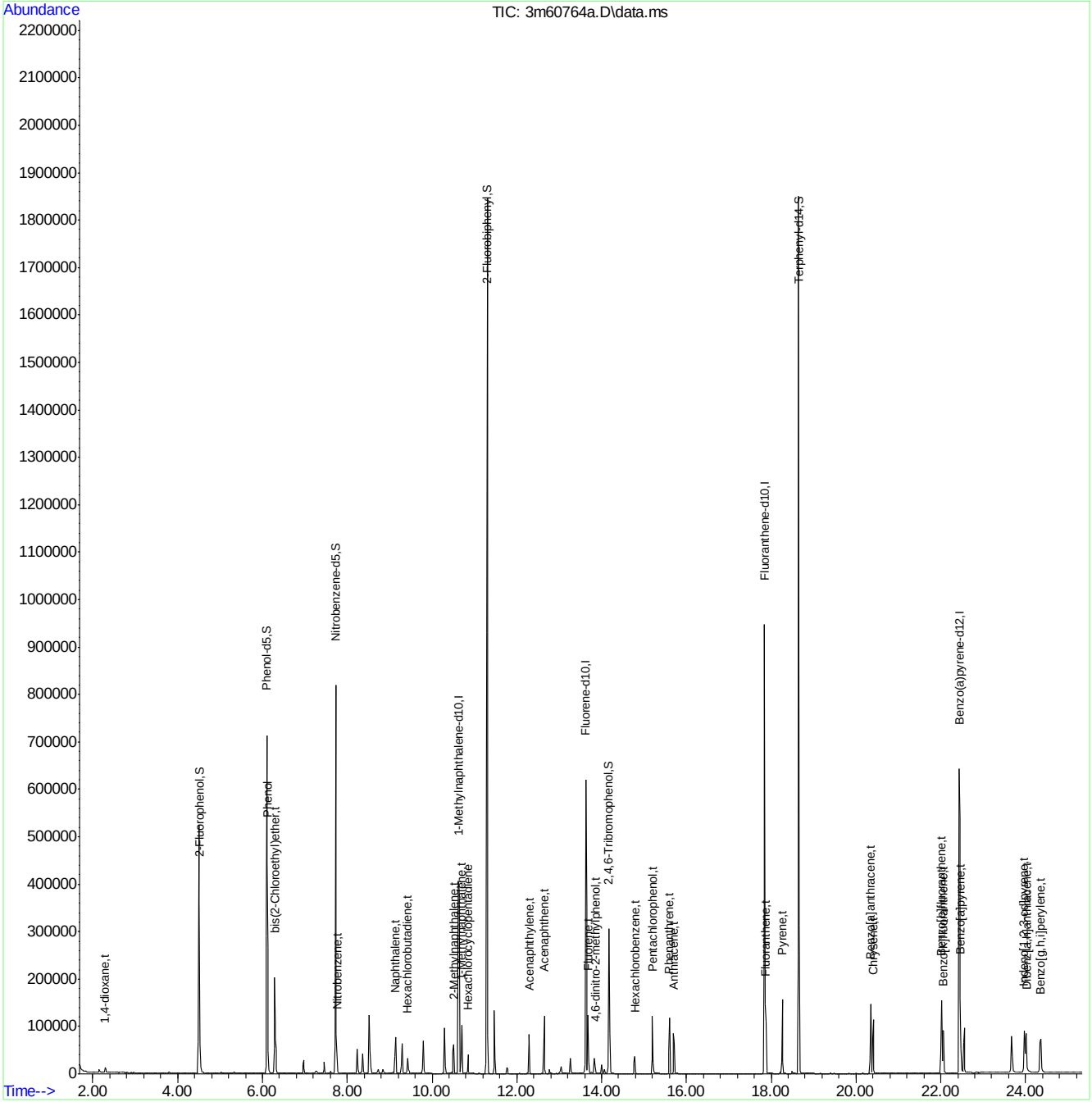
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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



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

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

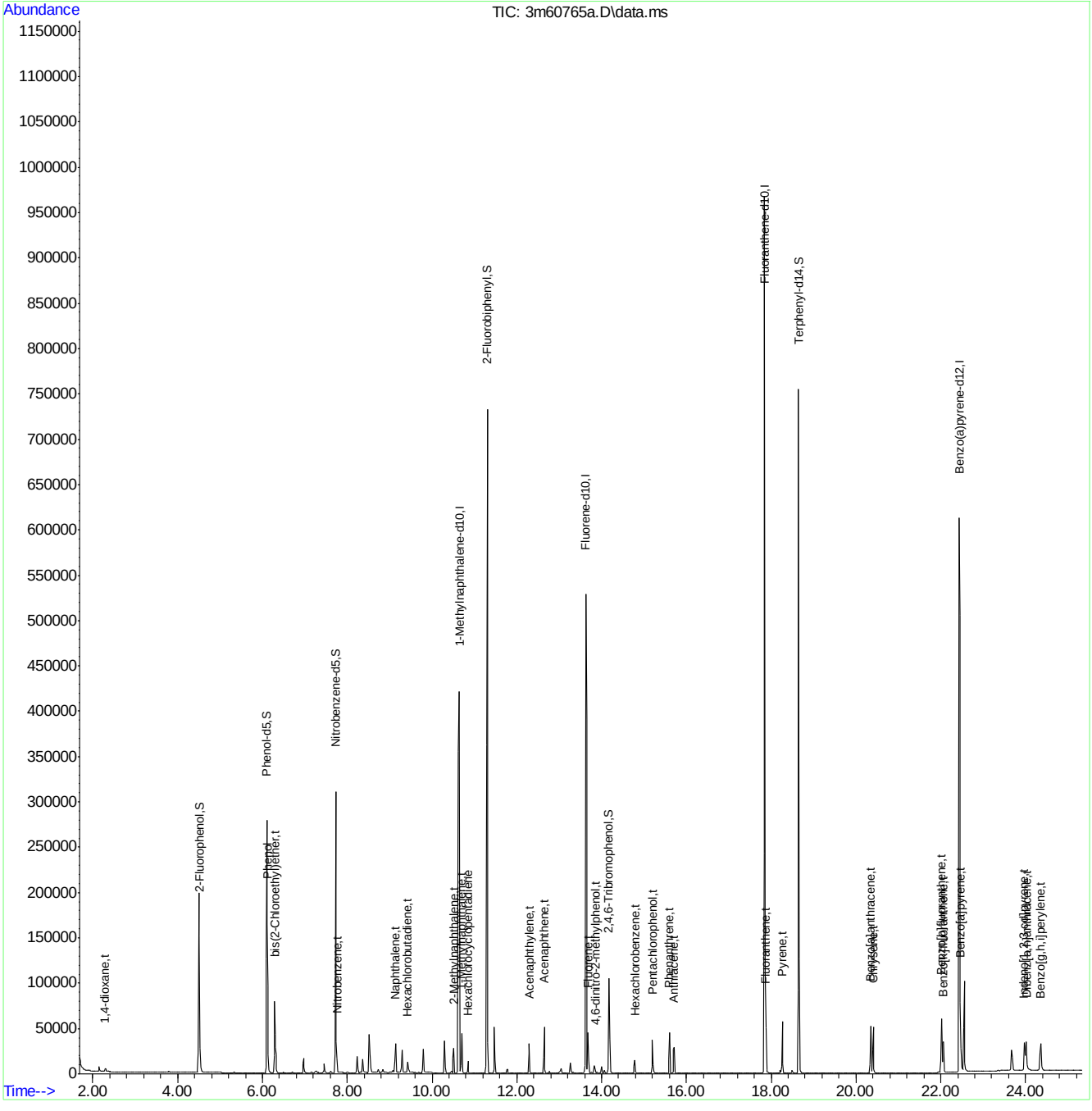
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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



SGS ACCUTEST JC20314

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 JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60766.D
Acq On : 21 Apr 2016 4:12 pm
Operator : linseyk
Sample : ic2855-0.1
Misc : op93052a,e3m2855
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 22 08:27:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:27:18 2016
Response via : Initial Calibration

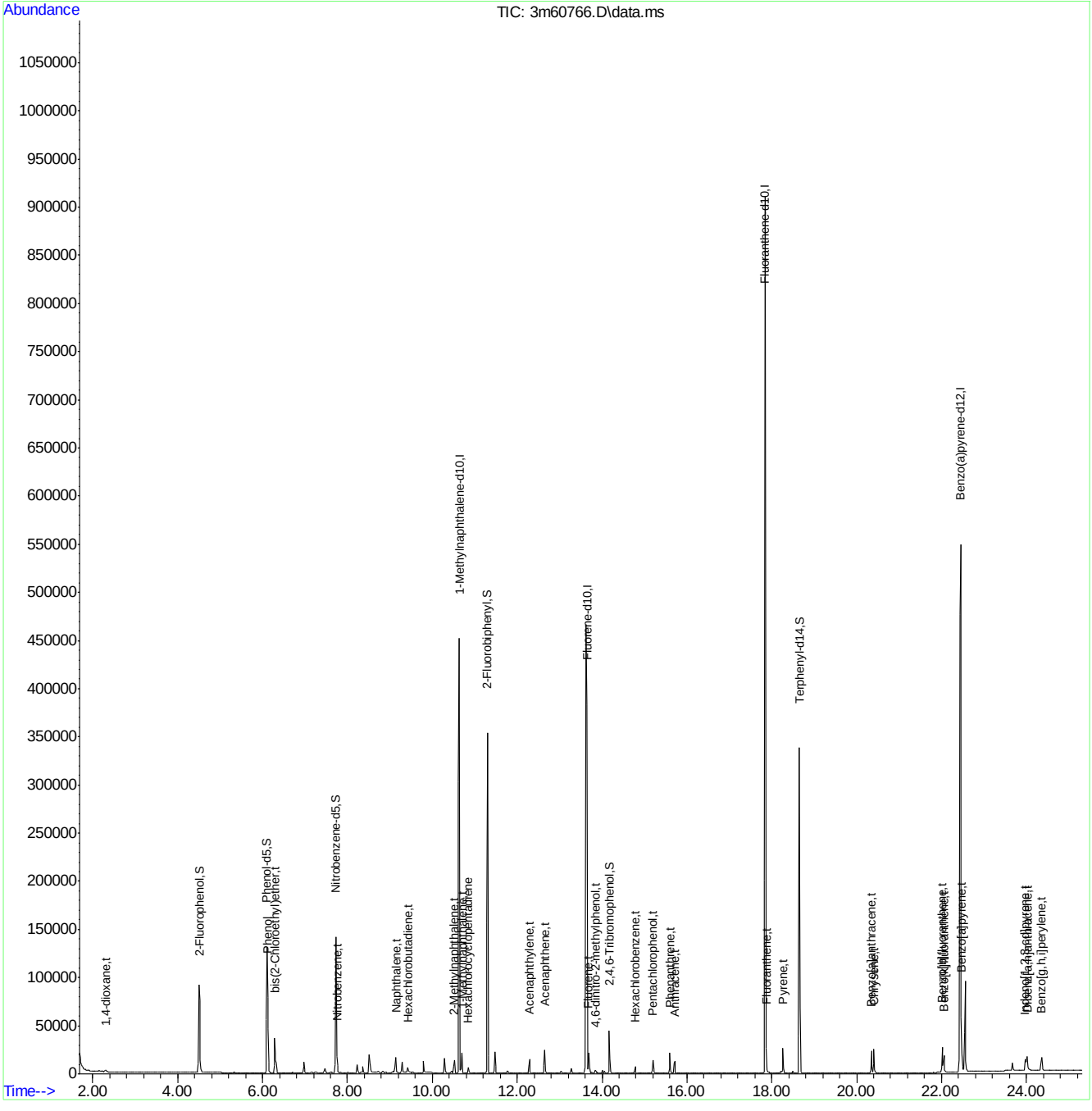
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60766.D
Acq On : 21 Apr 2016 4:12 pm
Operator : linseyk
Sample : ic2855-0.1
Misc : op93052a,e3m2855
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 22 08:27:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:27:18 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60767.D
Acq On : 21 Apr 2016 4:44 pm
Operator : linseyk
Sample : ic2855-0.05
Misc : op93052a,e3m2855
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 22 08:34:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:32:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.641	150	339033	4.00 ppm	0.00
14) Fluorene-d10	13.626	176	520555	4.00 ppm	-0.02
21) Fluoranthene-d10	17.844	212	888983	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.432	264	706519	4.00 ppm	-0.02
System Monitoring Compounds					
3) 2-Fluorophenol	4.515	112	42704	1.01 ppm	0.00
Spiked Amount 50.000				Recovery = 2.02%	
4) Phenol-d5	6.104	99	70262	1.00 ppm	0.00
Spiked Amount 50.000				Recovery = 2.00%	
7) Nitrobenzene-d5	7.726	82	63026	0.97 ppm	0.00
Spiked Amount 50.000				Recovery = 1.94%	
15) 2-Fluorobiphenyl	11.303	172	145045	1.01 ppm	0.00
Spiked Amount 50.000				Recovery = 2.02%	
20) 2,4,6-Tribromophenol	14.172	330	13489	0.83 ppm	0.00
Spiked Amount 50.000				Recovery = 1.66%	
28) Terphenyl-d14	18.647	244	135801	1.05 ppm	0.00
Spiked Amount 50.000				Recovery = 2.10%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.305	88	1056	0.06 ppm	90
5) Phenol	6.116	94	18706	0.25 ppm #	73
6) bis(2-Chloroethyl)ether	6.285	93	3013	0.05 ppm	88
8) Nitrobenzene	7.764	77	3438	0.05 ppm	92
9) Naphthalene	9.139	128	9285	0.05 ppm	99
10) Hexachlorobutadiene	9.421	225	1685	0.05 ppm	99
11) 2-Methylnaphthalene	10.518	141	4767	0.05 ppm	96
12) 1-Methylnaphthalene	10.702	141	6629	0.05 ppm	95
13) Hexachlorocyclopentadiene	10.846	237	2049	0.08 ppm	97
16) Acenaphthylene	12.293	152	8346	0.05 ppm	99
17) Acenaphthene	12.648	153	5946	0.05 ppm	99
18) 4,6-dinitro-2-methylph...	13.852	198	948	0.07 ppm	91
19) Fluorene	13.682	166	7106	0.05 ppm	100
22) Hexachlorobenzene	14.783	284	2065	0.05 ppm	96
23) Pentachlorophenol	15.201	266	4271	0.17 ppm	98
24) Phenanthrene	15.603	178	10238	0.05 ppm	99
25) Anthracene	15.711	178	8587	0.04 ppm	98
26) Fluoranthene	17.875	202	12772	0.05 ppm	99
27) Pyrene	18.261	202	11982	0.05 ppm	98
29) Benzo[a]anthracene	20.347	228	11591	0.05 ppm	100
30) Chrysene	20.408	228	11884	0.05 ppm	99
32) Benzo[b]fluoranthene	22.015	252	11635	0.04 ppm	99
33) Benzo[k]fluoranthene	22.062	252	11007	0.05 ppm	100
34) Benzo[a]pyrene	22.463	252	12936	0.06 ppm	98
35) Indeno[1,2,3-cd]pyrene	23.963	276	10547	0.05 ppm	100
36) Dibenz[a,h]anthracene	24.020	278	8444	0.05 ppm	100
37) Benzo[g,h,i]perylene	24.358	276	9475	0.05 ppm	99

SGS ACCUTEST JC20314

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

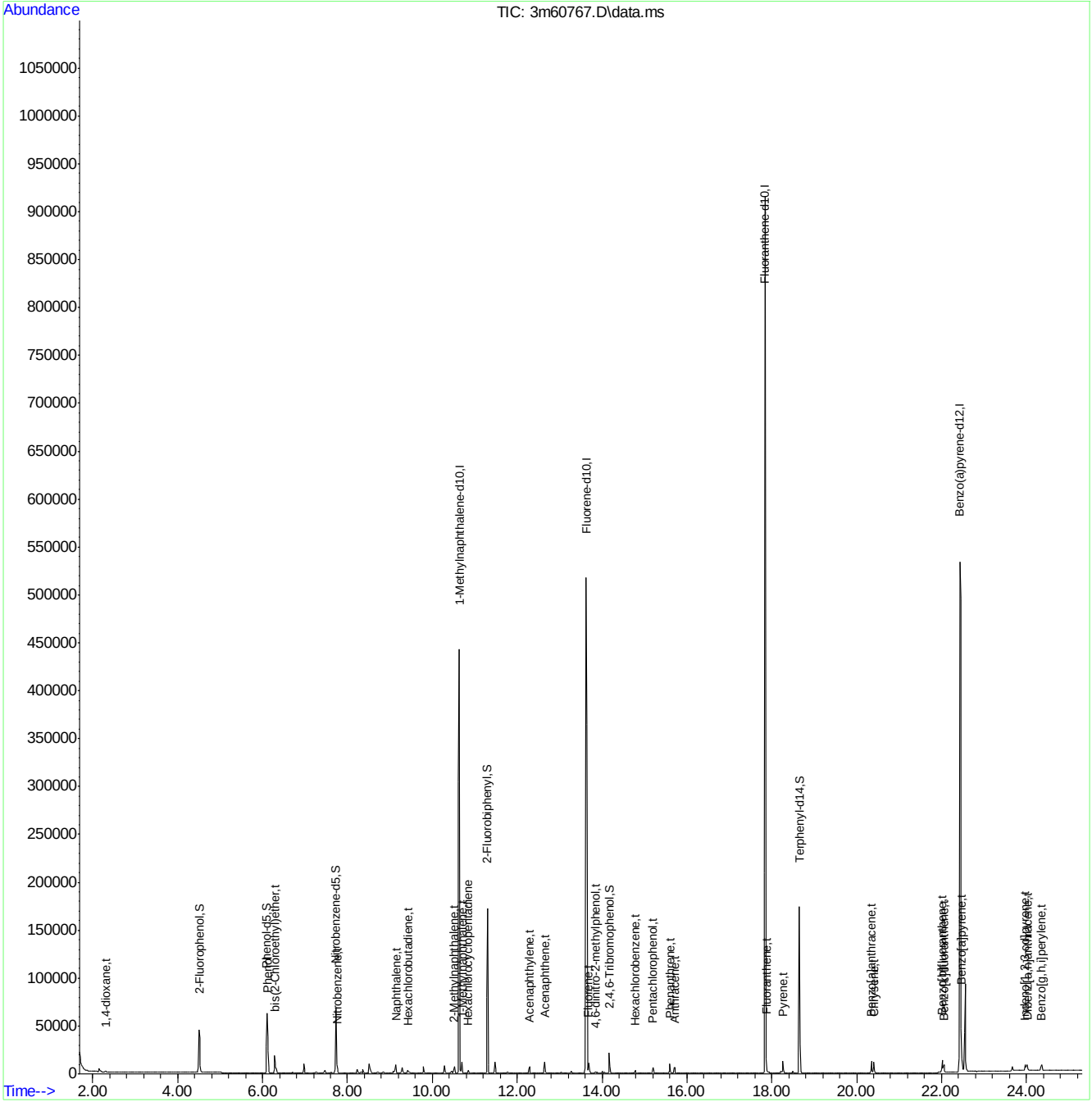
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60767.D
Acq On : 21 Apr 2016 4:44 pm
Operator : linseyk
Sample : ic2855-0.05
Misc : op93052a,e3m2855
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 22 08:34:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:32:39 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/22/16 12:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:29:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.640	150	345303	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	525823	4.00	ppm	0.02
21) Fluoranthene-d10	17.843	212	917656	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	713000	4.00	ppm	0.02
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	17018	0.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.78%	
4) Phenol-d5	6.104	99	28195	0.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.76%	
7) Nitrobenzene-d5	7.726	82	25103	0.37	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.74%	
15) 2-Fluorobiphenyl	11.303	172	57726	0.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.78%	
20) 2,4,6-Tribromophenol	14.172	330	4756	0.28	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.56%	
28) Terphenyl-d14	18.647	244	56137	0.41	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.82%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.305	88	245m	0.01	ppm	
5) Phenol	6.116	94	7474	0.09	ppm #	72
6) bis(2-Chloroethyl)ether	6.285	93	1201	0.02	ppm	90
8) Nitrobenzene	7.764	77	1406	0.02	ppm	86
9) Naphthalene	9.138	128	3866	0.02	ppm	100
10) Hexachlorobutadiene	9.421	225	661	0.02	ppm	97
11) 2-Methylnaphthalene	10.517	141	1996	0.02	ppm	93
12) 1-Methylnaphthalene	10.702	141	3332	0.03	ppm	91
13) Hexachlorocyclopentadiene	10.846	237	791	0.03	ppm	99
16) Acenaphthylene	12.293	152	3367	0.02	ppm	98
17) Acenaphthene	12.648	153	2382	0.02	ppm	98
18) 4,6-dinitro-2-methylph...	13.852	198	336	0.03	ppm	95
19) Fluorene	13.682	166	2916	0.02	ppm	97
22) Hexachlorobenzene	14.783	284	860	0.02	ppm	95
23) Pentachlorophenol	15.200	266	1647	0.07	ppm	97
24) Phenanthrene	15.602	178	4501	0.02	ppm	99
25) Anthracene	15.711	178	3476	0.02	ppm	96
26) Fluoranthene	17.874	202	6605	0.03	ppm	99
27) Pyrene	18.261	202	5085	0.02	ppm	97
29) Benzo[a]anthracene	20.346	228	5580	0.02	ppm	99
30) Chrysene	20.408	228	6534	0.03	ppm	99
32) Benzo[b]fluoranthene	22.015	252	5729	0.02	ppm	96
33) Benzo[k]fluoranthene	22.061	252	5167	0.02	ppm	95
34) Benzo[a]pyrene	22.463	252	4349m	0.02	ppm	
35) Indeno[1,2,3-cd]pyrene	23.963	276	4283	0.02	ppm	99
36) Dibenz[a,h]anthracene	24.020	278	3214	0.02	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	3711	0.02	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:29:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

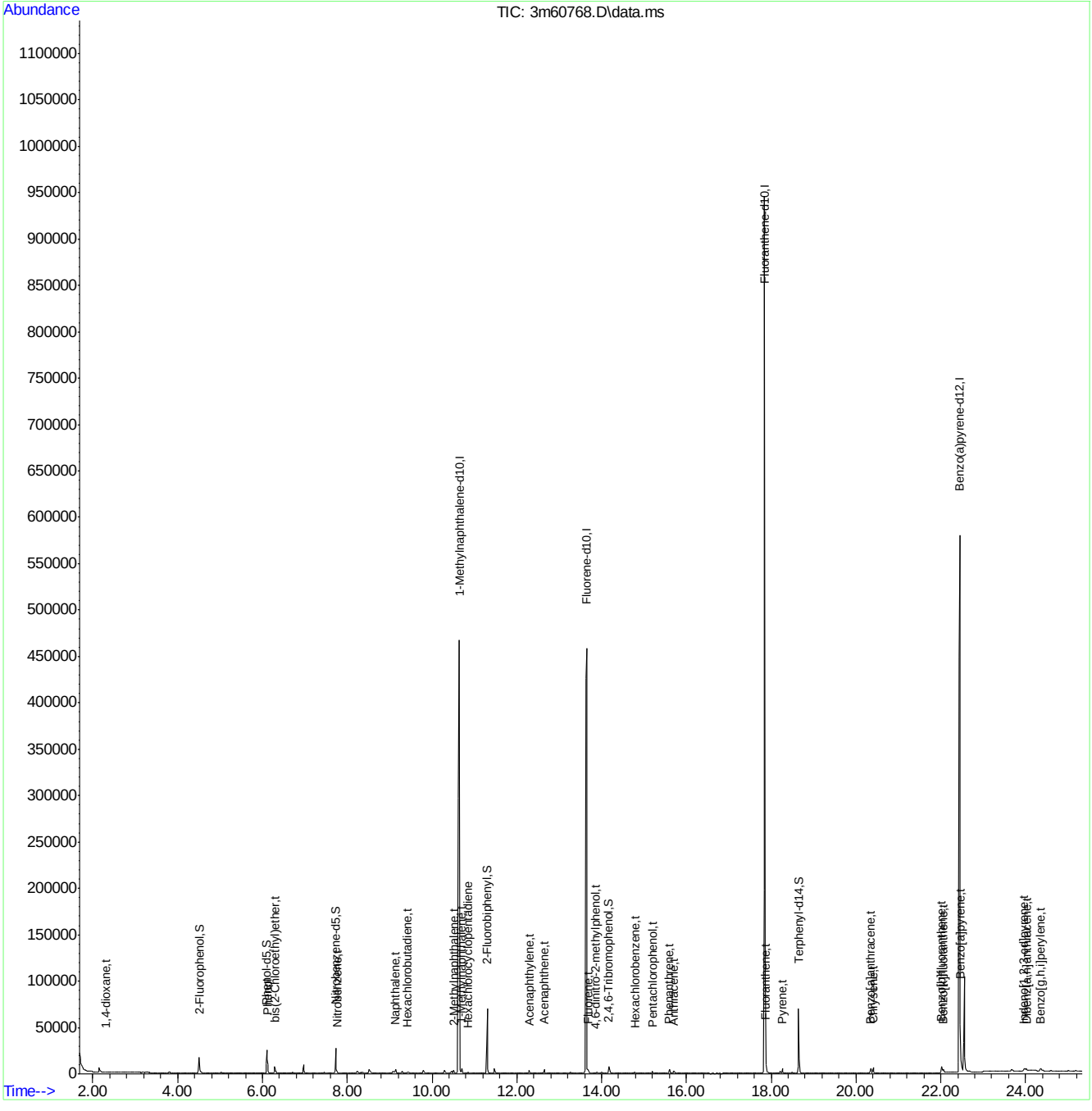
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:29:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Manual Integration Approval Summary

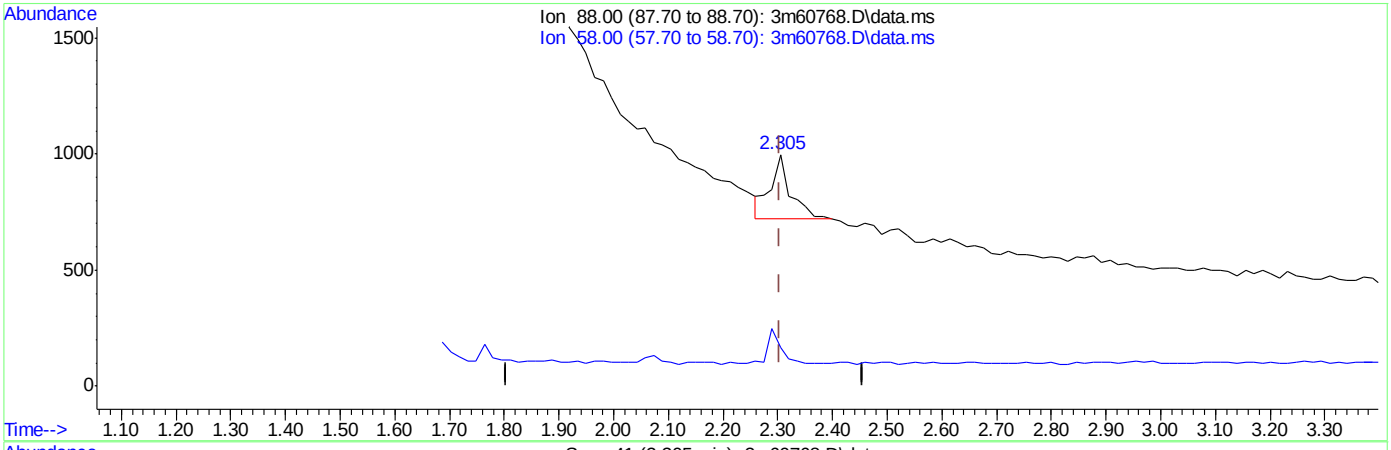
Sample Number:	E3M2855-IC2855	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M60768.D	**Analyst approved:**	04/22/16 09:15 Linsey Kirschmann
Injection Time:	04/21/16 17:17	**Supervisor approved:**	04/22/16 12:27 Nina Pandya

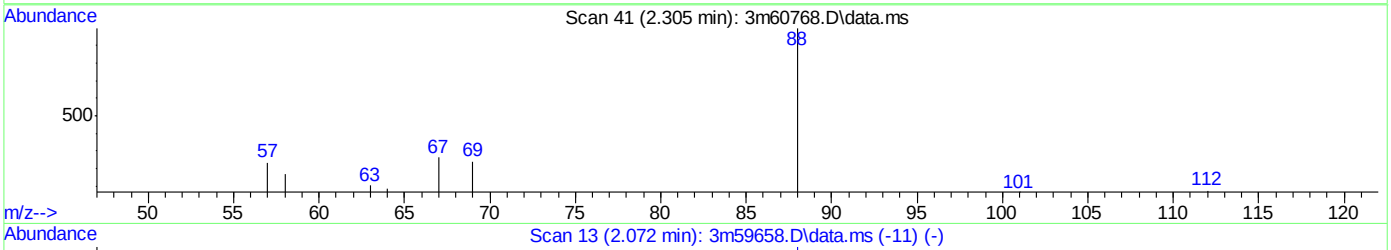
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.30	Baseline ripple
Benzo(a)pyrene	50-32-8		22.46	Baseline ripple

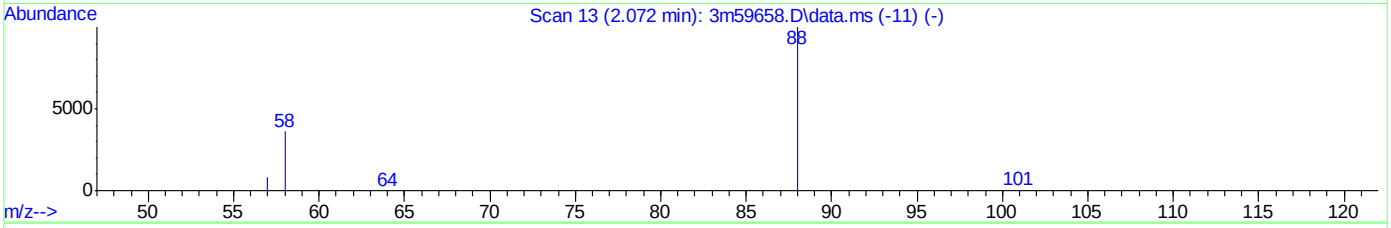
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:28:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration







TIC: 3m60768.D\data.ms

(2) 1,4-dioxane (t)

2.305min (-0.000) 0.04ppm

response 710

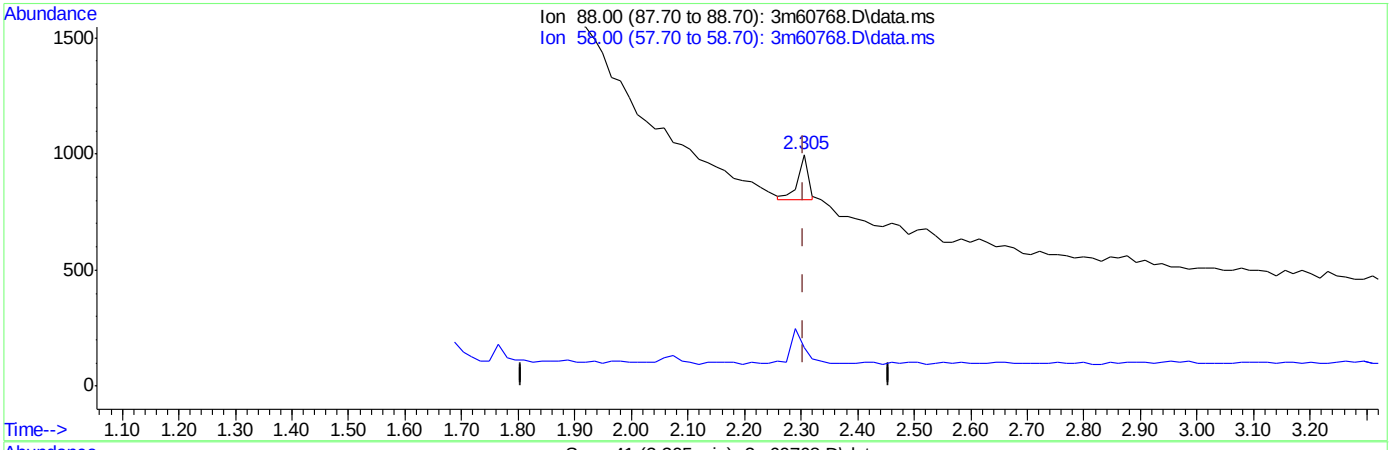
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	28.23
0.00	0.00	0.00
0.00	0.00	0.00

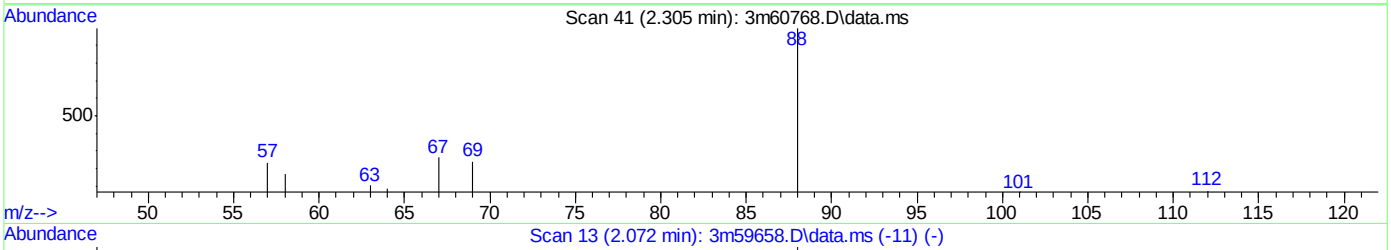
SGS ACCUTEST JC20314

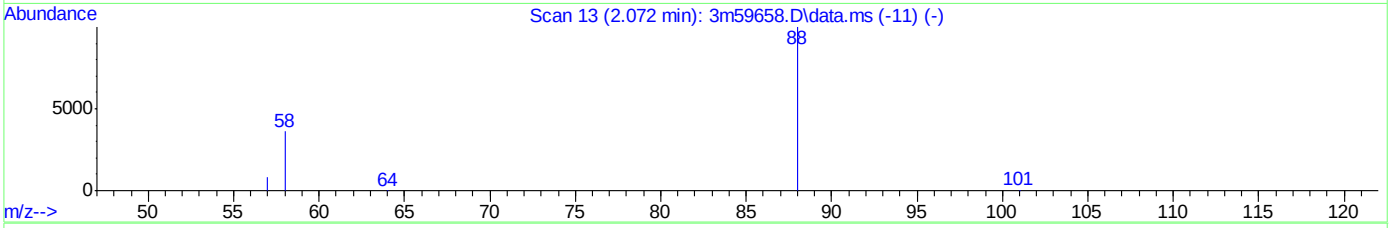
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:28:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration







TIC: 3m60768.D\data.ms

(2) 1,4-dioxane (t)

2.305min (-0.000) 0.01ppm m

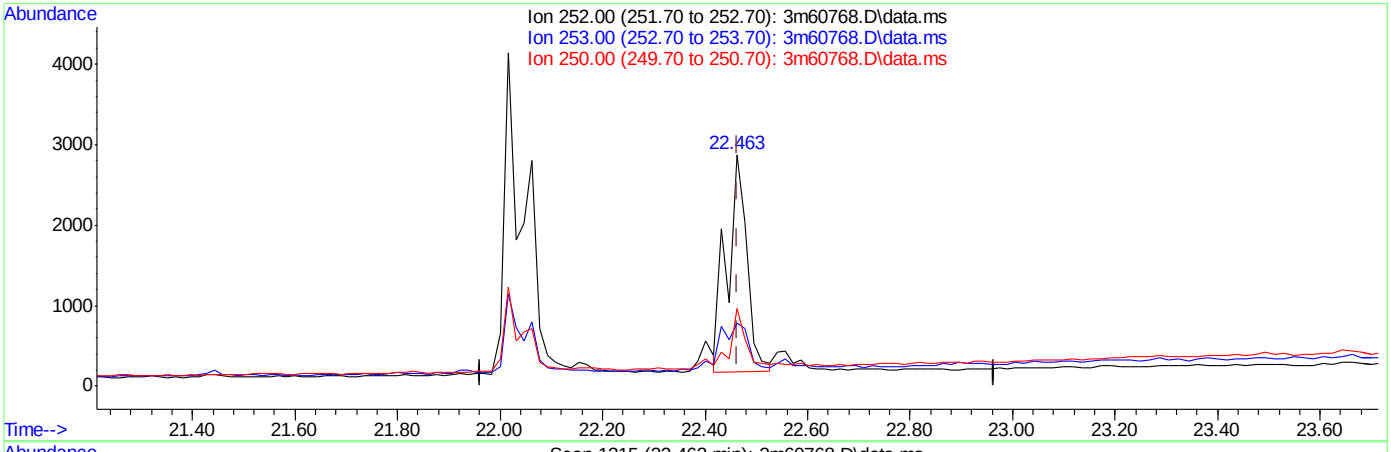
response 245

Ion	Exp%	Act%
88.00	100	100
58.00	32.40	16.63
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:28:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration



TIC: 3m60768.D\data.ms

(34) Benzo[a]pyrene (t)

22.463min (-0.000) 0.03ppm

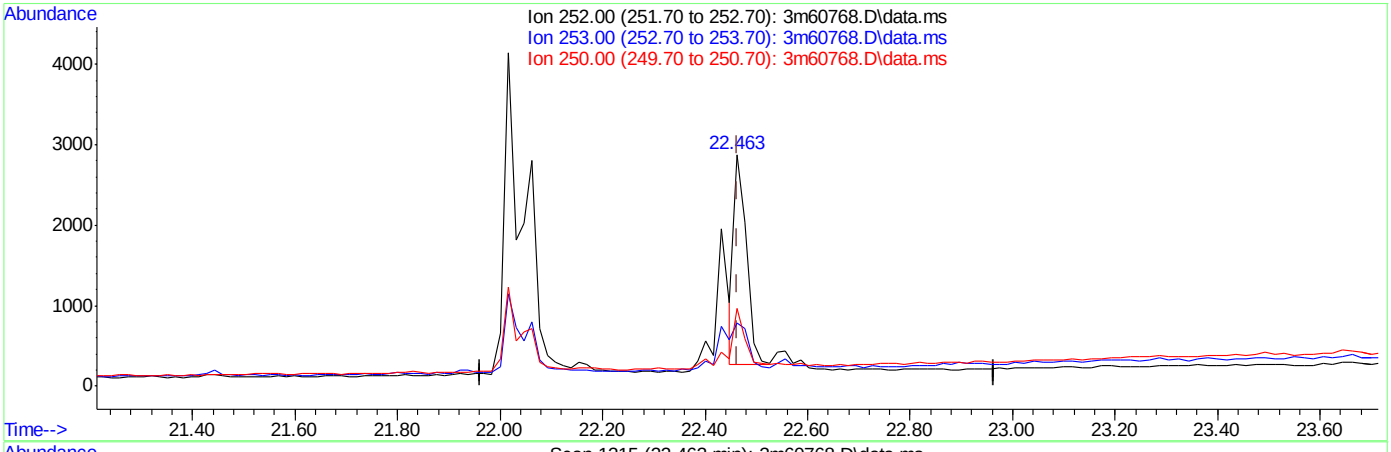
response 7218

Ion	Exp%	Act%
252.00	100	100
253.00	18.80	20.93
250.00	26.10	27.47
0.00	0.00	0.00

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 JC20314

3M60769.D

Manual Integrations APPROVED (compounds with "m" flag)

Nina Pandya 04/22/16 12:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60769.D
Acq On : 21 Apr 2016 5:49 pm
Operator : linseyk
Sample : ic2855-0.01
Misc : op93052a,e3m2855
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 08:30:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.640	150	341727	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	510798	4.00	ppm	0.00
21) Fluoranthene-d10	17.843	212	894999	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	717706	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	7703	0.18	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.36%	
4) Phenol-d5	6.104	99	12728	0.18	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.36%	
7) Nitrobenzene-d5	7.726	82	11420	0.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.34%	
15) 2-Fluorobiphenyl	11.303	172	27514	0.19	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.38%	
20) 2,4,6-Tribromophenol	14.172	330	2174	0.13	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.26%	
28) Terphenyl-d14	18.647	244	28577	0.21	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.42%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.305	88	176m	0.01	ppm	
5) Phenol	6.116	94	3362	0.04	ppm	# 69
6) bis(2-Chloroethyl)ether	6.285	93	566	0.01	ppm	89
8) Nitrobenzene	7.764	77	712	0.01	ppm	83
9) Naphthalene	9.139	128	1910	0.01	ppm	98
10) Hexachlorobutadiene	9.421	225	308	0.01	ppm	98
11) 2-Methylnaphthalene	10.517	141	971	0.01	ppm	94
12) 1-Methylnaphthalene	10.702	141	1726	0.01	ppm	95
13) Hexachlorocyclopentadiene	10.846	237	382	0.02	ppm	97
16) Acenaphthylene	12.293	152	1639	0.01	ppm	99
17) Acenaphthene	12.648	153	1117	0.01	ppm	98
18) 4,6-dinitro-2-methylph...	13.852	198	146	0.01	ppm	70
19) Fluorene	13.682	166	1465	0.01	ppm	99
22) Hexachlorobenzene	14.783	284	417	0.01	ppm	95
23) Pentachlorophenol	15.200	266	877	0.04	ppm	98
24) Phenanthrene	15.602	178	2267	0.01	ppm	98
25) Anthracene	15.711	178	1713	0.01	ppm	97
26) Fluoranthene	17.874	202	4045	0.02	ppm	99
27) Pyrene	18.261	202	2880	0.01	ppm	98
29) Benzo[a]anthracene	20.347	228	3441	0.02	ppm	98
30) Chrysene	20.408	228	4214	0.02	ppm	97
32) Benzo[b]fluoranthene	22.015	252	4562	0.02	ppm	88
33) Benzo[k]fluoranthene	22.062	252	1997	0.01	ppm	94
34) Benzo[a]pyrene	22.463	252	2699	0.01	ppm	86
35) Indeno[1,2,3-cd]pyrene	23.963	276	2125	0.01	ppm	100
36) Dibenz[a,h]anthracene	24.020	278	2112	0.01	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	1927	0.01	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60769.D
Acq On : 21 Apr 2016 5:49 pm
Operator : linseyk
Sample : ic2855-0.01
Misc : op93052a,e3m2855
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 08:30:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.7

7

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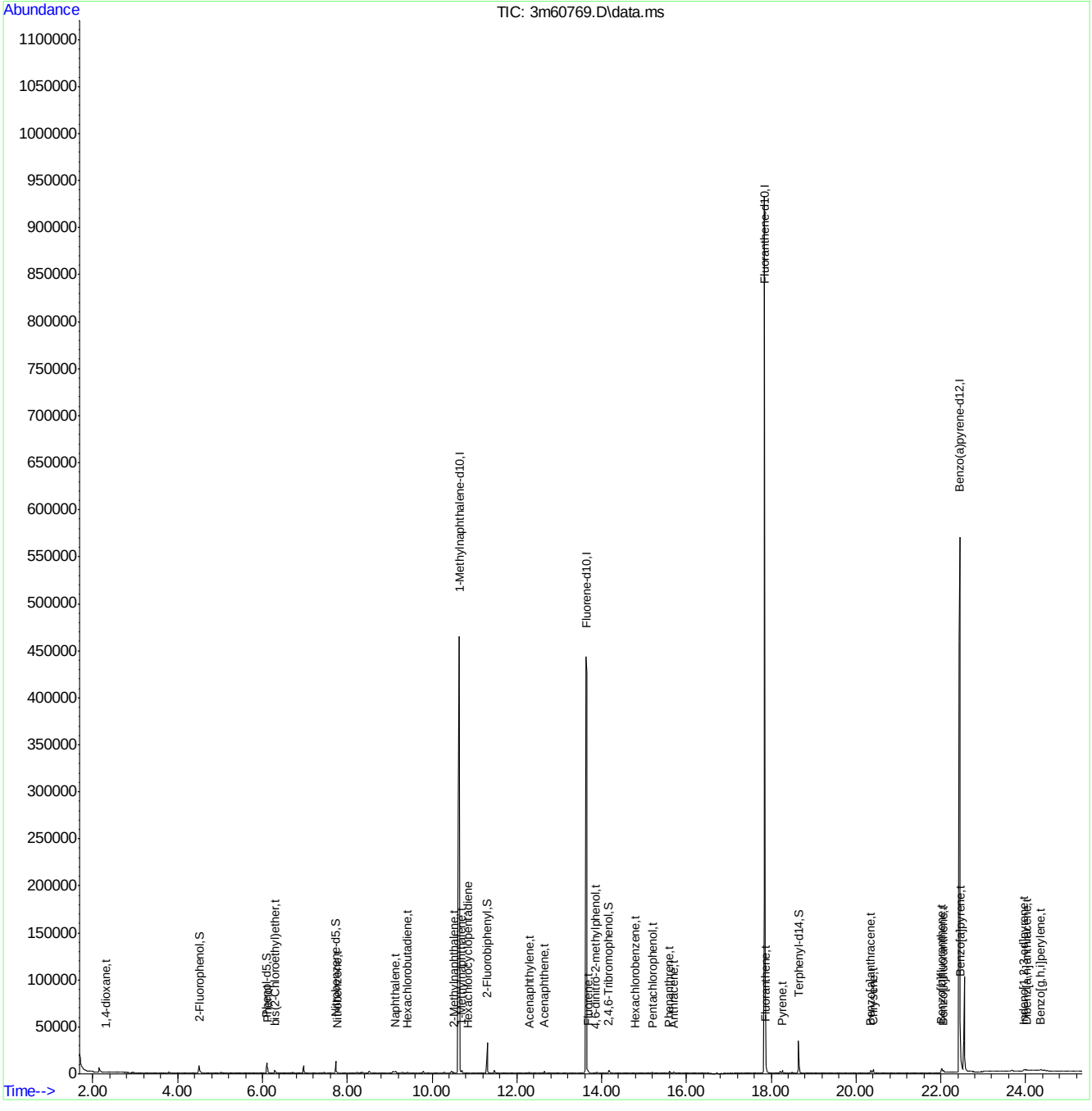
Quantitation Report (QT Reviewed)

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 JC20314

Manual Integration Approval Summary

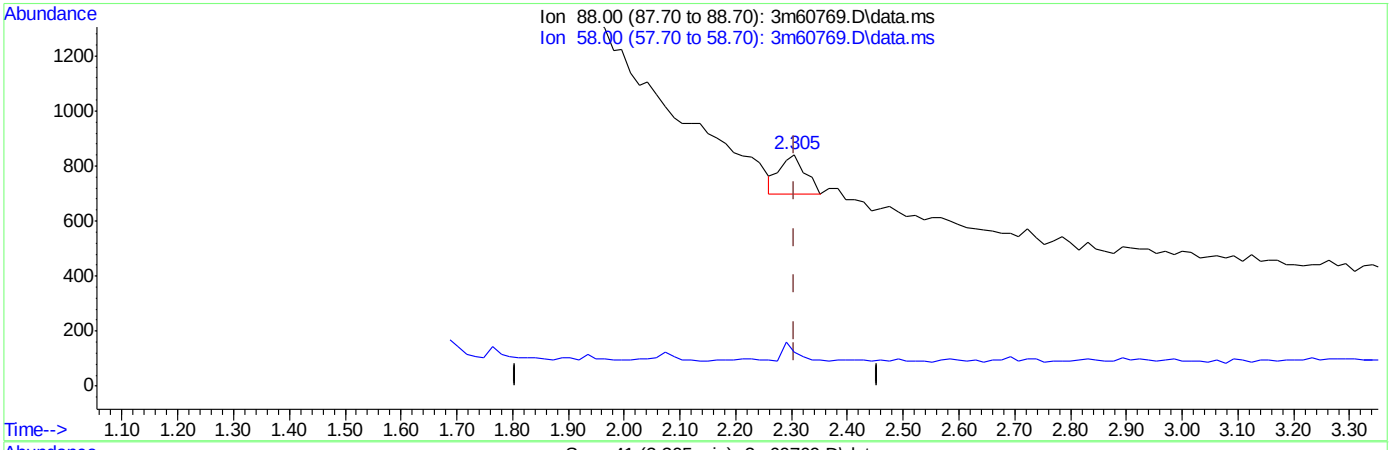
Sample Number:	E3M2855-IC2855	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M60769.D	**Analyst approved:**	04/22/16 09:15 Linsey Kirschmann
Injection Time:	04/21/16 17:49	**Supervisor approved:**	04/22/16 12:27 Nina Pandya

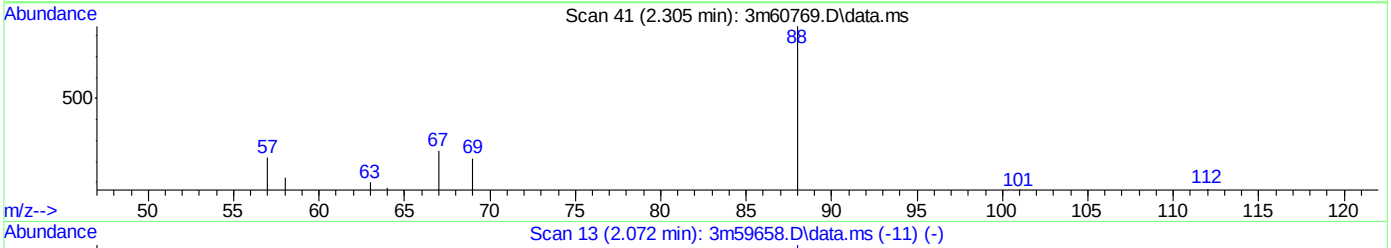
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.31	Baseline ripple

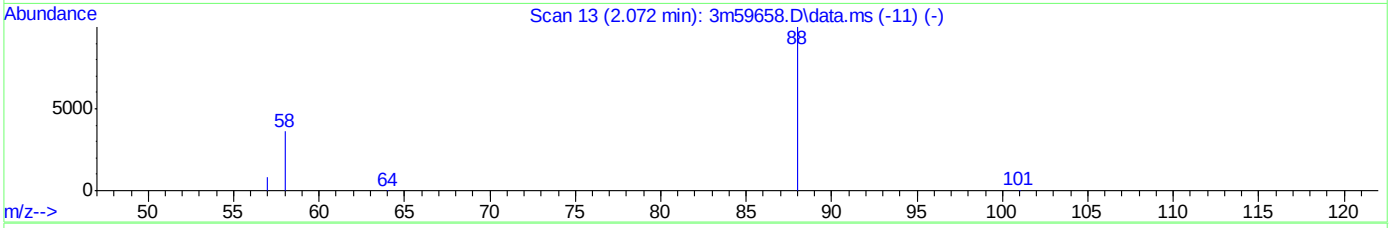
Quantitation Report (Qedit)

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

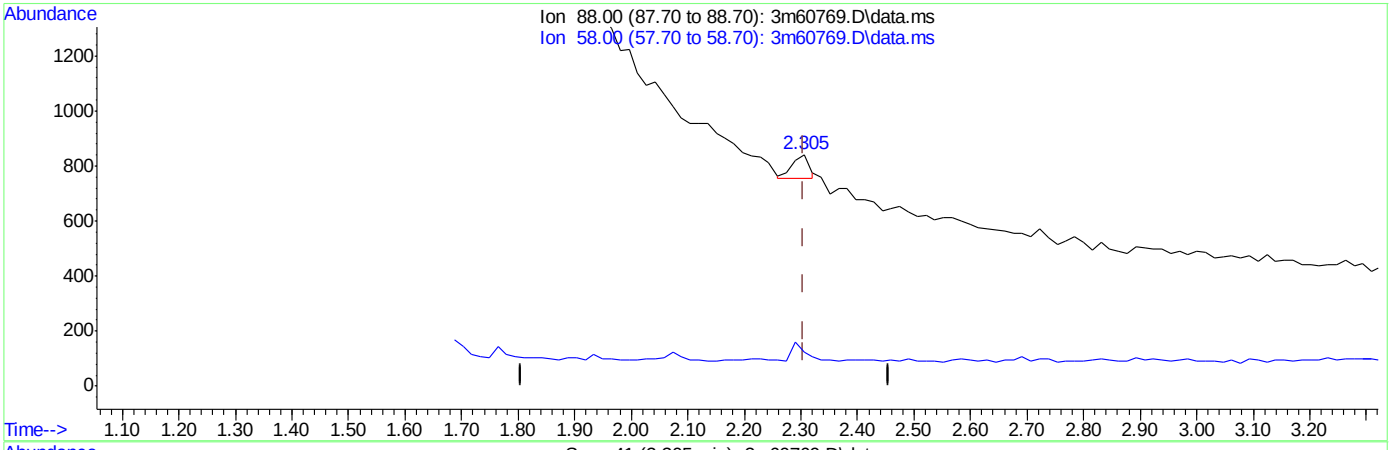
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	25.45
0.00	0.00	0.00
0.00	0.00	0.00

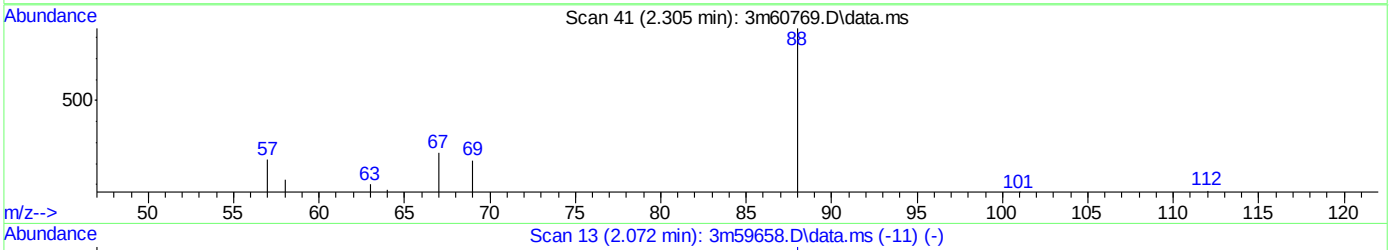
SGS ACCUTEST JC20314

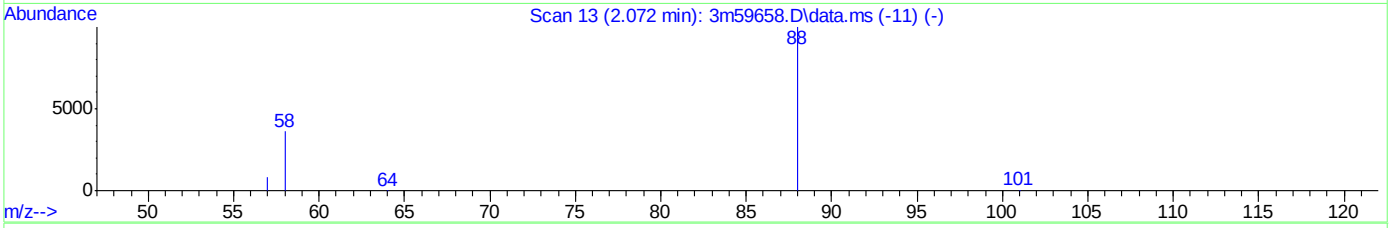
Quantitation Report (Qedit)

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

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

7.6.8

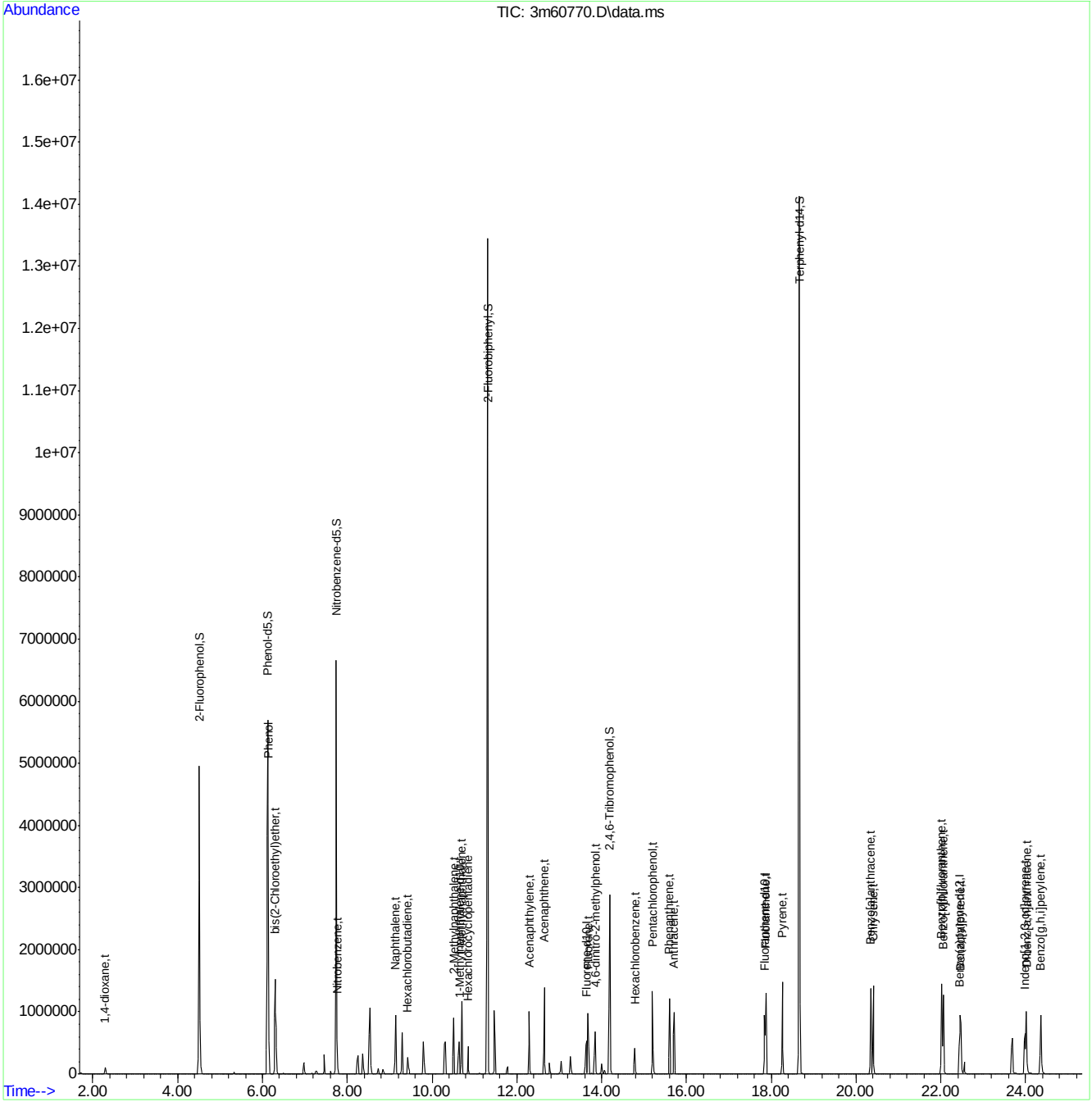
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60770.D
Acq On : 21 Apr 2016 6:22 pm
Operator : linseyk
Sample : ic2855-5.0
Misc : op93052a,e3m2855
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 08:30:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:48 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60771.D
Acq On : 21 Apr 2016 6:55 pm
Operator : linseyk
Sample : ic2855-2.5
Misc : op93052a,e3m2855
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 22 08:31:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:31:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.640	150	385250	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	616747	4.00	ppm	0.00
21) Fluoranthene-d10	17.843	212	966990	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	773663	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	2363254	48.90	ppm	0.00
Spiked Amount 50.000			Recovery = 97.80%			
4) Phenol-d5	6.116	99	3871836	48.37	ppm	-0.01
Spiked Amount 50.000			Recovery = 96.74%			
7) Nitrobenzene-d5	7.726	82	3072767	40.29	ppm	-0.02
Spiked Amount 50.000			Recovery = 80.58%			
15) 2-Fluorobiphenyl	11.303	172	7301000	42.25	ppm	-0.02
Spiked Amount 50.000			Recovery = 84.50%			
20) 2,4,6-Tribromophenol	14.191	330	926725	47.63	ppm	0.00
Spiked Amount 50.000			Recovery = 95.26%			
28) Terphenyl-d14	18.662	244	6991573	49.82	ppm	0.00
Spiked Amount 50.000			Recovery = 99.64%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.289	88	48881	2.39	ppm #	59
5) Phenol	6.128	94	1024552	11.84	ppm #	67
6) bis(2-Chloroethyl)ether	6.285	93	142356	2.16	ppm	77
8) Nitrobenzene	7.764	77	205619	2.56	ppm	76
9) Naphthalene	9.138	128	535435	2.50	ppm	98
10) Hexachlorobutadiene	9.421	225	87273	2.32	ppm	94
11) 2-Methylnaphthalene	10.517	141	279805	2.51	ppm	94
12) 1-Methylnaphthalene	10.702	141	340057	2.24	ppm	91
13) Hexachlorocyclopentadiene	10.846	237	158162	5.40	ppm	93
16) Acenaphthylene	12.293	152	544103	2.55	ppm	98
17) Acenaphthene	12.648	153	350568	2.45	ppm	95
18) 4,6-dinitro-2-methylph...	13.851	198	297531	19.93	ppm	92
19) Fluorene	13.682	166	399367	2.31	ppm	96
22) Hexachlorobenzene	14.783	284	115675	2.53	ppm	95
23) Pentachlorophenol	15.200	266	400828	15.26	ppm	98
24) Phenanthrene	15.602	178	602735	2.56	ppm	99
25) Anthracene	15.711	178	589914	2.71	ppm	98
26) Fluoranthene	17.874	202	671708	2.48	ppm	99
27) Pyrene	18.261	202	685271	2.51	ppm	99
29) Benzo[a]anthracene	20.346	228	610065	2.48	ppm	98
30) Chrysene	20.408	228	651165	2.57	ppm	98
32) Benzo[b]fluoranthene	22.015	252	621501	2.16	ppm	98
33) Benzo[k]fluoranthene	22.061	252	586018	2.45	ppm	99
34) Benzo[a]pyrene	22.463	252	565533	2.34	ppm	99
35) Indeno[1,2,3-cd]pyrene	23.963	276	624468	2.57	ppm	97
36) Dibenz[a,h]anthracene	24.020	278	520048	2.60	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	542545	2.57	ppm	100

SGS ACCUTEST JC20314

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

7.6.9

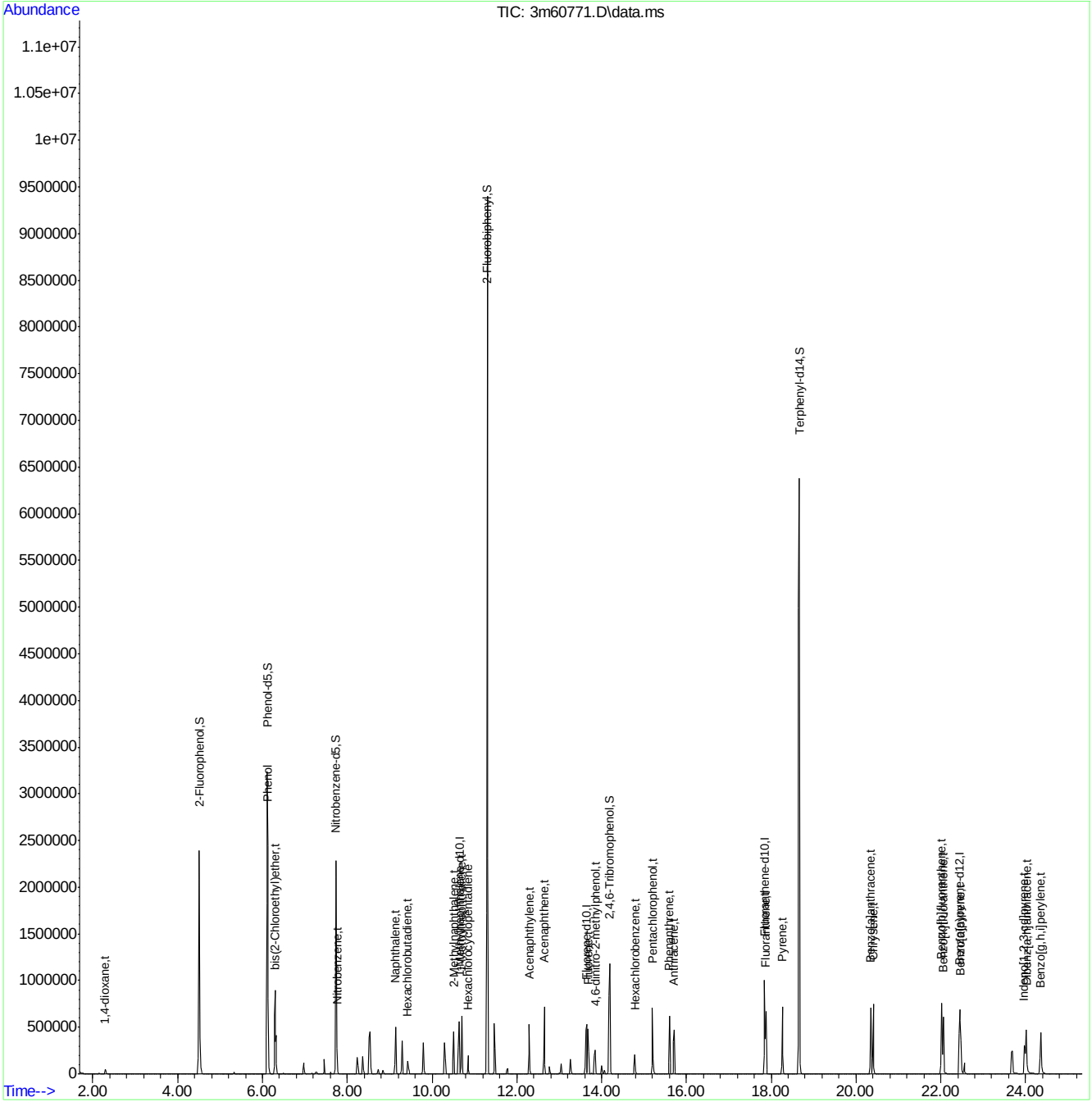
7

SGS ACCUTEST JC20314

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 JC20314

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

7.6.10

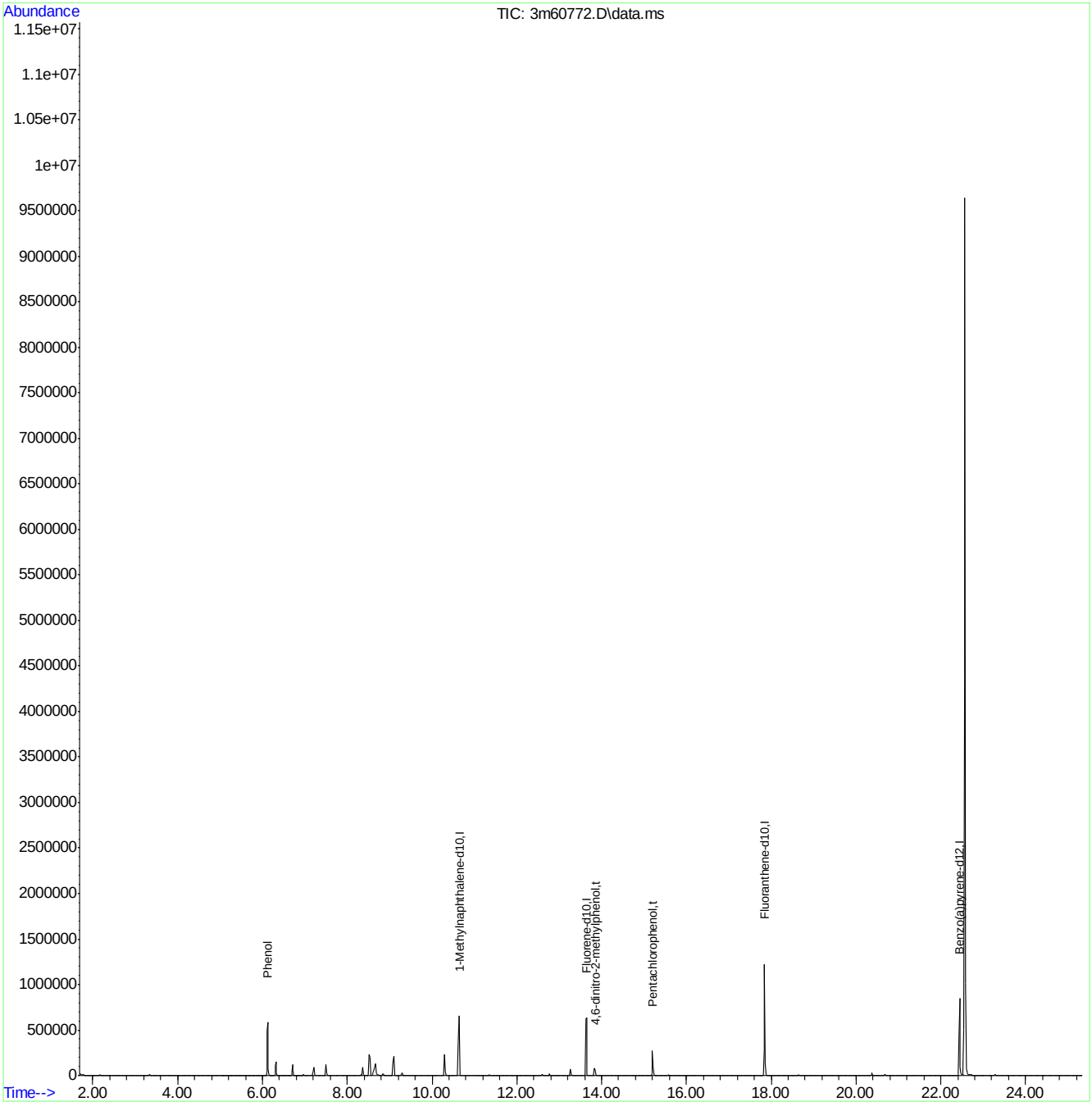
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60772.D
Acq On : 21 Apr 2016 7:27 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 22 08:56:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration



M3M2855SIM.M Fri Apr 22 08:56:16 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60773.D
Acq On : 21 Apr 2016 8:00 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 22 08:58:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.640	150	381667	4.00 ppm	0.00
14) Fluorene-d10	13.644	176	568016	4.00 ppm	0.00
21) Fluoranthene-d10	17.843	212	891736	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	666840	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
4) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
7) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
15) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
20) 2,4,6-Tribromophenol	0.000	330	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
28) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.320	88	21008	1.07 ppm	93
6) bis(2-Chloroethyl)ether	6.285	93	64147	1.00 ppm	87
8) Nitrobenzene	7.764	77	65386	0.82 ppm	100
9) Naphthalene	9.138	128	240749	1.14 ppm	99
10) Hexachlorobutadiene	9.421	225	41080	1.11 ppm	99
11) 2-Methylnaphthalene	10.517	141	115129	1.04 ppm	98
16) Acenaphthylene	12.293	152	209375	1.06 ppm	99
17) Acenaphthene	12.648	153	152795	1.16 ppm	96
19) Fluorene	13.682	166	170302	1.08 ppm	100
22) Hexachlorobenzene	14.783	284	47590	1.13 ppm	96
24) Phenanthrene	15.602	178	253476	1.16 ppm	95
25) Anthracene	15.711	178	221984	1.15 ppm	98
26) Fluoranthene	17.874	202	279548	1.02 ppm	99
27) Pyrene	18.261	202	275135	1.08 ppm	98
29) Benzo[a]anthracene	20.362	228	271481	1.11 ppm	94
30) Chrysene	20.408	228	239361	1.02 ppm	94
32) Benzo[b]fluoranthene	22.015	252	207742	0.94 ppm	97
33) Benzo[k]fluoranthene	22.061	252	230502	1.12 ppm	98
34) Benzo[a]pyrene	22.463	252	199534	0.97 ppm	99
35) Indeno[1,2,3-cd]pyrene	23.963	276	218688	1.04 ppm	98
36) Dibenz[a,h]anthracene	24.020	278	173448	1.00 ppm	100
37) Benzo[g,h,i]perylene	24.358	276	191304	1.05 ppm	100

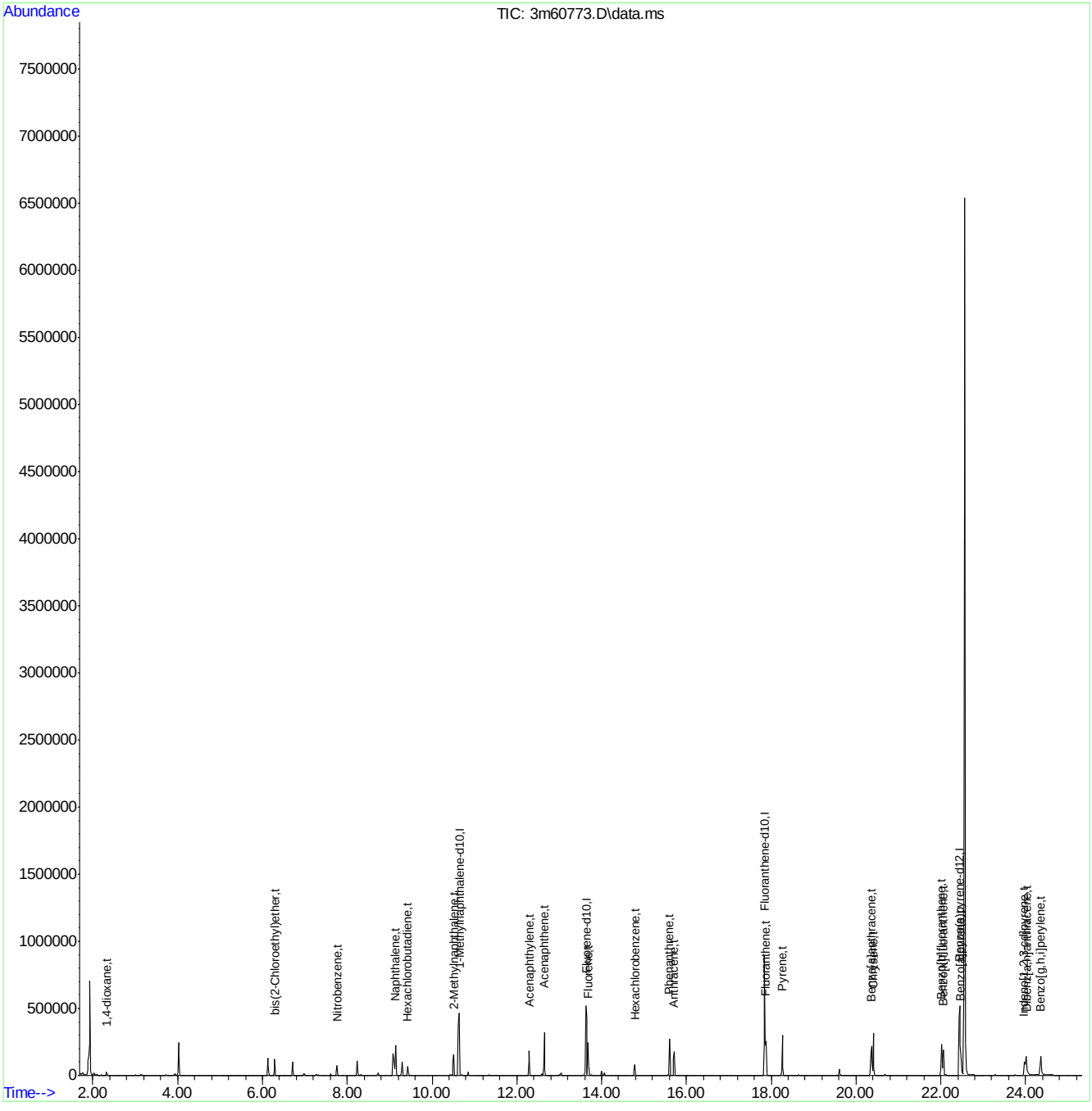
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60773.D
Acq On : 21 Apr 2016 8:00 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 22 08:58:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration



M3M2855SIM.M Fri Apr 22 08:58:28 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60774.D
Acq On : 21 Apr 2016 8:35 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 22 08:58:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.640	150	433101	4.00 ppm	0.00
14) Fluorene-d10	13.644	176	614407	4.00 ppm	0.00
21) Fluoranthene-d10	17.843	212	1087112	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	854436	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	0.000	112	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
4) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
7) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
15) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
20) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
28) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.289	88	25472	1.14 ppm	95
12) 1-Methylnaphthalene	10.702	141	161130	0.95 ppm	94
13) Hexachlorocyclopentadiene	10.845	237	34911	1.05 ppm	99

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

7.6.12

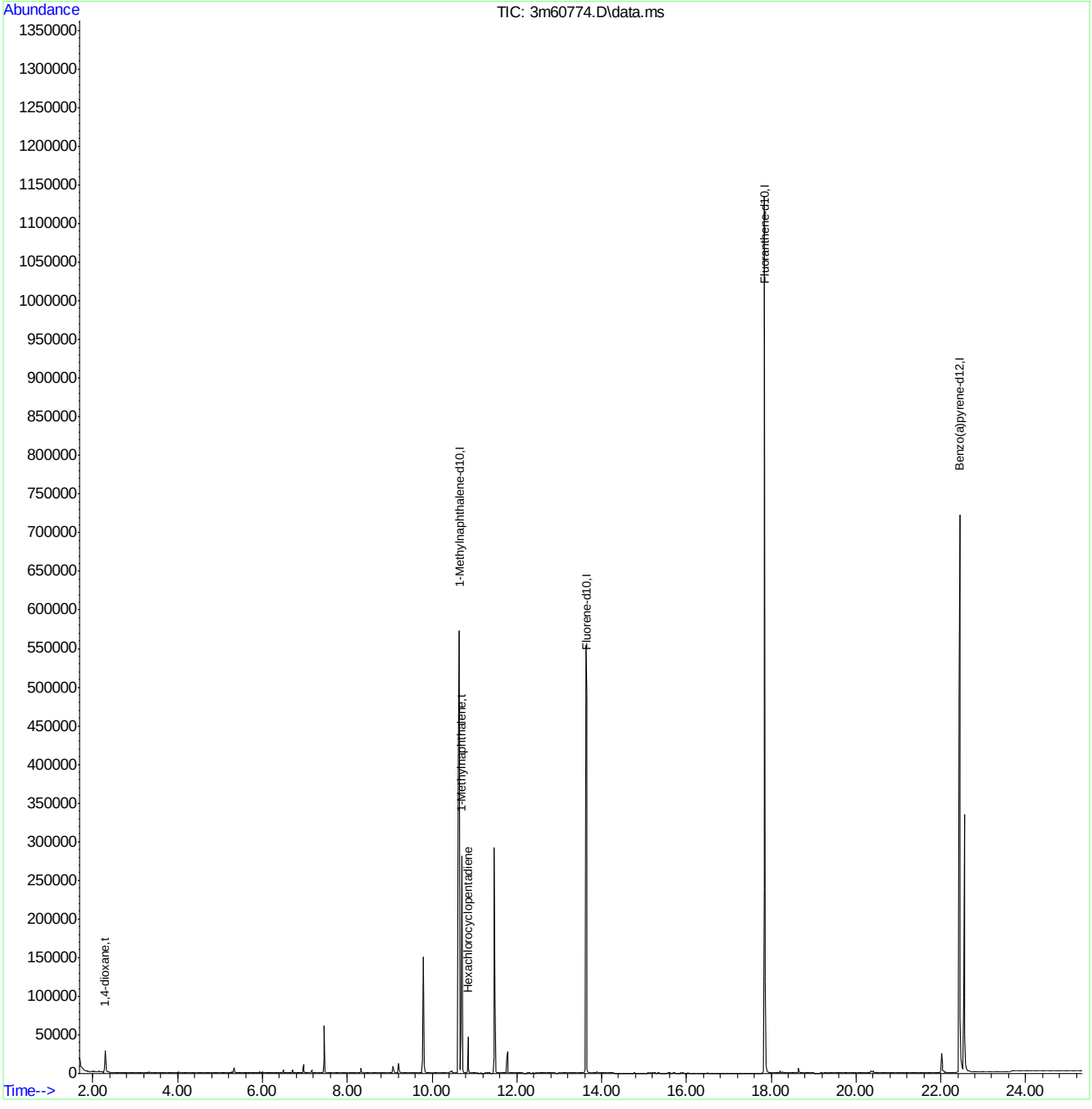
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60774.D
Acq On : 21 Apr 2016 8:35 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 22 08:58:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration



M3M2855SIM.M Fri Apr 22 08:58:16 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2885\
Data File : 3m61347.D
Acq On : 16 May 2016 9:42 am
Operator : ashleyd
Sample : cc2855-0.5
Misc : op93756a,e3m2885
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 10:06:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 12 12:34:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.385	150	615904	4.00	ppm	0.02
14) Fluorene-d10	13.373	176	943018	4.00	ppm	0.00
21) Fluoranthene-d10	17.592	212	1676777	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.212	264	1447214	4.00	ppm	0.02
System Monitoring Compounds						
3) 2-Fluorophenol	4.337	112	781875	10.15	ppm	0.02
Spiked Amount 50.000			Recovery	=	20.30%	
4) Phenol-d5	5.952	99	1271027	9.97	ppm	0.02
Spiked Amount 50.000			Recovery	=	19.94%	
7) Nitrobenzene-d5	7.493	82	1165017	9.83	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.66%	
15) 2-Fluorobiphenyl	11.052	172	2741915	10.58	ppm	0.02
Spiked Amount 50.000			Recovery	=	21.16%	
20) 2,4,6-Tribromophenol	13.938	330	292798	9.92	ppm	0.02
Spiked Amount 50.000			Recovery	=	19.84%	
28) Terphenyl-d14	18.411	244	2528356	10.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	20.78%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.112	88	15050	0.47	ppm #	58
5) Phenol	5.964	94	332489	2.42	ppm	94
6) bis(2-Chloroethyl)ether	6.060	93	46365	0.45	ppm	91
8) Nitrobenzene	7.531	77	59316	0.46	ppm #	48
9) Naphthalene	8.886	128	172285	0.50	ppm	91
10) Hexachlorobutadiene	9.169	225	31859	0.53	ppm	85
11) 2-Methylnaphthalene	10.262	141	100988	0.57	ppm #	65
12) 1-Methylnaphthalene	10.447	141	115539	0.48	ppm	76
13) Hexachlorocyclopentadiene	10.590	237	45319	0.96	ppm	87
16) Acenaphthylene	12.026	152	167530	0.51	ppm	100
17) Acenaphthene	12.381	153	111170	0.51	ppm	100
18) 4,6-dinitro-2-methylph...	13.618	198	64488	2.52	ppm	90
19) Fluorene	13.430	166	137844	0.53	ppm	88
22) Hexachlorobenzene	14.516	284	38046	0.48	ppm	91
23) Pentachlorophenol	14.964	266	95307	1.85	ppm	86
24) Phenanthrene	15.336	178	195924	0.48	ppm	97
25) Anthracene	15.444	178	179016	0.49	ppm	95
26) Fluoranthene	17.623	202	221871	0.43	ppm	96
27) Pyrene	18.025	202	220537	0.46	ppm	87
29) Benzo[a]anthracene	20.111	228	212839	0.46	ppm	94
30) Chrysene	20.173	228	213492	0.48	ppm	96
32) Benzo[b]fluoranthene	21.779	252	225898	0.47	ppm	90
33) Benzo[k]fluoranthene	21.826	252	211959	0.48	ppm	93
34) Benzo[a]pyrene	22.227	252	211411	0.47	ppm	96
35) Indeno[1,2,3-cd]pyrene	23.693	276	255133	0.56	ppm	98
36) Dibenz[a,h]anthracene	23.730	278	185974	0.49	ppm	100
37) Benzo[g,h,i]perylene	24.050	276	214972	0.54	ppm	99

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2885\
Data File : 3m61347.D
Acq On : 16 May 2016 9:42 am
Operator : ashleyd
Sample : cc2855-0.5
Misc : op93756a,e3m2885
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 10:06:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 12 12:34:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.13

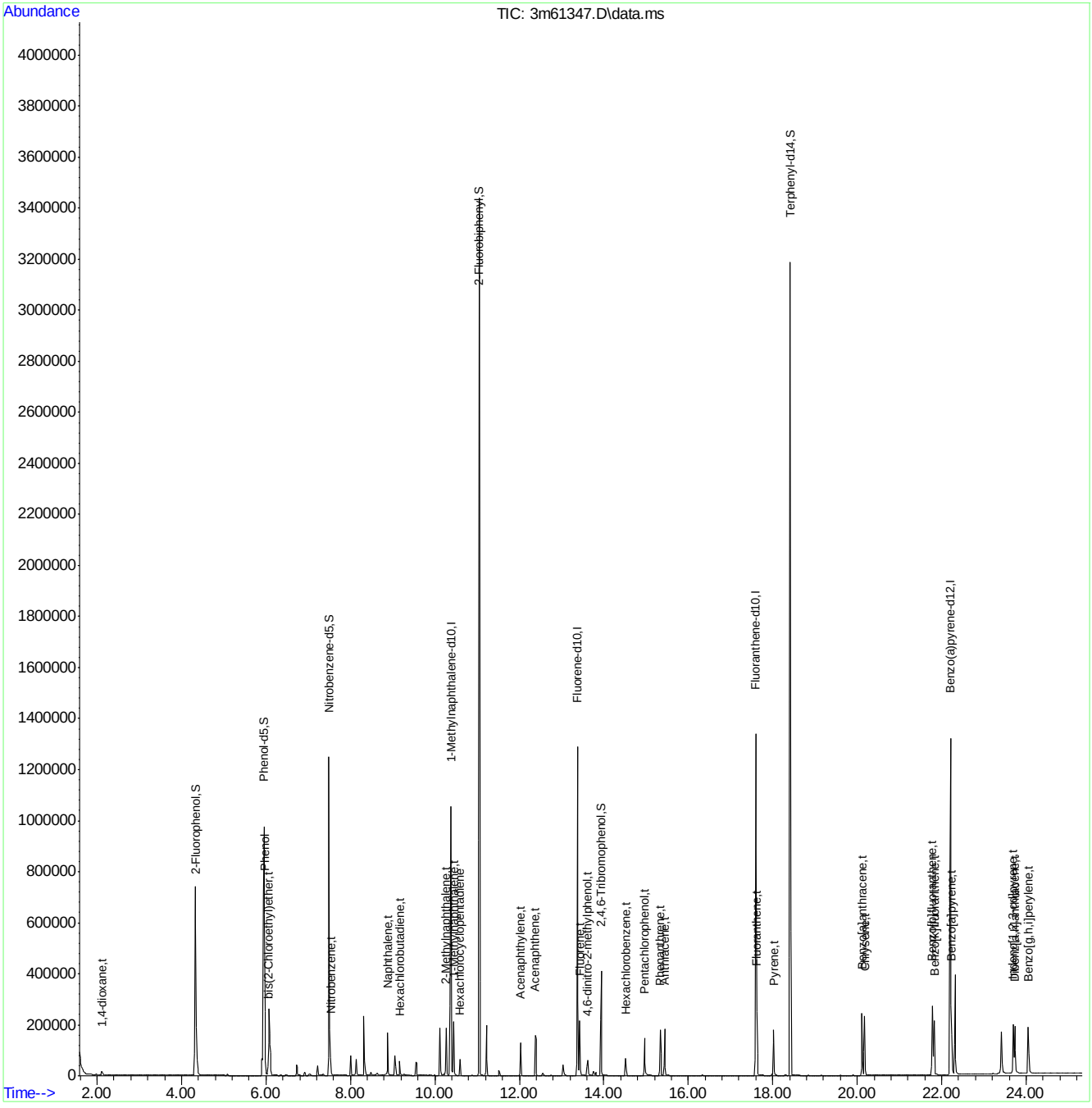
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2885\
Data File : 3m61347.D
Acq On : 16 May 2016 9:42 am
Operator : ashleyd
Sample : cc2855-0.5
Misc : op93756a,e3m2885
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 10:06:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 12 12:34:26 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16323.D
Acq On : 18 May 2016 10:43 am
Operator : linseyk
Sample : icc863-1
Misc : op93791,e4p863
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 12:35:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:35:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.881	150	266175	4.00	ppm	0.00
13) Fluorene-d10	10.839	176	257991	4.00	ppm	0.00
23) Fluoranthene-d10	15.037	212	431628	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.668	264	247629	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.695	112	533222	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
4) Phenol-d5	3.819	99	913590	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
7) Nitrobenzene-d5	5.179	82	641756	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
14) 2-Fluorobiphenyl	8.546	172	1911166	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
22) 2,4,6-Tribromophenol	11.358	330	218365	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
30) Terphenyl-d14	15.881	244	1203578	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.475	88	15710	1.00	ppm	100
5) Phenol	3.836	94	273911	5.00	ppm	100
6) bis(2-Chloroethyl)ether	3.940	93	34250	1.00	ppm	100
8) Naphthalene	6.459	128	132805	1.00	ppm	100
9) Hexachlorobutadiene	6.765	225	20239	1.00	ppm	100
10) 2-Methylnaphthalene	7.767	141	79778	1.00	ppm	100
11) 1-Methylnaphthalene	7.950	141	82589	1.00	ppm	100
12) Hexachlorocyclopentadiene	8.133	237	26161	2.00	ppm	100
15) Acenaphthylene	9.485	152	113222	1.00	ppm	100
16) Acenaphthene	9.852	153	68321	1.00	ppm	100
17) Dibenzofuran	10.195	168	122870	1.00	ppm	100
18) Fluorene	10.864	166	77333	1.00	ppm	100
19) 4,6-dinitro-2-methylph...	11.062	198	27981	5.00	ppm	100
20) n-nitrosodiphenylamine	11.211	169	40906	1.00	ppm	100
21) 1,2-Diphenylhydrazine	11.253	77	70523	1.00	ppm	100
24) Hexachlorobenzene	11.974	284	28879	1.00	ppm	100
25) Pentachlorophenol	12.404	266	56516	5.00	ppm	100
26) Phenanthrene	12.748	178	123878	1.00	ppm	100
27) Anthracene	12.852	178	110292	1.00	ppm	100
28) Fluoranthene	15.072	202	128096	1.00	ppm	100
29) Pyrene	15.467	202	111454	1.00	ppm	100
31) Benzo[a]anthracene	17.591	228	59453	1.00	ppm	100
32) Chrysene	17.639	228	110336	1.00	ppm	100
34) Benzo[b]fluoranthene	19.243	252	76125	1.00	ppm	100
35) Benzo[k]fluoranthene	19.289	252	91901	1.00	ppm	100
36) Benzo[a]pyrene	19.691	252	87257	1.00	ppm	100
37) Indeno[1,2,3-cd]pyrene	21.110	276	84131	1.00	ppm	100
38) Dibenz[a,h]anthracene	21.159	278	68968	1.00	ppm	100
39) Benzo[g,h,i]perylene	21.418	276	84005	1.00	ppm	100

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16323.D
Acq On : 18 May 2016 10:43 am
Operator : linseyk
Sample : icc863-1
Misc : op93791,e4p863
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 12:35:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:35:00 2016
Response via : Initial Calibration

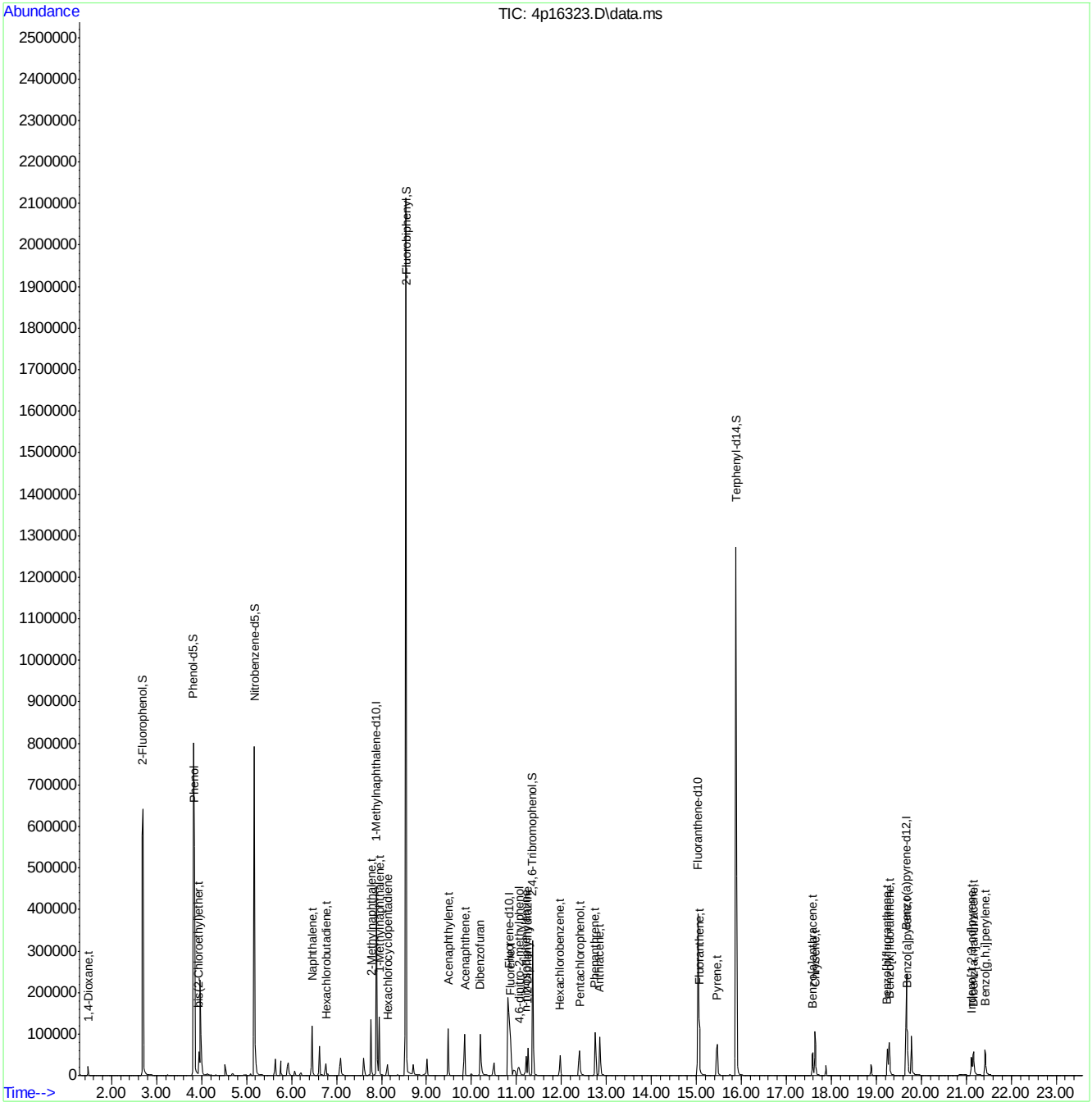
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16323.D
Acq On : 18 May 2016 10:43 am
Operator : linseyk
Sample : icc863-1
Misc : op93791,e4p863
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 12:35:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:35:00 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16324.D
Acq On : 18 May 2016 11:13 am
Operator : linseyk
Sample : ic863-.5
Misc : op93791,e4p863
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 12:35:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:35:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.881	150	260604	4.00	ppm	0.00
13) Fluorene-d10	10.839	176	243919	4.00	ppm	0.00
23) Fluoranthene-d10	15.037	212	414828	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.672	264	207466	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.695	112	299492	11.47	ppm	0.00
Spiked Amount 50.000			Recovery = 22.94%			
4) Phenol-d5	3.819	99	479484	10.72	ppm	0.00
Spiked Amount 50.000			Recovery = 21.44%			
7) Nitrobenzene-d5	5.178	82	344838	10.98	ppm	0.00
Spiked Amount 50.000			Recovery = 21.96%			
14) 2-Fluorobiphenyl	8.545	172	1049177	11.61	ppm	0.00
Spiked Amount 50.000			Recovery = 23.22%			
22) 2,4,6-Tribromophenol	11.358	330	105844	10.25	ppm	0.00
Spiked Amount 50.000			Recovery = 20.50%			
30) Terphenyl-d14	15.880	244	646576	11.18	ppm	0.00
Spiked Amount 50.000			Recovery = 22.36%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.475	88	8842	0.57	ppm	91
5) Phenol	3.836	94	145002	2.70	ppm	95
6) bis(2-Chloroethyl)ether	3.939	93	17382	0.52	ppm #	79
8) Naphthalene	6.459	128	72743	0.56	ppm	100
9) Hexachlorobutadiene	6.765	225	10984	0.55	ppm	99
10) 2-Methylnaphthalene	7.766	141	40183	0.51	ppm	99
11) 1-Methylnaphthalene	7.950	141	44538	0.55	ppm	97
12) Hexachlorocyclopentadiene	8.133	237	11283	0.88	ppm	99
15) Acenaphthylene	9.485	152	55765	0.52	ppm	100
16) Acenaphthene	9.852	153	36528	0.57	ppm	99
17) Dibenzofuran	10.195	168	63193	0.54	ppm	99
18) Fluorene	10.864	166	39839	0.54	ppm	99
19) 4,6-dinitro-2-methylph...	11.062	198	10067	1.90	ppm	92
20) n-nitrosodiphenylamine	11.211	169	20941	0.54	ppm	97
21) 1,2-Diphenylhydrazine	11.253	77	32182	0.48	ppm	99
24) Hexachlorobenzene	11.974	284	15415	0.56	ppm	99
25) Pentachlorophenol	12.404	266	21703	2.00	ppm	96
26) Phenanthrene	12.748	178	66947	0.56	ppm	99
27) Anthracene	12.851	178	52783	0.50	ppm	98
28) Fluoranthene	15.071	202	69776	0.57	ppm	99
29) Pyrene	15.467	202	56360	0.53	ppm	99
31) Benzo[a]anthracene	17.583	228	26856	0.47	ppm	90
32) Chrysene	17.641	228	57595	0.54	ppm	99
34) Benzo[b]fluoranthene	19.246	252	30587	0.48	ppm	93
35) Benzo[k]fluoranthene	19.281	252	35690	0.47	ppm	92
36) Benzo[a]pyrene	19.695	252	39774	0.54	ppm	97
37) Indeno[1,2,3-cd]pyrene	21.112	276	32072	0.46	ppm	99
38) Dibenz[a,h]anthracene	21.160	278	27108	0.47	ppm	100
39) Benzo[g,h,i]perylene	21.420	276	36524	0.52	ppm	100

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16324.D
Acq On : 18 May 2016 11:13 am
Operator : linseyk
Sample : ic863-.5
Misc : op93791,e4p863
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 12:35:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:35:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.15

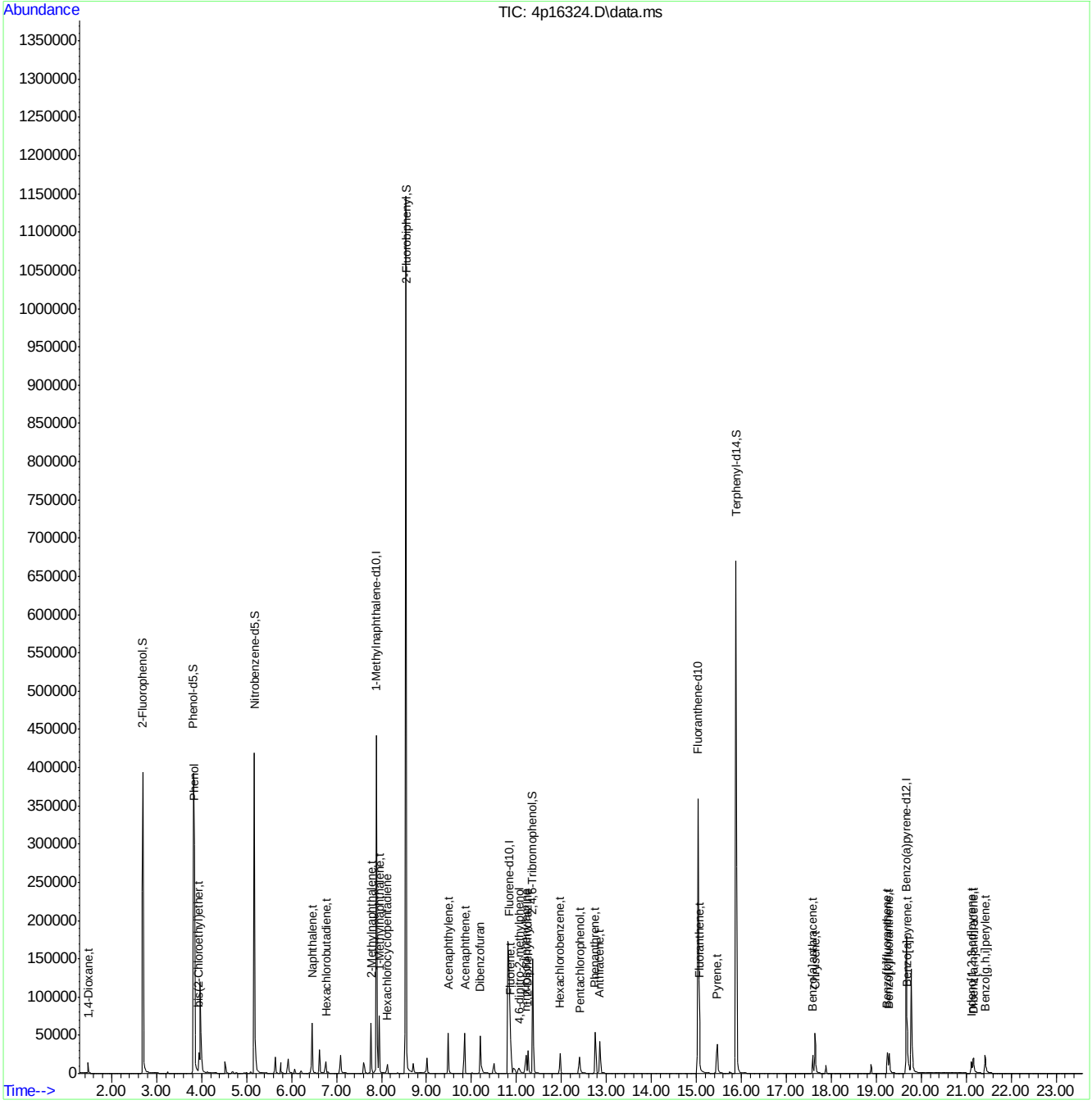
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16324.D
Acq On : 18 May 2016 11:13 am
Operator : linseyk
Sample : ic863-.5
Misc : op93791,e4p863
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 12:35:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:35:00 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16325.D
Acq On : 18 May 2016 11:43 am
Operator : linseyk
Sample : ic863-.2
Misc : op93791,e4p863
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 12:35:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:35:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.881	150	296656	4.00	ppm	0.00
13) Fluorene-d10	10.839	176	276610	4.00	ppm	0.00
23) Fluoranthene-d10	15.037	212	555197	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.672	264	251878	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.695	112	134557	4.53	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.06%	
4) Phenol-d5	3.819	99	192056	3.77	ppm	0.00
Spiked Amount 50.000			Recovery	=	7.54%	
7) Nitrobenzene-d5	5.179	82	150279	4.20	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.40%	
14) 2-Fluorobiphenyl	8.546	172	481809	4.70	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.40%	
22) 2,4,6-Tribromophenol	11.358	330	34565	2.95	ppm	0.00
Spiked Amount 50.000			Recovery	=	5.90%	
30) Terphenyl-d14	15.880	244	294113	3.80	ppm	0.00
Spiked Amount 50.000			Recovery	=	7.60%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.475	88	3848	0.22	ppm	75
5) Phenol	3.836	94	60990	1.00	ppm #	84
6) bis(2-Chloroethyl)ether	3.957	93	7875	0.21	ppm #	1
8) Naphthalene	6.459	128	31612	0.21	ppm	98
9) Hexachlorobutadiene	6.765	225	4883	0.22	ppm	97
10) 2-Methylnaphthalene	7.767	141	17299	0.19	ppm	94
11) 1-Methylnaphthalene	7.950	141	20173	0.22	ppm	97
12) Hexachlorocyclopentadiene	8.133	237	3935	0.27	ppm	99
15) Acenaphthylene	9.485	152	21537	0.18	ppm	99
16) Acenaphthene	9.852	153	15302	0.21	ppm	95
17) Dibenzofuran	10.195	168	25847	0.20	ppm	84
18) Fluorene	10.864	166	16641	0.20	ppm	100
19) 4,6-dinitro-2-methylph...	11.062	198	2962	0.49	ppm	52
20) n-nitrosodiphenylamine	11.211	169	7850	0.18	ppm	94
21) 1,2-Diphenylhydrazine	11.253	77	10251	0.14	ppm	96
24) Hexachlorobenzene	11.974	284	6516	0.18	ppm	99
25) Pentachlorophenol	12.404	266	6223	0.43	ppm	92
26) Phenanthrene	12.748	178	26756	0.17	ppm	99
27) Anthracene	12.852	178	19579	0.14	ppm	100
28) Fluoranthene	15.072	202	31767	0.19	ppm	99
29) Pyrene	15.467	202	28637	0.20	ppm	98
31) Benzo[a]anthracene	17.583	228	13868	0.18	ppm	91
32) Chrysene	17.641	228	22737	0.16	ppm	99
34) Benzo[b]fluoranthene	19.246	252	10562	0.14	ppm	94
35) Benzo[k]fluoranthene	19.293	252	11711	0.13	ppm	96
36) Benzo[a]pyrene	19.695	252	18870	0.21	ppm	96
37) Indeno[1,2,3-cd]pyrene	21.112	276	10817	0.13	ppm	99
38) Dibenz[a,h]anthracene	21.160	278	9027	0.13	ppm	100
39) Benzo[g,h,i]perylene	21.420	276	12864	0.15	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16325.D
Acq On : 18 May 2016 11:43 am
Operator : linseyk
Sample : ic863-.2
Misc : op93791,e4p863
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 12:35:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:35:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.16

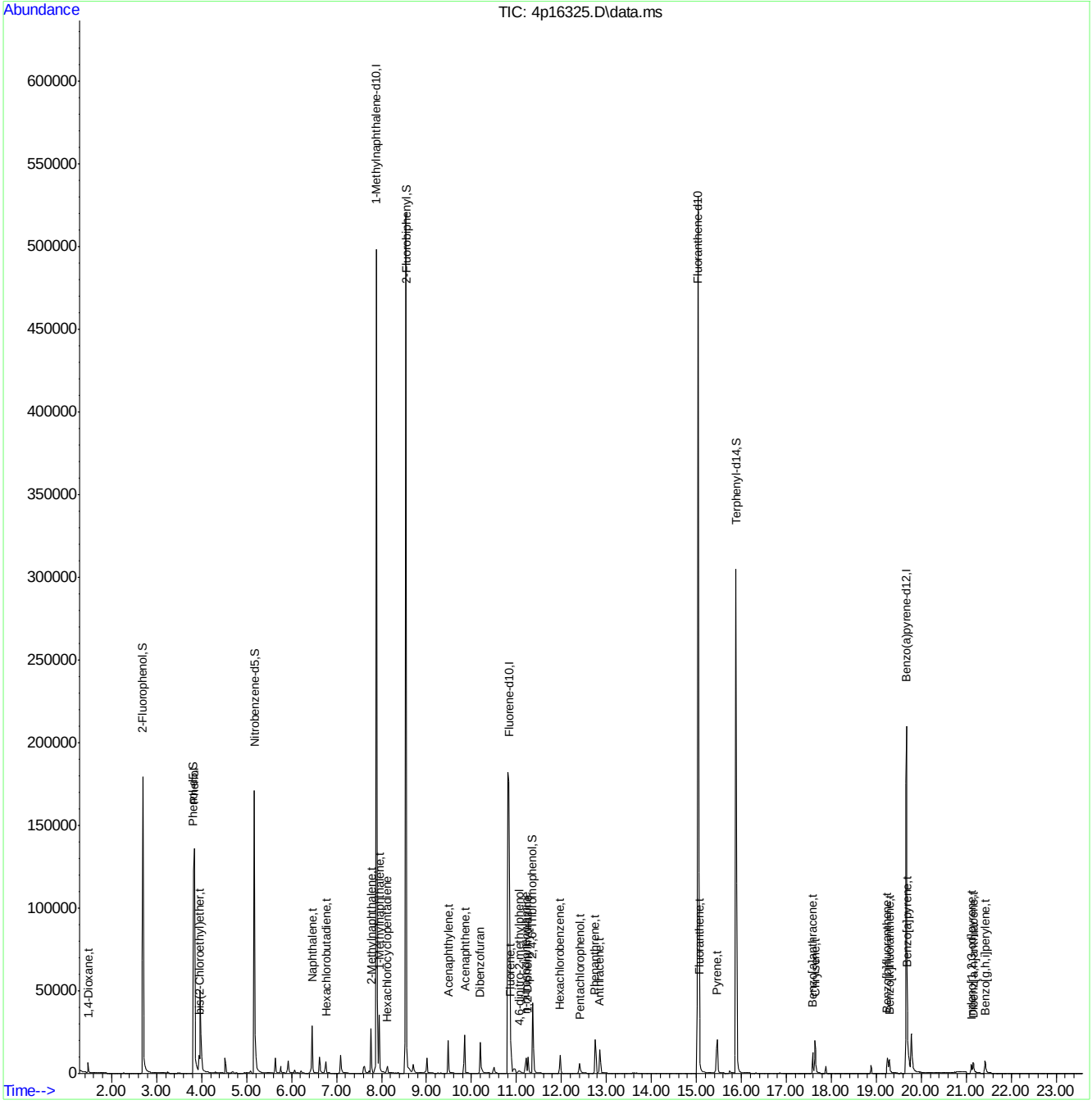
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16325.D
Acq On : 18 May 2016 11:43 am
Operator : linseyk
Sample : ic863-.2
Misc : op93791,e4p863
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 12:35:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:35:00 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16326.D
Acq On : 18 May 2016 12:12 pm
Operator : linseyk
Sample : ic863-.1
Misc : op93791,e4p863
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 12:36:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:36:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	7.881	150	272163	4.00 ppm	0.00
13) Fluorene-d10	10.839	176	254257	4.00 ppm	0.00
23) Fluoranthene-d10	15.037	212	462200	4.00 ppm	0.00
33) Benzo(a)pyrene-d12	19.672	264	217396	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	2.695	112	58802	1.97 ppm	0.00
Spiked Amount 50.000			Recovery	= 3.94%	
4) Phenol-d5	3.836	99	77001	1.64 ppm	0.02
Spiked Amount 50.000			Recovery	= 3.28%	
7) Nitrobenzene-d5	5.179	82	71460	2.08 ppm	0.00
Spiked Amount 50.000			Recovery	= 4.16%	
14) 2-Fluorobiphenyl	8.546	172	223836	2.14 ppm	0.00
Spiked Amount 50.000			Recovery	= 4.28%	
22) 2,4,6-Tribromophenol	11.358	330	11741	1.18 ppm	0.00
Spiked Amount 50.000			Recovery	= 2.36%	
30) Terphenyl-d14	15.880	244	115542	1.75 ppm	0.00
Spiked Amount 50.000			Recovery	= 3.50%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.475	88	1903	0.11 ppm #	63
5) Phenol	3.836	94	25333	0.44 ppm #	67
6) bis(2-Chloroethyl)ether	3.957	93	3552	0.10 ppm #	2
8) Naphthalene	6.459	128	14894	0.10 ppm	98
9) Hexachlorobutadiene	6.765	225	2420	0.11 ppm	97
10) 2-Methylnaphthalene	7.767	141	7611	0.09 ppm	94
11) 1-Methylnaphthalene	7.950	141	9099	0.10 ppm	95
12) Hexachlorocyclopentadiene	8.133	237	1332	0.12 ppm	95
15) Acenaphthylene	9.485	152	9309	0.09 ppm	99
16) Acenaphthene	9.852	153	6816	0.10 ppm	95
17) Dibenzofuran	10.195	168	11121	0.09 ppm	70
18) Fluorene	10.864	166	7459	0.09 ppm	94
19) 4,6-dinitro-2-methylph...	11.087	198	748	0.18 ppm	79
20) n-nitrosodiphenylamine	11.211	169	3398	0.08 ppm	90
21) 1,2-Diphenylhydrazine	11.253	77	4699	0.08 ppm	96
24) Hexachlorobenzene	11.974	284	2860	0.09 ppm	98
25) Pentachlorophenol	12.404	266	2134	0.24 ppm	86
26) Phenanthrene	12.748	178	11796	0.09 ppm	99
27) Anthracene	12.852	178	8386	0.08 ppm	97
28) Fluoranthene	15.072	202	14475	0.10 ppm	97
29) Pyrene	15.467	202	9735	0.08 ppm	97
31) Benzo[a]anthracene	17.583	228	3762	0.06 ppm	92
32) Chrysene	17.641	228	8347	0.07 ppm	98
34) Benzo[b]fluoranthene	19.246	252	3995	0.07 ppm	93
35) Benzo[k]fluoranthene	19.281	252	3982	0.06 ppm	94
36) Benzo[a]pyrene	19.695	252	8750	0.11 ppm	98
37) Indeno[1,2,3-cd]pyrene	21.112	276	4248	0.07 ppm	99
38) Dibenz[a,h]anthracene	21.160	278	3549	0.07 ppm	100
39) Benzo[g,h,i]perylene	21.420	276	5203	0.08 ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16326.D
Acq On : 18 May 2016 12:12 pm
Operator : linseyk
Sample : ic863-.1
Misc : op93791,e4p863
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 12:36:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:36:50 2016
Response via : Initial Calibration

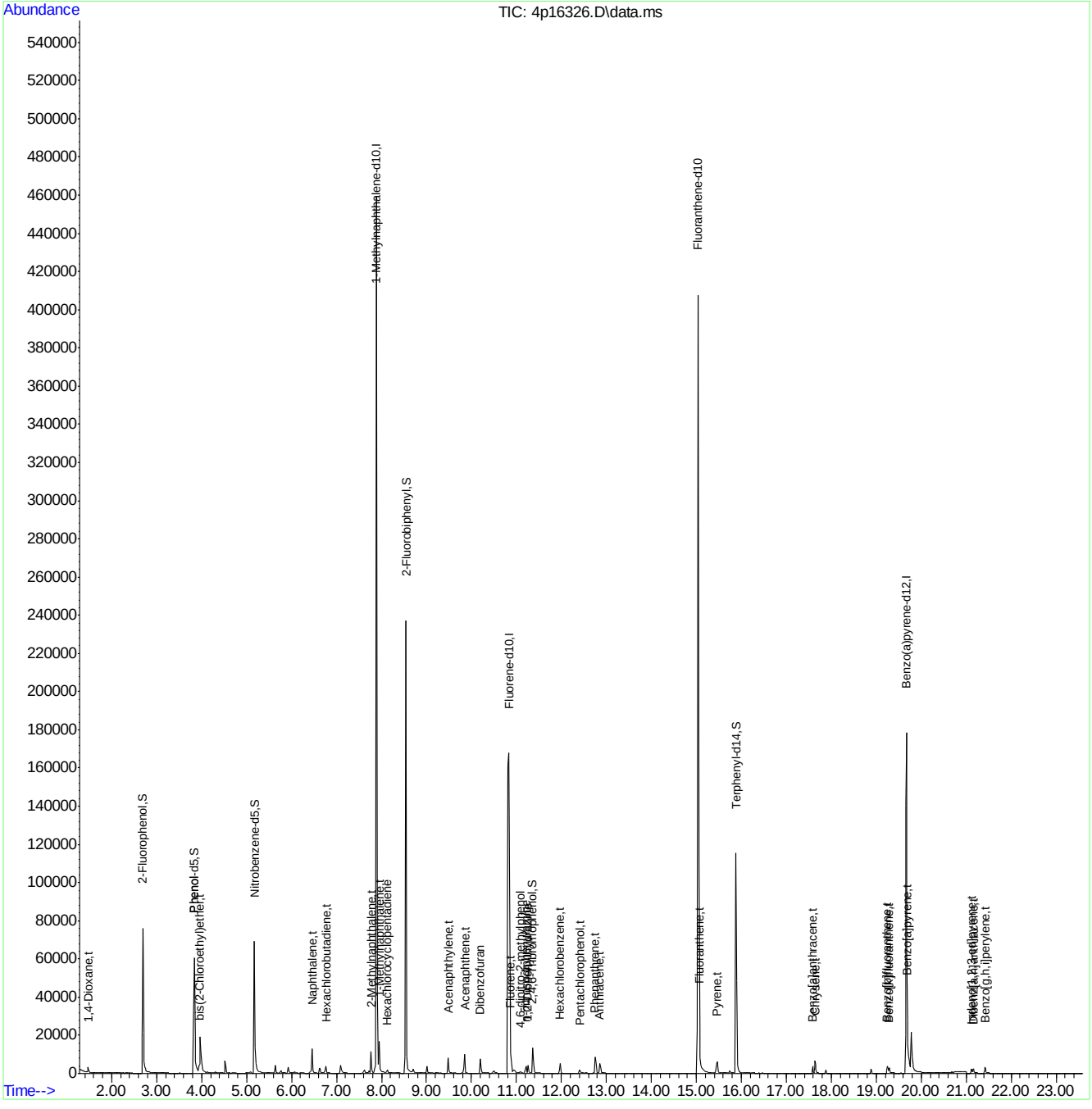
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16326.D
Acq On : 18 May 2016 12:12 pm
Operator : linseyk
Sample : ic863-.1
Misc : op93791,e4p863
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 12:36:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:36:50 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16327.D
Acq On : 18 May 2016 12:42 pm
Operator : linseyk
Sample : ic863-.05
Misc : op93791,e4p863
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 18 16:20:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:37:23 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	7.879	150	308359	4.00 ppm	0.00
13) Fluorene-d10	10.837	176	330130	4.00 ppm	0.00
23) Fluoranthene-d10	15.035	212	543634	4.00 ppm	0.00
33) Benzo(a)pyrene-d12	19.670	264	267299	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	2.695	112	34312	1.02 ppm	0.00
Spiked Amount 50.000			Recovery	= 2.04%	
4) Phenol-d5	3.836	99	43080	0.85 ppm	0.00
Spiked Amount 50.000			Recovery	= 1.70%	
7) Nitrobenzene-d5	5.177	82	42833	1.09 ppm	0.00
Spiked Amount 50.000			Recovery	= 2.18%	
14) 2-Fluorobiphenyl	8.544	172	134083	0.97 ppm	0.00
Spiked Amount 50.000			Recovery	= 1.94%	
22) 2,4,6-Tribromophenol	11.356	330	5727	0.50 ppm	0.00
Spiked Amount 50.000			Recovery	= 1.00%	
30) Terphenyl-d14	15.879	244	61339	0.82 ppm	0.00
Spiked Amount 50.000			Recovery	= 1.64%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.475	88	1090	0.05 ppm #	60
5) Phenol	3.836	94	14442	0.23 ppm #	69
6) bis(2-Chloroethyl)ether	3.957	93	2131	0.05 ppm #	3
8) Naphthalene	6.457	128	9641	0.06 ppm	95
9) Hexachlorobutadiene	6.763	225	1611	0.06 ppm	88
10) 2-Methylnaphthalene	7.765	141	4294	0.05 ppm	82
11) 1-Methylnaphthalene	7.948	141	6057	0.06 ppm	86
12) Hexachlorocyclopentadiene	8.131	237	782	0.07 ppm	94
15) Acenaphthylene	9.483	152	4860	0.04 ppm	98
16) Acenaphthene	9.850	153	4552	0.05 ppm	90
17) Dibenzofuran	10.194	168	6143	0.04 ppm #	22
18) Fluorene	10.887	166	4937	0.05 ppm #	61
19) 4,6-dinitro-2-methylph...	11.110	198	372	0.08 ppm #	39
20) n-nitrosodiphenylamine	11.209	169	2176	0.04 ppm	84
21) 1,2-Diphenylhydrazine	11.251	77	2529	0.03 ppm	86
24) Hexachlorobenzene	11.972	284	1763	0.05 ppm	93
25) Pentachlorophenol	12.402	266	943	0.10 ppm	71
26) Phenanthrene	12.764	178	7314	0.05 ppm	90
27) Anthracene	12.867	178	5088	0.04 ppm	92
28) Fluoranthene	15.070	202	9433	0.06 ppm	97
29) Pyrene	15.466	202	5848	0.04 ppm	95
31) Benzo[a]anthracene	17.591	228	2297	0.04 ppm	95
32) Chrysene	17.639	228	4892	0.04 ppm	97
34) Benzo[b]fluoranthene	19.245	252	2224	0.03 ppm	93
35) Benzo[k]fluoranthene	19.291	252	2303	0.03 ppm	99
36) Benzo[a]pyrene	19.693	252	6018	0.06 ppm	97
37) Indeno[1,2,3-cd]pyrene	21.111	276	2701	0.04 ppm	97
38) Dibenz[a,h]anthracene	21.159	278	2180	0.04 ppm	95
39) Benzo[g,h,i]perylene	21.418	276	2748	0.03 ppm	97

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16327.D
Acq On : 18 May 2016 12:42 pm
Operator : linseyk
Sample : ic863-.05
Misc : op93791,e4p863
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 18 16:20:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:37:23 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.18

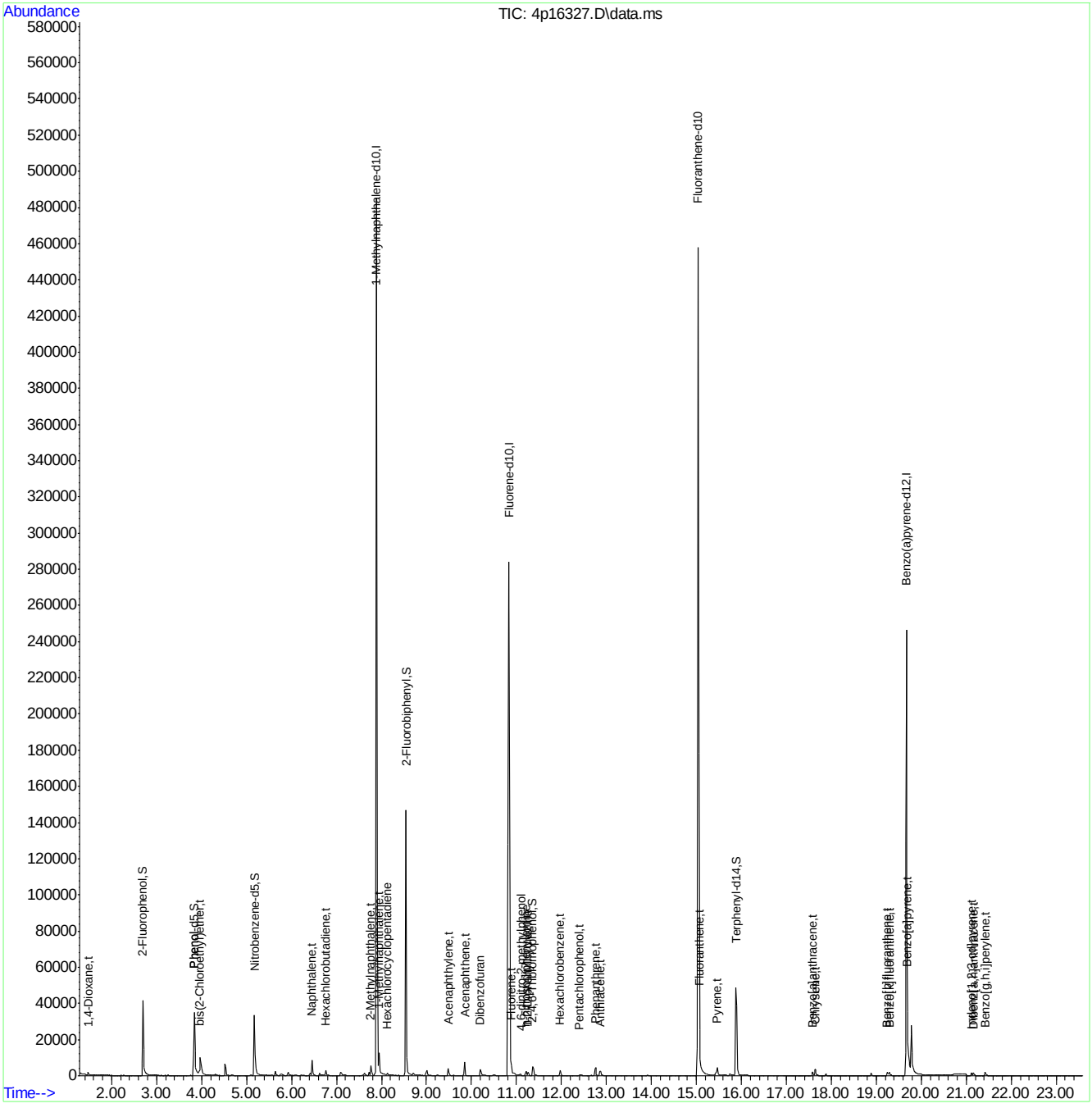
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16327.D
Acq On : 18 May 2016 12:42 pm
Operator : linseyk
Sample : ic863-.05
Misc : op93791,e4p863
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 18 16:20:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 12:37:23 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16328.D
Acq On : 18 May 2016 1:12 pm
Operator : linseyk
Sample : ic863-.02
Misc : op93791,e4p863
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 18 16:20:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:20:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.881	150	248362	4.00	ppm	0.00
13) Fluorene-d10	10.839	176	209710	4.00	ppm	0.00
23) Fluoranthene-d10	15.037	212	384856	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.668	264	160950	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.695	112	13548	0.50	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.00%	
4) Phenol-d5	3.836	99	19267	0.49	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.98%	
7) Nitrobenzene-d5	5.179	82	12131	0.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.76%	
14) 2-Fluorobiphenyl	8.546	172	41480	0.47	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.94%	
22) 2,4,6-Tribromophenol	11.358	330	2438	0.33	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.66%	
30) Terphenyl-d14	15.880	244	18859	0.37	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.74%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.475	88	398	0.02	ppm #	59
5) Phenol	3.854	94	4145	0.08	ppm #	89
6) bis(2-Chloroethyl)ether	3.957	93	930	0.03	ppm #	41
8) Naphthalene	6.459	128	3020	0.02	ppm	97
9) Hexachlorobutadiene	6.765	225	537	0.02	ppm	92
10) 2-Methylnaphthalene	7.766	141	1455	0.02	ppm	85
11) 1-Methylnaphthalene	7.950	141	1851	0.02	ppm	90
12) Hexachlorocyclopentadiene	8.133	237	154	0.02	ppm #	65
15) Acenaphthylene	9.485	152	1602	0.02	ppm	94
16) Acenaphthene	9.852	153	1358	0.02	ppm	92
17) Dibenzofuran	10.195	168	2066	0.02	ppm #	42
18) Fluorene	10.864	166	1459	0.02	ppm	88
20) n-nitrosodiphenylamine	11.211	169	654	0.02	ppm	85
21) 1,2-Diphenylhydrazine	11.253	77	805	0.02	ppm	90
24) Hexachlorobenzene	11.974	284	770	0.03	ppm	96
25) Pentachlorophenol	12.421	266	233	0.04	ppm	80
26) Phenanthrene	12.748	178	2322	0.02	ppm	98
27) Anthracene	12.851	178	1357	0.02	ppm	96
28) Fluoranthene	15.072	202	3319	0.03	ppm	98
29) Pyrene	15.467	202	1750	0.02	ppm	96
31) Benzo[a]anthracene	17.581	228	824	0.02	ppm	90
32) Chrysene	17.639	228	1599	0.02	ppm	98
34) Benzo[b]fluoranthene	19.243	252	678	0.02	ppm	98
35) Benzo[k]fluoranthene	19.289	252	723	0.02	ppm	96
36) Benzo[a]pyrene	19.691	252	1905	0.03	ppm	94
37) Indeno[1,2,3-cd]pyrene	21.110	276	727	0.02	ppm	93
38) Dibenz[a,h]anthracene	21.158	278	588	0.02	ppm	93
39) Benzo[g,h,i]perylene	21.418	276	844	0.02	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16328.D
Acq On : 18 May 2016 1:12 pm
Operator : linseyk
Sample : ic863-.02
Misc : op93791,e4p863
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 18 16:20:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:20:39 2016
Response via : Initial Calibration

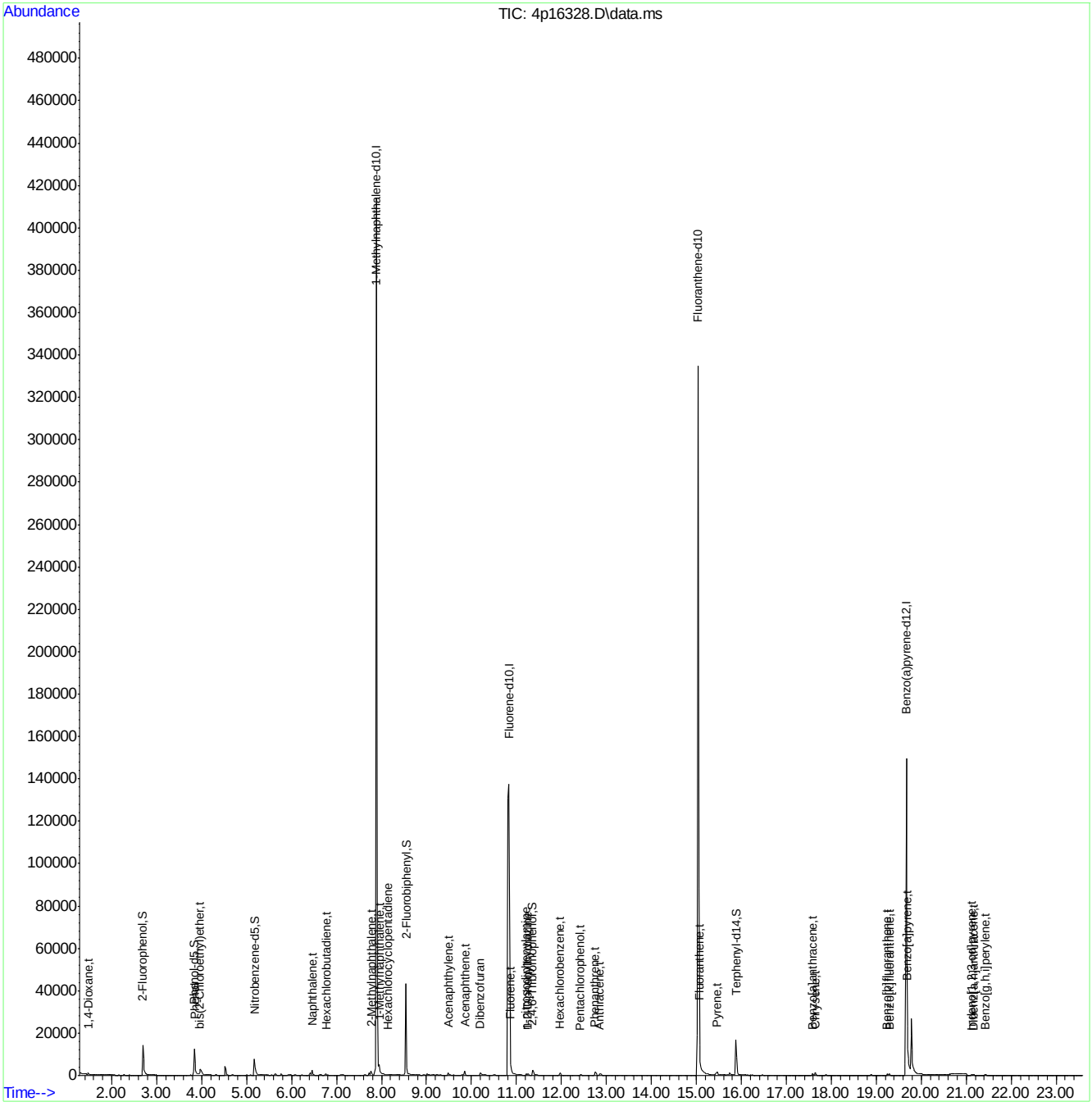
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16328.D
Acq On : 18 May 2016 1:12 pm
Operator : linseyk
Sample : ic863-.02
Misc : op93791,e4p863
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 18 16:20:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:20:39 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

4P16329.D

Manual Integrations APPROVED (compounds with "m" flag)

Nina Pandya
05/20/16 11:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16329.D
Acq On : 18 May 2016 1:42 pm
Operator : linseyk
Sample : ic863-.01
Misc : op93791,e4p863
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 16:21:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:21:11 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.881	150	263724	4.00	ppm	0.00
13) Fluorene-d10	10.839	176	228691	4.00	ppm	0.00
23) Fluoranthene-d10	15.037	212	432940	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.668	264	180623	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.709	112	4096	0.14	ppm	0.01
Spiked Amount 50.000			Recovery = 0.28%			
4) Phenol-d5	3.836	99	6550	0.15	ppm	0.00
Spiked Amount 50.000			Recovery = 0.30%			
7) Nitrobenzene-d5	5.178	82	5131	0.15	ppm	0.00
Spiked Amount 50.000			Recovery = 0.30%			
14) 2-Fluorobiphenyl	8.545	172	19403	0.20	ppm	0.00
Spiked Amount 50.000			Recovery = 0.40%			
22) 2,4,6-Tribromophenol	11.358	330	687	0.09	ppm	0.00
Spiked Amount 50.000			Recovery = 0.18%			
30) Terphenyl-d14	15.880	244	7025	0.12	ppm	0.00
Spiked Amount 50.000			Recovery = 0.24%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.475	88	294	0.02	ppm	79
5) Phenol	3.853	94	1809	0.04	ppm	97
6) bis(2-Chloroethyl)ether	3.957	93	480	0.01	ppm #	39
8) Naphthalene	6.459	128	1431	0.01	ppm	98
9) Hexachlorobutadiene	6.765	225	241	0.01	ppm	83
10) 2-Methylnaphthalene	7.766	141	690	0.01	ppm	81
11) 1-Methylnaphthalene	7.950	141	1306	0.01	ppm	88
15) Acenaphthylene	9.485	152	718	0.01	ppm	90
16) Acenaphthene	9.852	153	685	0.01	ppm	84
17) Dibenzofuran	10.218	168	1108	0.01	ppm	76
18) Fluorene	10.864	166	752m	0.01	ppm	
20) n-nitrosodiphenylamine	11.211	169	285	0.01	ppm #	54
21) 1,2-Diphenylhydrazine	11.253	77	388	0.01	ppm	86
24) Hexachlorobenzene	11.974	284	348	0.01	ppm	90
26) Phenanthrene	12.748	178	1116	0.01	ppm	90
27) Anthracene	12.869	178	708	0.01	ppm	91
28) Fluoranthene	15.071	202	1829	0.01	ppm	97
29) Pyrene	15.467	202	785	0.01	ppm	97
31) Benzo[a]anthracene	17.591	228	382	0.01	ppm	97
32) Chrysene	17.648	228	628	0.01	ppm	93
34) Benzo[b]fluoranthene	19.254	252	377	0.01	ppm	87
35) Benzo[k]fluoranthene	19.288	252	312	0.01	ppm	86
36) Benzo[a]pyrene	19.691	252	1286	0.02	ppm	98
37) Indeno[1,2,3-cd]pyrene	21.110	276	398	0.01	ppm	73
38) Dibenz[a,h]anthracene	21.158	278	299	0.01	ppm	95
39) Benzo[g,h,i]perylene	21.418	276	411	0.01	ppm	100

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

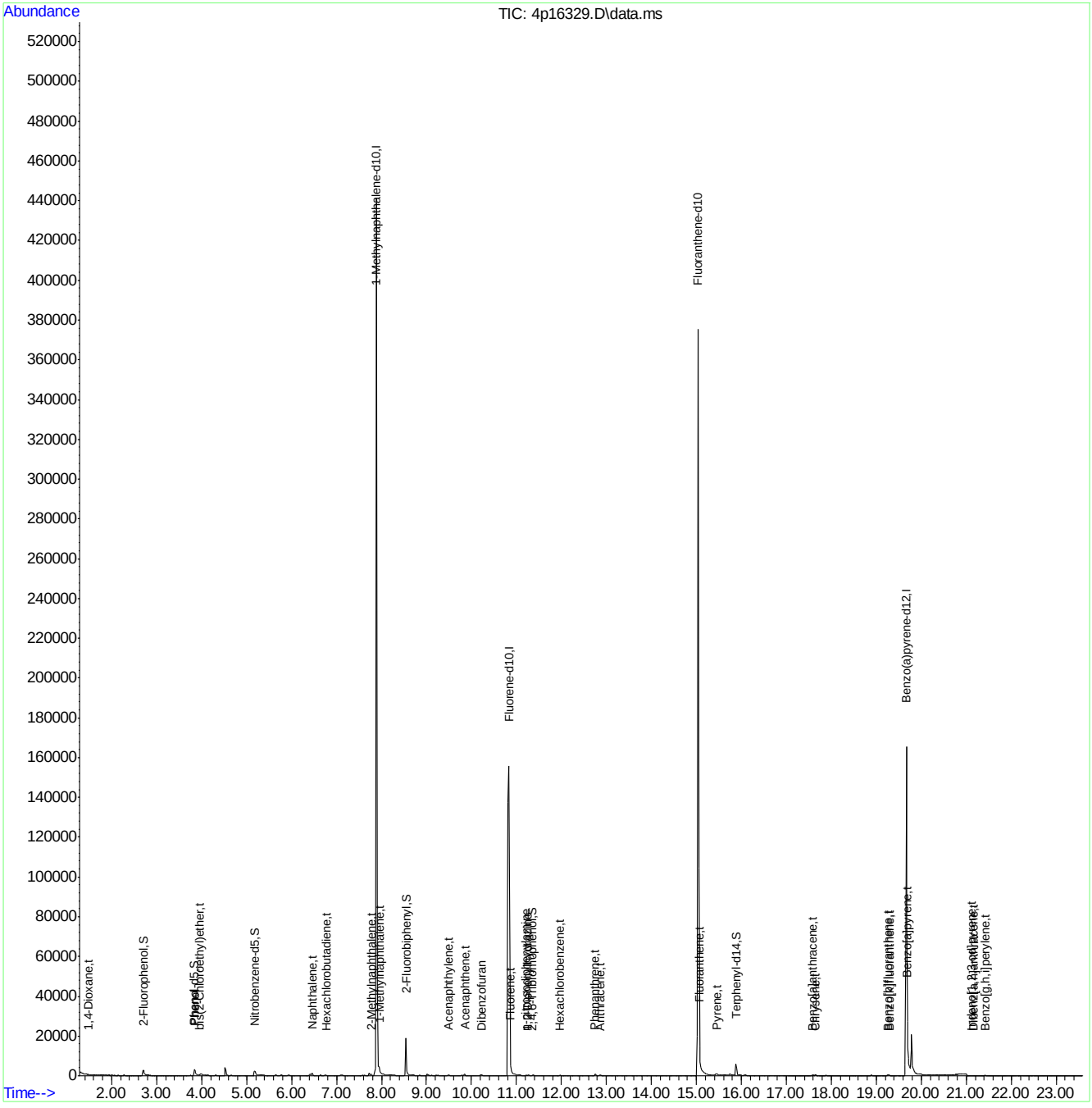
M4P863SIM.M Wed May 18 16:21:57 2016

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16329.D
Acq On : 18 May 2016 1:42 pm
Operator : linseyk
Sample : ic863-.01
Misc : op93791,e4p863
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 16:21:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:21:11 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Manual Integration Approval Summary

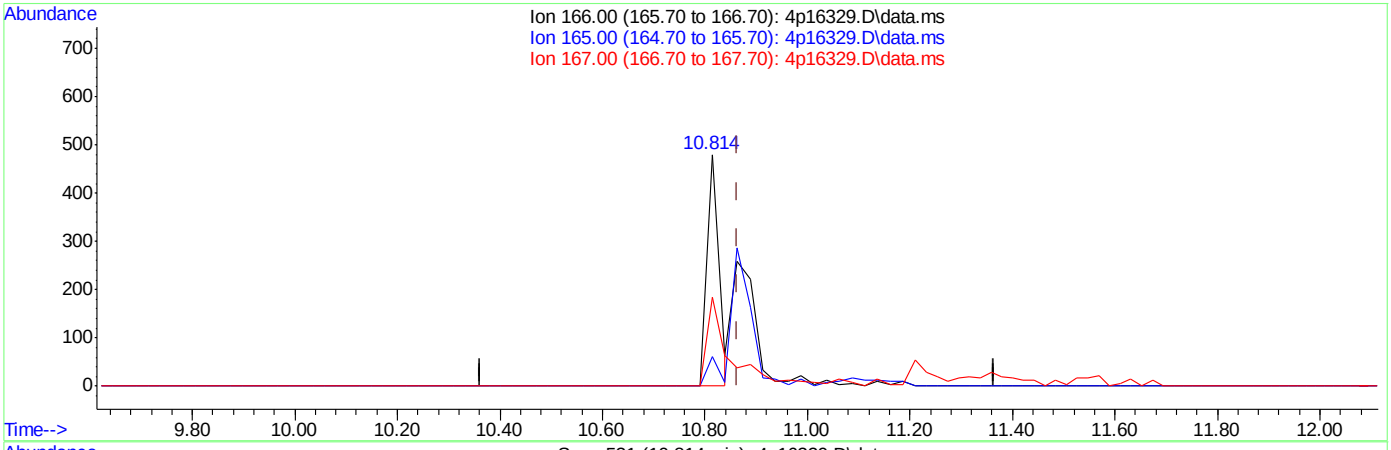
Sample Number:	E4P863-IC863	**Method:**	SW846 8270D
Lab FileID:	4P16329.D	**Analyst approved:**	05/18/16 17:29 Linsey Kirschmann
Injection Time:	05/18/16 13:42	**Supervisor approved:**	05/20/16 11:58 Nina Pandya

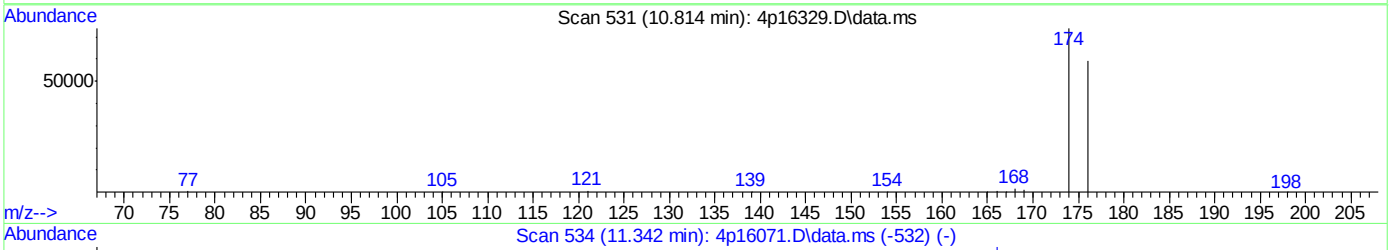
Parameter	CAS	Sig#	R.T. (min.)	Reason
Fluorene	86-73-7		10.86	Poor instrument integration

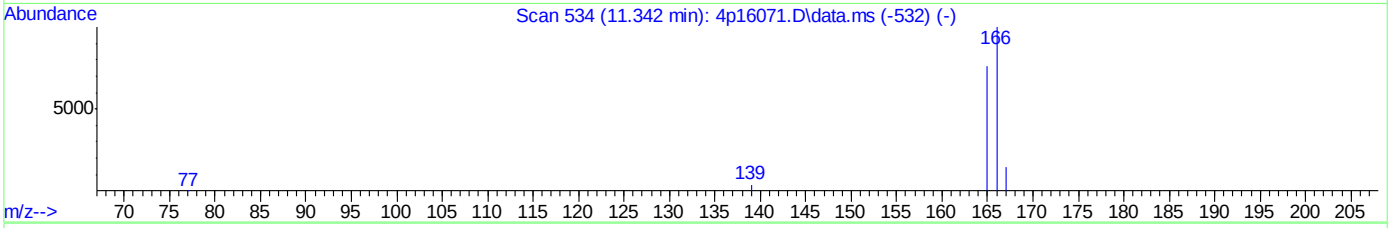
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16329.D
Acq On : 18 May 2016 1:42 pm
Operator : linseyk
Sample : ic863-.01
Misc : op93791,e4p863
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 16:21:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:21:11 2016
Response via : Initial Calibration







TIC: 4p16329.D\data.ms

(18) Fluorene (t)

10.814min (-0.050) 0.01ppm

response 777

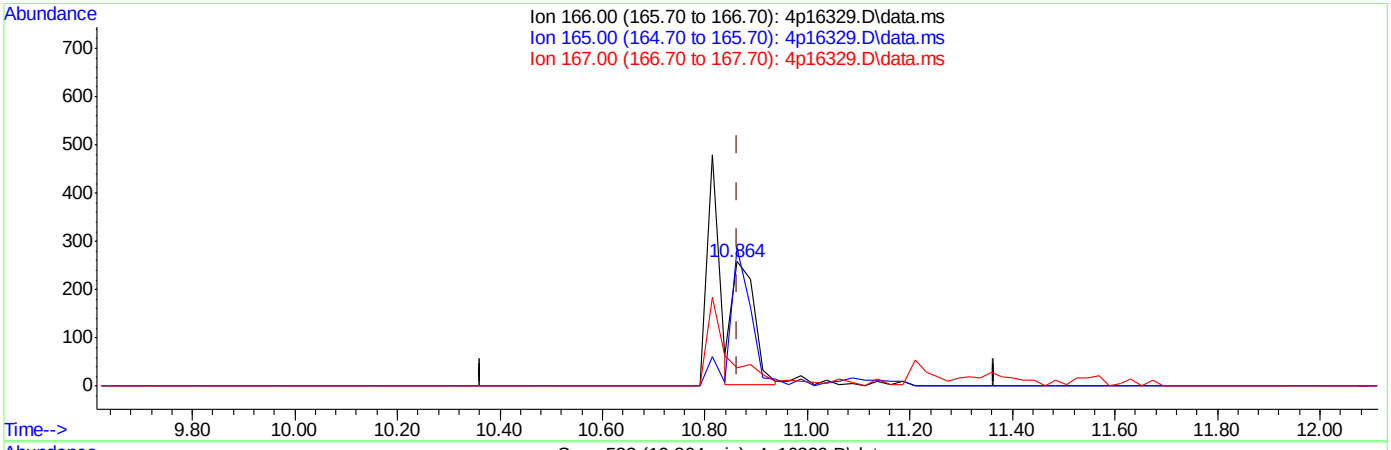
Ion	Exp%	Act%
166.00	100	100
165.00	116.40	12.71#
167.00	10.40	34.23
0.00	0.00	0.00

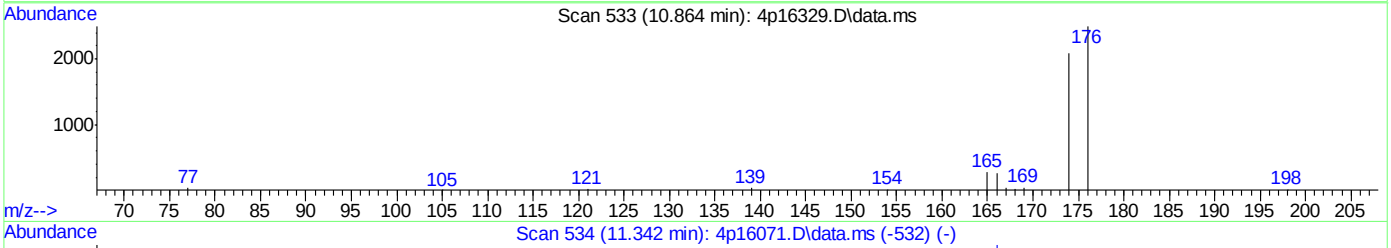
SGS ACCUTEST JC20314

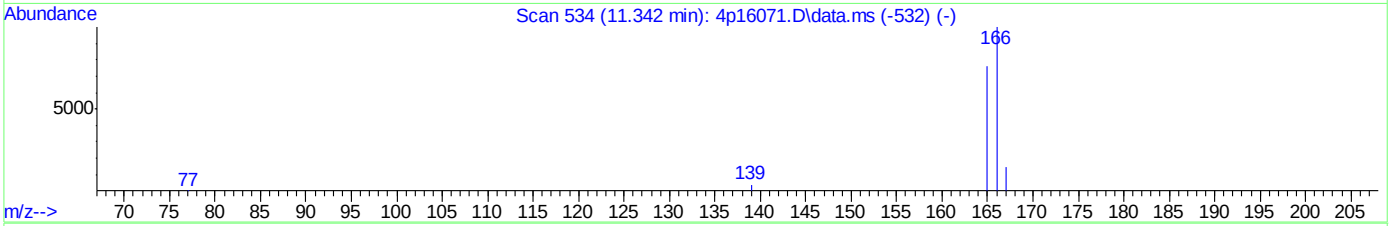
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16329.D
Acq On : 18 May 2016 1:42 pm
Operator : linseyk
Sample : ic863-.01
Misc : op93791,e4p863
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 16:21:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:21:11 2016
Response via : Initial Calibration







TIC: 4p16329.D\data.ms

(18) Fluorene (t)

10.864min (-0.000) 0.01ppm m

response 752

Ion	Exp%	Act%
166.00	100	100
165.00	116.40	110.85
167.00	10.40	14.34
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16330.D
Acq On : 18 May 2016 2:12 pm
Operator : linseyk
Sample : ic863-5
Misc : op93791,e4p863
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 18 16:22:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:22:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.881	150	298440	4.00	ppm	0.00
13) Fluorene-d10	10.839	176	332927	4.00	ppm	0.00
23) Fluoranthene-d10	15.037	212	493086	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.670	264	289968	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.695	112	2704593	79.48	ppm	-0.01
Spiked Amount 50.000			Recovery = 158.96%			
4) Phenol-d5	3.836	99	4308613	87.27	ppm	0.00
Spiked Amount 50.000			Recovery = 174.54%			
7) Nitrobenzene-d5	5.179	82	3989914	103.93	ppm	0.00
Spiked Amount 50.000			Recovery = 207.86%			
14) 2-Fluorobiphenyl	8.546	172	7687147	53.76	ppm	0.00
Spiked Amount 50.000			Recovery = 107.52%			
22) 2,4,6-Tribromophenol	11.358	330	1062814	91.18	ppm	0.00
Spiked Amount 50.000			Recovery = 182.36%			
30) Terphenyl-d14	15.898	244	5955770	97.27	ppm	0.02
Spiked Amount 50.000			Recovery = 194.54%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.475	88	80588	4.06	ppm	97
5) Phenol	3.836	94	1154418	19.76	ppm #	43
6) bis(2-Chloroethyl)ether	3.957	93	166739	3.79	ppm #	1
8) Naphthalene	6.459	128	723289	4.31	ppm	98
9) Hexachlorobutadiene	6.765	225	115369	4.26	ppm	99
10) 2-Methylnaphthalene	7.767	141	455925	5.31	ppm	99
11) 1-Methylnaphthalene	7.950	141	463688	4.46	ppm	97
12) Hexachlorocyclopentadiene	8.133	237	197075	18.82	ppm	99
15) Acenaphthylene	9.485	152	755565	5.83	ppm	98
16) Acenaphthene	9.852	153	412451	4.32	ppm	100
17) Dibenzofuran	10.195	168	663179	4.39	ppm	87
18) Fluorene	10.864	166	430372	4.15	ppm	99
19) 4,6-dinitro-2-methylph...	11.062	198	427018	93.63	ppm	86
20) n-nitrosodiphenylamine	11.211	169	303000	6.11	ppm	97
21) 1,2-Diphenylhydrazine	11.253	77	503321	7.13	ppm	96
24) Hexachlorobenzene	11.974	284	161256	4.51	ppm	98
25) Pentachlorophenol	12.404	266	435212	59.24	ppm	95
26) Phenanthrene	12.748	178	730669	5.36	ppm	98
27) Anthracene	12.852	178	744403	6.96	ppm	99
28) Fluoranthene	15.072	202	751752	4.55	ppm	98
29) Pyrene	15.468	202	736004	6.22	ppm	98
31) Benzo[a]anthracene	17.591	228	485369	8.82	ppm	99
32) Chrysene	17.639	228	676457	6.30	ppm	99
34) Benzo[b]fluoranthene	19.245	252	550129	7.62	ppm	99
35) Benzo[k]fluoranthene	19.291	252	628643	7.67	ppm	99
36) Benzo[a]pyrene	19.693	252	537790	4.72	ppm	99
37) Indeno[1,2,3-cd]pyrene	21.120	276	564055	7.35	ppm	92
38) Dibenz[a,h]anthracene	21.159	278	477728	7.88	ppm	94
39) Benzo[g,h,i]perylene	21.418	276	522660	6.08	ppm	99

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16330.D
Acq On : 18 May 2016 2:12 pm
Operator : linseyk
Sample : ic863-5
Misc : op93791,e4p863
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 18 16:22:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:22:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.21

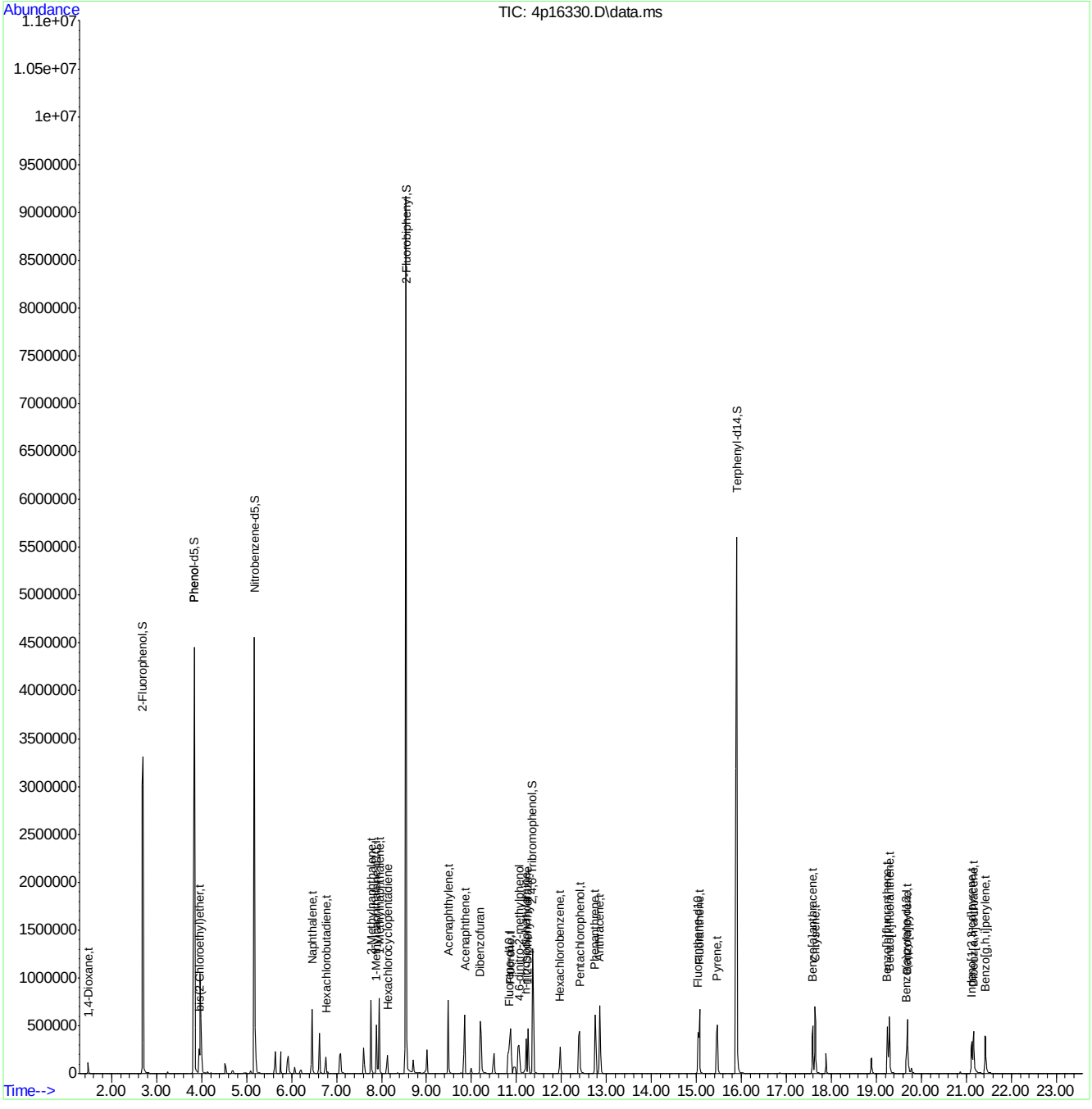
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16330.D
Acq On : 18 May 2016 2:12 pm
Operator : linseyk
Sample : ic863-5
Misc : op93791,e4p863
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 18 16:22:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:22:00 2016
Response via : Initial Calibration



M4P863SIM.M Wed May 18 16:22:30 2016 Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16331.D
Acq On : 18 May 2016 2:42 pm
Operator : linseyk
Sample : ic863-2.5
Misc : op93791,e4p863
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 18 16:22:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:22:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.879	150	282169	4.00	ppm	0.00
13) Fluorene-d10	10.837	176	336290	4.00	ppm	0.00
23) Fluoranthene-d10	15.035	212	479394	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.668	264	287851	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.695	112	1491479	47.76	ppm	0.00
Spiked Amount 50.000			Recovery = 95.52%			
4) Phenol-d5	3.819	99	2250685	49.11	ppm	-0.02
Spiked Amount 50.000			Recovery = 98.22%			
7) Nitrobenzene-d5	5.177	82	2215226	60.69	ppm	0.00
Spiked Amount 50.000			Recovery = 121.38%			
14) 2-Fluorobiphenyl	8.544	172	4693957	34.80	ppm	0.00
Spiked Amount 50.000			Recovery = 69.60%			
22) 2,4,6-Tribromophenol	11.356	330	582131	50.33	ppm	0.00
Spiked Amount 50.000			Recovery = 100.66%			
30) Terphenyl-d14	15.896	244	3351198	56.49	ppm	0.00
Spiked Amount 50.000			Recovery = 112.98%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.475	88	46111	2.54	ppm	96
5) Phenol	3.836	94	759729	14.18	ppm #	83
6) bis(2-Chloroethyl)ether	3.957	93	92256	2.29	ppm #	1
8) Naphthalene	6.457	128	403349	2.60	ppm	98
9) Hexachlorobutadiene	6.763	225	66029	2.63	ppm	91
10) 2-Methylnaphthalene	7.765	141	226751	2.77	ppm	92
11) 1-Methylnaphthalene	7.948	141	259929	2.68	ppm	91
12) Hexachlorocyclopentadiene	8.131	237	106347	9.37	ppm	99
15) Acenaphthylene	9.483	152	339445	2.52	ppm	97
16) Acenaphthene	9.850	153	238291	2.51	ppm	91
17) Dibenzofuran	10.193	168	332546	2.22	ppm	69
18) Fluorene	10.887	166	207382	2.03	ppm #	56
19) 4,6-dinitro-2-methylph...	11.060	198	189463	26.55	ppm	90
20) n-nitrosodiphenylamine	11.209	169	169538	3.28	ppm	93
21) 1,2-Diphenylhydrazine	11.251	77	247952	3.25	ppm	92
24) Hexachlorobenzene	11.972	284	83459	2.43	ppm	93
25) Pentachlorophenol	12.402	266	194326	22.15	ppm	99
26) Phenanthrene	12.746	178	367281	2.75	ppm	97
27) Anthracene	12.850	178	355447	3.42	ppm	98
28) Fluoranthene	15.070	202	396380	2.50	ppm	98
29) Pyrene	15.465	202	370402	3.11	ppm	98
31) Benzo[a]anthracene	17.591	228	206072	3.42	ppm	99
32) Chrysene	17.639	228	331648	3.06	ppm	98
34) Benzo[b]fluoranthene	19.254	252	235261	2.97	ppm	88
35) Benzo[k]fluoranthene	19.289	252	303734	3.37	ppm	99
36) Benzo[a]pyrene	19.691	252	261655	2.34	ppm	98
37) Indeno[1,2,3-cd]pyrene	21.120	276	247553	3.25	ppm	92
38) Dibenz[a,h]anthracene	21.159	278	209727	3.18	ppm	100
39) Benzo[g,h,i]perylene	21.418	276	245373	2.76	ppm	99

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16331.D
Acq On : 18 May 2016 2:42 pm
Operator : linseyk
Sample : ic863-2.5
Misc : op93791,e4p863
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 18 16:22:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:22:34 2016
Response via : Initial Calibration

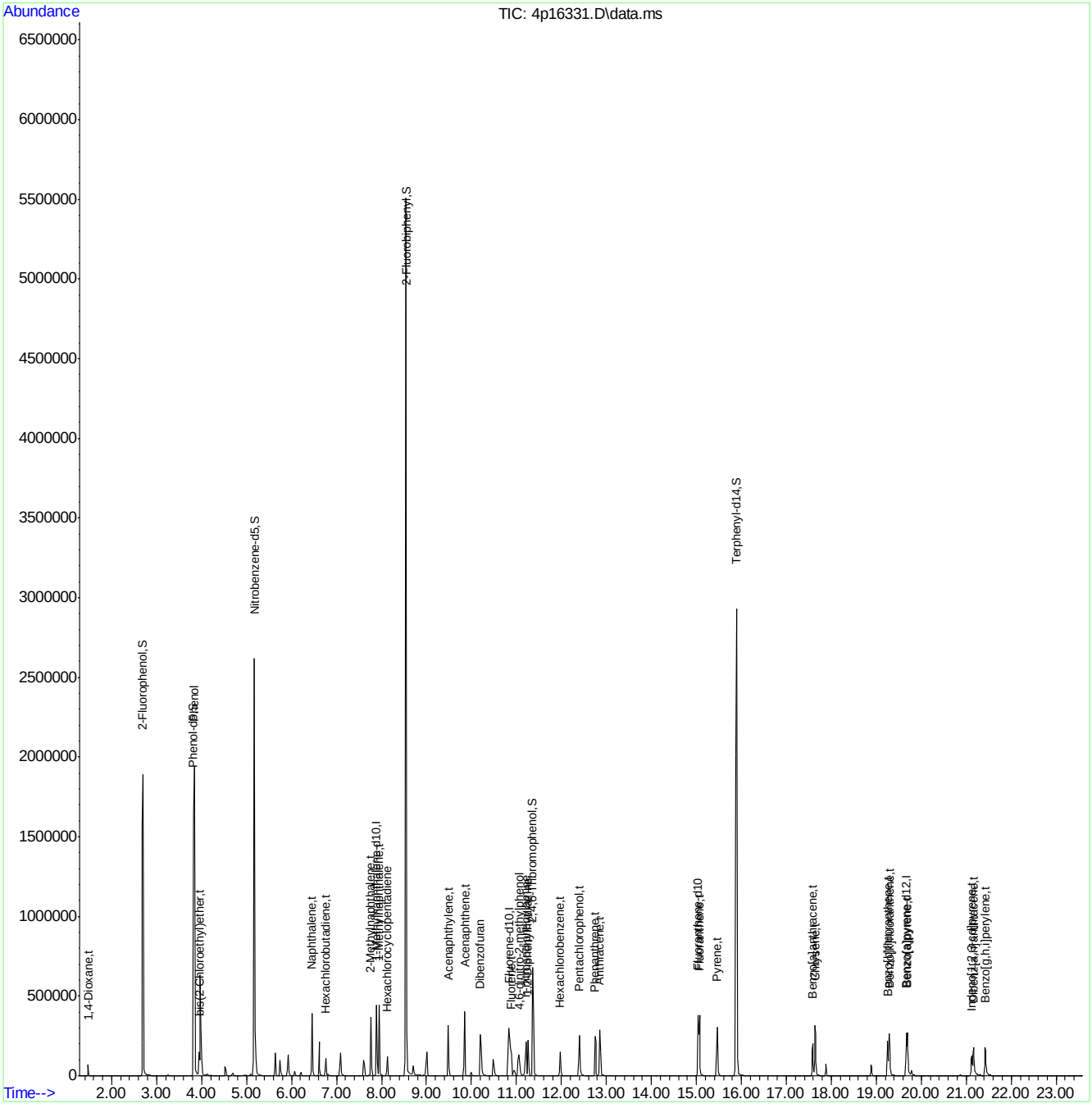
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16331.D
Acq On : 18 May 2016 2:42 pm
Operator : linseyk
Sample : ic863-2.5
Misc : op93791,e4p863
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 18 16:22:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:22:34 2016
Response via : Initial Calibration



M4P863SIM.M Wed May 18 16:23:04 2016 Page: 3

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16332.D
Acq On : 18 May 2016 3:12 pm
Operator : linseyk
Sample : icv863-1
Misc : op93791,e4p863
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 18 16:34:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:33:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	7.881	150	249091	4.00 ppm	0.00
13) Fluorene-d10	10.839	176	235059	4.00 ppm	0.00
23) Fluoranthene-d10	15.037	212	408046	4.00 ppm	0.00
33) Benzo(a)pyrene-d12	19.668	264	181305	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%	
14) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
22) 2,4,6-Tribromophenol	0.000	330	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
30) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
5) Phenol	3.836	94	229640	4.78 ppm	# 83
19) 4,6-dinitro-2-methylph...	11.062	198	23110	3.51 ppm	96
25) Pentachlorophenol	12.404	266	39286	3.63 ppm	98

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

7.6.23

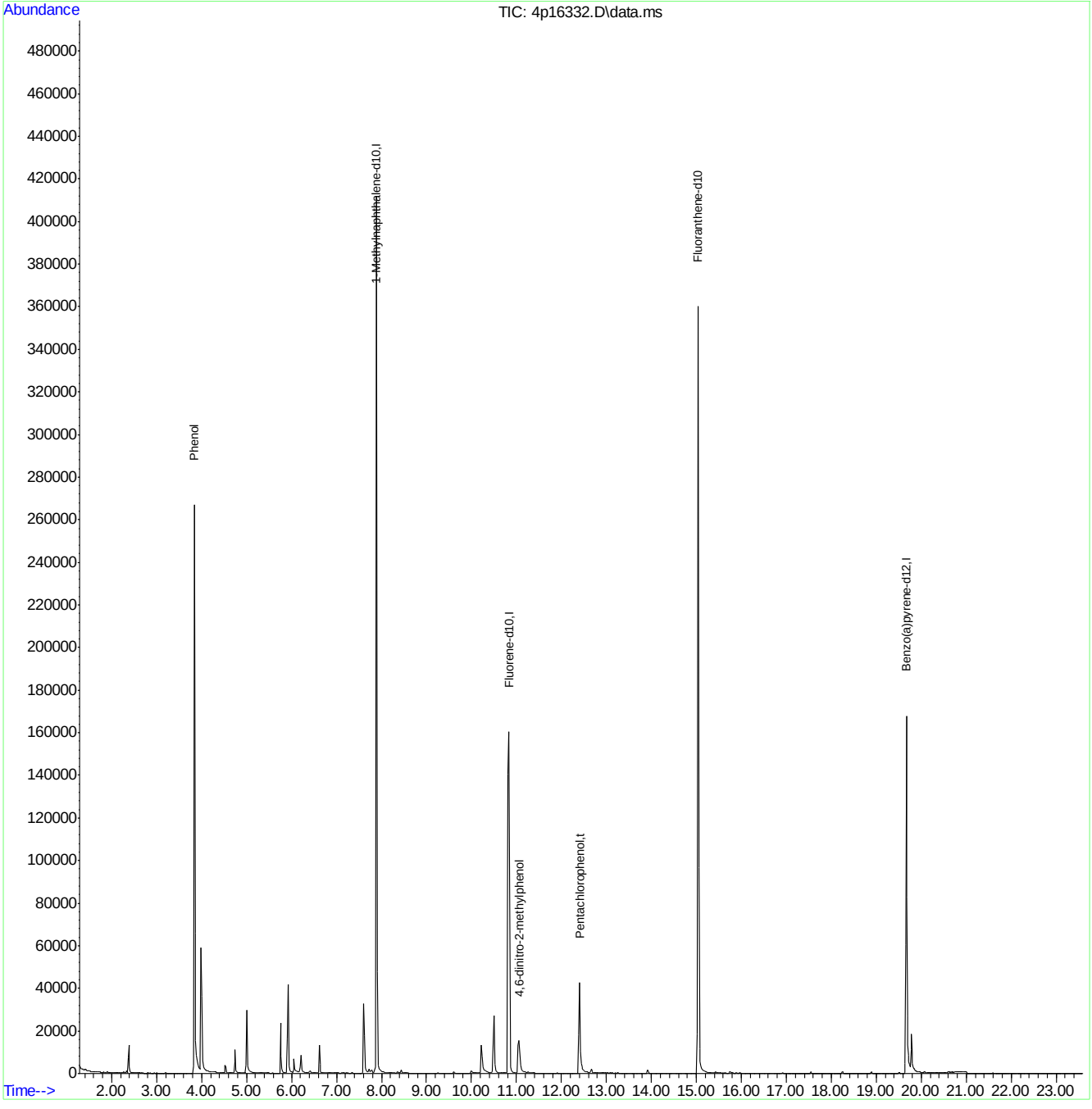
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16332.D
Acq On : 18 May 2016 3:12 pm
Operator : linseyk
Sample : icv863-1
Misc : op93791,e4p863
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 18 16:34:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:33:14 2016
Response via : Initial Calibration



M4P863SIM.M Fri May 20 09:27:36 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16333.D
Acq On : 18 May 2016 3:41 pm
Operator : linseyk
Sample : icv863-1
Misc : op93791,e4p863
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 18 16:37:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:33:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	7.881	150	293259	4.00 ppm	0.00
13) Fluorene-d10	10.839	176	242587	4.00 ppm	0.00
23) Fluoranthene-d10	15.037	212	402011	4.00 ppm	0.00
33) Benzo(a)pyrene-d12	19.672	264	182403	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%	
14) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
22) 2,4,6-Tribromophenol	0.000	330	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
30) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
6) bis(2-Chloroethyl)ether	3.957	93	41184	0.99 ppm	# 23
8) Naphthalene	6.459	128	157410	0.97 ppm	99
9) Hexachlorobutadiene	6.765	225	24490	0.93 ppm	98
10) 2-Methylnaphthalene	7.766	141	88007	1.02 ppm	97
15) Acenaphthylene	9.485	152	112042	1.15 ppm	99
16) Acenaphthene	9.852	153	81139	1.19 ppm	97
17) Dibenzofuran	10.195	168	132363	1.25 ppm	81
18) Fluorene	10.864	166	79136	1.10 ppm	96
20) n-nitrosodiphenylamine	11.211	169	37496	0.94 ppm	94
21) 1,2-Diphenylhydrazine	11.253	77	60725	0.95 ppm	97
24) Hexachlorobenzene	11.974	284	30913	1.08 ppm	99
26) Phenanthrene	12.748	178	124911	1.10 ppm	98
27) Anthracene	12.851	178	94272	0.91 ppm	99
28) Fluoranthene	15.072	202	142327	1.07 ppm	99
29) Pyrene	15.467	202	120955	1.17 ppm	98
31) Benzo[a]anthracene	17.583	228	48216	0.83 ppm	89
32) Chrysene	17.641	228	105342	1.13 ppm	99
34) Benzo[b]fluoranthene	19.246	252	50893	0.94 ppm	93
35) Benzo[k]fluoranthene	19.292	252	66224	0.94 ppm	96
36) Benzo[a]pyrene	19.695	252	74906	1.07 ppm	98
37) Indeno[1,2,3-cd]pyrene	21.112	276	50549	0.87 ppm	98
38) Dibenz[a,h]anthracene	21.160	278	43941	0.90 ppm	99
39) Benzo[g,h,i]perylene	21.420	276	61290	1.07 ppm	100

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

7.6.24

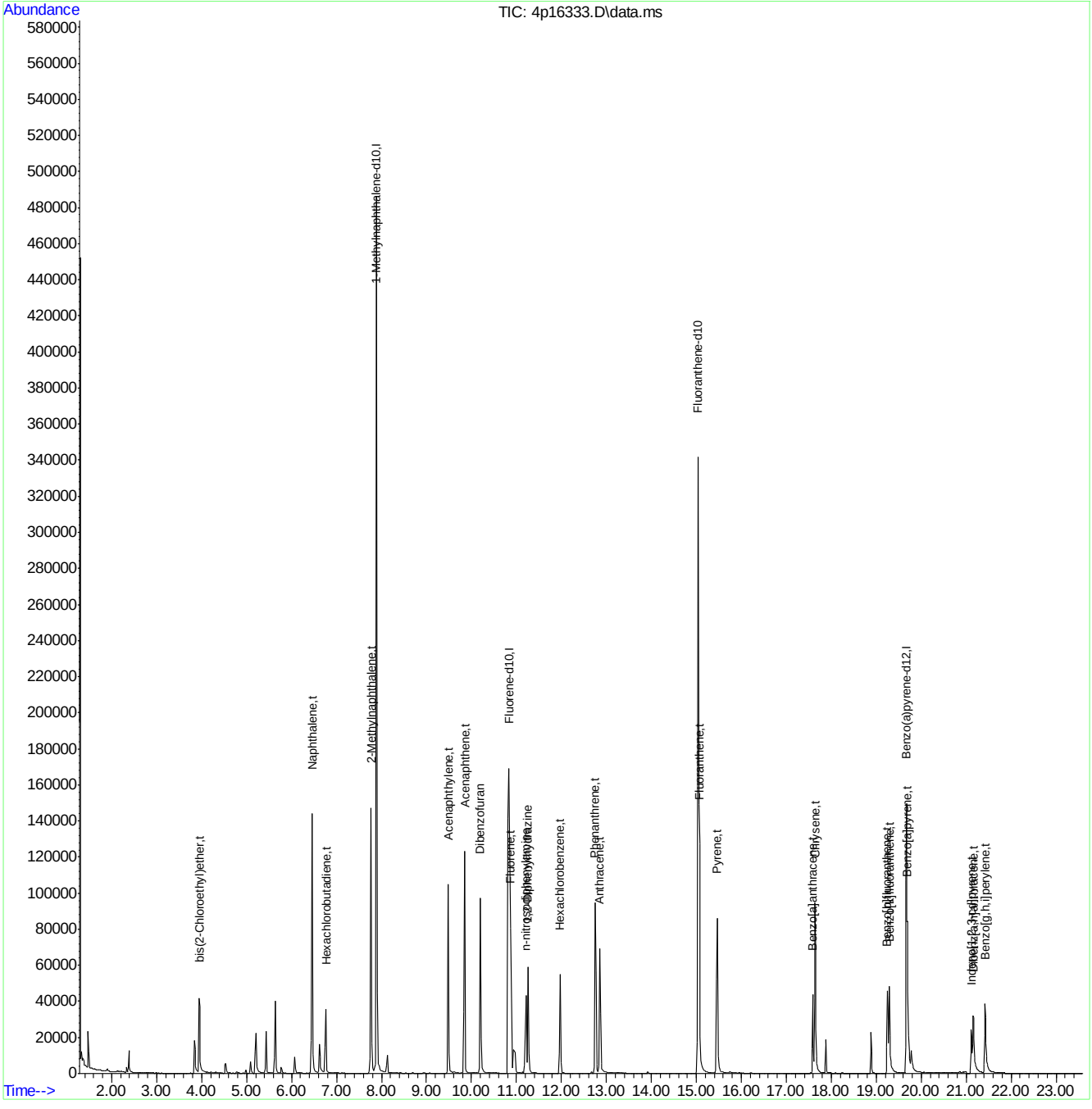
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16333.D
Acq On : 18 May 2016 3:41 pm
Operator : linseyk
Sample : icv863-1
Misc : op93791,e4p863
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 18 16:37:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:33:14 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16334.D
Acq On : 18 May 2016 4:12 pm
Operator : linseyk
Sample : icv863-1
Misc : op93791,e4p863
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 18 17:25:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:33:14 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	7.881	150	394123	4.00 ppm	0.00
13) Fluorene-d10	10.839	176	381531	4.00 ppm	0.00
23) Fluoranthene-d10	15.037	212	669904	4.00 ppm	0.00
33) Benzo(a)pyrene-d12	19.672	264	344208	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%	
14) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
22) 2,4,6-Tribromophenol	0.000	330	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
30) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.475	88	26615	1.05 ppm	88
11) 1-Methylnaphthalene	7.950	141	147164	1.08 ppm	93
12) Hexachlorocyclopentadiene	8.133	237	21091	0.95 ppm	98

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

7.6.25

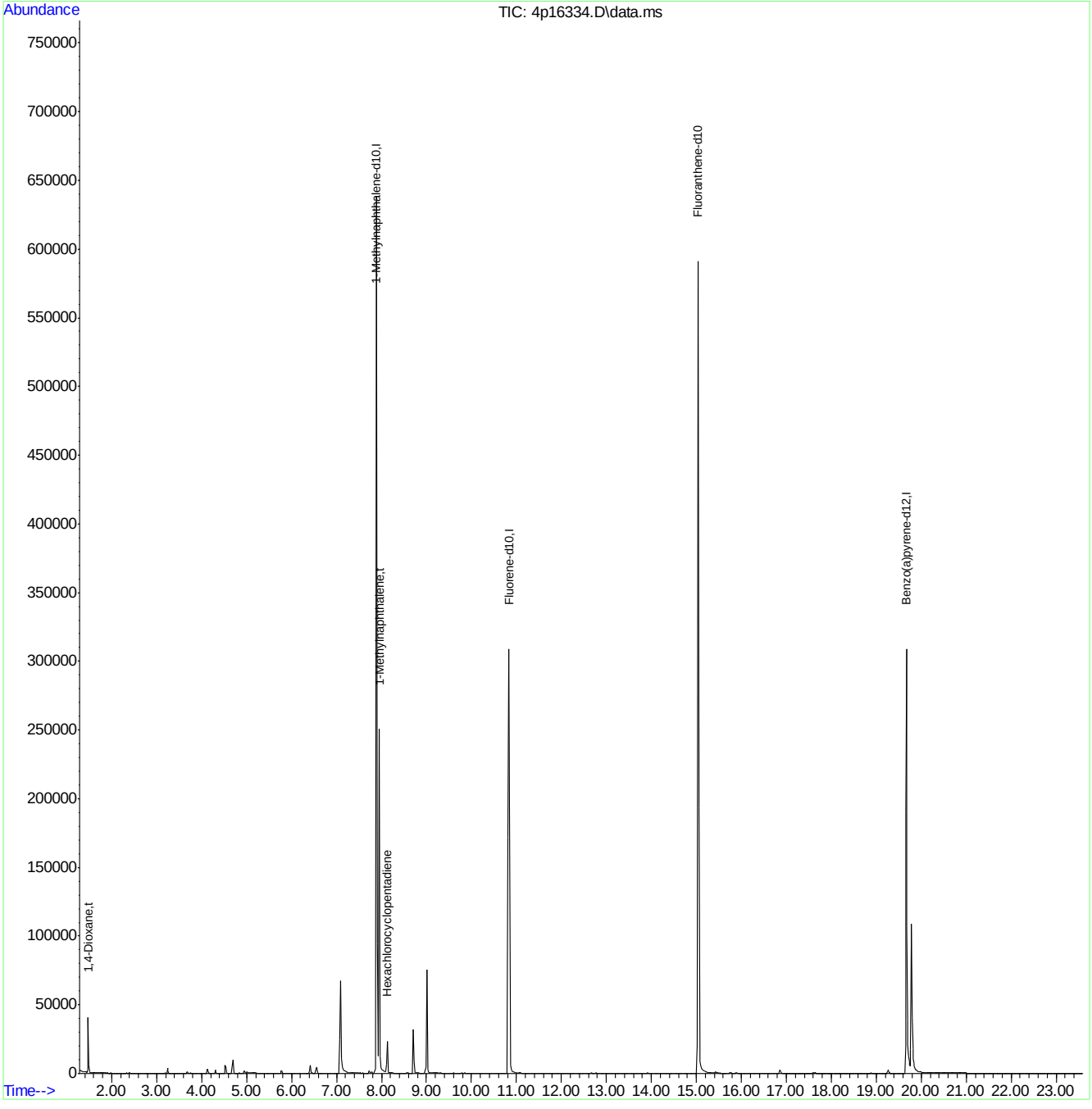
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P863\
Data File : 4p16334.D
Acq On : 18 May 2016 4:12 pm
Operator : linseyk
Sample : icv863-1
Misc : op93791,e4p863
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 18 17:25:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 16:33:14 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P866\
Data File : 4p16347.D
Acq On : 19 May 2016 2:43 pm
Operator : linseyk
Sample : cc863-1
Misc : op93984a,e4p866
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 19 17:51:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 13:24:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	7.879	150	251208	4.00	ppm		0.00
13) Fluorene-d10	10.812	176	293043	4.00	ppm		-0.02
23) Fluoranthene-d10	15.035	212	395328	4.00	ppm		0.00
33) Benzo(a)pyrene-d12	19.655	264	258245	4.00	ppm		-0.01
System Monitoring Compounds							
3) 2-Fluorophenol	2.682	112	515201	18.63	ppm		-0.01
Spiked Amount 50.000			Recovery = 37.26%				
4) Phenol-d5	3.819	99	853927	20.98	ppm		0.00
Spiked Amount 50.000			Recovery = 41.96%				
7) Nitrobenzene-d5	5.157	82	577472	17.31	ppm		-0.02
Spiked Amount 50.000			Recovery = 34.62%				
14) 2-Fluorobiphenyl	8.544	172	1509373	12.62	ppm		0.00
Spiked Amount 50.000			Recovery = 25.24%				
22) 2,4,6-Tribromophenol	11.356	330	197130	18.33	ppm		0.00
Spiked Amount 50.000			Recovery = 36.66%				
30) Terphenyl-d14	15.878	244	1173003	23.64	ppm		-0.02
Spiked Amount 50.000			Recovery = 47.28%				
Target Compounds							Qvalue
2) 1,4-Dioxane	1.475	88	9961	0.61	ppm		90
5) Phenol	3.836	94	218425	4.50	ppm	#	81
6) bis(2-Chloroethyl)ether	3.939	93	38024	1.07	ppm	#	32
8) Naphthalene	6.457	128	113553	0.82	ppm		96
9) Hexachlorobutadiene	6.744	225	18653	0.83	ppm	#	61
10) 2-Methylnaphthalene	7.764	141	65461	0.89	ppm		83
11) 1-Methylnaphthalene	7.948	141	62160	0.71	ppm		85
12) Hexachlorocyclopentadiene	8.108	237	23669	1.47	ppm		88
15) Acenaphthylene	9.483	152	107963	0.92	ppm		94
16) Acenaphthene	9.827	153	64416	0.78	ppm	#	59
17) Dibenzofuran	10.193	168	119607	0.93	ppm		67
18) Fluorene	10.862	166	92876	1.07	ppm		85
19) 4,6-dinitro-2-methylph...	11.060	198	25103	3.21	ppm		99
20) n-nitrosodiphenylamine	11.209	169	25479	0.53	ppm		94
21) 1,2-Diphenylhydrazine	11.251	77	56608	0.73	ppm	#	72
24) Hexachlorobenzene	11.972	284	25392	0.90	ppm		87
25) Pentachlorophenol	12.385	266	54386	4.92	ppm		78
26) Phenanthrene	12.746	178	118472	1.06	ppm		95
27) Anthracene	12.849	178	103831	1.02	ppm		94
28) Fluoranthene	15.052	202	117388	0.90	ppm		89
29) Pyrene	15.448	202	115856	1.14	ppm		88
31) Benzo[a]anthracene	17.579	228	72130	1.20	ppm		94
32) Chrysene	17.637	228	110868	1.21	ppm		93
34) Benzo[b]fluoranthene	19.241	252	99006	1.26	ppm		91
35) Benzo[k]fluoranthene	19.275	252	95024	0.95	ppm		93
36) Benzo[a]pyrene	19.689	252	92610	0.93	ppm		95
37) Indeno[1,2,3-cd]pyrene	21.108	276	82914	1.00	ppm		95
38) Dibenz[a,h]anthracene	21.147	278	68162	0.98	ppm		97
39) Benzo[g,h,i]perylene	21.416	276	81726	1.01	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P866\
Data File : 4p16347.D
Acq On : 19 May 2016 2:43 pm
Operator : linseyk
Sample : cc863-1
Misc : op93984a,e4p866
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 19 17:51:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 13:24:21 2016
Response via : Initial Calibration

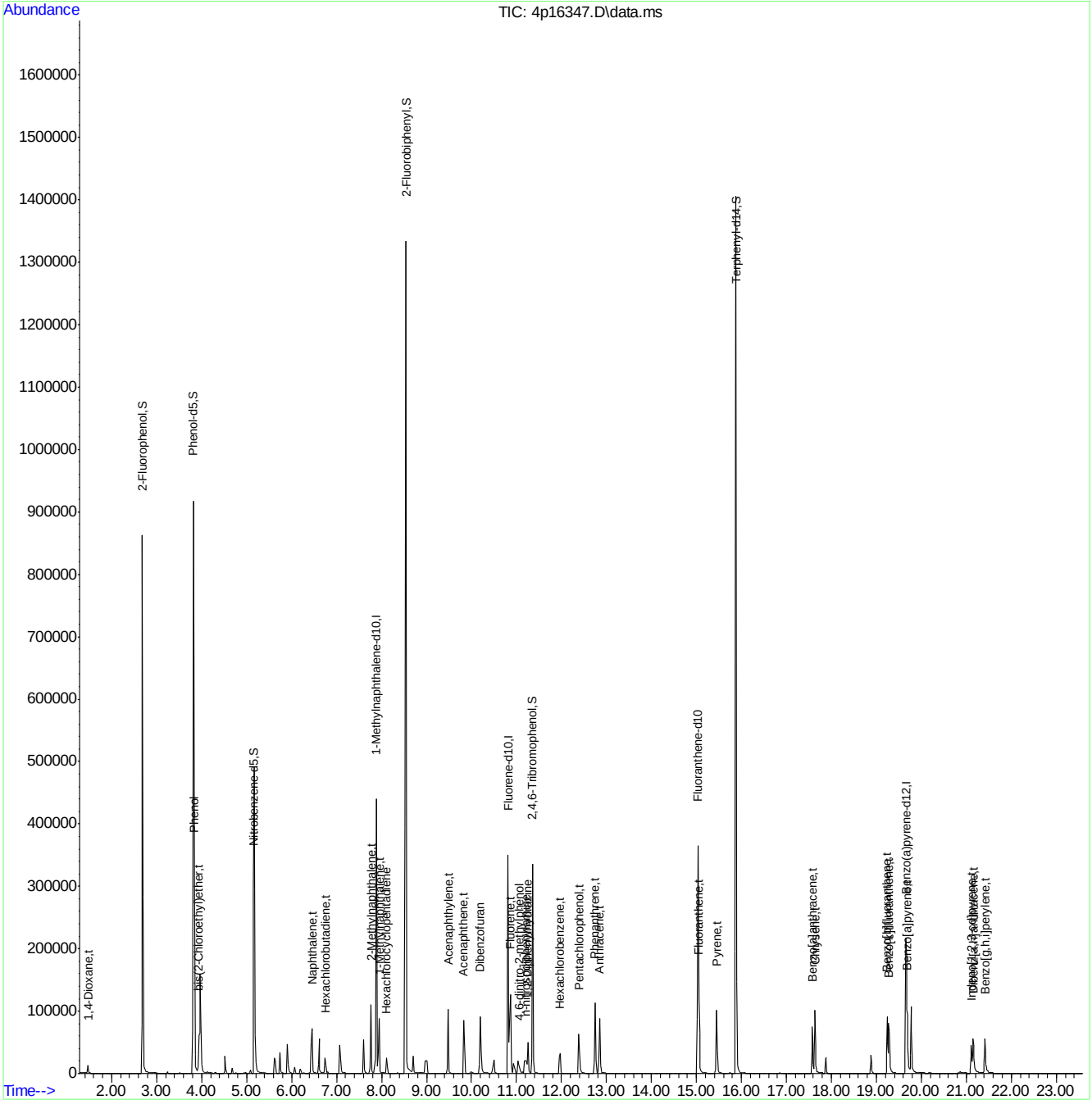
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P866\
Data File : 4p16347.D
Acq On : 19 May 2016 2:43 pm
Operator : linseyk
Sample : cc863-1
Misc : op93984a,e4p866
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 19 17:51:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 13:24:21 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16367.D
Acq On : 20 May 2016 9:44 am
Operator : linseyk
Sample : cc863-.5
Misc : op94042a,e4p867
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 10:08:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 13:24:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.856	150	149395	4.00	ppm	-0.02
13) Fluorene-d10	10.812	176	178338	4.00	ppm	-0.02
23) Fluoranthene-d10	15.018	212	317617	4.00	ppm	-0.02
33) Benzo(a)pyrene-d12	19.645	264	170370	4.00	ppm	-0.02
System Monitoring Compounds						
3) 2-Fluorophenol	2.682	112	213010	12.95	ppm	-0.01
Spiked Amount 50.000			Recovery = 25.90%			
4) Phenol-d5	3.802	99	317954	13.13	ppm	-0.02
Spiked Amount 50.000			Recovery = 26.26%			
7) Nitrobenzene-d5	5.158	82	288092	14.52	ppm	-0.02
Spiked Amount 50.000			Recovery = 29.04%			
14) 2-Fluorobiphenyl	8.521	172	687756	9.45	ppm	-0.02
Spiked Amount 50.000			Recovery = 18.90%			
22) 2,4,6-Tribromophenol	11.335	330	77183	11.79	ppm	-0.02
Spiked Amount 50.000			Recovery = 23.58%			
30) Terphenyl-d14	15.861	244	482857	12.11	ppm	-0.03
Spiked Amount 50.000			Recovery = 24.22%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.462	88	4948	0.51	ppm #	1
5) Phenol	3.819	94	98931	3.43	ppm #	84
6) bis(2-Chloroethyl)ether	3.940	93	12429	0.59	ppm #	1
8) Naphthalene	6.438	128	51630	0.62	ppm	98
9) Hexachlorobutadiene	6.744	225	8015	0.60	ppm	92
10) 2-Methylnaphthalene	7.742	141	25176	0.57	ppm	82
11) 1-Methylnaphthalene	7.925	141	32897	0.64	ppm	82
12) Hexachlorocyclopentadiene	8.108	237	11175	1.22	ppm	99
15) Acenaphthylene	9.460	152	41588	0.58	ppm	96
16) Acenaphthene	9.827	153	31968	0.64	ppm	88
17) Dibenzofuran	10.171	168	38565	0.49	ppm #	53
18) Fluorene	10.862	166	28981	0.55	ppm #	61
19) 4,6-dinitro-2-methylph...	11.036	198	11586	2.71	ppm	87
20) n-nitrosodiphenylamine	11.184	169	22221	0.76	ppm	74
21) 1,2-Diphenylhydrazine	11.230	77	26115	0.55	ppm	95
24) Hexachlorobenzene	11.955	284	10093	0.45	ppm	95
25) Pentachlorophenol	12.385	266	18964	2.46	ppm	100
26) Phenanthrene	12.729	178	49115	0.55	ppm	97
27) Anthracene	12.832	178	43981	0.54	ppm	97
28) Fluoranthene	15.053	202	49599	0.47	ppm	98
29) Pyrene	15.431	202	45562	0.56	ppm	86
31) Benzo[a]anthracene	17.562	228	27035	0.61	ppm	93
32) Chrysene	17.620	228	43392	0.59	ppm	96
34) Benzo[b]fluoranthene	19.220	252	27845	0.58	ppm	98
35) Benzo[k]fluoranthene	19.266	252	32449	0.54	ppm	99
36) Benzo[a]pyrene	19.668	252	30637	0.47	ppm	99
37) Indeno[1,2,3-cd]pyrene	21.090	276	26919	0.52	ppm	95
38) Dibenz[a,h]anthracene	21.128	278	22493	0.52	ppm	98
39) Benzo[g,h,i]perylene	21.387	276	28942	0.54	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16367.D
Acq On : 20 May 2016 9:44 am
Operator : linseyk
Sample : cc863-.5
Misc : op94042a,e4p867
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 10:08:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 13:24:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.27

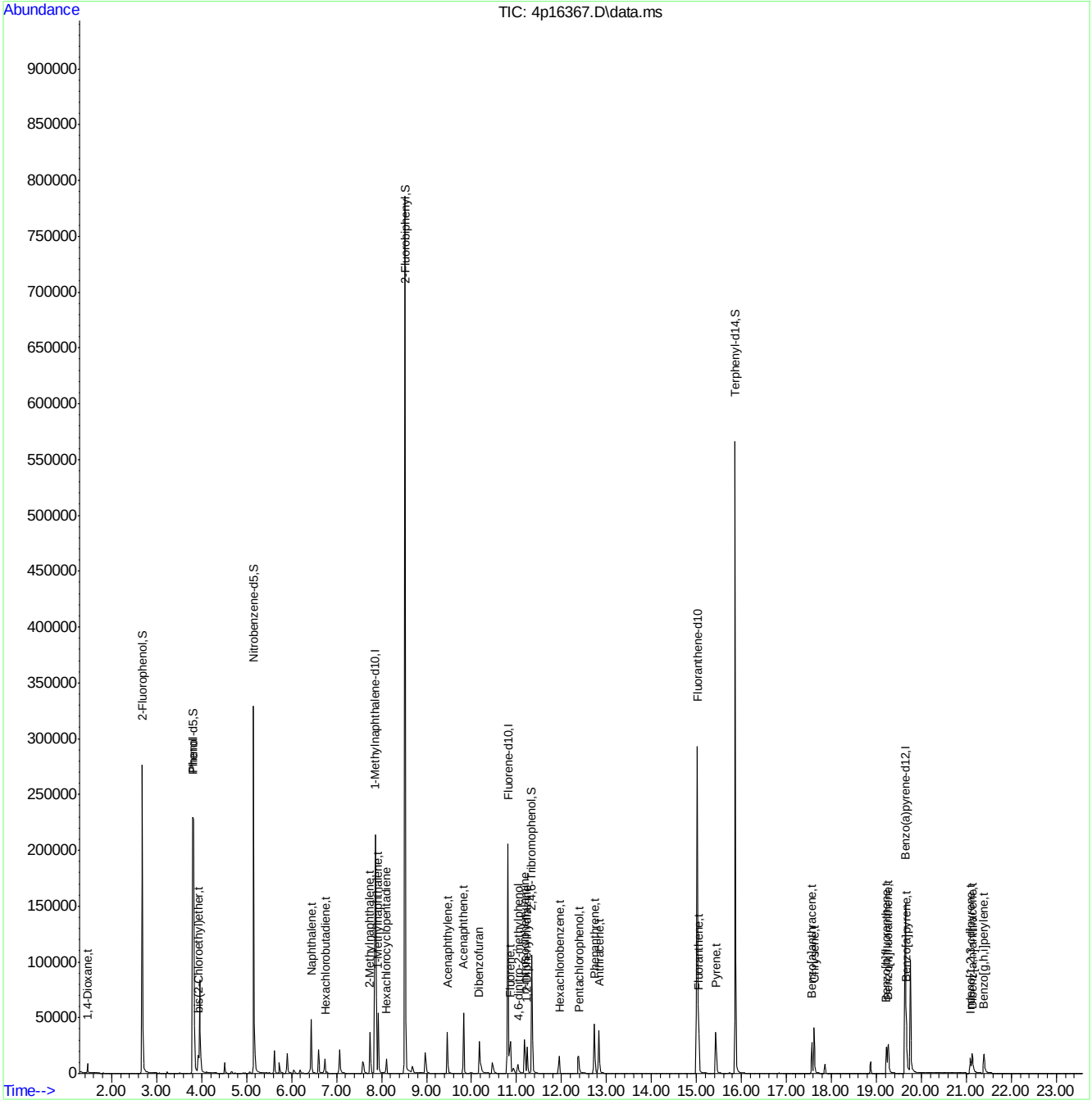
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P867\
Data File : 4p16367.D
Acq On : 20 May 2016 9:44 am
Operator : linseyk
Sample : cc863-.5
Misc : op94042a,e4p867
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 10:08:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P863SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 19 13:24:21 2016
Response via : Initial Calibration



M4P863SIM.M Fri May 20 16:30:21 2016 Page: 3

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 JC20314

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

7.6.28

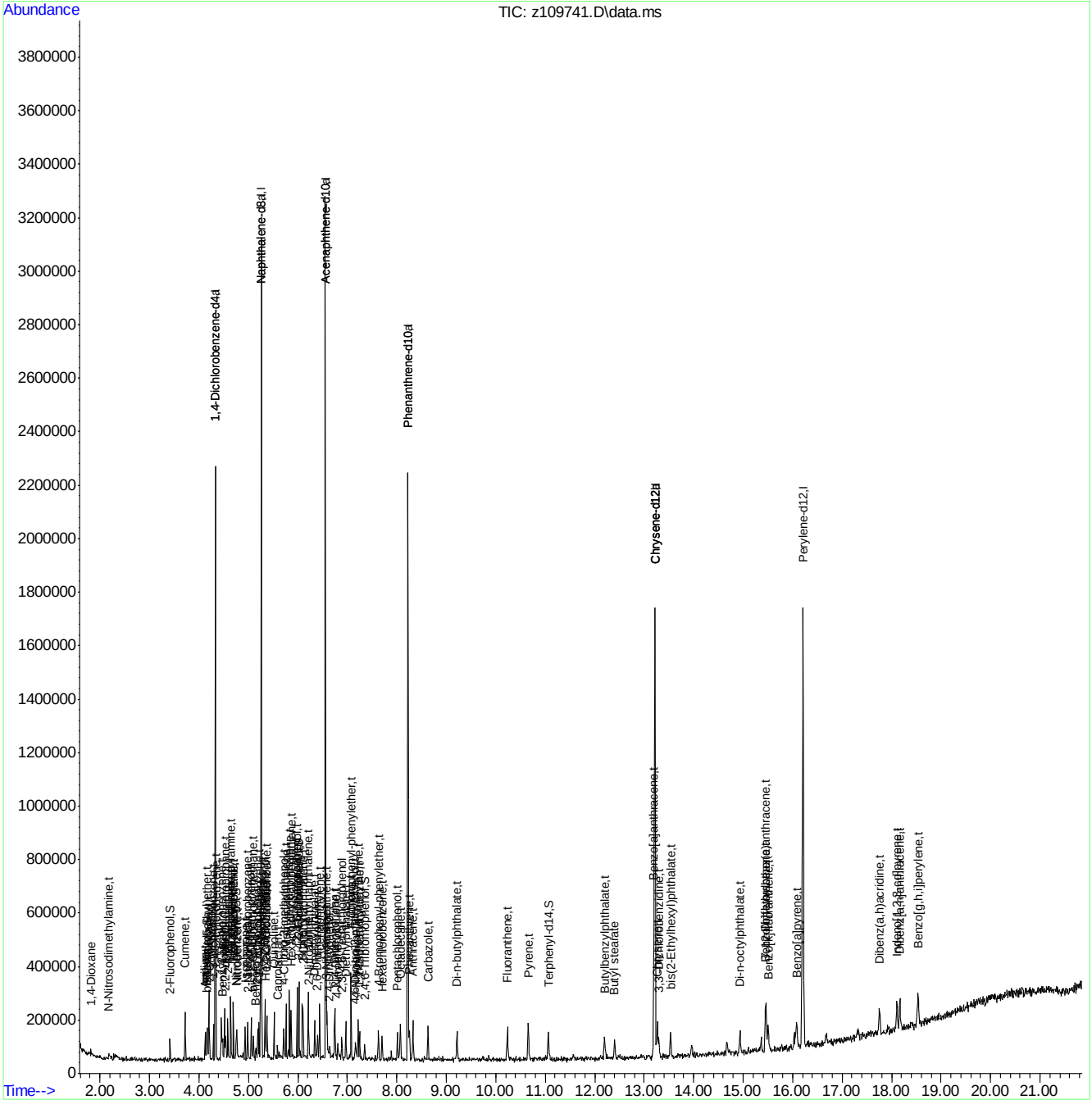
7

SGS ACCUTEST JC20314

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

SGS ACCUTEST JC20314

Manual Integration Approval Summary

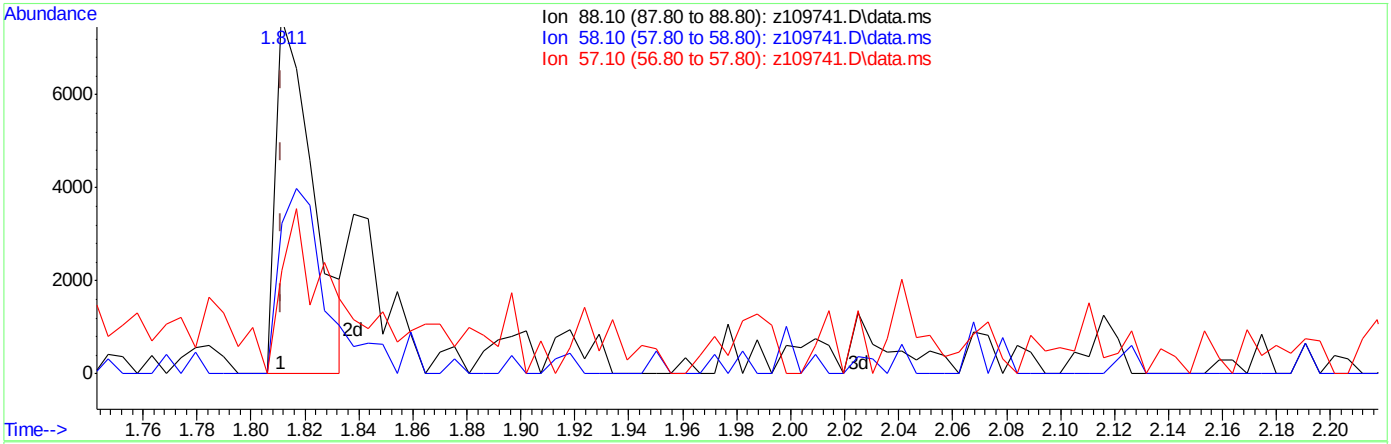
Sample Number:	EZ5485-IC5485	**Method:**	SW846 8270D
Lab FileID:	Z109741.D	**Analyst approved:**	04/14/16 09:34 Arielle Cocozza
Injection Time:	04/13/16 21:35	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

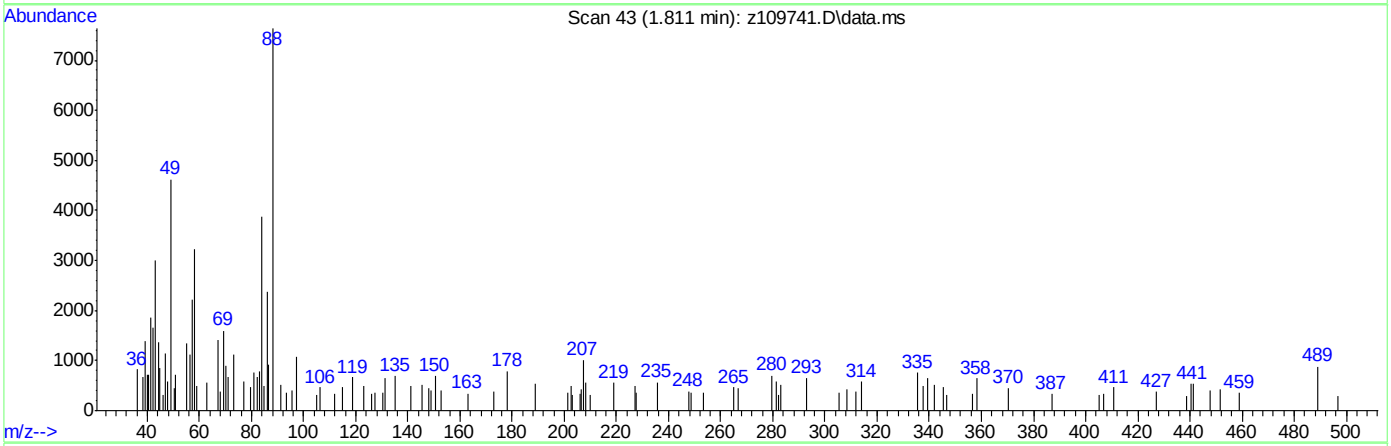
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		1.81	Poor instrument integration

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

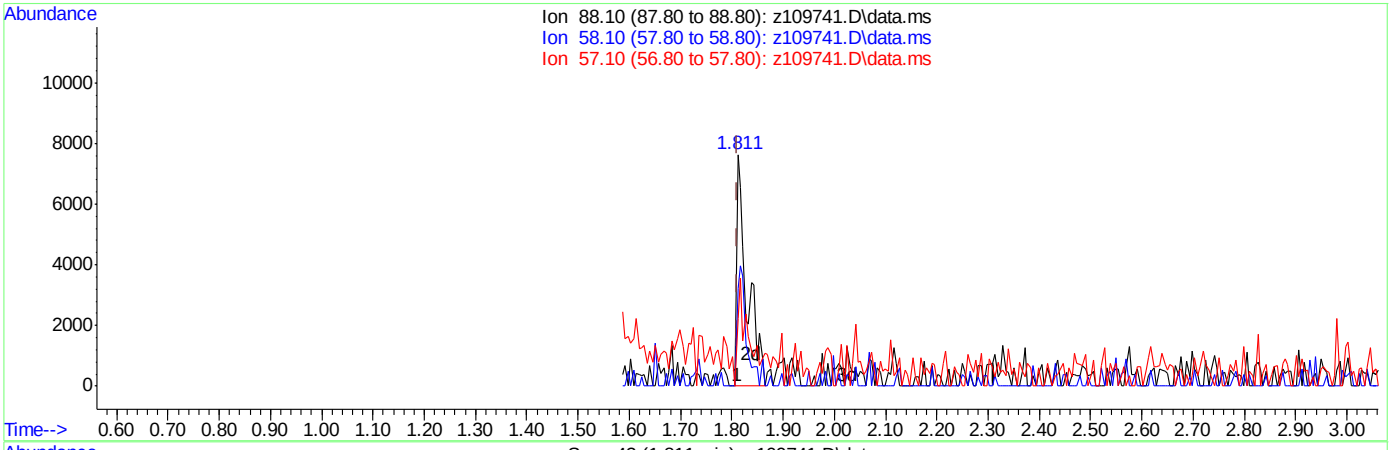
response 7365

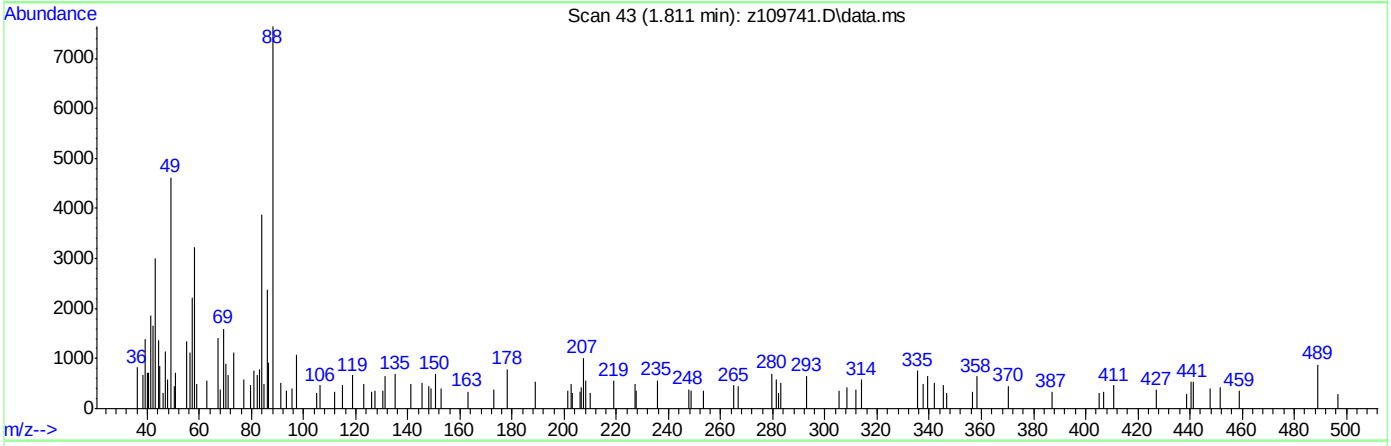
Ion	Exp%	Act%
88.10	100	100
58.10	40.80	40.79
57.10	21.10	21.14
0.00	0.00	0.00

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

SGS ACCUTEST JC20314

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

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 JC20314

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

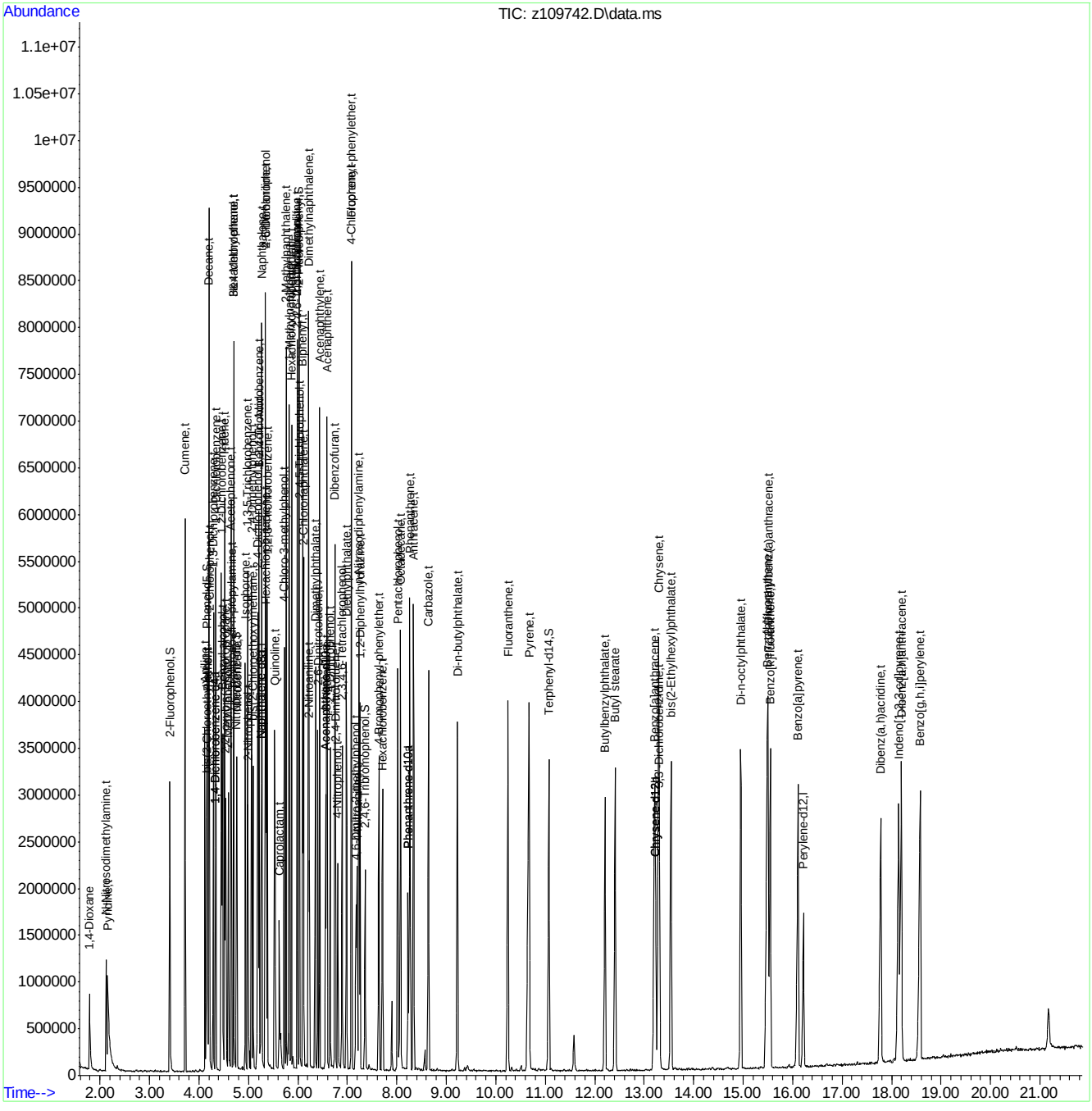
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.265	178	2377720	86.35	ppm	100
78)	Anthracene	8.340	178	2445080	86.90	ppm	100
79)	Carbazole	8.639	167	2369418	89.40	ppm	100
80)	Di-n-butylphthalate	9.227	149	2986496	91.62	ppm	100
81)	Fluoranthene	10.252	202	2529527	84.76	ppm	100
82)	Octadecane	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

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



MZ5485.M Thu Apr 14 08:59:37 2016 RTE

SGS ACCUTEST JC20314

Manual Integration Approval Summary

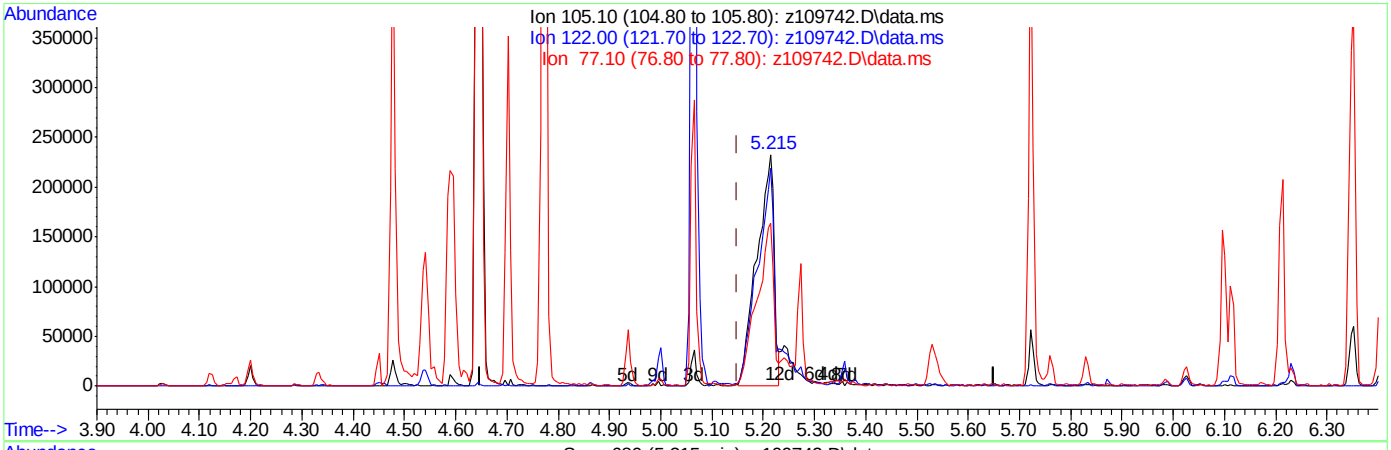
Sample Number:	EZ5485-IC5485	**Method:**	SW846 8270D
Lab FileID:	Z109742.D	**Analyst approved:**	04/14/16 09:34 Arielle Cocozza
Injection Time:	04/13/16 22:06	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

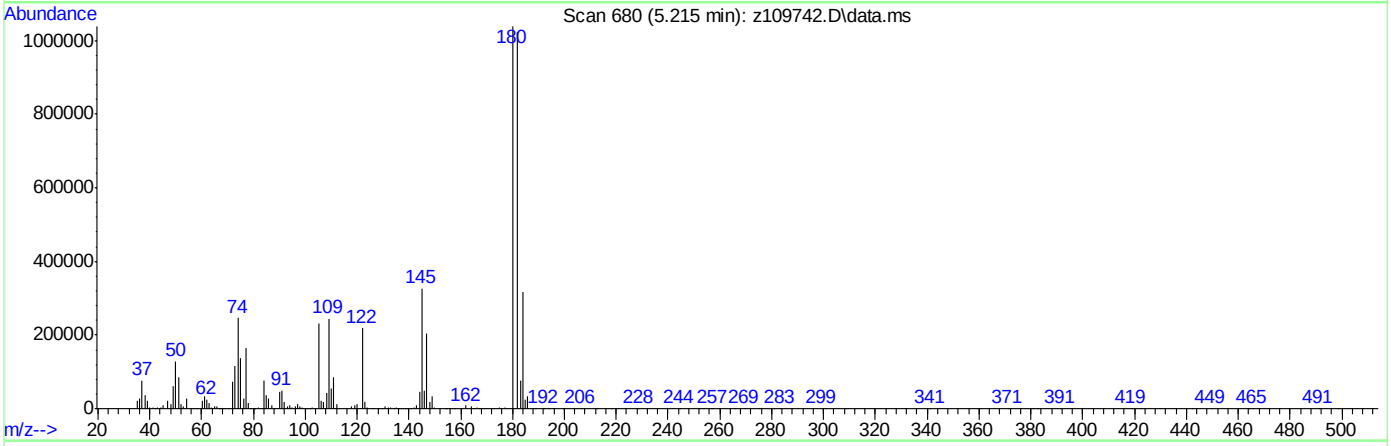
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.21	Poor instrument integration
Caprolactam	105-60-2		5.63	Poor instrument integration

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





TIC: z109742.D\data.ms

(31) Benzoic Acid

5.215min (+0.065) 92.20ppm

response 546611

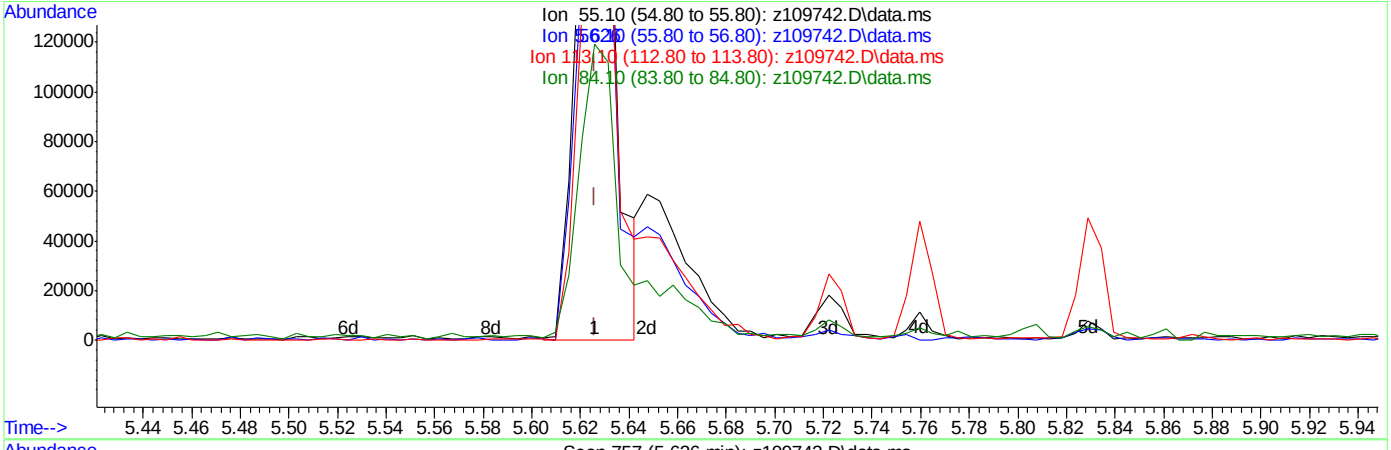
Ion	Exp%	Act%
105.10	100	100
122.00	65.80	92.34#
77.10	70.30	70.25
0.00	0.00	0.00

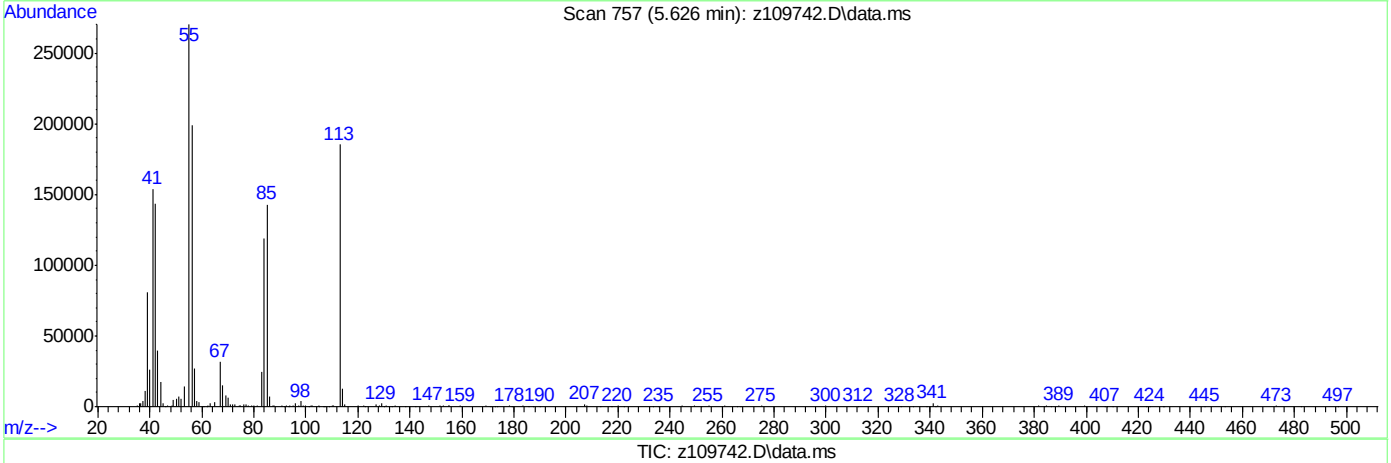
SGS ACCUTEST JC20314

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

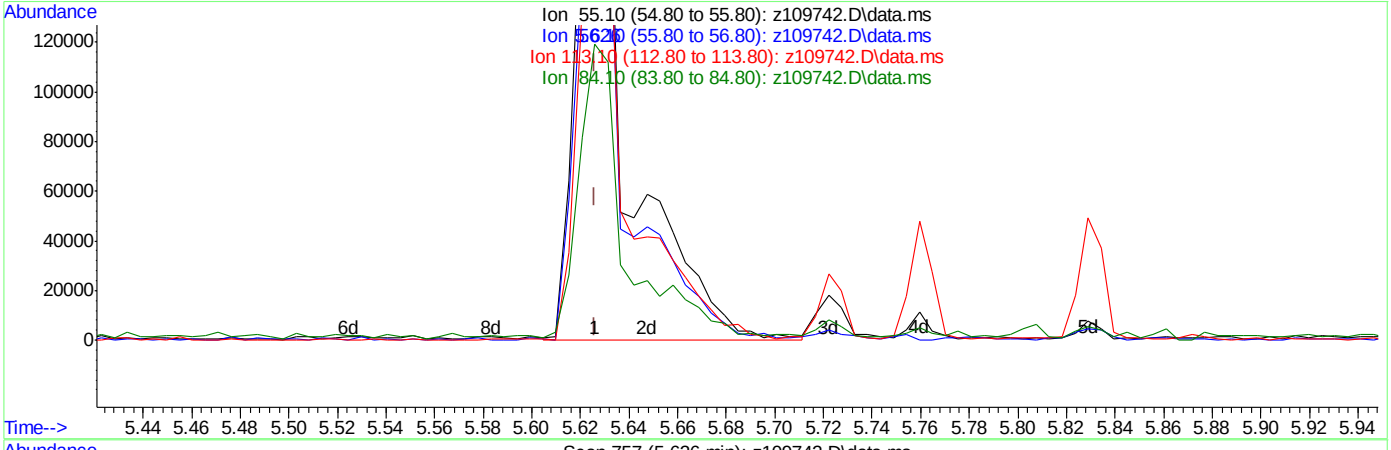
Ion	Exp%	Act%
55.10	100	100
56.10	72.40	72.44
113.10	67.30	67.26
84.10	43.90	43.86

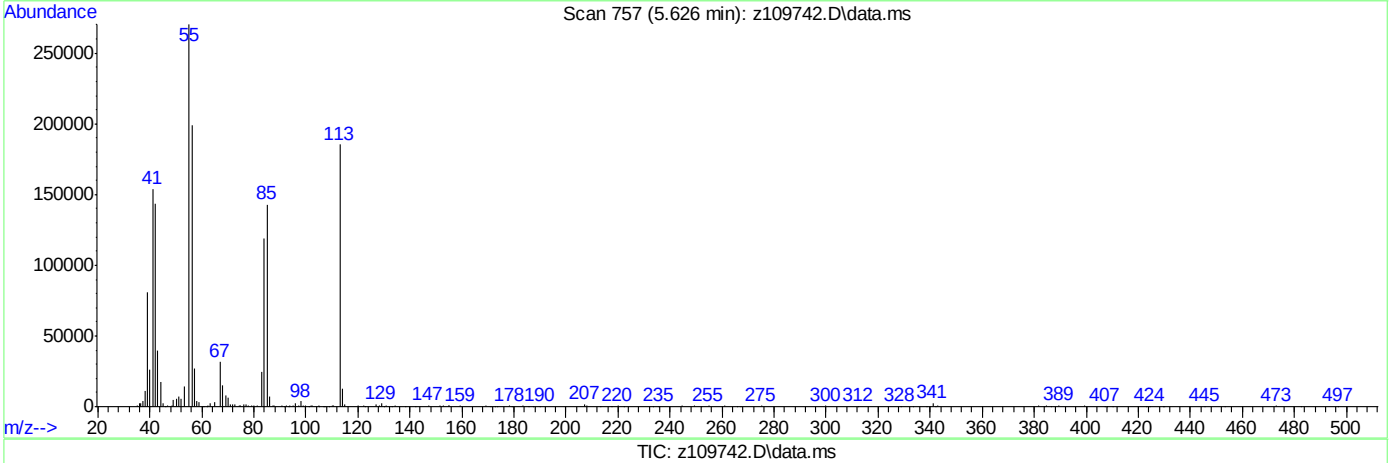
SGS ACCUTEST JC20314

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

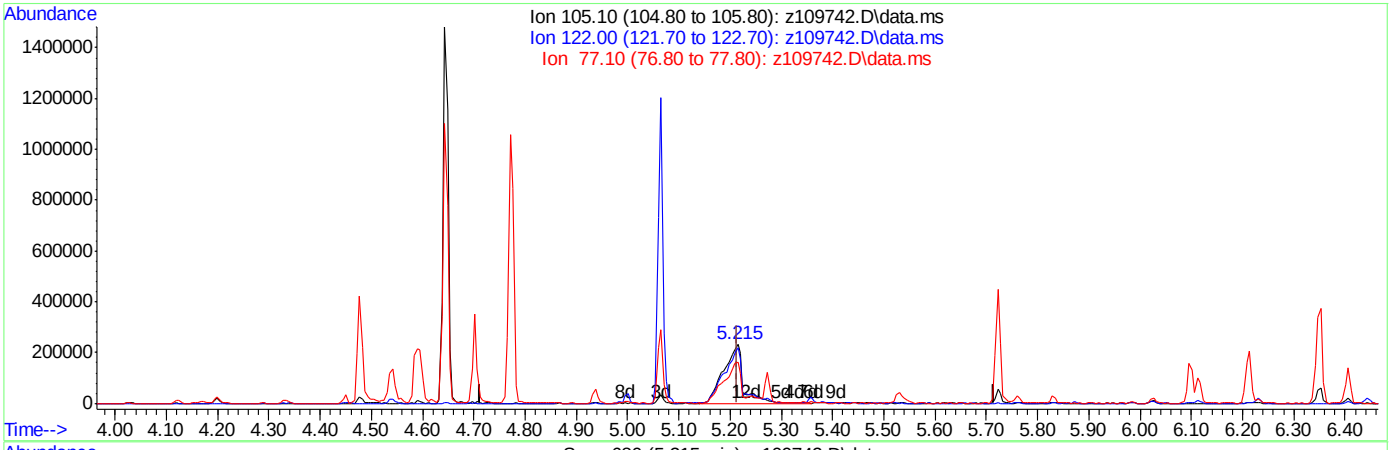
response 355543

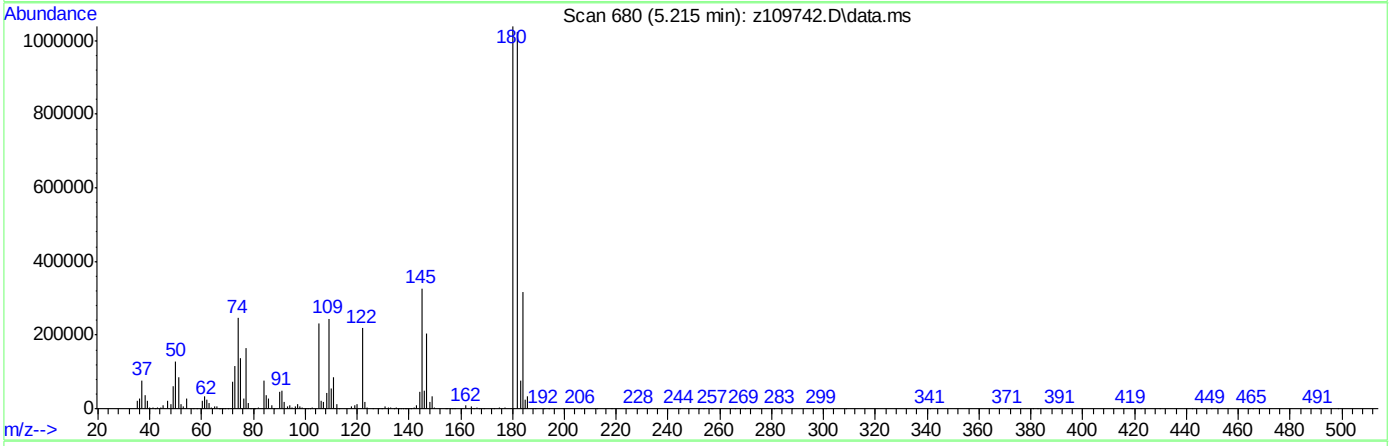
Ion	Exp%	Act%
55.10	100	100
56.10	72.40	73.48
113.10	67.30	68.58
84.10	43.90	44.12

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

SGS ACCUTEST JC20314

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 JC20314

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

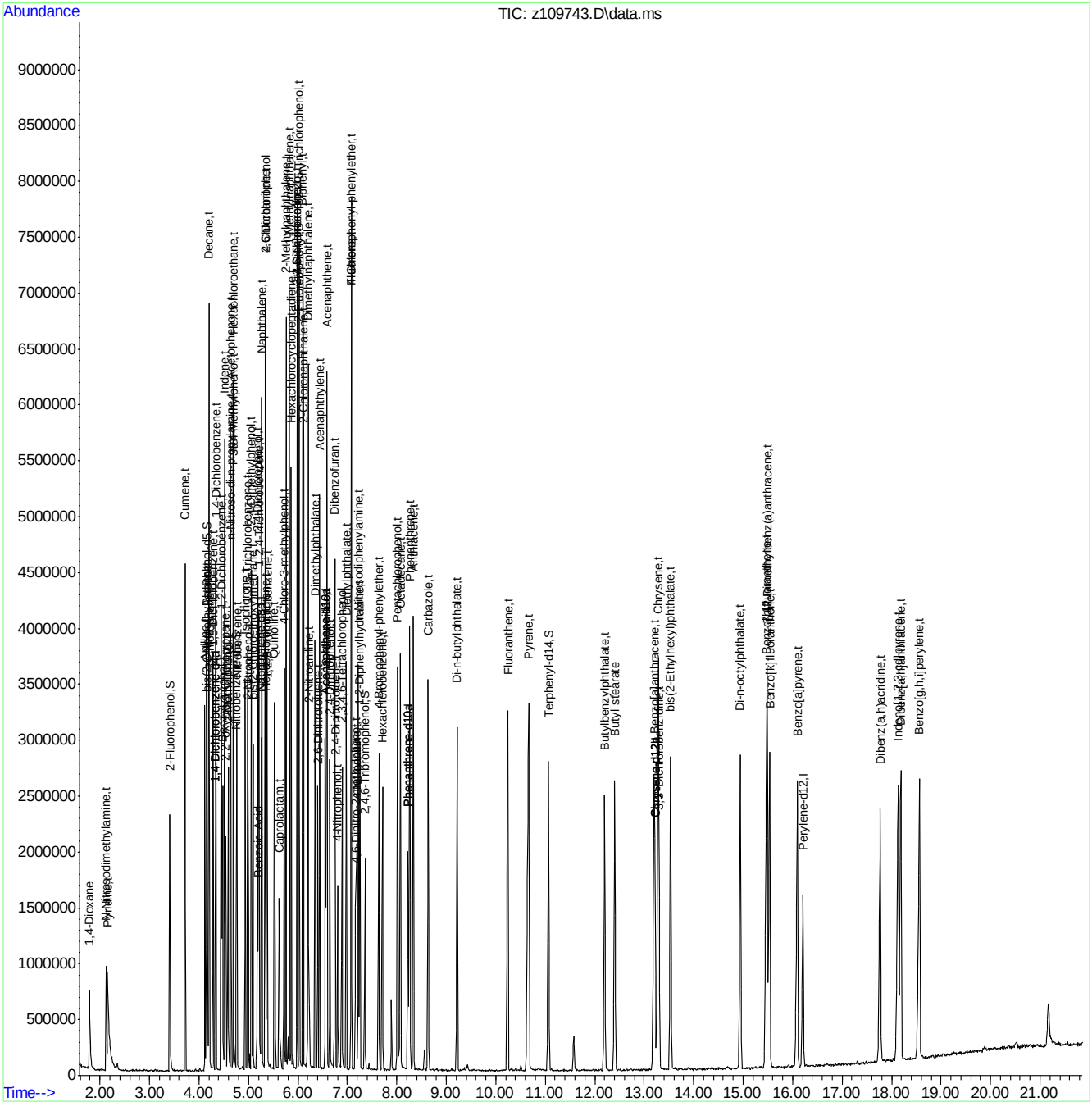
7.6.30

7

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 JC20314

Manual Integration Approval Summary

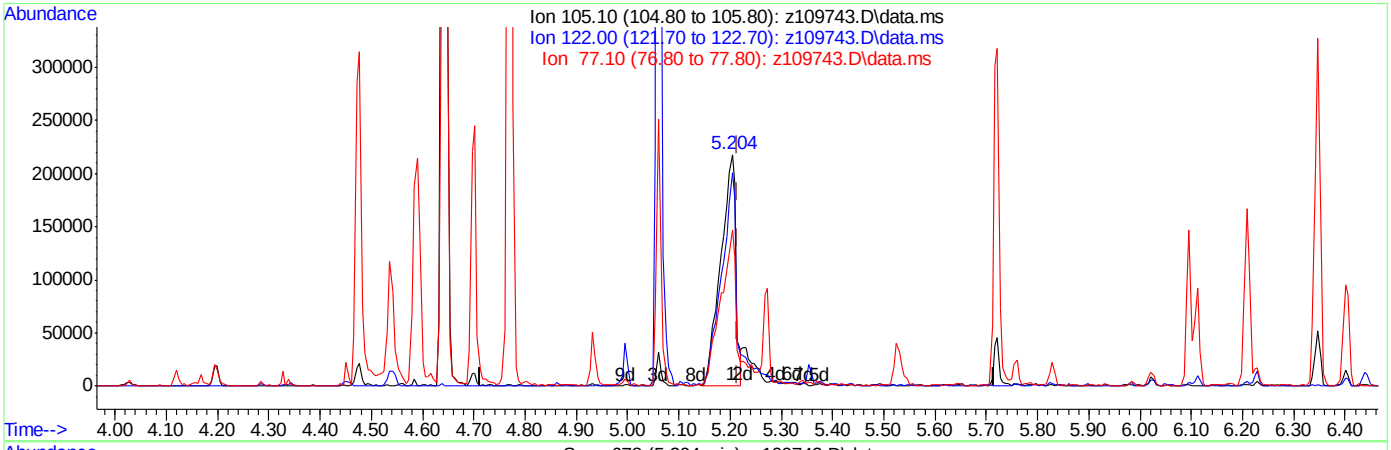
Sample Number:	EZ5485-IC5485	**Method:**	SW846 8270D
Lab FileID:	Z109743.D	**Analyst approved:**	04/14/16 09:34 Arielle Cocozza
Injection Time:	04/13/16 22:38	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

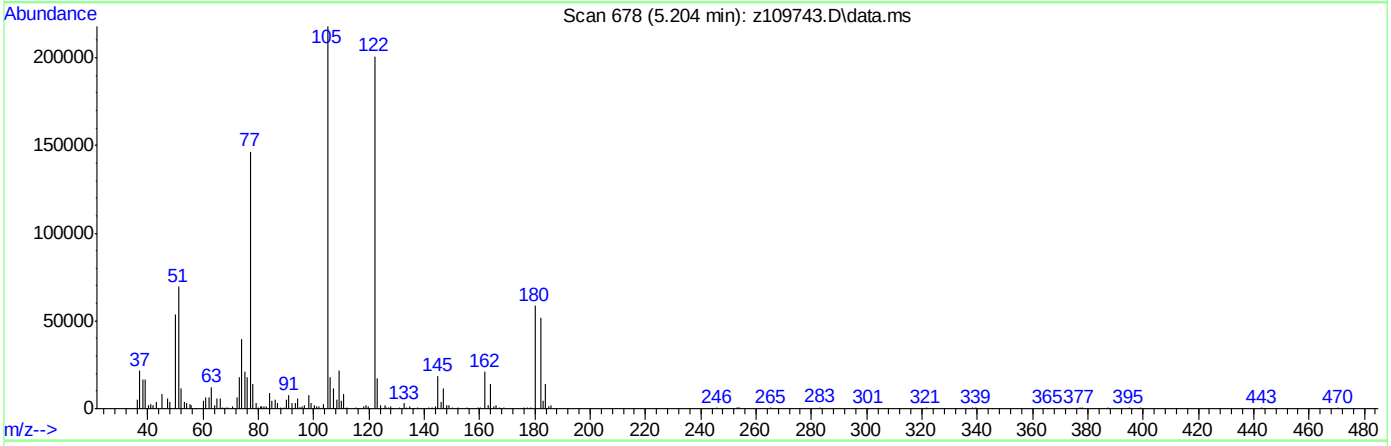
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.20	Poor instrument integration
Caprolactam	105-60-2		5.62	Poor instrument integration

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

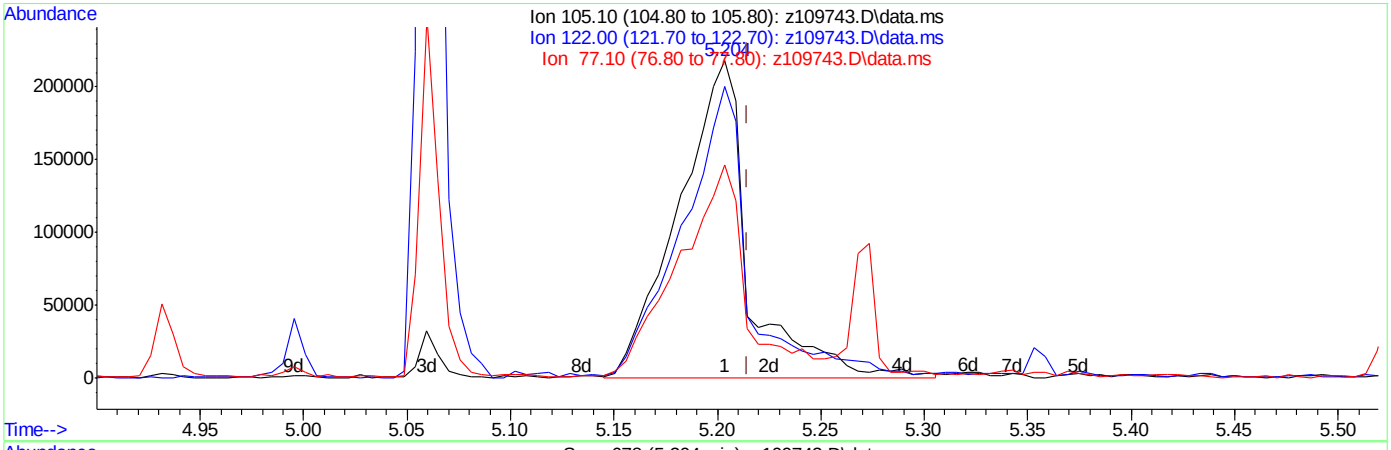
Ion	Exp%	Act%
105.10	100	100
122.00	94.00	92.29
77.10	70.50	67.19
0.00	0.00	0.00

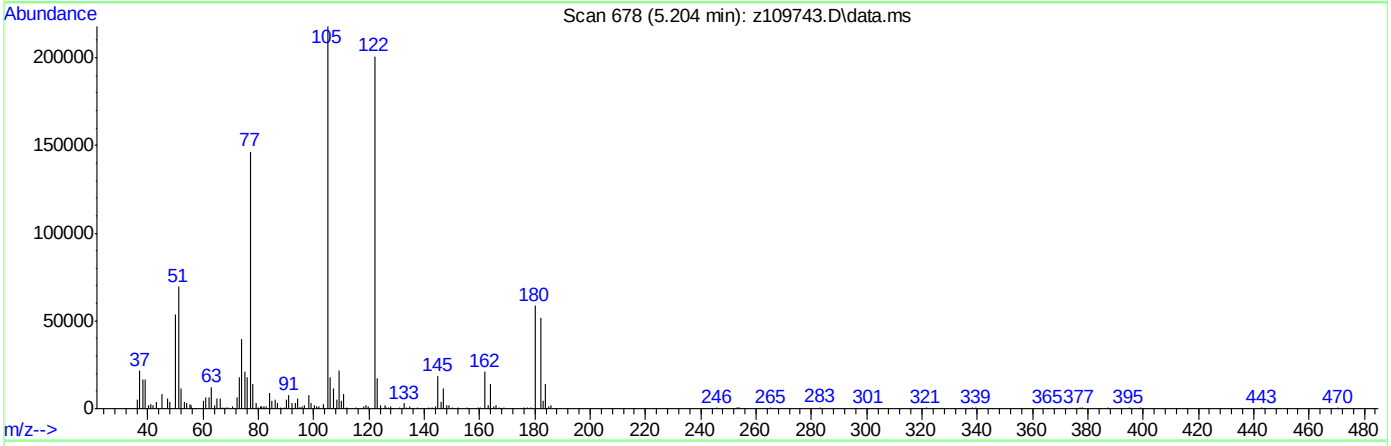
Z109743.D edits: Benzoic Acid

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

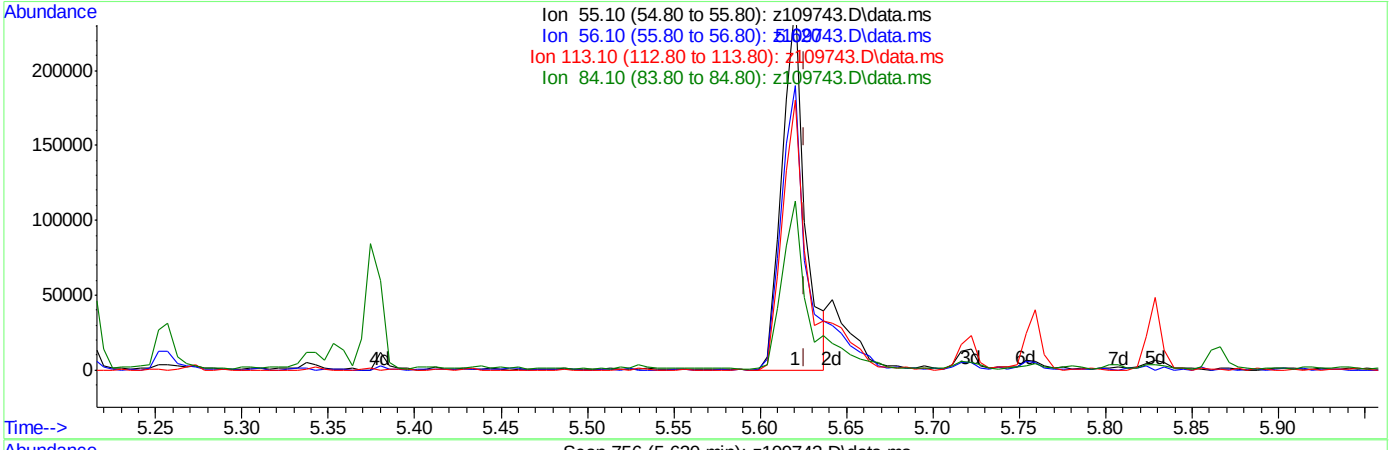
Ion	Exp%	Act%
105.10	100	100
122.00	94.00	92.10
77.10	70.50	67.25
0.00	0.00	0.00

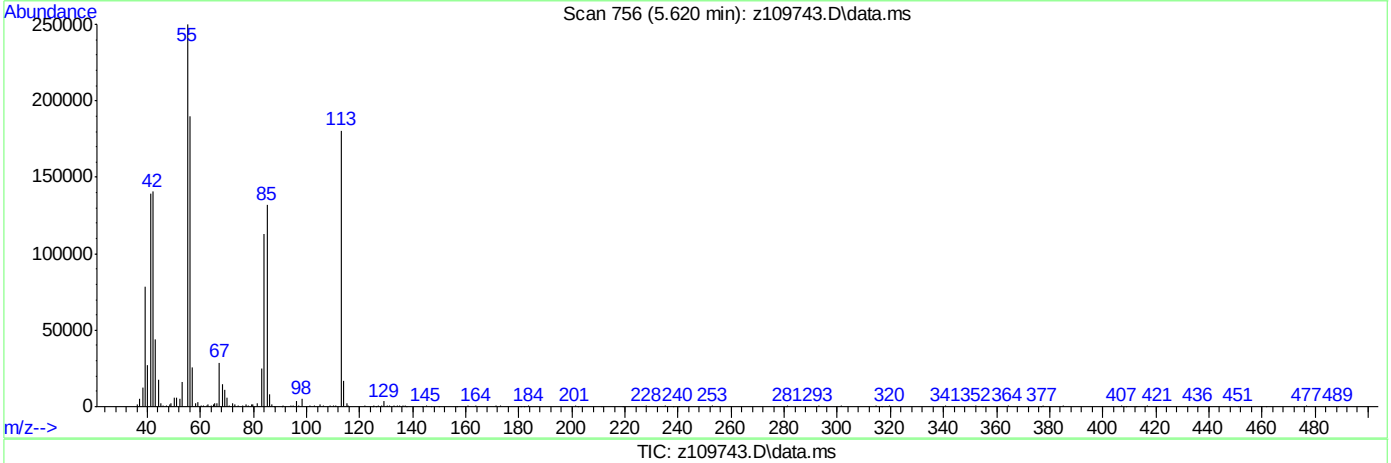
SGS ACCUTEST JC20314

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

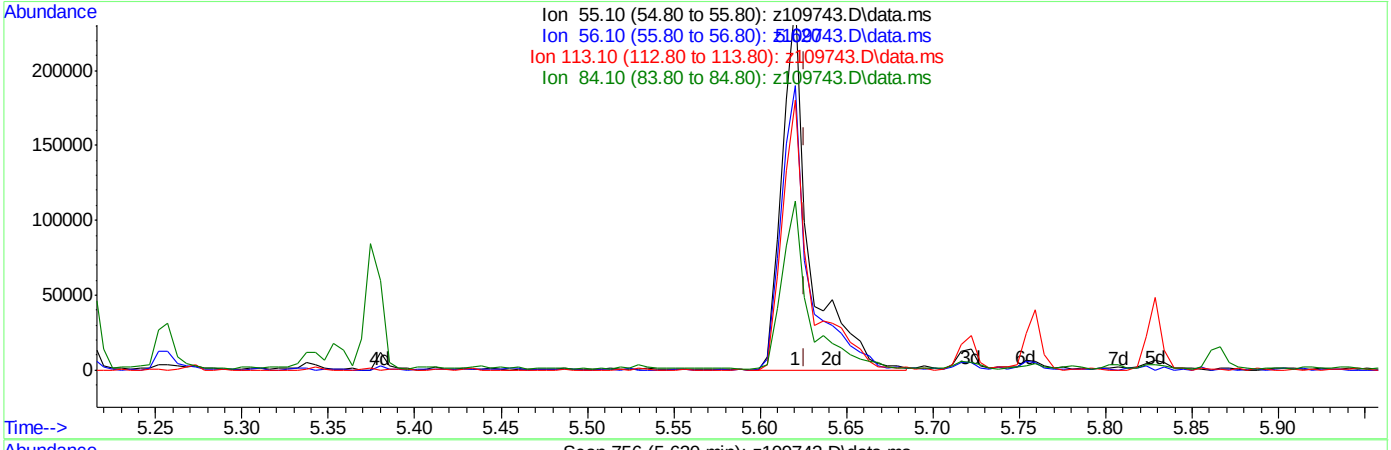
response 226878

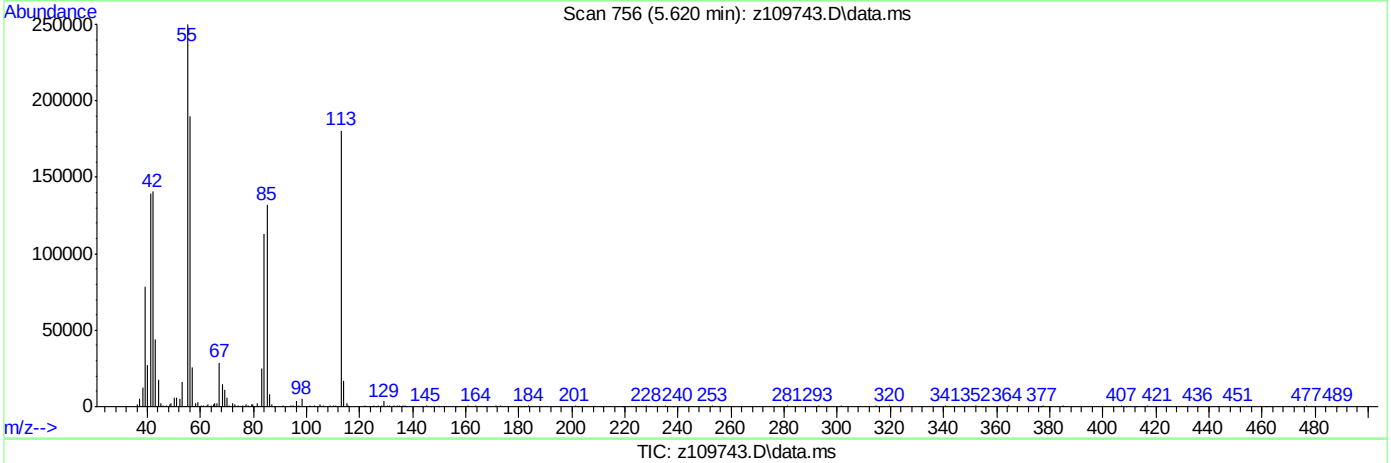
Ion	Exp%	Act%
55.10	100	100
56.10	73.50	75.29
113.10	68.60	71.30
84.10	44.10	43.64

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 JC20314

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

SGS ACCUTEST JC20314

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 JC20314

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

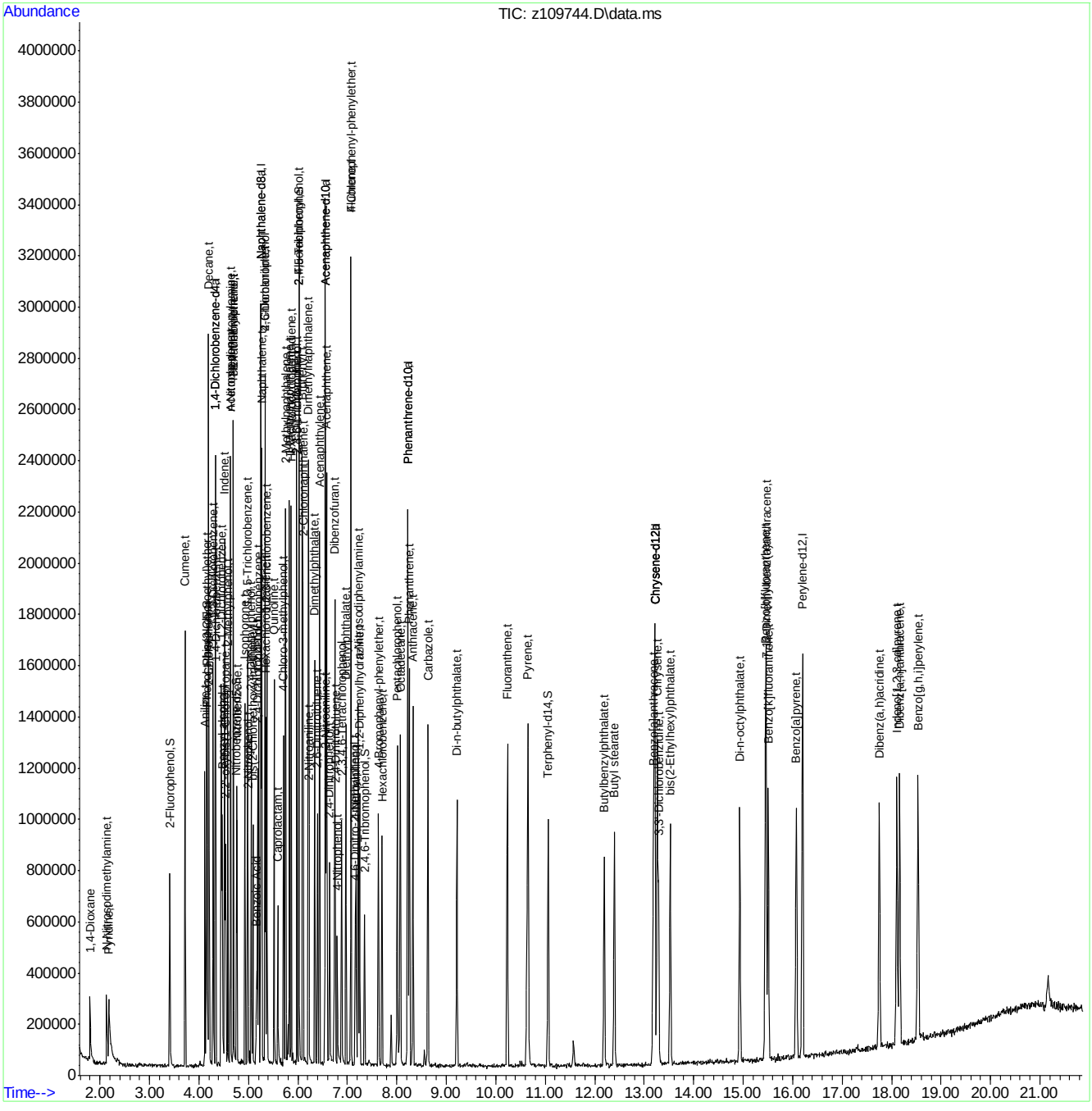
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC20314

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 JC20314

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

SGS ACCUTEST JC20314

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 JC20314

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

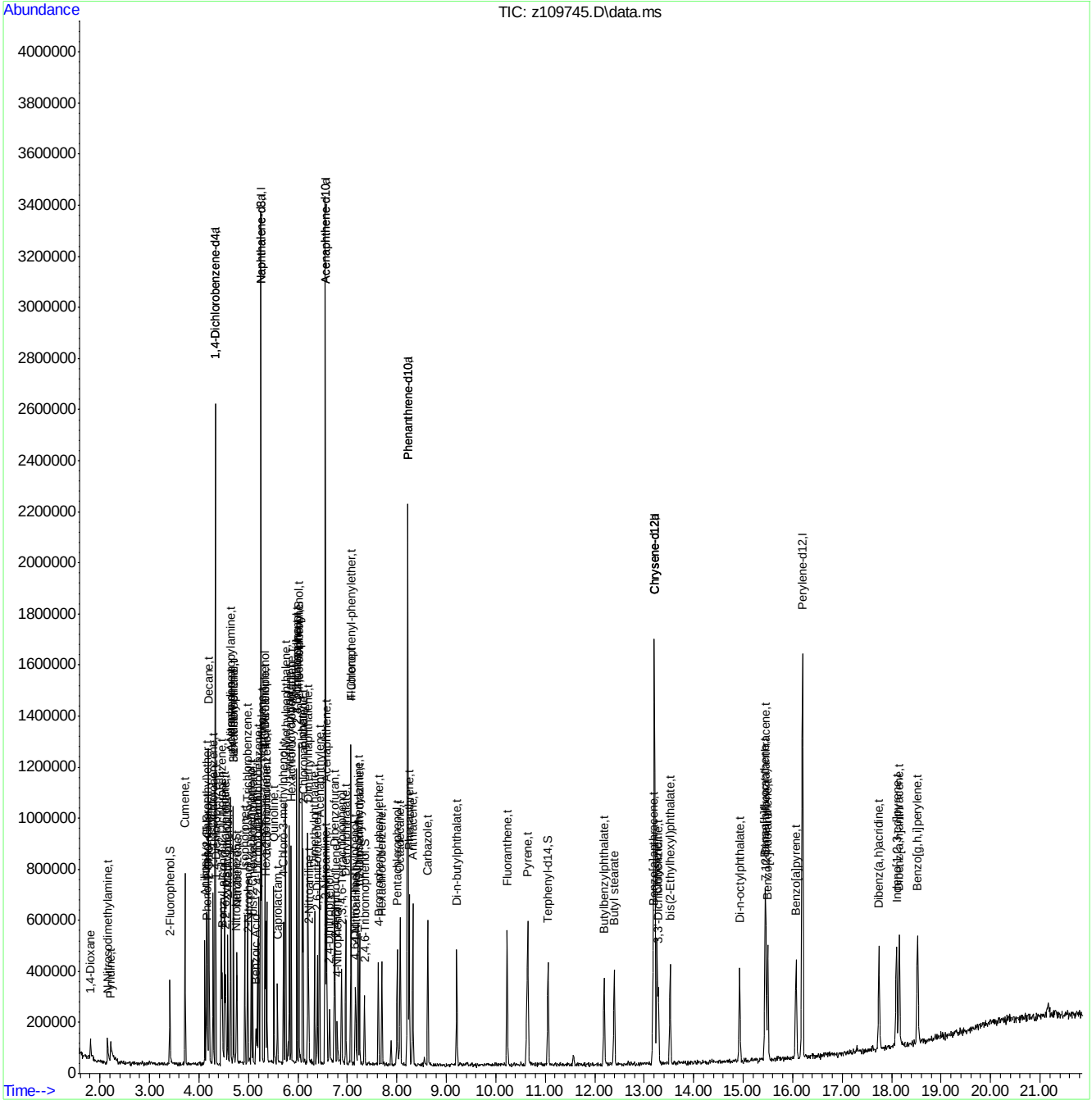
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.249	178	265865	9.69	ppm	97
78)	Anthracene	8.324	178	280527	9.95	ppm	96
79)	Carbazole	8.623	167	257259	9.55	ppm	95
80)	Di-n-butylphthalate	9.211	149	325473	9.82	ppm	99
81)	Fluoranthene	10.231	202	269861	9.23	ppm	97
82)	Octadecane	8.067	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

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 Page: 4

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 JC20314

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 JC20314

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

7.6.33

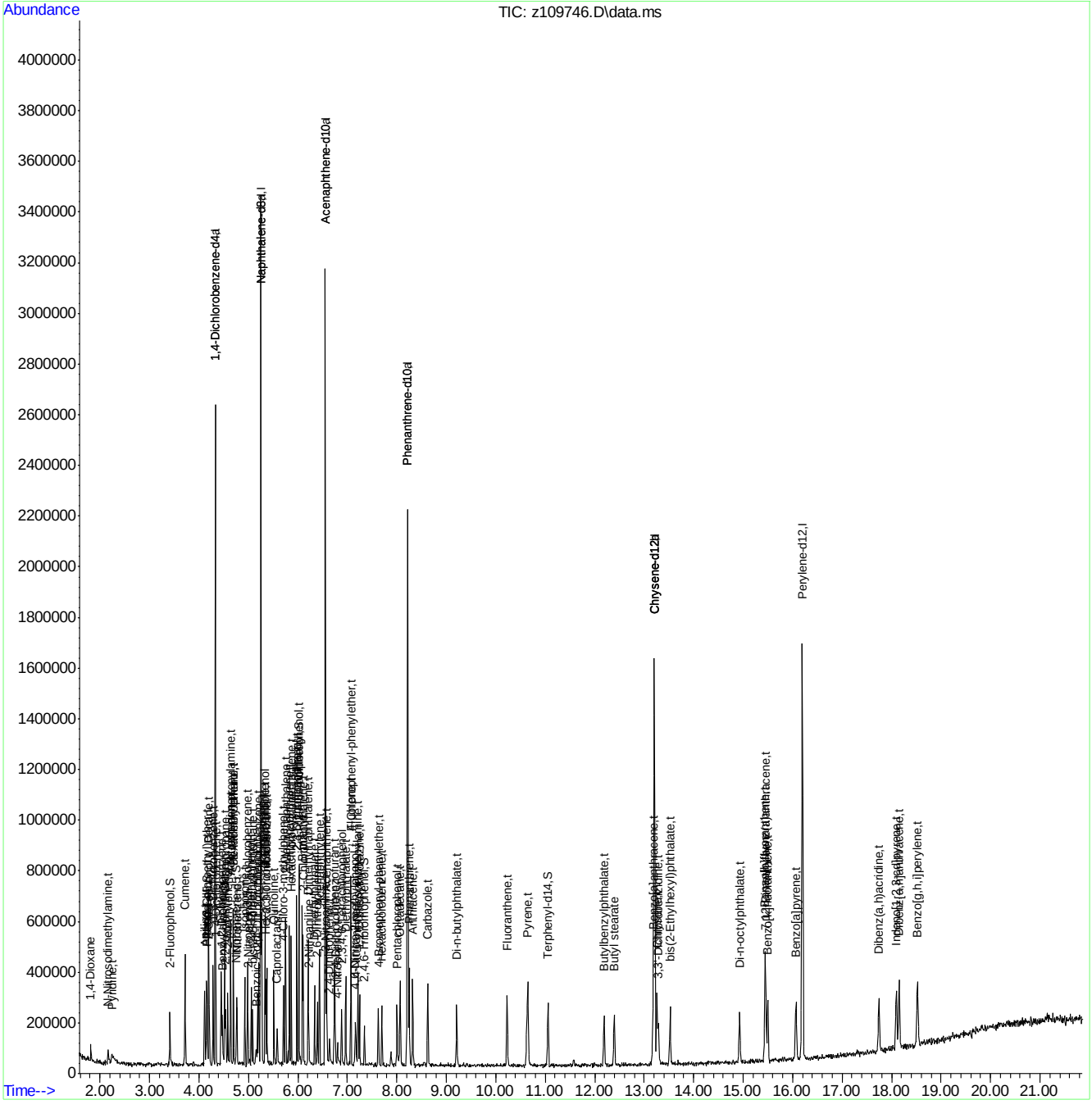
7

SGS ACCUTEST JC20314

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 Page: 4

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 JC20314

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

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

7.6.34

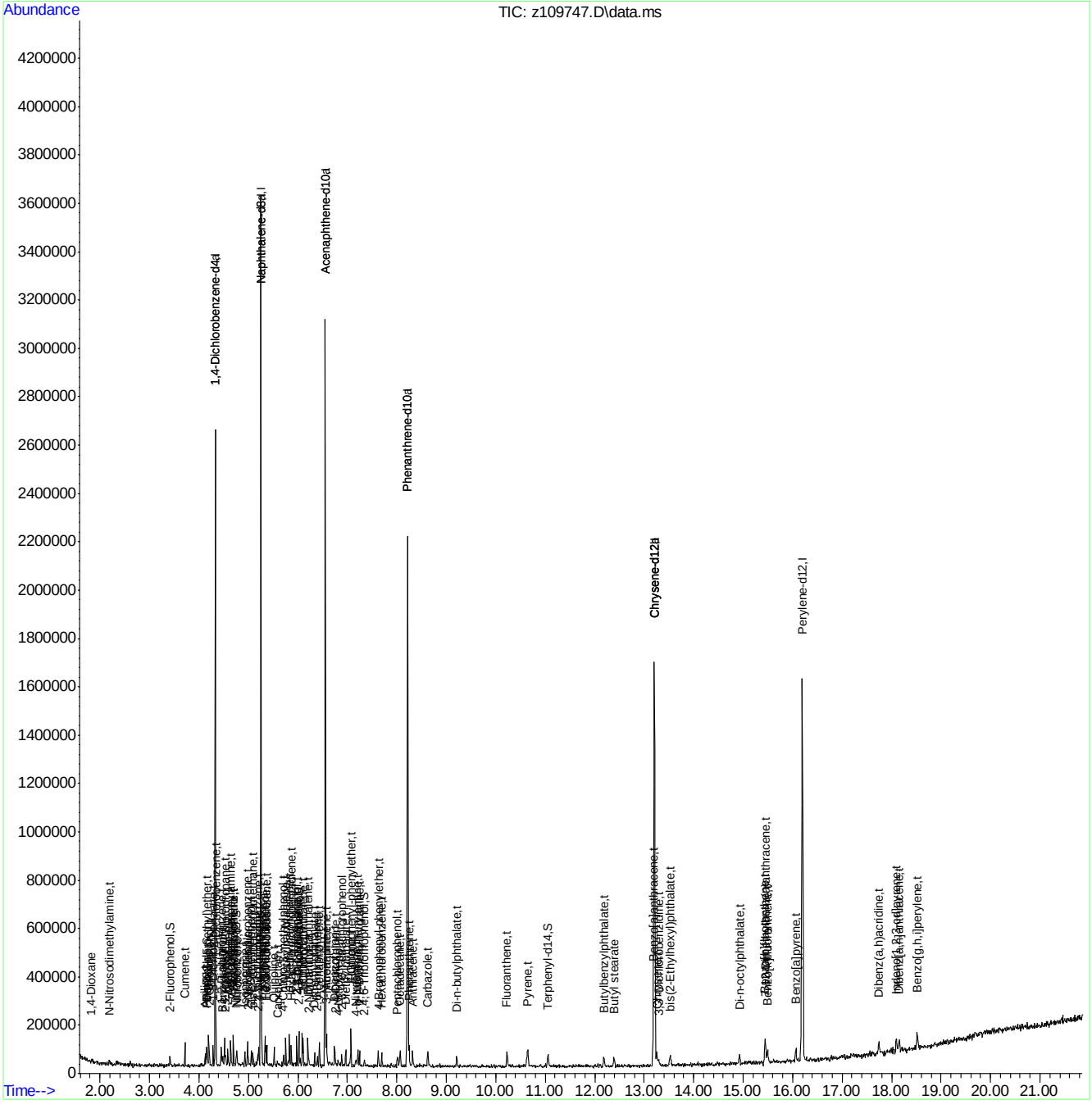
7

SGS ACCUTEST JC20314

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

SGS ACCUTEST JC20314

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 JC20314

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

7.6.35

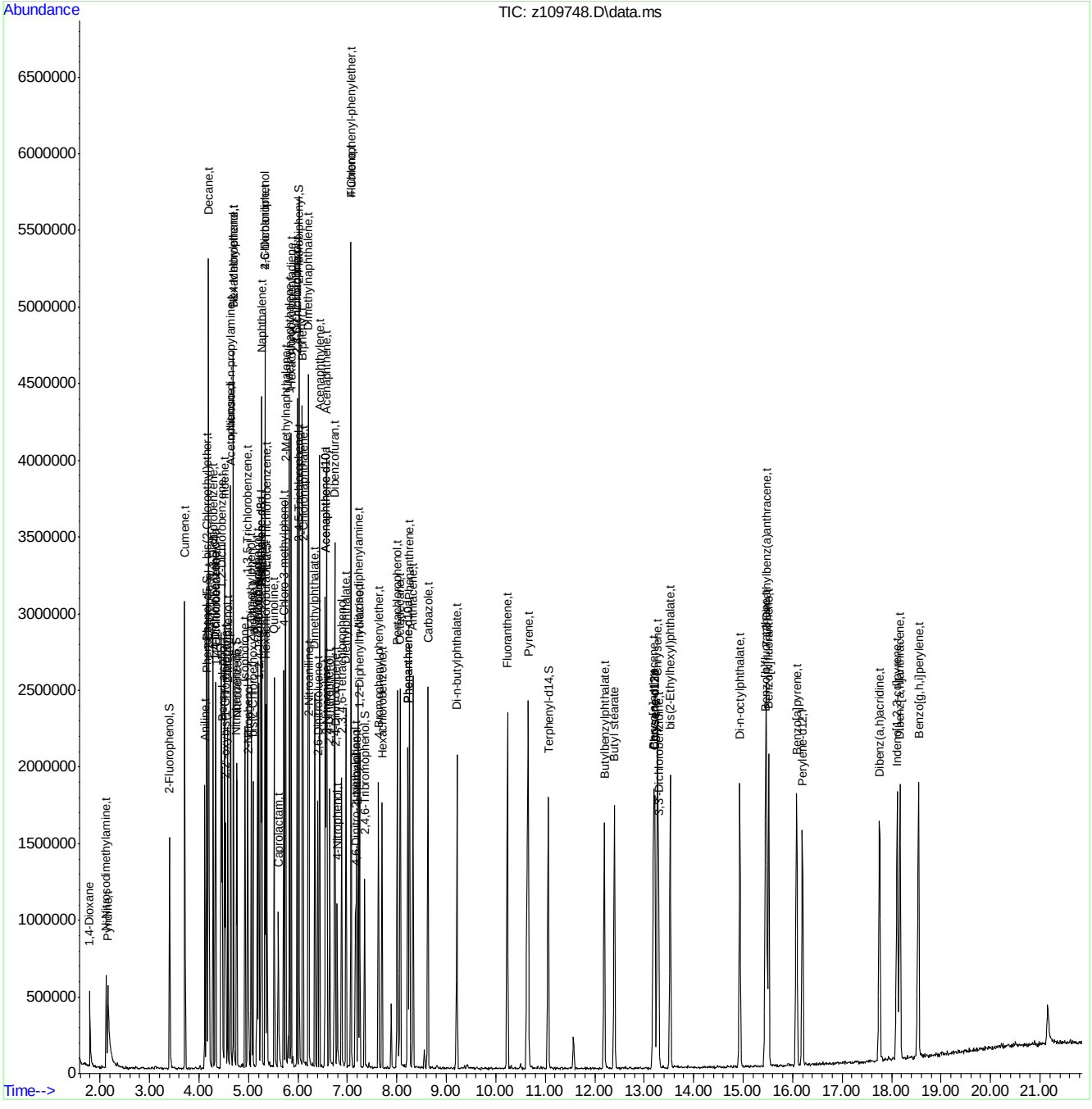
7

SGS ACCUTEST JC20314

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

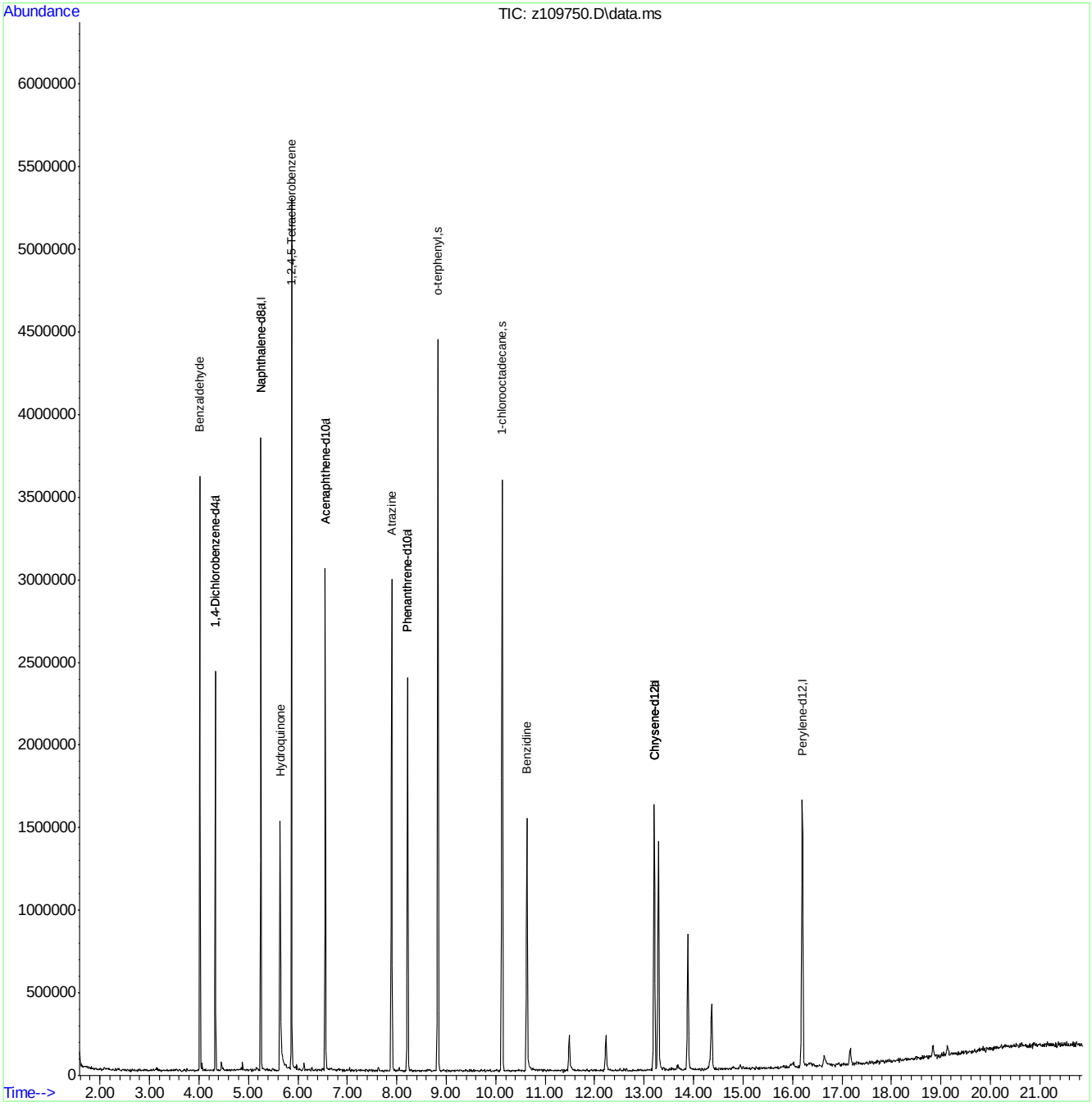
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	292127	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1202462	40.00	ppm	0.00
47) Acenaphthene-d10	6.556	164	572164	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	966486	40.00	ppm	0.00
83) Chrysene-d12	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

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

7.6.37

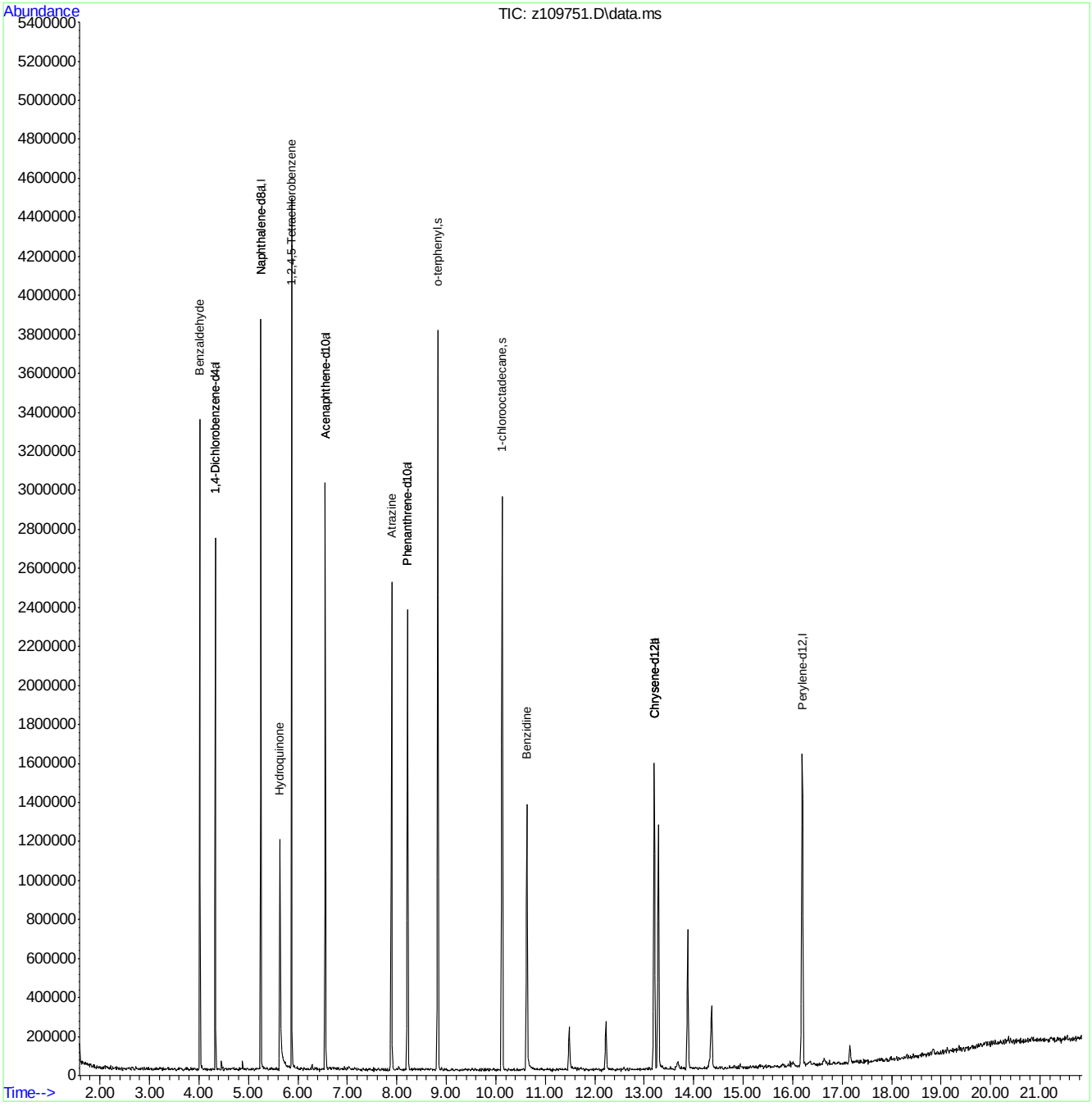
7

SGS ACCUTEST JC20314

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

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

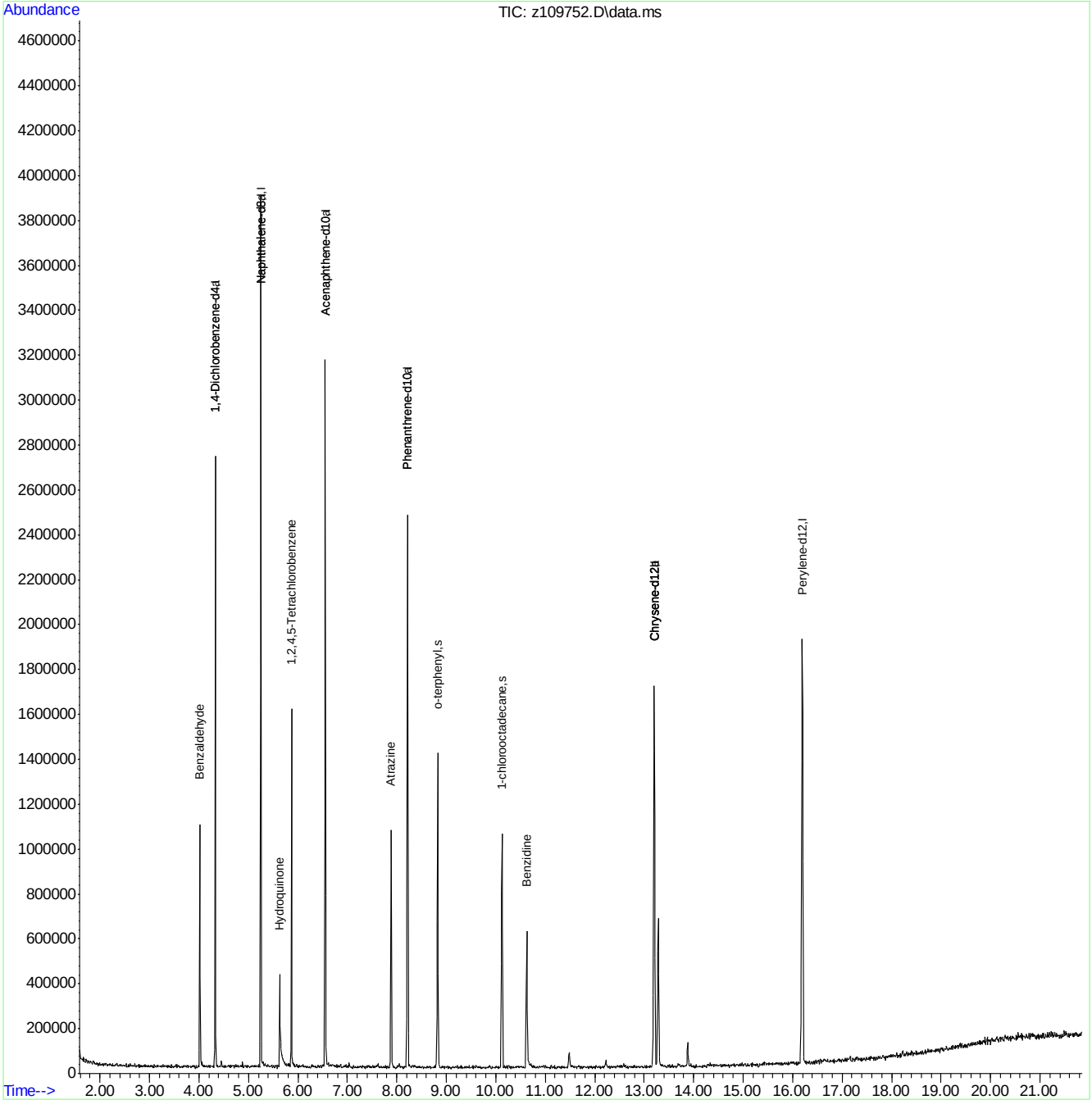
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	300514	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1217462	40.00	ppm	0.00
47) Acenaphthene-d10	6.550	164	584904	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1037494	40.00	ppm	0.00
83) Chrysene-d12	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

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



MZ5485.M Thu Apr 14 10:02:48 2016 RTE

Page: 2

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

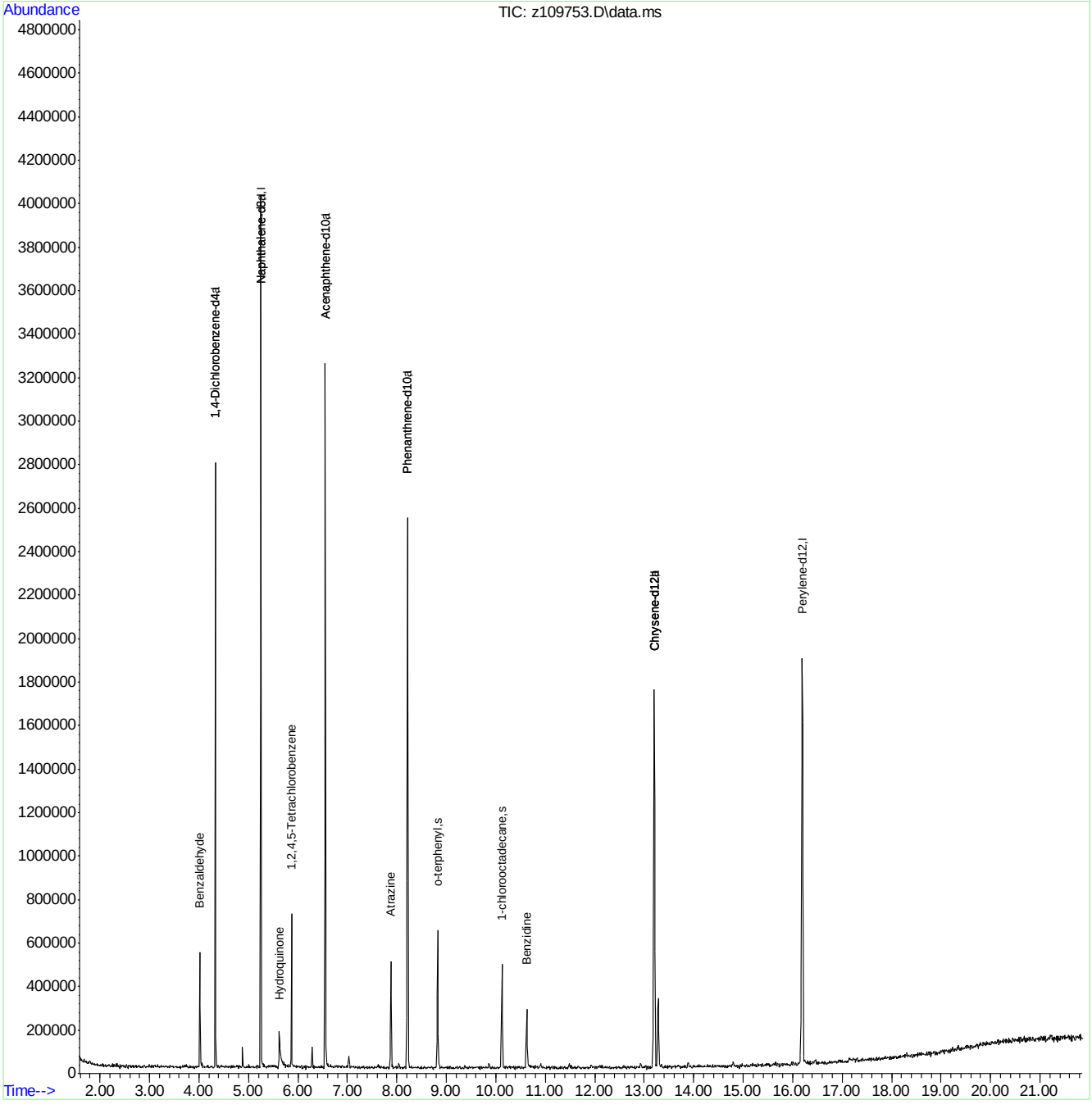
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.328	152	311373	40.00	ppm	0.00
24) Naphthalene-d8	5.252	136	1244793	40.00	ppm	0.00
47) Acenaphthene-d10	6.555	164	608850	40.00	ppm	0.00
69) Phenanthrene-d10	8.217	188	1079818	40.00	ppm	0.00
83) Chrysene-d12	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

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

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

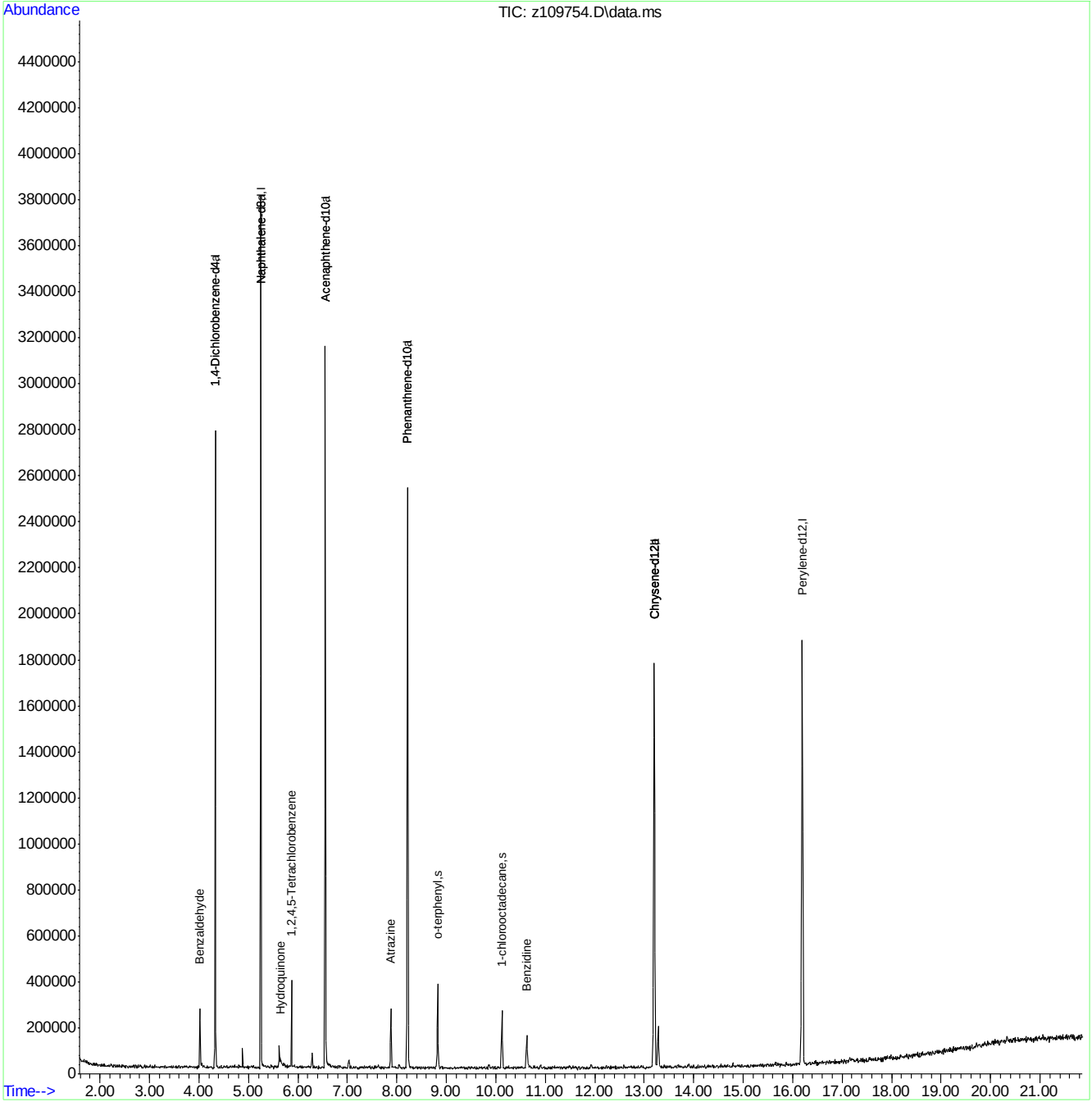
7.6.40
7

SGS ACCUTEST JC20314

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

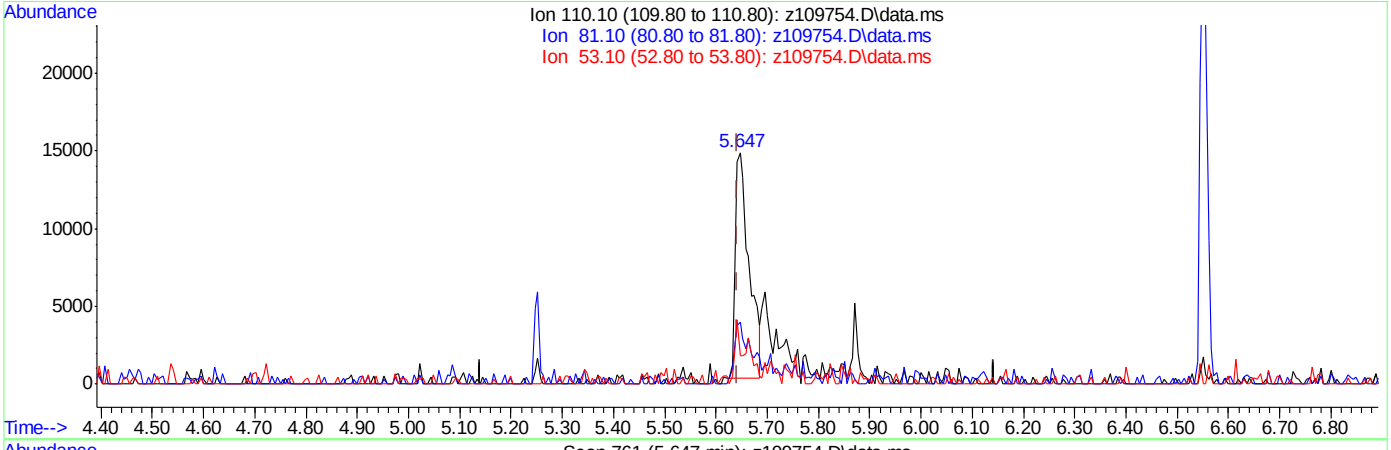
Sample Number:	EZ5486-IC5486	**Method:**	SW846 8270D
Lab FileID:	Z109754.D	**Analyst approved:**	04/14/16 12:00 Arielle Cocozza
Injection Time:	04/14/16 03:58	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

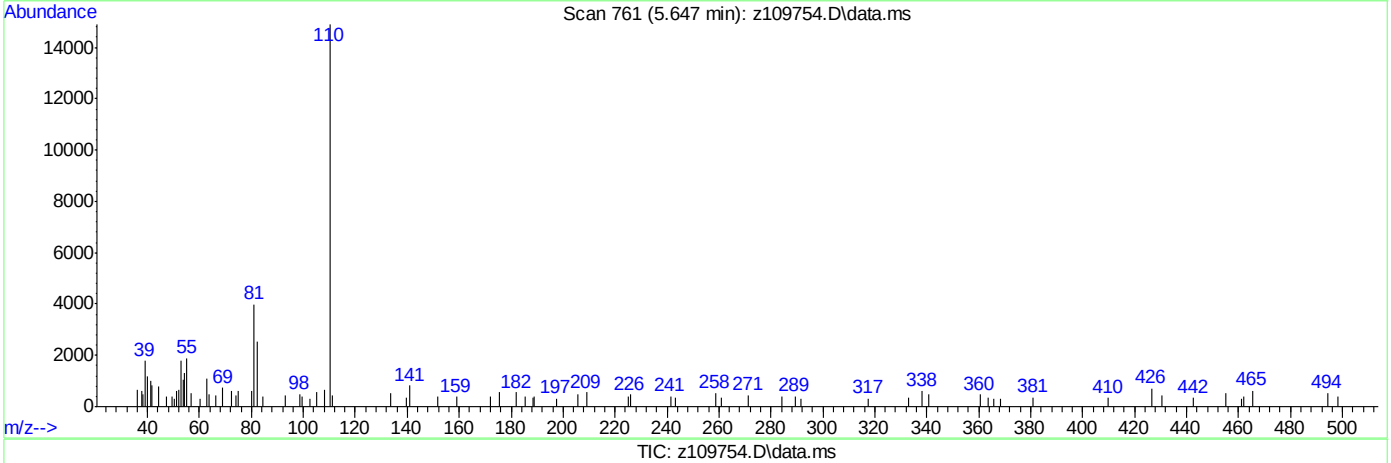
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hydroquinone	123-31-9		5.65	Poor instrument integration

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

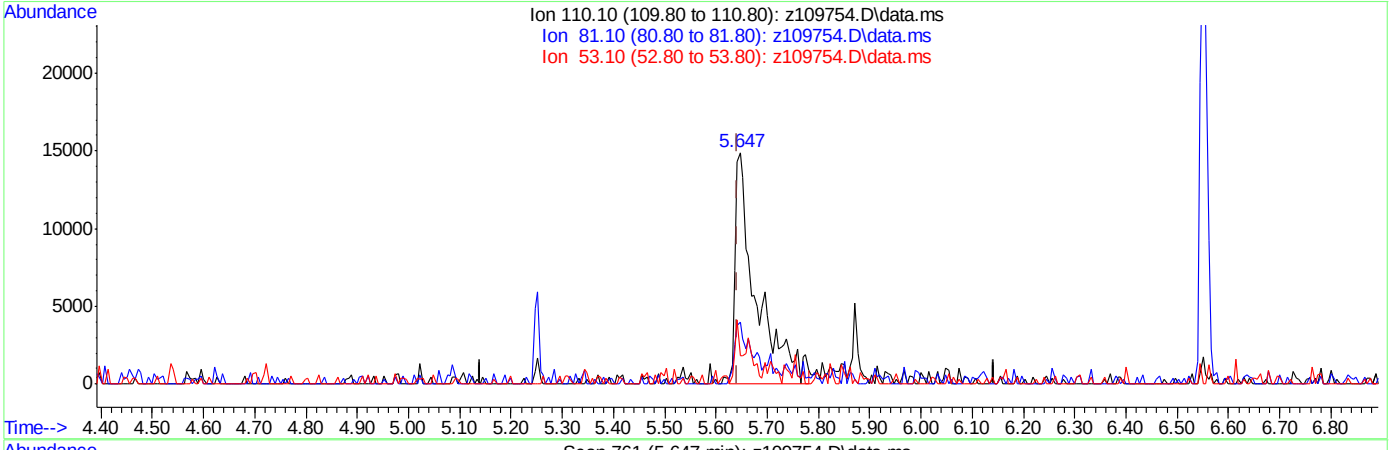
response 26917

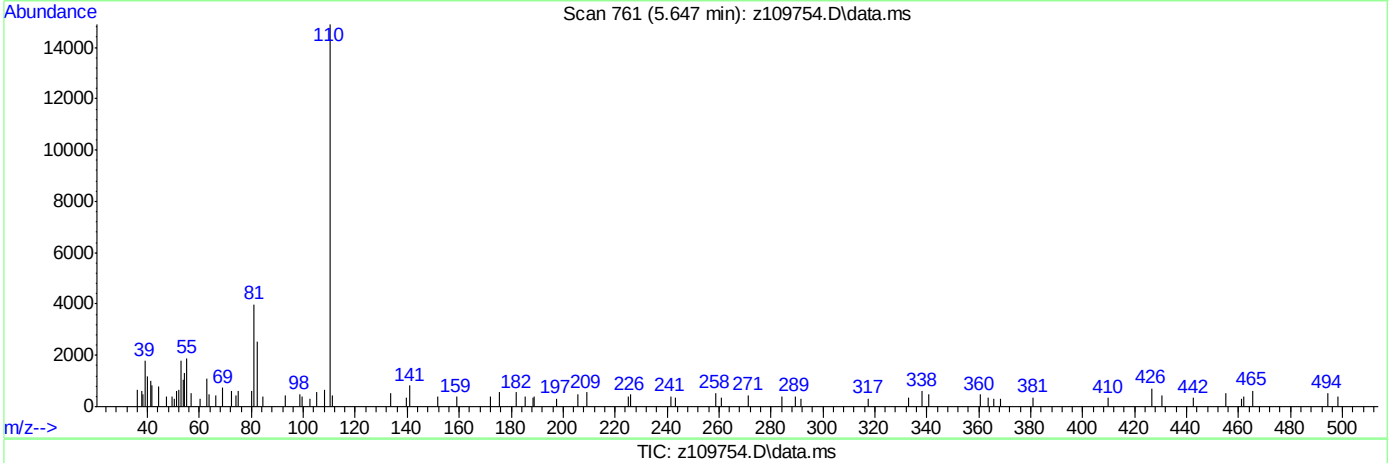
Ion	Exp%	Act%
110.10	100	100
81.10	25.30	22.81
53.10	19.60	20.09
0.00	0.00	0.00

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

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

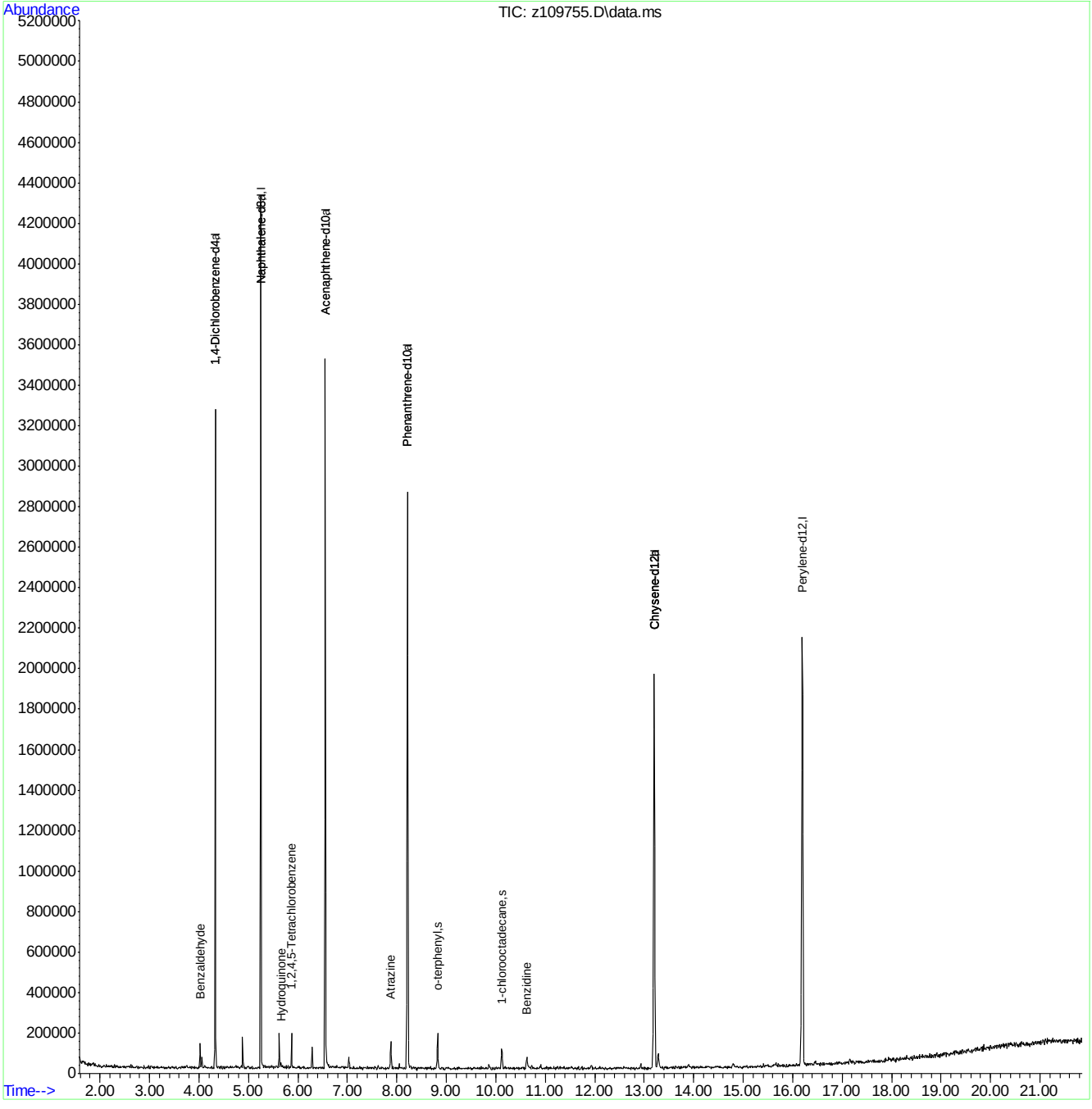
7.6.41
7

SGS ACCUTEST JC20314

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 Page: 2

Manual Integration Approval Summary

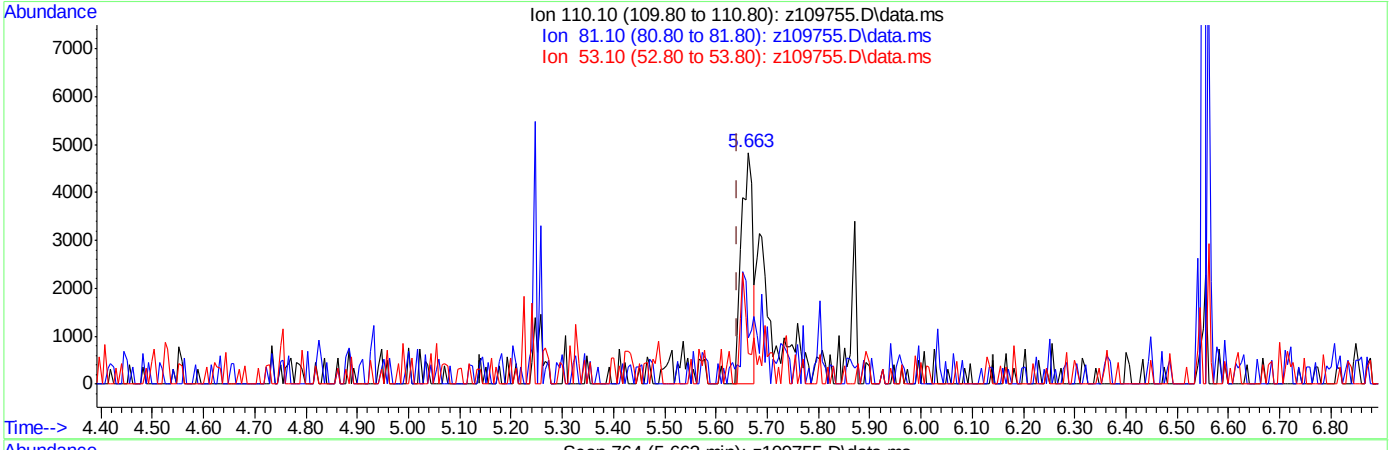
Sample Number:	EZ5486-IC5486	**Method:**	SW846 8270D
Lab FileID:	Z109755.D	**Analyst approved:**	04/14/16 12:00 Arielle Cocozza
Injection Time:	04/14/16 04:29	**Supervisor approved:**	04/14/16 15:48 Nina Pandya

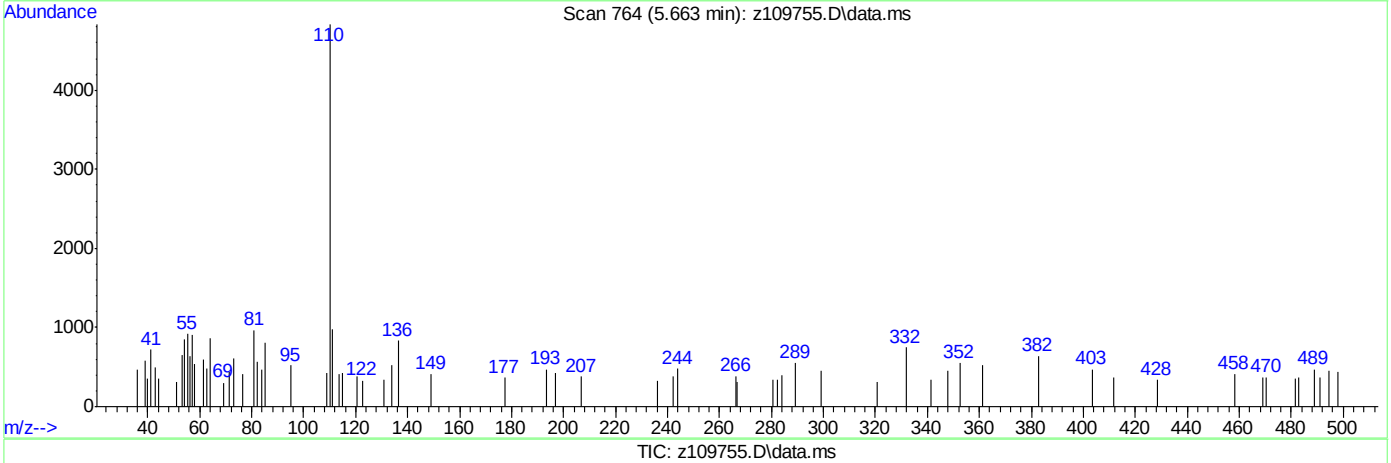
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hydroquinone	123-31-9		5.66	Poor instrument integration

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

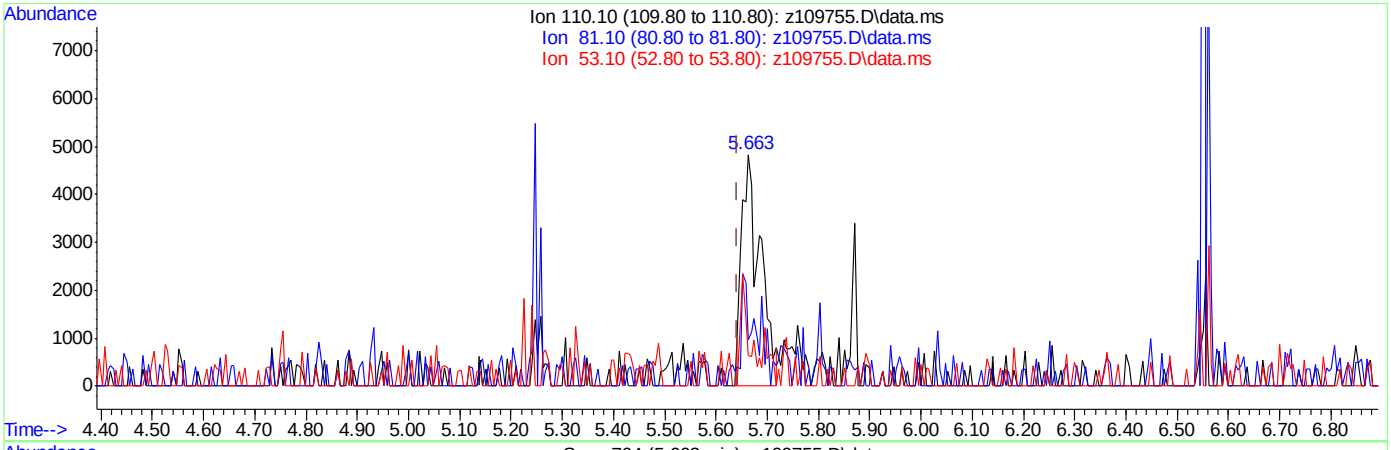
Ion	Exp%	Act%
110.10	100	100
81.10	25.30	2.73
53.10	19.60	4.48
0.00	0.00	0.00

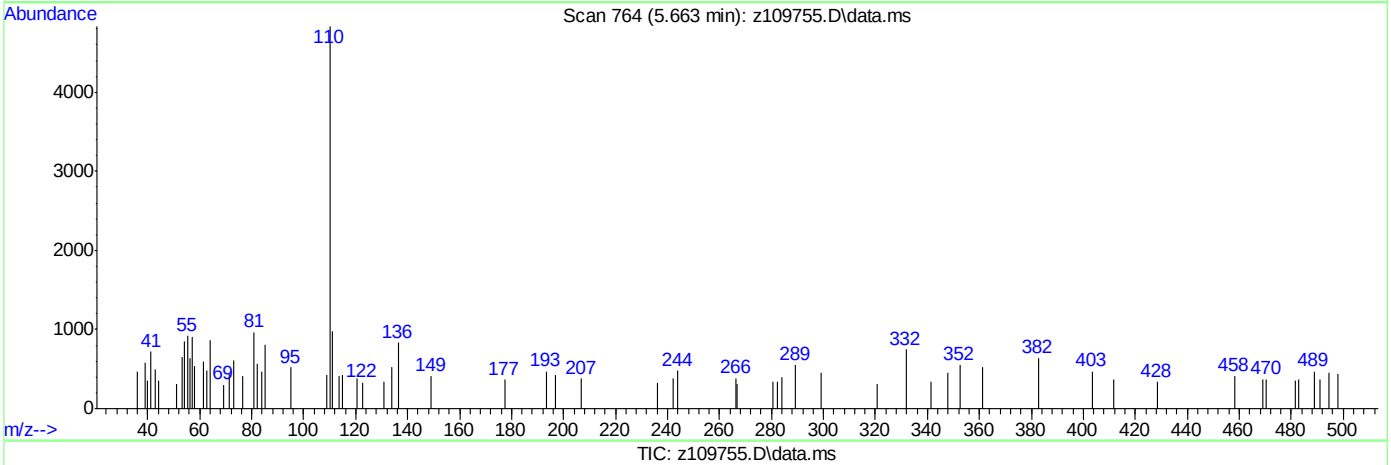
SGS ACCUTEST JC20314

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 JC20314

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

7.6.42

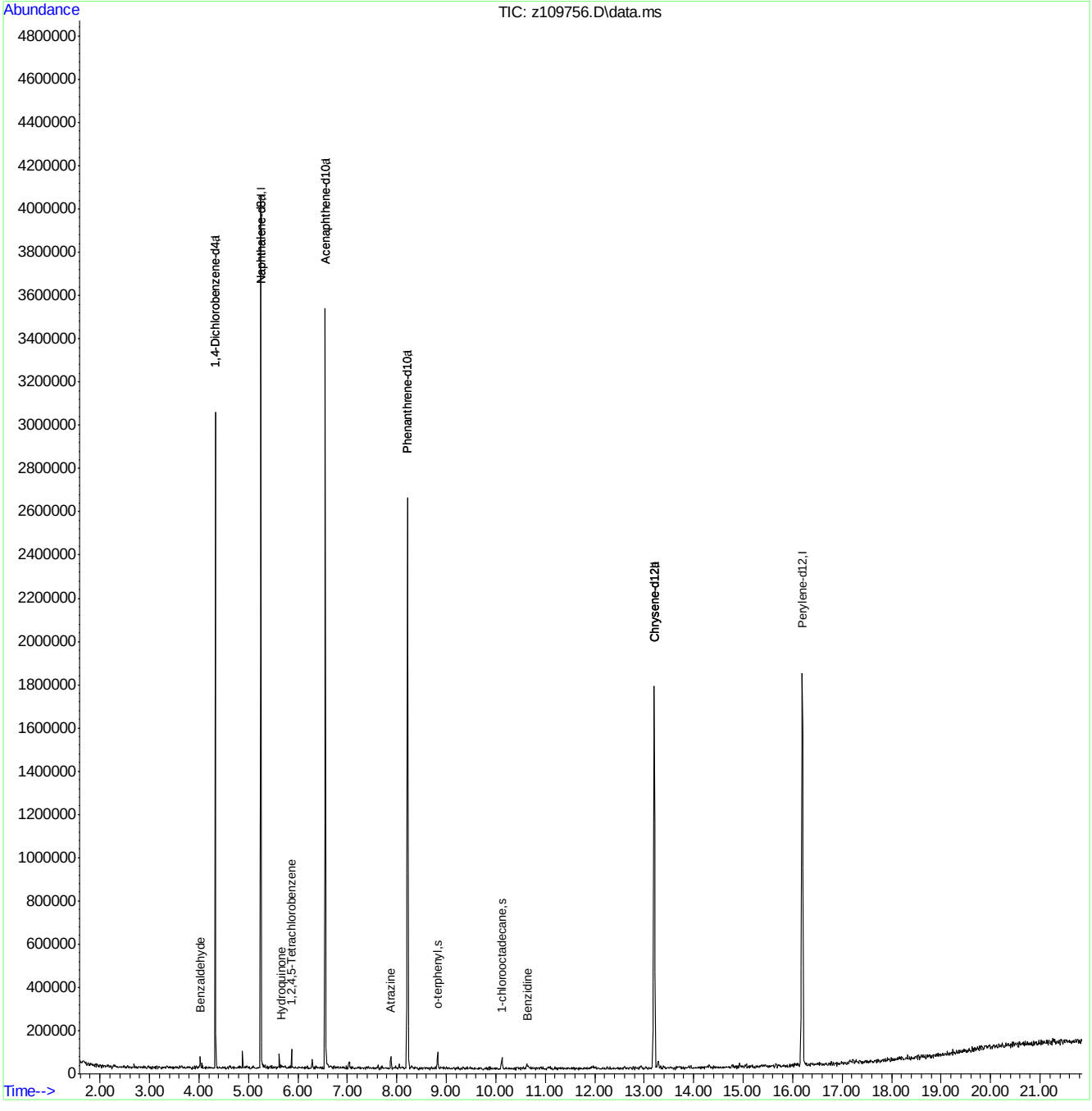
7

SGS ACCUTEST JC20314

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



MZ5485.M Thu Apr 14 10:13:06 2016 RTE Page: 2

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

7.6.43

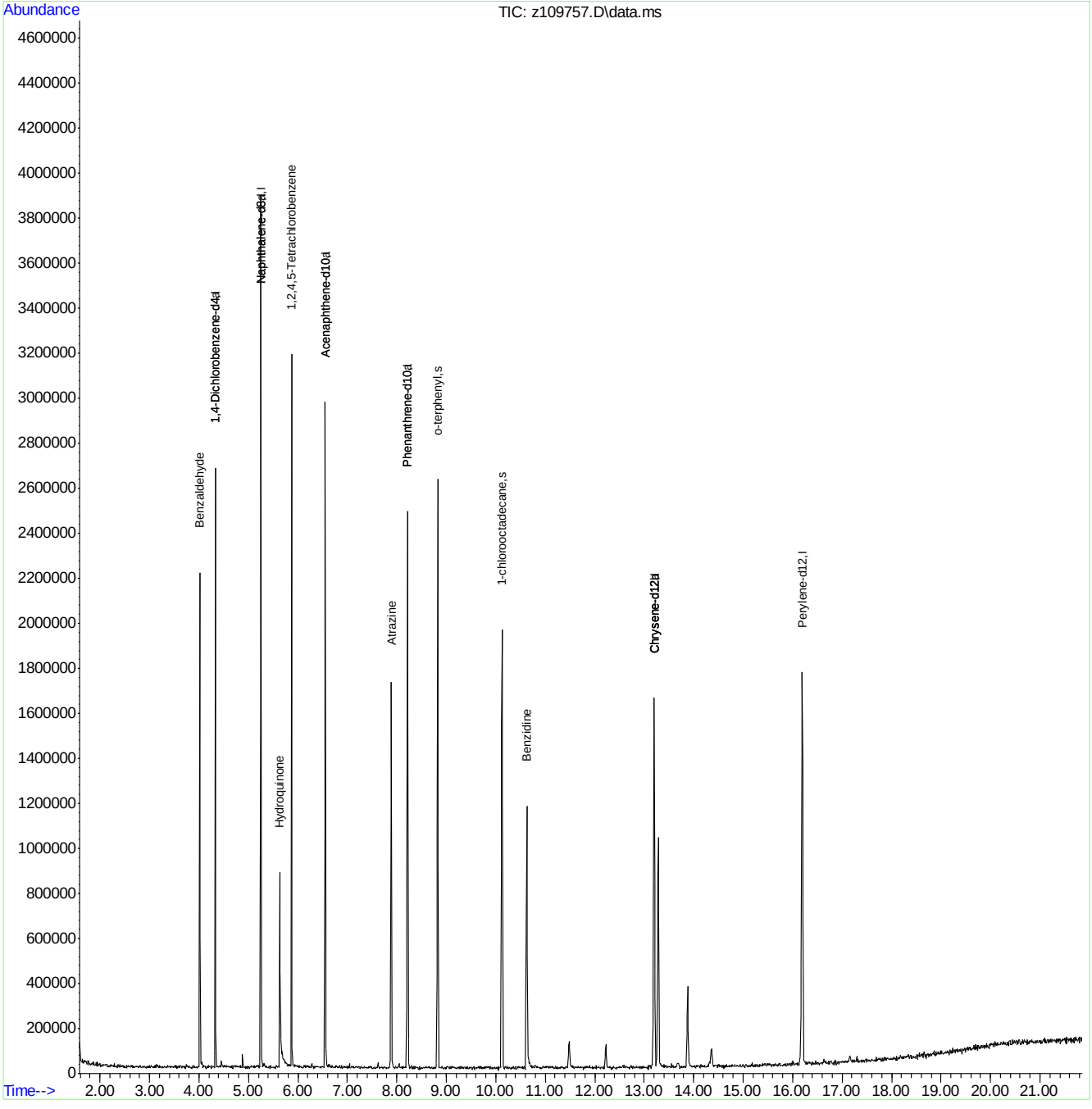
7

SGS ACCUTEST JC20314

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



SGS ACCUTEST JC20314

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 JC20314

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

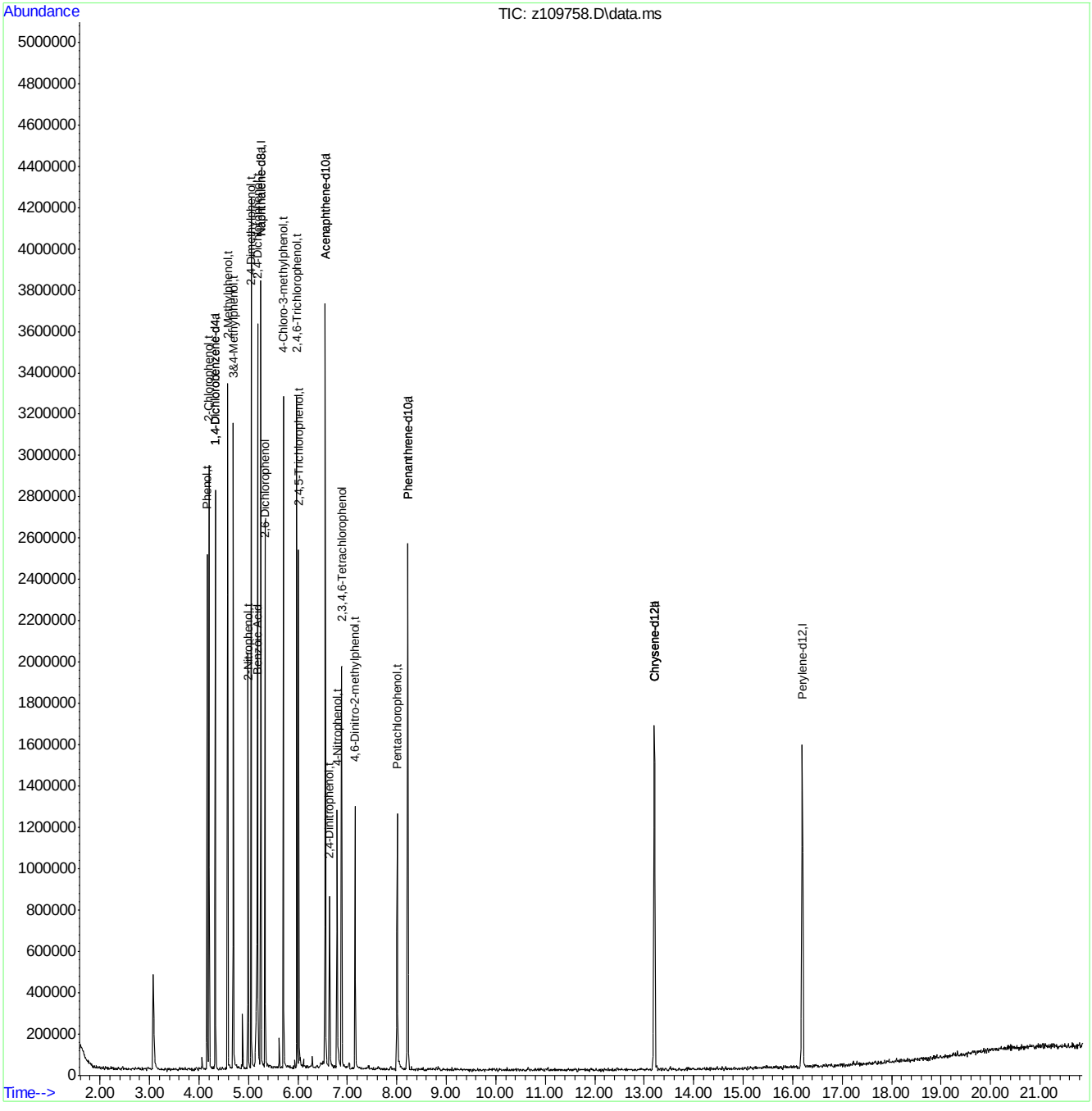
7.6.44

7

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 JC20314

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

7.6.45

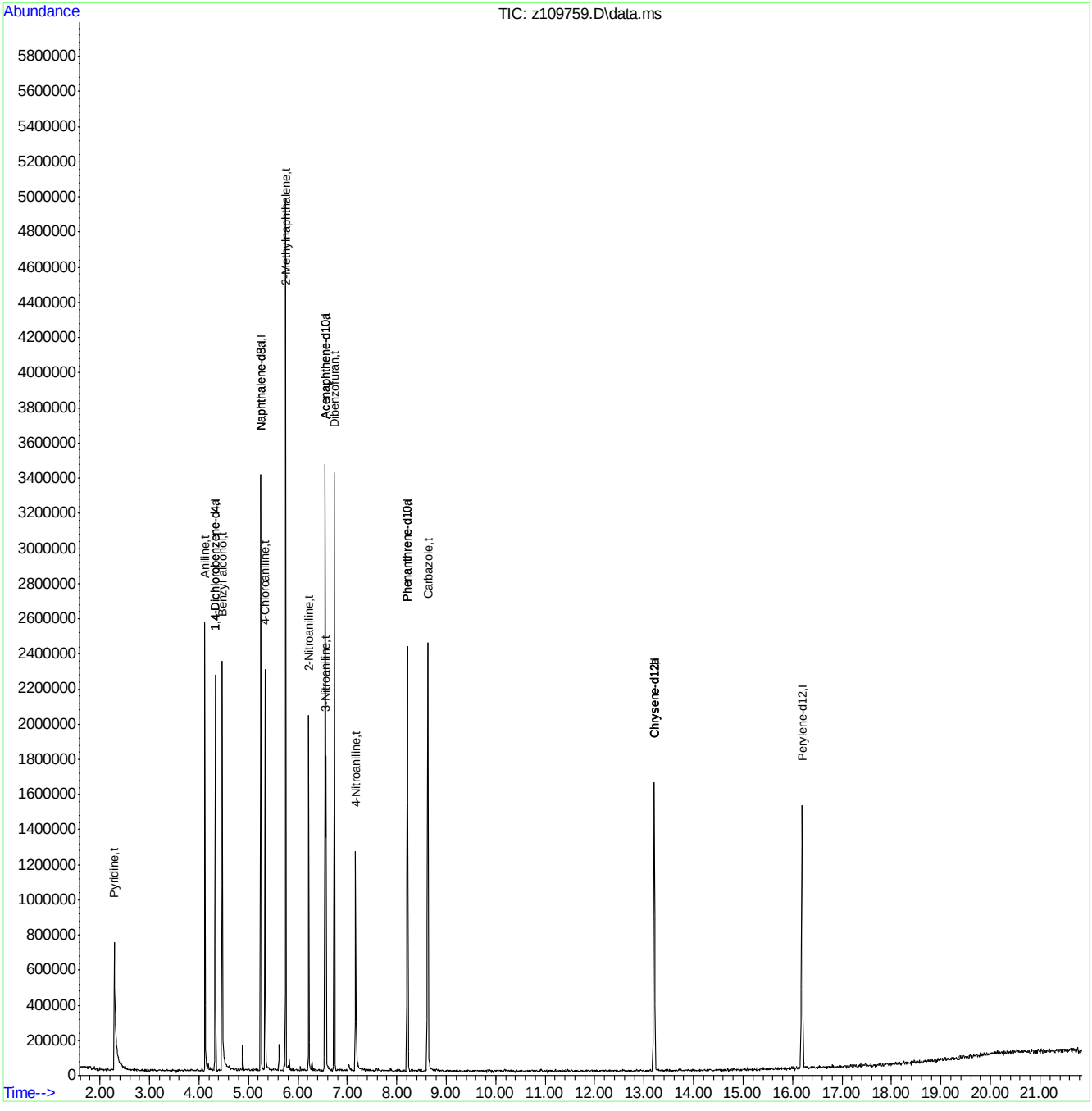
7

SGS ACCUTEST JC20314

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

SGS ACCUTEST JC20314

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

7.6.46

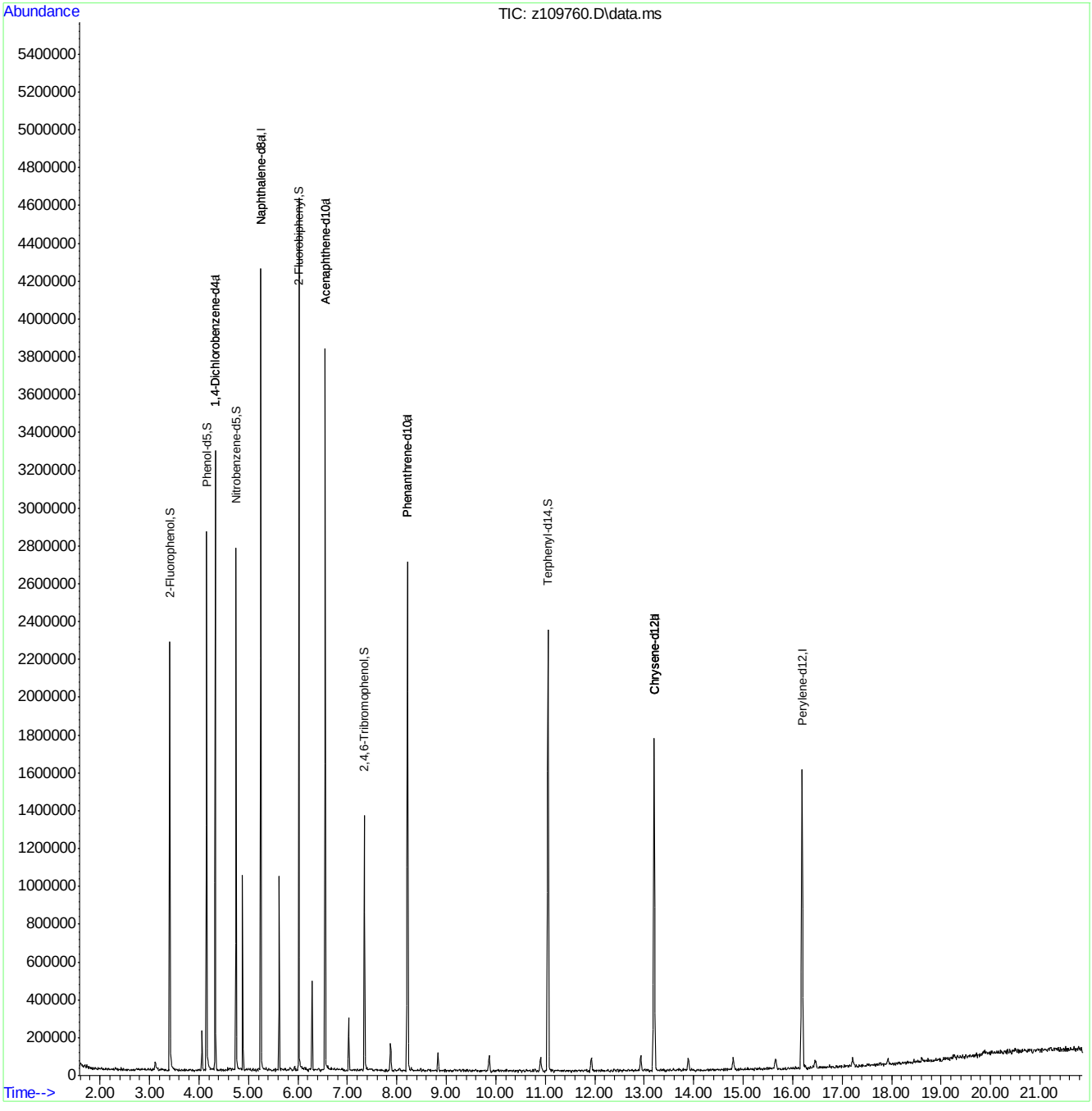
7

SGS ACCUTEST JC20314

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 JC20314

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

7.6.47

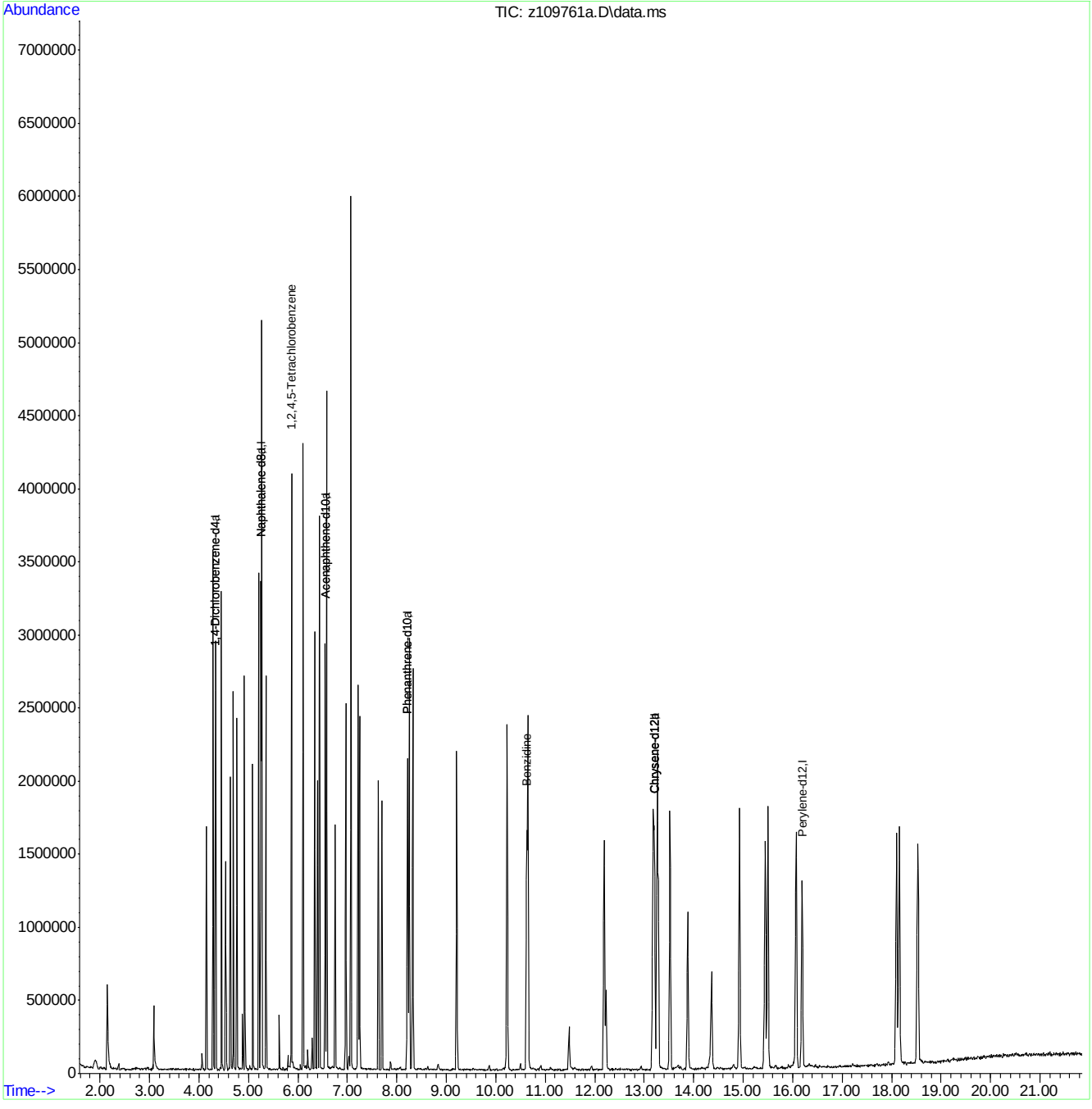
7

SGS ACCUTEST JC20314

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 : 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

SGS ACCUTEST JC20314

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

7.6.48

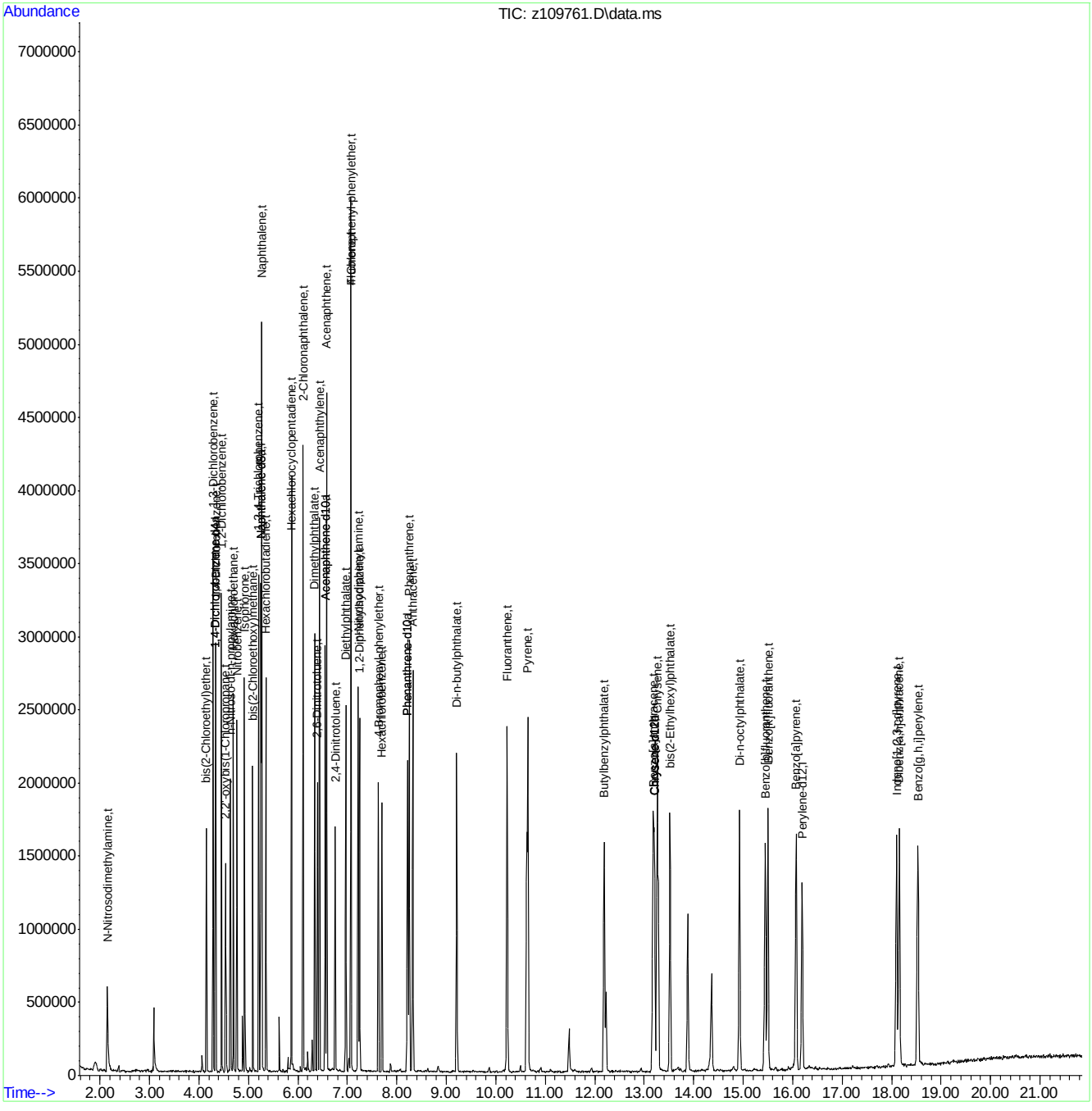
7

SGS ACCUTEST JC20314

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 : 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

7.6.49

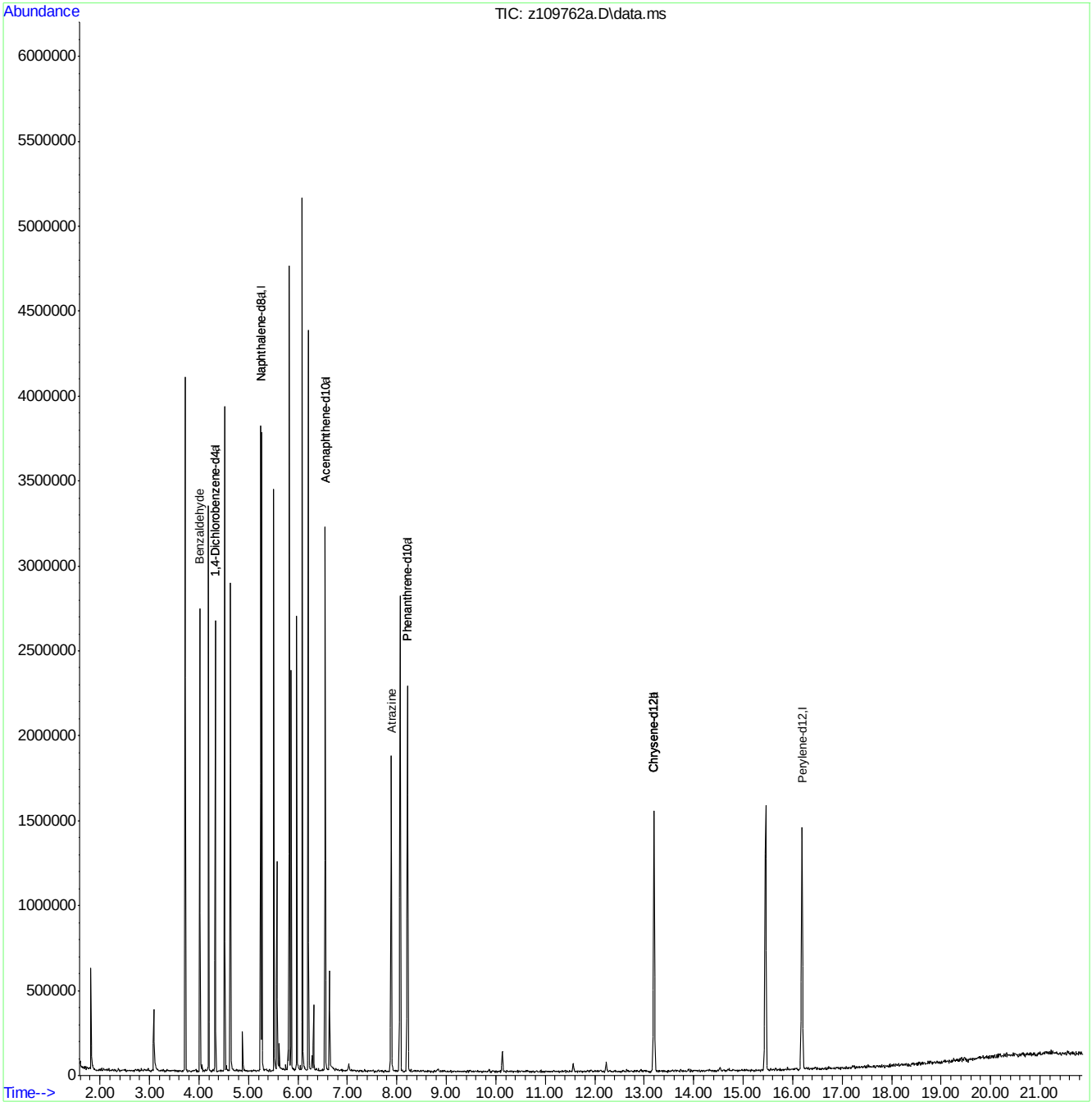
7

SGS ACCUTEST JC20314

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

Page: 2

SGS ACCUTEST JC20314

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

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

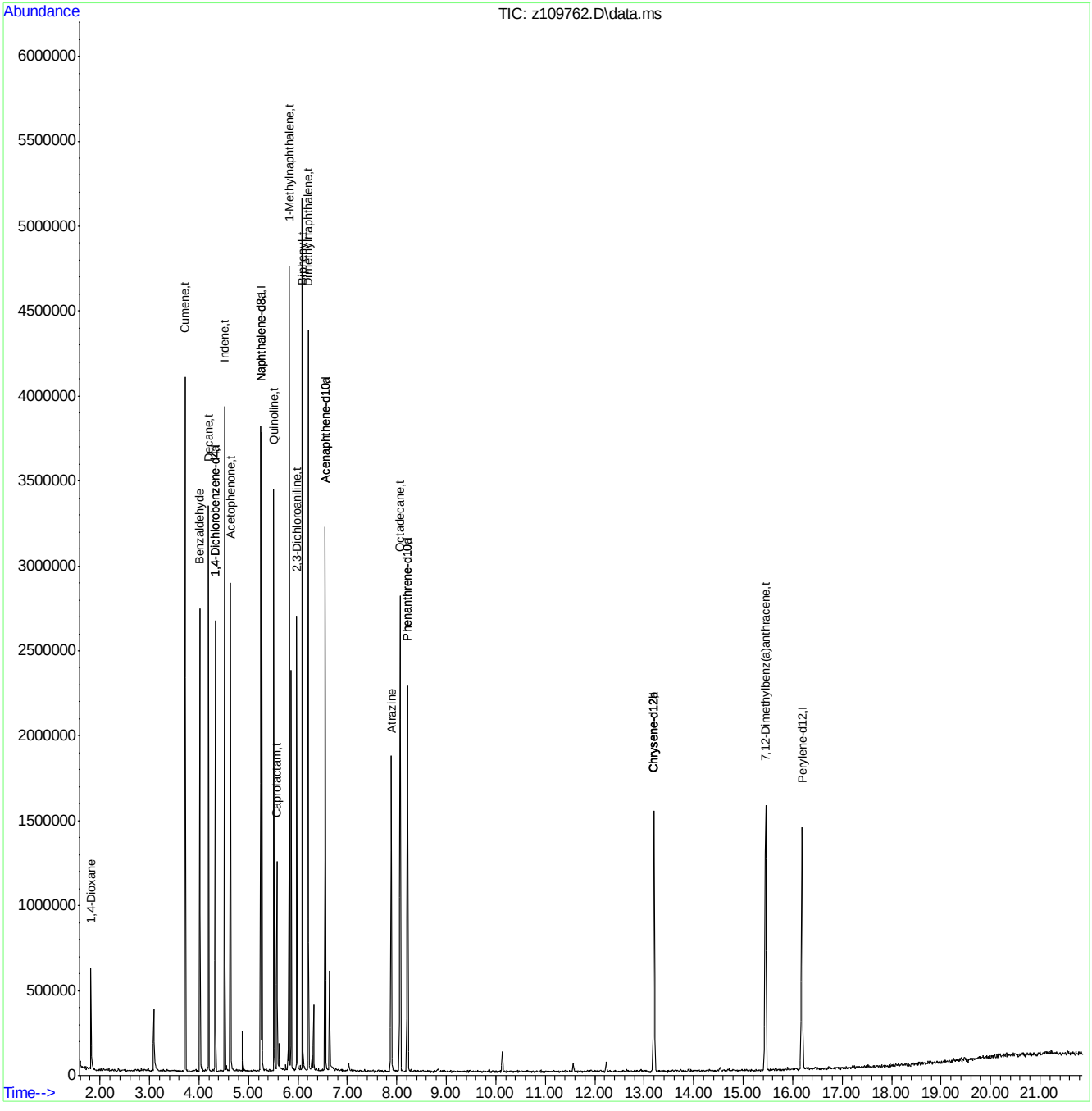
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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

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

7.6.51

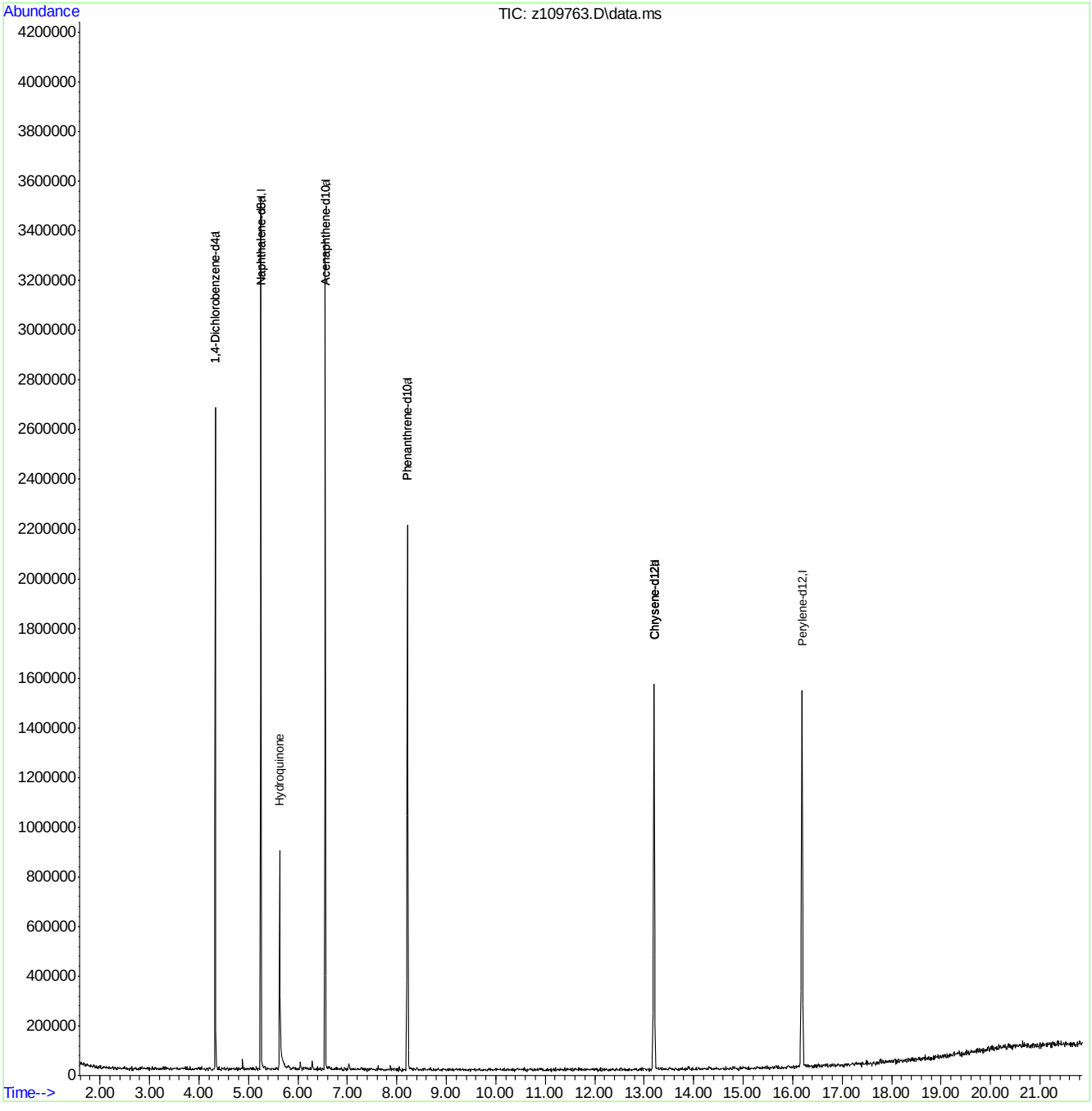
7

SGS ACCUTEST JC20314

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

Page: 2

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

7.6.52

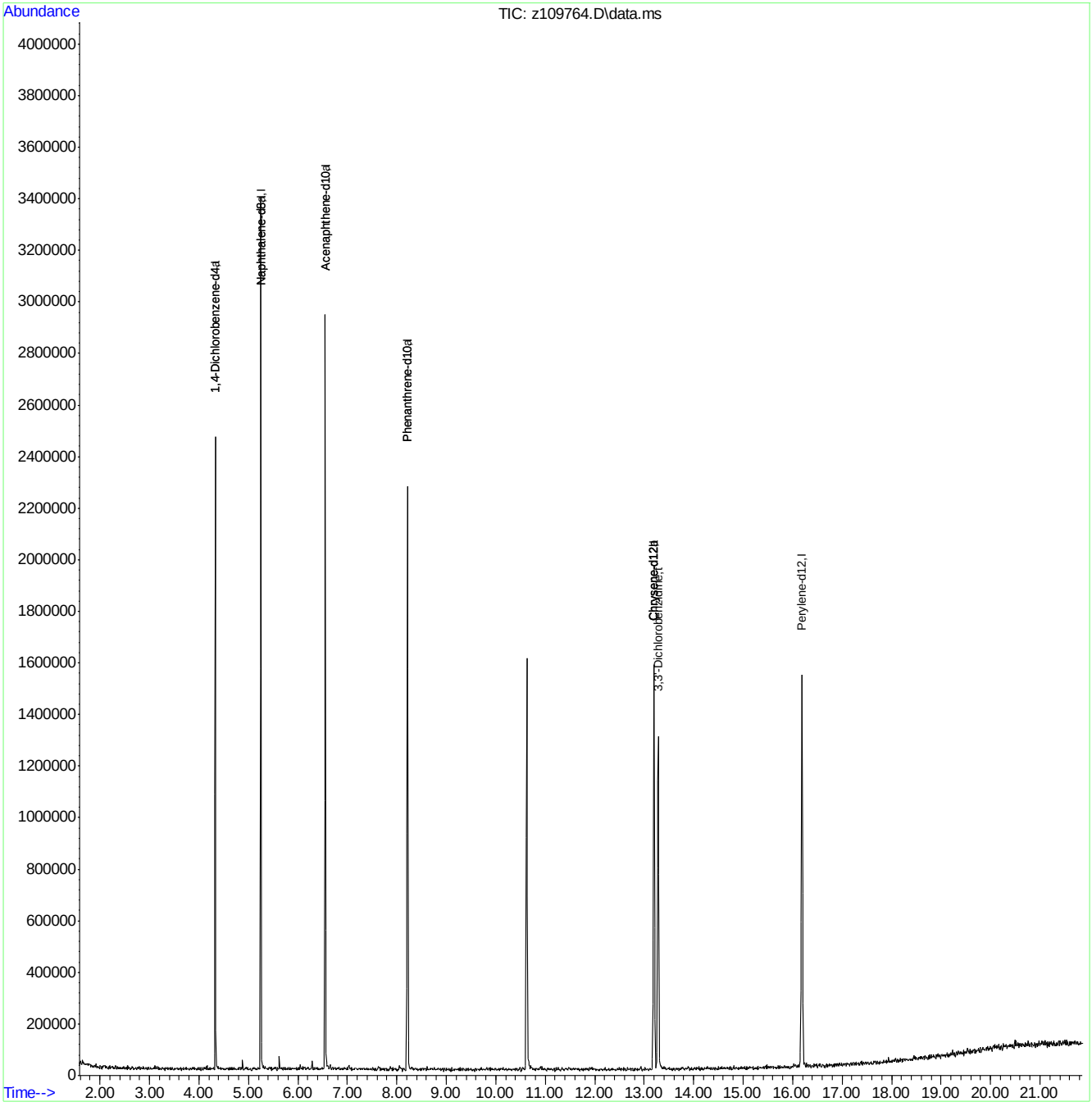
7

SGS ACCUTEST JC20314

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 JC20314

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/18/16 13:32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110698.D
Acq On : 16 May 2016 11:13 am
Operator : ariellec
Sample : cc5485-50
Misc : op93793,ez5530
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 11:41:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:40:33 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.208	152	179144	40.00	ppm	0.00
24) Naphthalene-d8	5.132	136	648434	40.00	ppm	0.00
47) Acenaphthene-d10	6.403	164	414917	40.00	ppm	0.00
69) Phenanthrene-d10	8.006	188	717853	40.00	ppm	0.00
83) Chrysene-d12	12.910	240	765672	40.00	ppm	0.00
92) Perylene-d12	15.891	264	648921	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.325	152	207196	40.00	ppm	0.06
104) Phenanthrene-d10a	8.006	188	717853	40.00	ppm	-0.11
106) Chrysene-d12a	12.910	240	765672	40.00	ppm	-0.16
108) Acenaphthene-d10a	6.403	164	414917	40.00	ppm	-0.07
110) Naphthalene-d8a	5.132	136	648434	40.00	ppm	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	3.289	112	284602	46.01	ppm	0.00
Spiked Amount 50.000			Recovery = 92.02%			
8) Phenol-d5	4.047	99	353371	48.75	ppm	0.00
Spiked Amount 50.000			Recovery = 97.50%			
25) Nitrobenzene-d5	4.635	82	299023	57.14	ppm	0.00
Spiked Amount 50.000			Recovery = 114.28%			
51) 2-Fluorobiphenyl	5.896	172	615888	46.31	ppm	0.01
Spiked Amount 50.000			Recovery = 92.62%			
73) 2,4,6-Tribromophenol	7.167	330	88822	40.26	ppm	0.00
Spiked Amount 50.000			Recovery = 80.52%			
86) Terphenyl-d14	10.773	244	780557	48.52	ppm	0.10
Spiked Amount 50.000			Recovery = 97.04%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.654	88	127625	48.01	ppm	88
3) Pyridine	1.985	79	117611	28.12	ppm	89
4) N-Nitrosodimethylamine	1.964	74	108306	31.09	ppm	90
6) Indene	4.395	116	504464	44.30	ppm	99
7) Cumene	3.588	105	713418	49.12	ppm	96
9) Phenol	4.058	94	351008	47.70	ppm	90
10) Aniline	3.999	93	278605	32.91	ppm	98
11) bis(2-Chloroethyl)ether	4.031	93	249815	49.58	ppm	95
12) 2-Chlorophenol	4.090	128	306703	45.20	ppm	95
13) Decane	4.069	43	251885	40.28	ppm	95
14) 1,3-Dichlorobenzene	4.165	146	347350	47.05	ppm	98
15) 1,4-Dichlorobenzene	4.218	146	361427	51.61	ppm	93
16) Benzyl alcohol	4.357	108	148909	47.95	ppm	92
17) 1,2-Dichlorobenzene	4.336	146	321476	47.38	ppm	93
18) Acetophenone	4.523	105	369274	46.76	ppm	98
19) 2-Methylphenol	4.475	108	268898	46.75	ppm	93
20) 2,2'-oxybis(1-Chloropr...	4.416	121	83669	47.49	ppm #	74
21) 3&4-Methylphenol	4.587	108	258504	43.09	ppm	97
22) n-Nitroso-di-n-propyla...	4.523	70	215243	52.69	ppm	96
23) Hexachloroethane	4.571	201	115601	56.65	ppm	96
26) Nitrobenzene	4.651	77	289769	54.94	ppm	97
27) Quinoline	5.399	129	592424	48.27	ppm	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110698.D
Acq On : 16 May 2016 11:13 am
Operator : ariellec
Sample : cc5485-50
Misc : op93793,ez5530
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 11:41:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:40:33 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28) Isophorone	4.811	82	495759	53.99	ppm		95
29) 2-Nitrophenol	4.875	139	169110	51.61	ppm	#	54
30) 2,4-Dimethylphenol	4.945	107	277146	53.76	ppm		93
31) Benzoic Acid	5.089	105	224513m	60.37	ppm		
32) bis(2-Chloroethoxy)met...	4.972	93	280194	49.20	ppm		94
33) 2,4-Dichlorophenol	5.073	162	240458	52.96	ppm		96
34) 2,6-Dichlorophenol	5.217	162	252632	56.87	ppm		98
35) 1,3,5-Trichlorobenzene	4.859	180	298072	58.75	ppm		94
36) 1,2,4-Trichlorobenzene	5.089	180	246625	52.15	ppm		88
37) 1,2,3-Trichlorobenzene	5.255	180	267586	58.18	ppm		97
38) Naphthalene	5.148	128	864883	48.58	ppm		98
39) 4-Chloroaniline	5.223	127	312716	44.13	ppm		96
40) 2,3-Dichloroaniline	5.858	161	302408	53.06	ppm		94
41) Caprolactam	5.495	55	108866	47.16	ppm		86
42) Hexachlorobutadiene	5.228	225	142714	67.92	ppm		95
43) 4-Chloro-3-methylphenol	5.607	107	271235	56.33	ppm		79
44) 2-Methylnaphthalene	5.634	141	489295	49.37	ppm		95
45) 1-Methylnaphthalene	5.704	141	501368	47.26	ppm		93
46) Dimethylnaphthalene	6.072	156	576393	56.22	ppm		95
48) Hexachlorocyclopentadiene	5.741	237	275088	99.46	ppm		81
49) 2,4,6-Trichlorophenol	5.864	196	180690	52.73	ppm		98
50) 2,4,5-Trichlorophenol	5.907	196	193407	52.11	ppm		92
52) 2-Chloronaphthalene	5.976	162	550967	46.86	ppm		93
53) Biphenyl	5.965	154	728570	44.23	ppm		95
54) 2-Nitroaniline	6.094	65	162982	51.42	ppm		97
55) Dimethylphthalate	6.206	163	682499	51.70	ppm		99
56) Acenaphthylene	6.291	152	910272	44.07	ppm		99
57) 2,6-Dinitrotoluene	6.264	165	148857	51.45	ppm		95
58) 3-Nitroaniline	6.430	138	154805	44.27	ppm		96
59) Acenaphthene	6.430	153	585695	47.41	ppm		96
60) 2,4-Dinitrophenol	6.505	184	177942	112.30	ppm	#	73
61) 4-Nitrophenol	6.670	109	93267	57.92	ppm		99
62) Dibenzofuran	6.585	168	809488	47.44	ppm		97
63) 2,4-Dinitrotoluene	6.606	165	205026	54.48	ppm		68
64) 2,3,4,6-Tetrachlorophenol	6.729	232	165320	56.11	ppm		93
65) Diethylphthalate	6.804	149	685092	50.57	ppm		98
66) Fluorene	6.900	166	661934	47.12	ppm		95
67) 4-Chlorophenyl-phenyle...	6.900	204	337787	58.33	ppm		90
68) 4-Nitroaniline	7.018	138	161147	46.06	ppm		87
70) 4,6-Dinitro-2-methylph...	7.002	198	142611	66.78	ppm		92
71) n-Nitrosodiphenylamine	7.044	169	496930	47.61	ppm		93
72) 1,2-Diphenylhydrazine	7.066	77	609209	48.83	ppm		95
74) 4-Bromophenyl-phenylether	7.429	248	199665	53.61	ppm		98
75) Hexachlorobenzene	7.504	284	196536	47.06	ppm		82
76) Pentachlorophenol	7.808	266	238499	107.59	ppm		92
77) Phenanthrene	8.038	178	962997	46.88	ppm		98
78) Anthracene	8.108	178	997884	47.15	ppm		98
79) Carbazole	8.401	167	972510	48.19	ppm		98
80) Di-n-butylphthalate	8.962	149	1296802	52.21	ppm		98
81) Fluoranthene	9.967	202	1136771	53.00	ppm		99

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110698.D
Acq On : 16 May 2016 11:13 am
Operator : ariellec
Sample : cc5485-50
Misc : op93793,ez5530
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 11:41:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:40:33 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82)	Octadecane	7.846	57	346535	38.90	ppm	93
84)	Pyrene	10.378	202	1182976	45.82	ppm	98
85)	Butyl stearate	12.082	56	285879	40.96	ppm	94
87)	Butylbenzylphthalate	11.890	149	623155	50.57	ppm	83
88)	Benzo[a]anthracene	12.889	228	1139632	50.96	ppm	95
89)	3,3'-Dichlorobenzidine	12.996	252	361183	44.73	ppm	99
90)	Chrysene	12.964	228	1040152	47.65	ppm	98
91)	bis(2-Ethylhexyl)phtha...	13.204	149	812139	46.83	ppm	92
93)	Di-n-octylphthalate	14.604	149	1479982	59.18	ppm	98
94)	Benzo[b]fluoranthene	15.165	252	1089528	53.19	ppm	90
95)	Benzo[k]fluoranthene	15.213	252	990415	53.86	ppm	91
96)	Benzo[a]pyrene	15.774	252	938282	51.46	ppm	96
97)	Indeno[1,2,3-cd]pyrene	17.814	276	930640	51.06	ppm	88
98)	Dibenz(a,h)acridine	17.446	279	834634	48.36	ppm	94
99)	Dibenz[a,h]anthracene	17.862	278	954407	49.75	ppm	100
100)	7,12-Dimethylbenz(a)an...	15.159	256	475867	51.06	ppm	89
101)	Benzo[g,h,i]perylene	18.247	276	942134	48.09	ppm	94

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

7.6.53

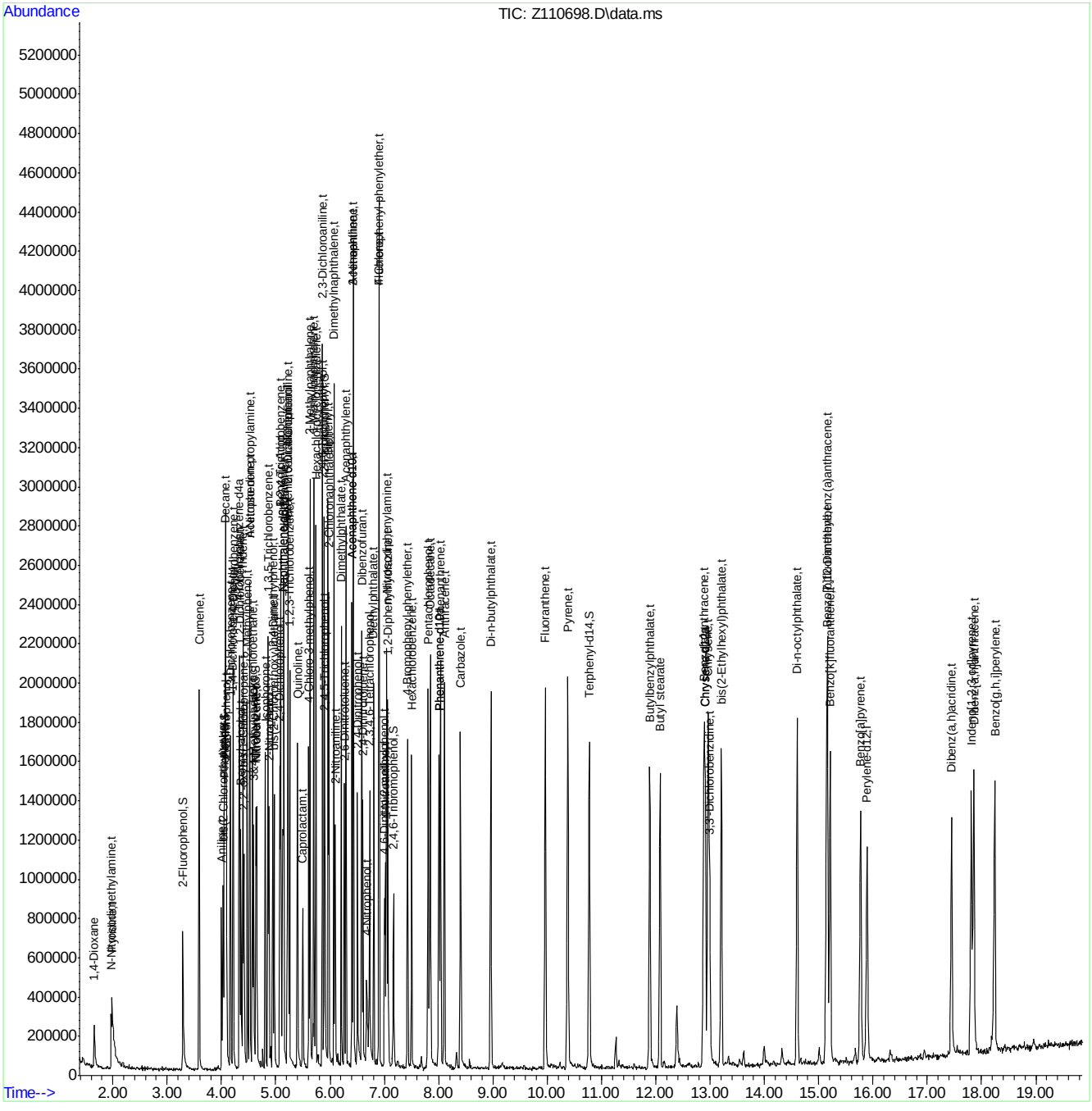
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110698.D
Acq On : 16 May 2016 11:13 am
Operator : ariellec
Sample : cc5485-50
Misc : op93793,ez5530
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 11:41:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:40:33 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Manual Integration Approval Summary

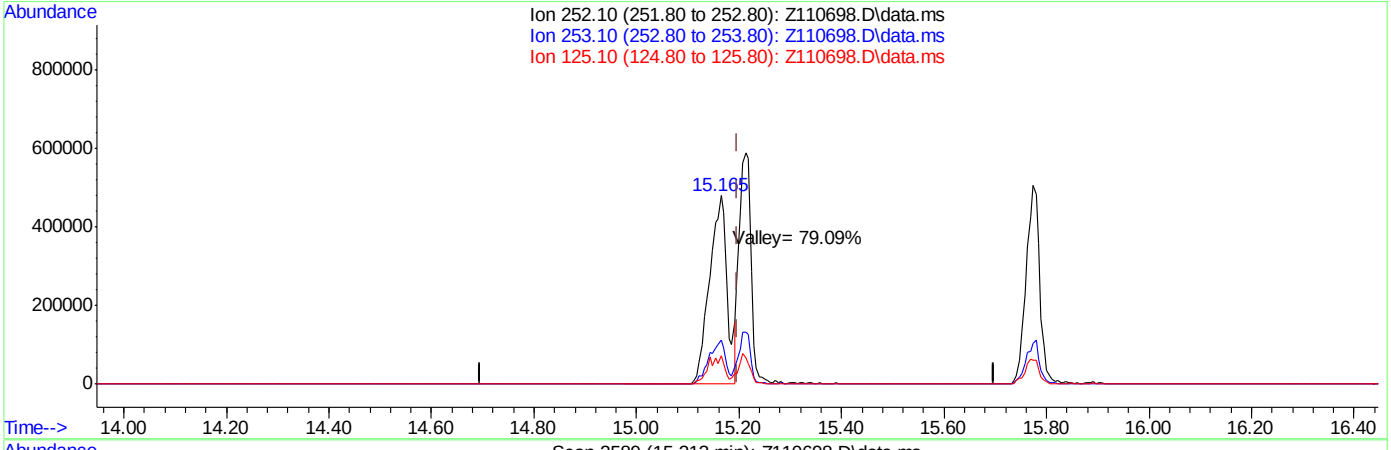
Sample Number:	EZ5530-CC5485	**Method:**	SW846 8270D
Lab FileID:	Z110698.D	**Analyst approved:**	05/16/16 14:48 Arielle Cocozza
Injection Time:	05/16/16 11:13	**Supervisor approved:**	05/18/16 13:32 Nina Pandya

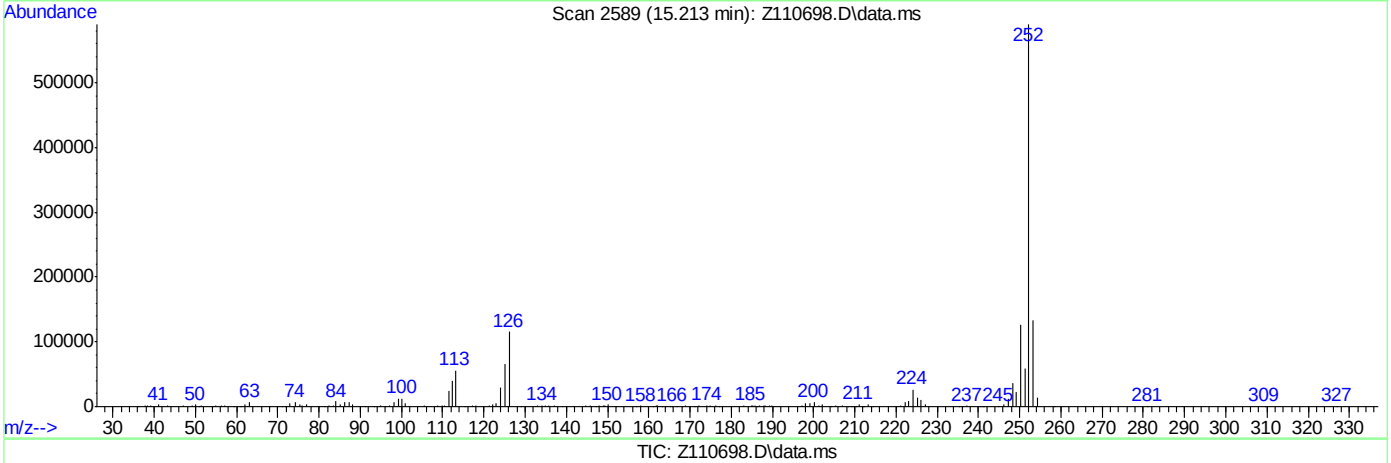
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.09	Overlapping peak

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110698.D
Acq On    : 16 May 2016  11:13 am
Operator  : ariellec
Sample    : cc5485-50
Misc      : op93793,ez5530
ALS Vial  : 2   Sample Multiplier: 1

Quant Time: May 16 11:40:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title  : Semi Volatile  GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:40:33 2016
Response via : Initial Calibration
```



TIC: Z110698.D\data.ms

(95) Benzo[k]fluoranthene (t)

15.213min (+0.016) 53.86ppm

response 990415

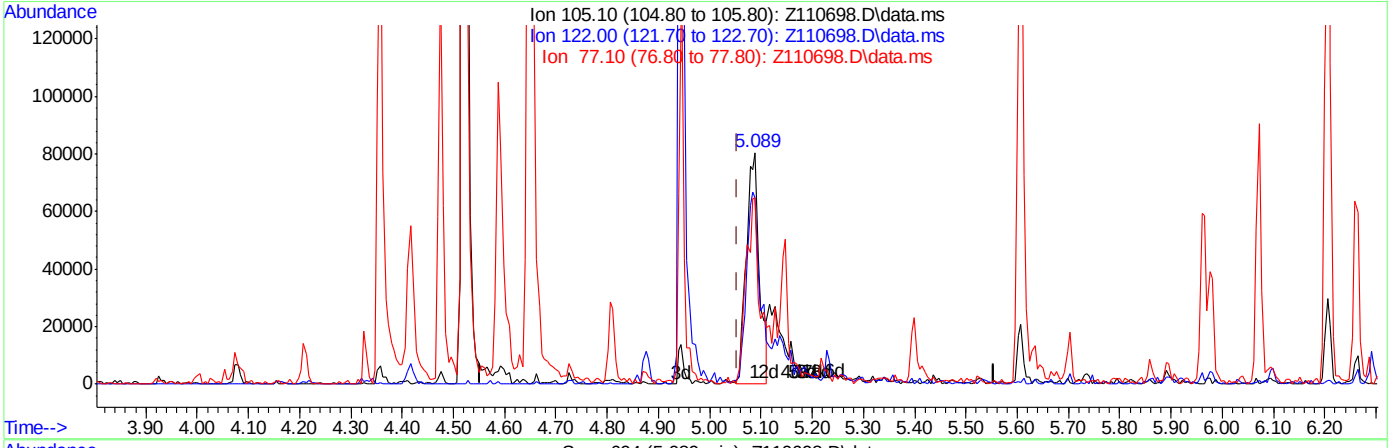
Ion	Exp%	Act%
252.10	100	100
253.10	19.10	22.64
125.10	6.00	10.65
0.00	0.00	0.00

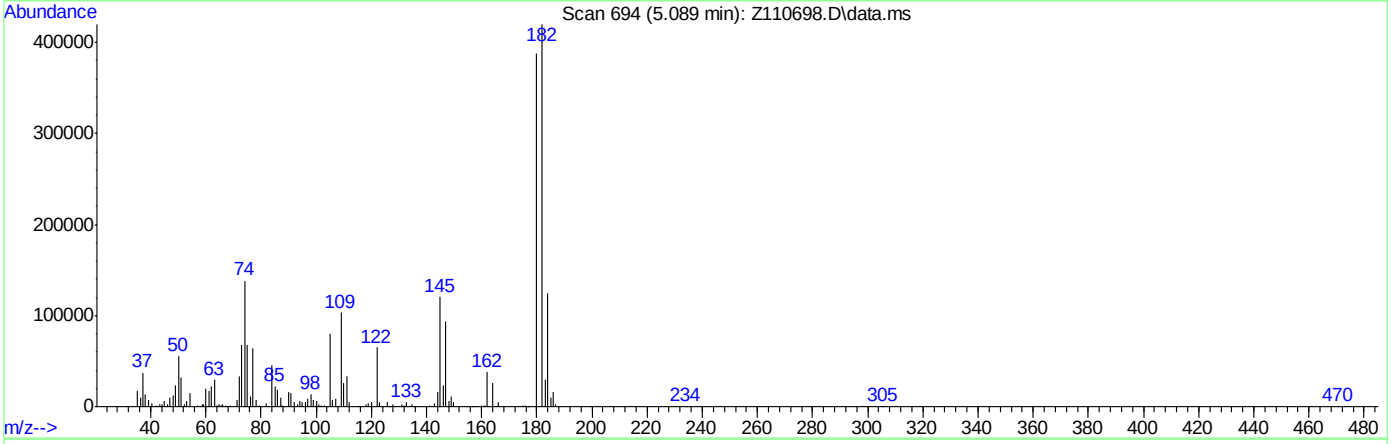
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110698.D
Acq On : 16 May 2016 11:13 am
Operator : ariellec
Sample : cc5485-50
Misc : op93793,ez5530
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 11:41:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:40:33 2016
Response via : Initial Calibration





TIC: Z110698.D\data.ms

(31) Benzoic Acid

5.089min (+0.035) 38.96ppm

response 144884

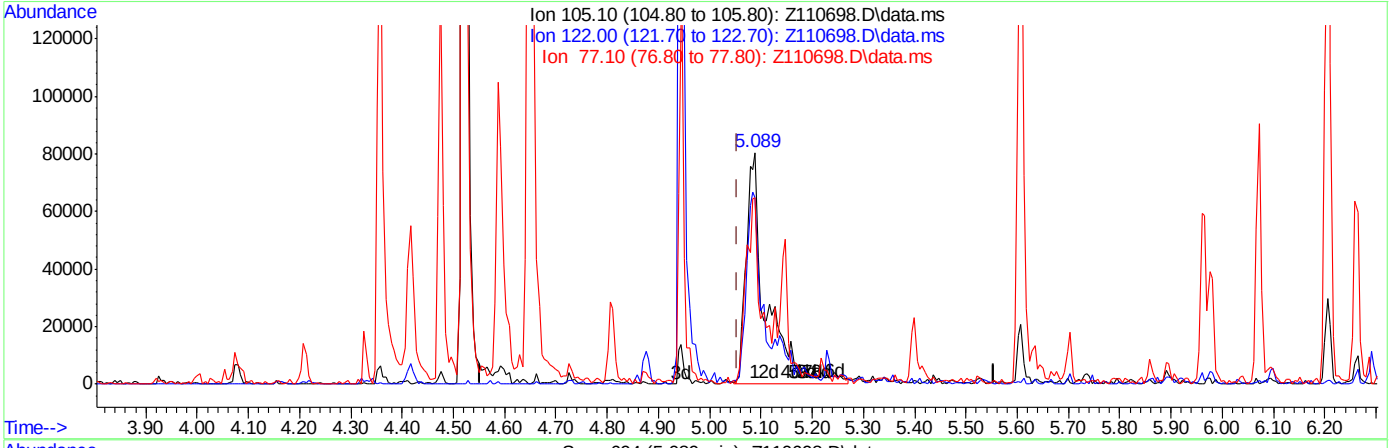
Ion	Exp%	Act%
105.10	100	100
122.00	92.10	82.01
77.10	83.70	79.34
0.00	0.00	0.00

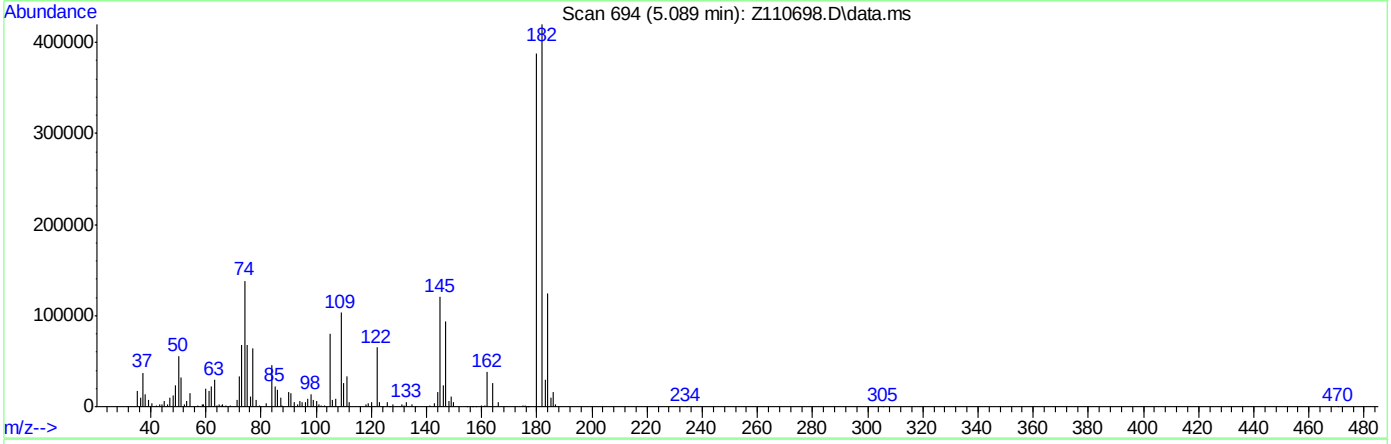
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110698.D
Acq On : 16 May 2016 11:13 am
Operator : ariellec
Sample : cc5485-50
Misc : op93793,ez5530
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 11:41:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:40:33 2016
Response via : Initial Calibration





TIC: Z110698.D\data.ms

(31) Benzoic Acid

5.089min (+0.035) 60.37ppm m

response 224513

Ion	Exp%	Act%
105.10	100	100
122.00	92.10	80.35
77.10	83.70	80.26
0.00	0.00	0.00

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110699.D
Acq On : 16 May 2016 11:42 am
Operator : ariellec
Sample : cc5486-50
Misc : op93793,ez5530
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 16 12:52:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:40:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.208	152	188881	40.00	ppm	0.00
24) Naphthalene-d8	5.132	136	759256	40.00	ppm	0.00
47) Acenaphthene-d10	6.403	164	481948	40.00	ppm	0.00
69) Phenanthrene-d10	8.001	188	813858	40.00	ppm	0.00
83) Chrysene-d12	12.905	240	831396	40.00	ppm	0.00
92) Perylene-d12	15.891	264	757608	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.208	152	188881	40.00	ppm	-0.06
104) Phenanthrene-d10a	8.001	188	813858	40.00	ppm	-0.11
106) Chrysene-d12a	12.905	240	831396	40.00	ppm	-0.16
108) Acenaphthene-d10a	6.403	164	481948	40.00	ppm	-0.07
110) Naphthalene-d8a	5.132	136	759256	40.00	ppm	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
103) Benzaldehyde	3.898	105	117513	23.57	ppm	92
105) Atrazine	7.680	215	60294	29.77	ppm	79
107) Benzidine	10.362	184	248539	21.87	ppm	79
109) 1,2,4,5-Tetrachloroben...	5.752	216	158952	25.73	ppm	90
111) Hydroquinone	5.549	110	119402	23.80	ppm	95

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

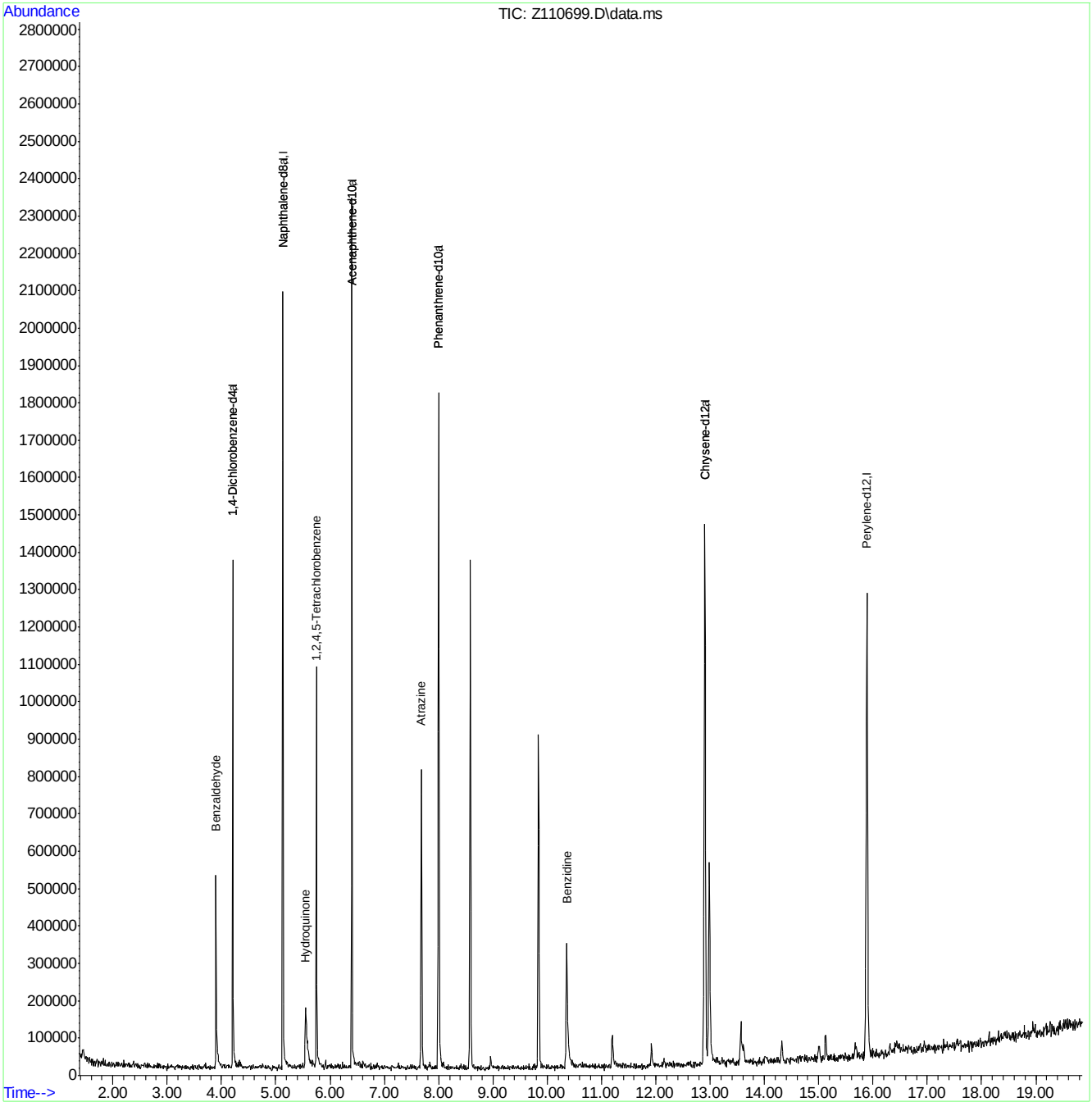
7.6.54

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5530\
Data File : Z110699.D
Acq On : 16 May 2016 11:42 am
Operator : ariellec
Sample : cc5486-50
Misc : op93793,ez5530
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 16 12:52:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5485.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Mon May 16 11:40:50 2016
Response via : Initial Calibration



MZ5485.M Mon May 16 12:52:33 2016 RTE

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110737.D
Acq On : 17 May 2016 5:11 pm
Operator : ariellec
Sample : icc5533-50
Misc : op93924,ez5533,1000
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 08:05:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:03:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.659	152	164662	40.00	ppm	0.00
24) Naphthalene-d8	5.578	136	626581	40.00	ppm	0.00
47) Acenaphthene-d10	6.977	164	370015	40.00	ppm	0.00
69) Phenanthrene-d10	8.847	188	625896	40.00	ppm	0.00
83) Chrysene-d12	14.093	240	599516	40.00	ppm	0.00
92) Perylene-d12	17.117	264	542407	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.659	152	164662	40.00	ppm	0.00
104) Phenanthrene-d10a	8.847	188	625896	40.00	ppm	0.00
108) Chrysene-d12a	14.093	240	599516	40.00	ppm	0.00
110) Acenaphthene-d10a	6.977	164	370015	40.00	ppm	0.00
112) Naphthalene-d8a	5.578	136	626581	40.00	ppm	0.00
114) Chrysene-d12b	14.093	240	599516	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.665	112	276956	49.78	ppm	0.00
Spiked Amount 50.000			Recovery = 99.56%			
8) Phenol-d5	4.381	99	334313	48.65	ppm	0.00
Spiked Amount 50.000			Recovery = 97.30%			
25) Nitrobenzene-d5	5.060	82	279069	48.14	ppm	0.00
Spiked Amount 50.000			Recovery = 96.28%			
51) 2-Fluorobiphenyl	6.374	172	556030	46.23	ppm	0.00
Spiked Amount 50.000			Recovery = 92.46%			
73) 2,4,6-Tribromophenol	7.859	330	78718	51.05	ppm	0.00
Spiked Amount 50.000			Recovery = 102.10%			
86) Terphenyl-d14	11.892	244	610186	47.79	ppm	0.00
Spiked Amount 50.000			Recovery = 95.58%			
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	2.191	88	107953	44.79	ppm	85
3) Pyridine	2.522	79	272296	51.12	ppm	89
4) N-Nitrosodimethylamine	2.479	74	156086	52.68	ppm	97
6) Indene	4.846	116	446190	47.61	ppm	91
7) Cumene	4.066	105	669094	48.38	ppm	97
9) Phenol	4.392	94	343538	48.79	ppm	95
10) Aniline	4.413	93	333078	44.43	ppm	80
11) bis(2-Chloroethyl)ether	4.461	93	223680	48.24	ppm	93
12) 2-Chlorophenol	4.499	128	276450	47.96	ppm	94
13) Decane	4.541	43	203709	45.31	ppm	87
14) 1,3-Dichlorobenzene	4.616	146	314781	48.49	ppm	100
15) 1,4-Dichlorobenzene	4.670	146	300317	47.08	ppm	98
16) Benzyl alcohol	4.755	108	165863	37.68	ppm #	72
17) 1,2-Dichlorobenzene	4.782	146	282416	47.53	ppm	98
18) Acetophenone	4.947	105	361031	48.75	ppm #	65
19) 2-Methylphenol	4.835	108	235506	46.78	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.857	121	72820	45.16	ppm #	51

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110737.D
Acq On : 17 May 2016 5:11 pm
Operator : ariellec
Sample : icc5533-50
Misc : op93924,ez5533,1000
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 08:05:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:03:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	4.947	108	260634	49.27	ppm		95
22) n-Nitroso-di-n-propyla...	4.953	70	184693	49.88	ppm		80
23) Hexachloroethane	5.028	201	106123	47.99	ppm		85
26) Nitrobenzene	5.070	77	269841	47.14	ppm		90
27) Quinoline	5.834	129	530814	46.82	ppm		93
28) Isophorone	5.247	82	474832	48.16	ppm		94
29) 2-Nitrophenol	5.300	139	147854	50.19	ppm		72
30) 2,4-Dimethylphenol	5.327	107	253572	50.46	ppm		85
31) Benzoic Acid	5.412	105	189962	51.66	ppm		98
32) bis(2-Chloroethoxy)met...	5.396	93	275977	48.35	ppm		98
33) 2,4-Dichlorophenol	5.471	162	220121	48.08	ppm		93
34) 2,6-Dichlorophenol	5.631	162	212239	47.29	ppm		98
35) 1,3,5-Trichlorobenzene	5.311	180	256449	46.19	ppm		97
36) 1,2,4-Trichlorobenzene	5.535	180	245706	48.09	ppm		95
37) 1,2,3-Trichlorobenzene	5.695	180	235393	47.72	ppm		88
38) Naphthalene	5.594	128	784822	47.82	ppm		97
39) 4-Chloroaniline	5.626	127	313226	45.80	ppm		96
40) 2,3-Dichloroaniline	6.304	161	268954	47.39	ppm		90
41) Caprolactam	5.888	55	93799	47.45	ppm		83
42) Hexachlorobutadiene	5.679	225	139203	46.56	ppm		97
43) 4-Chloro-3-methylphenol	5.968	107	245527	49.37	ppm		97
44) 2-Methylnaphthalene	6.091	141	461110	48.11	ppm		95
45) 1-Methylnaphthalene	6.165	141	466606	46.75	ppm		97
46) Dimethylnaphthalene	6.593	156	474403	48.42	ppm		96
48) Hexachlorocyclopentadiene	6.208	237	296695	104.98	ppm		96
49) 2,4,6-Trichlorophenol	6.304	196	160189	47.30	ppm		90
50) 2,4,5-Trichlorophenol	6.336	196	166031	46.93	ppm		90
52) 2-Chloronaphthalene	6.475	162	484567	47.25	ppm		97
53) Biphenyl	6.454	154	647931	47.72	ppm		97
54) 2-Nitroaniline	6.555	65	149369	51.55	ppm	#	73
55) Dimethylphthalate	6.716	163	582458	47.44	ppm		99
56) Acenaphthylene	6.844	152	833395	47.47	ppm		98
57) 2,6-Dinitrotoluene	6.774	165	124911	52.13	ppm		92
58) 3-Nitroaniline	6.929	138	145869	50.82	ppm		83
59) Acenaphthene	7.010	153	512597	47.01	ppm		97
60) 2,4-Dinitrophenol	7.036	184	96246	129.38	ppm	#	56
61) 4-Nitrophenol	7.084	109	87227	54.31	ppm	#	74
62) Dibenzofuran	7.186	168	693229	46.93	ppm		94
63) 2,4-Dinitrotoluene	7.170	165	173815	53.37	ppm		96
64) 2,3,4,6-Tetrachlorophenol	7.314	232	140157	49.00	ppm		91
65) Diethylphthalate	7.442	149	591819	46.70	ppm		99
66) Fluorene	7.570	166	581333	47.51	ppm		96
67) 4-Chlorophenyl-phenyle...	7.570	204	271813	47.23	ppm		95
68) 4-Nitroaniline	7.587	138	145856	49.37	ppm		74
70) 4,6-Dinitro-2-methylph...	7.629	198	80119	67.61	ppm		96
71) n-Nitrosodiphenylamine	7.715	169	401270	47.45	ppm		98
72) 1,2-Diphenylhydrazine	7.763	77	559170	49.92	ppm		64
74) 4-Bromophenyl-phenylether	8.201	248	161142	48.17	ppm		90
75) Hexachlorobenzene	8.276	284	169480	46.87	ppm		98
76) Pentachlorophenol	8.559	266	237549	108.18	ppm		94

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110737.D
Acq On : 17 May 2016 5:11 pm
Operator : ariellec
Sample : icc5533-50
Misc : op93924,ez5533,1000
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 08:05:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:03:58 2016
Response via : Initial Calibration

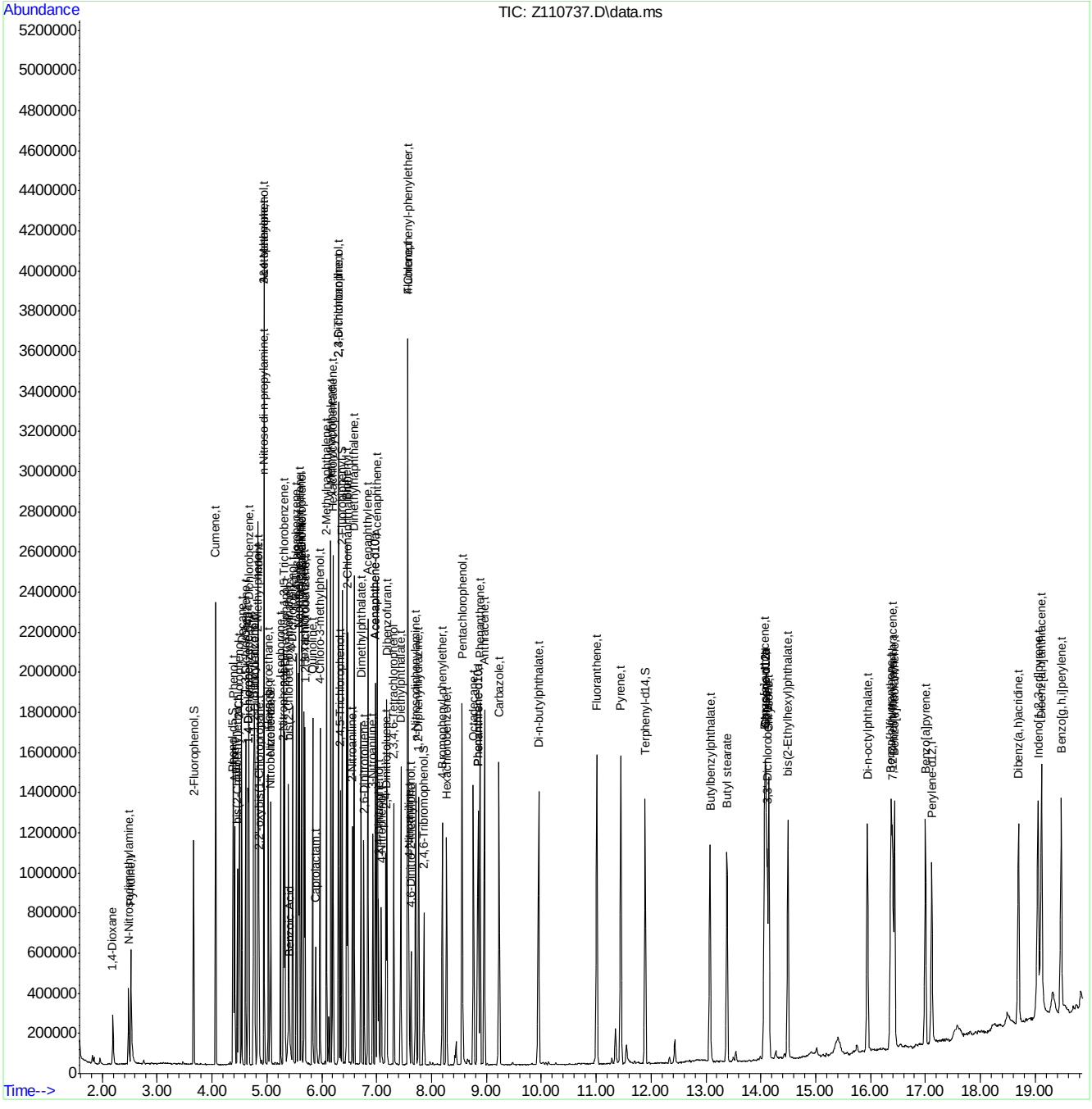
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	8.885	178	822226	47.38	ppm	98
78) Anthracene	8.965	178	838436	47.98	ppm	98
79) Carbazole	9.232	167	781610	48.13	ppm	98
80) Di-n-butylphthalate	9.953	149	1025969	49.23	ppm	97
81) Fluoranthene	11.011	202	922803	47.64	ppm	97
82) Octadecane	8.762	57	290488	50.23	ppm	92
84) Pyrene	11.449	202	957754	47.87	ppm	93
85) Butyl stearate	13.383	56	195245	48.85	ppm	82
87) Butylbenzylphthalate	13.078	149	447851	47.75	ppm	98
88) Benzo[a]anthracene	14.072	228	855586	46.41	ppm	95
89) 3,3'-Dichlorobenzidine	14.115	252	307549	48.95	ppm	98
90) Chrysene	14.147	228	809802	47.38	ppm	91
91) bis(2-Ethylhexyl)phtha...	14.494	149	607877	48.59	ppm	96
93) Di-n-octylphthalate	15.942	149	1022831	47.48	ppm	99
94) Benzo[b]fluoranthene	16.369	252	824687	46.03	ppm	82
95) Benzo[k]fluoranthene	16.439	252	790323	46.40	ppm	99
96) Benzo[a]pyrene	17.000	252	740573	47.36	ppm	95
97) Indeno[1,2,3-cd]pyrene	19.056	276	678923	48.13	ppm	98
98) Dibenz(a,h)acridine	18.698	279	640653	49.03	ppm	100
99) Dibenz[a,h]anthracene	19.120	278	720771	49.35	ppm	88
100) 7,12-Dimethylbenz(a)an...	16.396	256	367339	52.24	ppm	90
101) Benzo[g,h,i]perylene	19.478	276	726280	48.38	ppm	87

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110737.D
Acq On : 17 May 2016 5:11 pm
Operator : ariellec
Sample : icc5533-50
Misc : op93924,ez5533,1000
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 08:05:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:03:58 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 08:35:03 2016 RTE

Page: 4

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110738.D
Acq On : 17 May 2016 5:54 pm
Operator : ariellec
Sample : ic5533-25
Misc : op93924,ez5533,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 08:09:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:05:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	174548	40.00	ppm	0.00
24) Naphthalene-d8	5.573	136	641374	40.00	ppm	0.00
47) Acenaphthene-d10	6.978	164	376837	40.00	ppm	0.00
69) Phenanthrene-d10	8.842	188	646436	40.00	ppm	0.00
83) Chrysene-d12	14.088	240	620635	40.00	ppm	0.00
92) Perylene-d12	17.112	264	543601	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.654	152	174548	40.00	ppm	0.00
104) Phenanthrene-d10a	8.842	188	646436	40.00	ppm	0.00
108) Chrysene-d12a	14.088	240	620635	40.00	ppm	0.00
110) Acenaphthene-d10a	6.978	164	376837	40.00	ppm	0.00
112) Naphthalene-d8a	5.573	136	641374	40.00	ppm	0.00
114) Chrysene-d12b	14.088	240	620635	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.660	112	143174	24.31	ppm	0.00
Spiked Amount 50.000			Recovery	=	48.62%	
8) Phenol-d5	4.381	99	176250	24.42	ppm	0.00
Spiked Amount 50.000			Recovery	=	48.84%	
25) Nitrobenzene-d5	5.054	82	148720	25.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.76%	
51) 2-Fluorobiphenyl	6.369	172	301684	25.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.54%	
73) 2,4,6-Tribromophenol	7.854	330	40075	24.99	ppm	0.00
Spiked Amount 50.000			Recovery	=	49.98%	
86) Terphenyl-d14	11.887	244	321731	24.70	ppm	0.00
Spiked Amount 50.000			Recovery	=	49.40%	
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	2.196	88	54353	22.04	ppm	98
3) Pyridine	2.522	79	145361	25.55	ppm	99
4) N-Nitrosodimethylamine	2.479	74	78882	24.67	ppm	99
6) Indene	4.841	116	242013	24.75	ppm	99
7) Cumene	4.066	105	353047	24.34	ppm	99
9) Phenol	4.392	94	180027	24.32	ppm	93
10) Aniline	4.408	93	181978	23.78	ppm	93
11) bis(2-Chloroethyl)ether	4.461	93	121603	25.03	ppm	96
12) 2-Chlorophenol	4.499	128	148692	24.67	ppm	97
13) Decane	4.541	43	110799	24.00	ppm	98
14) 1,3-Dichlorobenzene	4.616	146	165665	24.32	ppm	98
15) 1,4-Dichlorobenzene	4.670	146	162725	24.54	ppm	99
16) Benzyl alcohol	4.755	108	89814	20.97	ppm	92
17) 1,2-Dichlorobenzene	4.777	146	152968	24.69	ppm	96
18) Acetophenone	4.947	105	193995	24.92	ppm	79
19) 2-Methylphenol	4.835	108	123673	23.68	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.857	121	39339	23.78	ppm	93

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110738.D
Acq On : 17 May 2016 5:54 pm
Operator : ariellec
Sample : ic5533-25
Misc : op93924,ez5533,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 08:09:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:05:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.942	108	137838	24.70	ppm	99
22) n-Nitroso-di-n-propyla...	4.947	70	99433	25.35	ppm	96
23) Hexachloroethane	5.028	201	54949	23.76	ppm	99
26) Nitrobenzene	5.070	77	143695	25.00	ppm	95
27) Quinoline	5.829	129	278106	24.48	ppm	98
28) Isophorone	5.241	82	248762	24.96	ppm	98
29) 2-Nitrophenol	5.300	139	77033	25.51	ppm	90
30) 2,4-Dimethylphenol	5.327	107	127042	24.62	ppm	97
31) Benzoic Acid	5.391	105	95784	25.17	ppm	95
32) bis(2-Chloroethoxy)met...	5.396	93	145742	25.22	ppm	98
33) 2,4-Dichlorophenol	5.471	162	115406	24.95	ppm	97
34) 2,6-Dichlorophenol	5.631	162	111638	24.75	ppm	97
35) 1,3,5-Trichlorobenzene	5.311	180	136964	24.73	ppm	99
36) 1,2,4-Trichlorobenzene	5.535	180	133077	25.77	ppm	99
37) 1,2,3-Trichlorobenzene	5.690	180	125646	25.27	ppm	95
38) Naphthalene	5.589	128	411423	24.85	ppm	99
39) 4-Chloroaniline	5.626	127	168031	24.69	ppm	97
40) 2,3-Dichloroaniline	6.299	161	142430	24.95	ppm	97
41) Caprolactam	5.872	55	47780	24.02	ppm	97
42) Hexachlorobutadiene	5.679	225	75660	25.30	ppm	98
43) 4-Chloro-3-methylphenol	5.968	107	130857	25.81	ppm	94
44) 2-Methylnaphthalene	6.085	141	243898	25.18	ppm	98
45) 1-Methylnaphthalene	6.160	141	247399	24.75	ppm	97
46) Dimethylnaphthalene	6.588	156	246611	24.85	ppm	96
48) Hexachlorocyclopentadiene	6.208	237	155200	53.04	ppm	99
49) 2,4,6-Trichlorophenol	6.299	196	84660	24.99	ppm	95
50) 2,4,5-Trichlorophenol	6.331	196	89740	25.43	ppm	99
52) 2-Chloronaphthalene	6.470	162	261770	25.53	ppm	97
53) Biphenyl	6.454	154	339861	24.96	ppm	98
54) 2-Nitroaniline	6.550	65	78014	26.17	ppm	94
55) Dimethylphthalate	6.716	163	310780	25.29	ppm	98
56) Acenaphthylene	6.839	152	449167	25.55	ppm	100
57) 2,6-Dinitrotoluene	6.769	165	65566	26.49	ppm	98
58) 3-Nitroaniline	6.924	138	76548	26.04	ppm	94
59) Acenaphthene	7.010	153	269072	24.72	ppm	98
60) 2,4-Dinitrophenol	7.031	184	42258	50.80	ppm	95
61) 4-Nitrophenol	7.079	109	44953	26.72	ppm	97
62) Dibenzofuran	7.186	168	372784	25.30	ppm	99
63) 2,4-Dinitrotoluene	7.165	165	91559	27.00	ppm	97
64) 2,3,4,6-Tetrachlorophenol	7.309	232	74451	25.73	ppm	97
65) Diethylphthalate	7.437	149	316311	25.06	ppm	99
66) Fluorene	7.565	166	310618	25.35	ppm	99
67) 4-Chlorophenyl-phenyle...	7.565	204	145791	25.34	ppm	94
68) 4-Nitroaniline	7.576	138	75915	25.34	ppm	99
70) 4,6-Dinitro-2-methylph...	7.624	198	38285	27.99	ppm	95
71) n-Nitrosodiphenylamine	7.709	169	215764	25.13	ppm	98
72) 1,2-Diphenylhydrazine	7.763	77	294324	25.45	ppm	95
74) 4-Bromophenyl-phenylether	8.196	248	85327	25.00	ppm	96
75) Hexachlorobenzene	8.270	284	89948	24.60	ppm	95
76) Pentachlorophenol	8.553	266	124921	53.62	ppm	100

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110738.D
Acq On : 17 May 2016 5:54 pm
Operator : ariellec
Sample : ic5533-25
Misc : op93924,ez5533,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 08:09:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:05:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	8.879	178	433107	24.59 ppm	99
78) Anthracene	8.960	178	443741	24.92 ppm	98
79) Carbazole	9.227	167	417452	25.20 ppm	99
80) Di-n-butylphthalate	9.948	149	541917	25.31 ppm	100
81) Fluoranthene	11.006	202	491045	24.94 ppm	100
82) Octadecane	8.762	57	154396	25.81 ppm	98
84) Pyrene	11.444	202	509836	24.97 ppm	99
85) Butyl stearate	13.378	56	105517	25.70 ppm	99
87) Butylbenzylphthalate	13.073	149	239997	25.09 ppm	97
88) Benzo[a]anthracene	14.067	228	453700	24.36 ppm	99
89) 3,3'-Dichlorobenzidine	14.109	252	164186	25.42 ppm	97
90) Chrysene	14.141	228	425573	24.48 ppm	98
91) bis(2-Ethylhexyl)phtha...	14.489	149	318873	24.86 ppm	99
93) Di-n-octylphthalate	15.936	149	534546	25.18 ppm	99
94) Benzo[b]fluoranthene	16.358	252	428131	24.49 ppm	99
95) Benzo[k]fluoranthene	16.423	252	413334	24.81 ppm	98
96) Benzo[a]pyrene	16.989	252	384526	24.98 ppm	98
97) Indeno[1,2,3-cd]pyrene	19.040	276	351372	25.17 ppm	98
98) Dibenz(a,h)acridine	18.688	279	326762	25.11 ppm	97
99) Dibenz[a,h]anthracene	19.104	278	365657	25.09 ppm	98
100) 7,12-Dimethylbenz(a)an...	16.385	256	185679	25.96 ppm	98
101) Benzo[g,h,i]perylene	19.462	276	367143	24.67 ppm	99

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

7.6.56

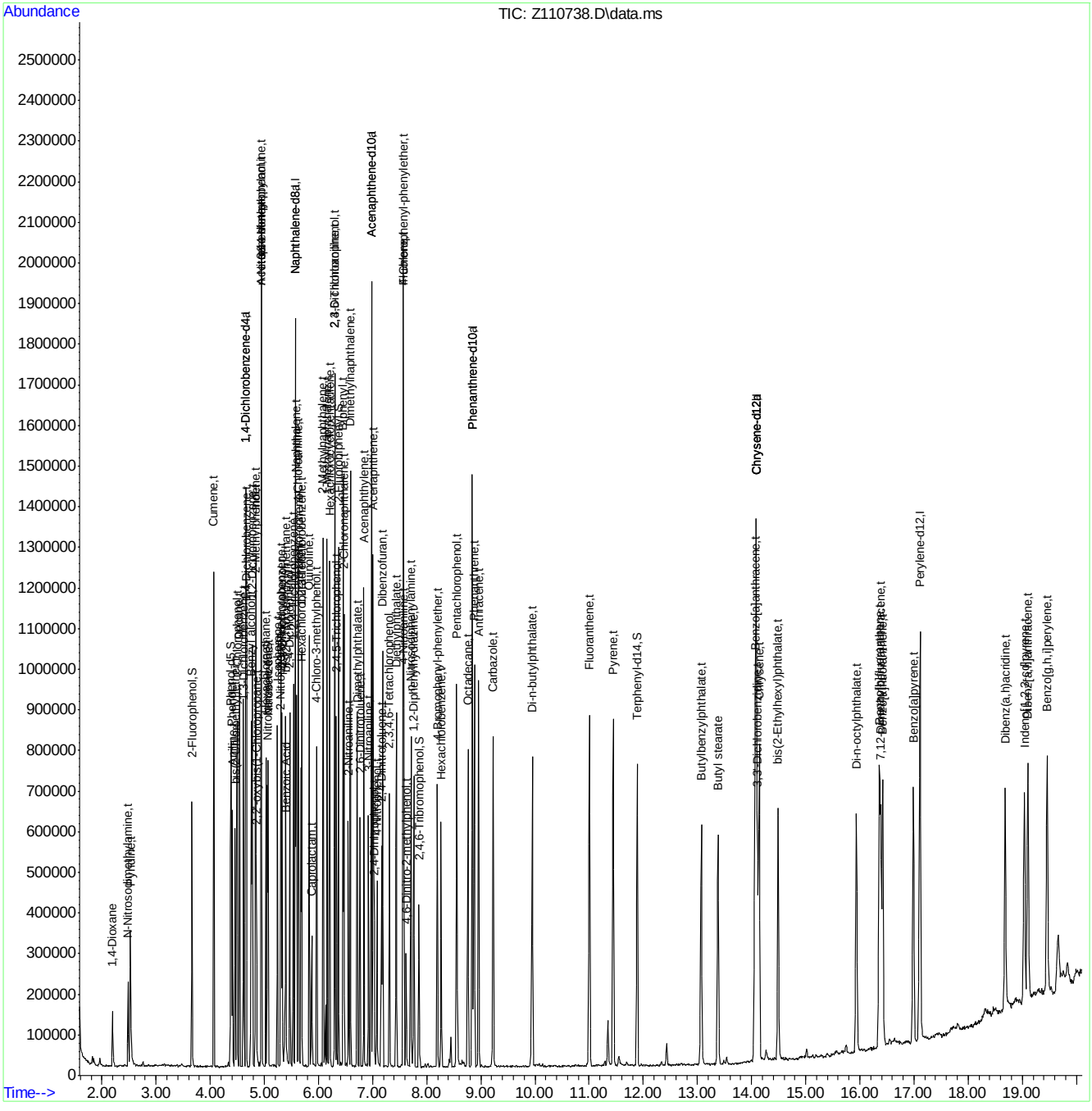
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110738.D
Acq On : 17 May 2016 5:54 pm
Operator : ariellec
Sample : ic5533-25
Misc : op93924,ez5533,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 08:09:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:05:28 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/18/16 17:00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110739.D
Acq On : 17 May 2016 6:47 pm
Operator : ariellec
Sample : ic5533-1
Misc : op93924,ez5533,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 08:13:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:10:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.653	152	188355	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	713170	40.00	ppm	0.00
47) Acenaphthene-d10	6.977	164	412314	40.00	ppm	0.00
69) Phenanthrene-d10	8.842	188	695929	40.00	ppm	0.00
83) Chrysene-d12	14.082	240	662964	40.00	ppm	0.00
92) Perylene-d12	17.111	264	582864	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.653	152	188355	40.00	ppm	0.00
104) Phenanthrene-d10a	8.842	188	695929	40.00	ppm	0.00
108) Chrysene-d12a	14.082	240	662964	40.00	ppm	0.00
110) Acenaphthene-d10a	6.977	164	412314	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	713170	40.00	ppm	0.00
114) Chrysene-d12b	14.082	240	662964	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.660	112	6990	1.11	ppm	0.00
Spiked Amount 50.000			Recovery = 2.22%			
8) Phenol-d5	4.376	99	8483	1.10	ppm	0.00
Spiked Amount 50.000			Recovery = 2.20%			
25) Nitrobenzene-d5	5.054	82	7269	1.11	ppm	0.00
Spiked Amount 50.000			Recovery = 2.22%			
51) 2-Fluorobiphenyl	6.368	172	14684	1.12	ppm	0.00
Spiked Amount 50.000			Recovery = 2.24%			
73) 2,4,6-Tribromophenol	7.853	330	1682	0.97	ppm	0.00
Spiked Amount 50.000			Recovery = 1.94%			
86) Terphenyl-d14	11.887	244	16109	1.16	ppm	0.00
Spiked Amount 50.000			Recovery = 2.32%			
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	2.196	88	3355	1.30	ppm	93
3) Pyridine	2.538	79	6217	1.01	ppm	86
4) N-Nitrosodimethylamine	2.490	74	3560	1.04	ppm	97
6) Indene	4.840	116	12372	1.18	ppm	98
7) Cumene	4.066	105	16861	1.08	ppm	95
9) Phenol	4.386	94	8827	1.11	ppm	94
10) Aniline	4.408	93	10801	1.32	ppm	72
11) bis(2-Chloroethyl)ether	4.461	93	6236	1.19	ppm	86
12) 2-Chlorophenol	4.498	128	7717	1.19	ppm	88
13) Decane	4.541	43	5488	1.11	ppm	97
14) 1,3-Dichlorobenzene	4.611	146	7916	1.08	ppm	94
15) 1,4-Dichlorobenzene	4.669	146	7869	1.10	ppm	92
16) Benzyl alcohol	4.750	108	4054	0.91	ppm	96
17) 1,2-Dichlorobenzene	4.776	146	7359	1.10	ppm	93
18) Acetophenone	4.942	105	10348	1.23	ppm	90
19) 2-Methylphenol	4.830	108	5976	1.07	ppm	93
20) 2,2'-oxybis(1-Chloropr...	4.856	121	1891	1.07	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110739.D
Acq On : 17 May 2016 6:47 pm
Operator : ariellec
Sample : ic5533-1
Misc : op93924,ez5533,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 08:13:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:10:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.942	108	6570	1.09	ppm	98
22) n-Nitroso-di-n-propyla...	4.942	70	5135	1.21	ppm	99
23) Hexachloroethane	5.027	201	2544	1.03	ppm	97
26) Nitrobenzene	5.065	77	7597	1.19	ppm	96
27) Quinoline	5.823	129	13338	1.06	ppm	95
28) Isophorone	5.241	82	12908	1.17	ppm	96
29) 2-Nitrophenol	5.300	139	3255	0.96	ppm	84
30) 2,4-Dimethylphenol	5.321	107	5972	1.04	ppm	94
31) Benzoic Acid	5.359	105	3676m	0.87	ppm	
32) bis(2-Chloroethoxy)met...	5.396	93	7740	1.20	ppm	93
33) 2,4-Dichlorophenol	5.465	162	5840	1.14	ppm	91
34) 2,6-Dichlorophenol	5.631	162	5513	1.10	ppm	95
35) 1,3,5-Trichlorobenzene	5.305	180	6677	1.09	ppm	96
36) 1,2,4-Trichlorobenzene	5.530	180	6775	1.17	ppm	92
37) 1,2,3-Trichlorobenzene	5.690	180	6165	1.11	ppm	90
38) Naphthalene	5.588	128	20981	1.14	ppm	99
39) 4-Chloroaniline	5.620	127	8497	1.13	ppm	96
40) 2,3-Dichloroaniline	6.299	161	7327	1.15	ppm	96
41) Caprolactam	5.855	55	2301	1.05	ppm	83
42) Hexachlorobutadiene	5.679	225	3663	1.10	ppm	92
43) 4-Chloro-3-methylphenol	5.962	107	6289	1.11	ppm	91
44) 2-Methylnaphthalene	6.085	141	12157	1.13	ppm	95
45) 1-Methylnaphthalene	6.160	141	12550	1.13	ppm	96
46) Dimethylnaphthalene	6.587	156	13145	1.19	ppm	96
48) Hexachlorocyclopentadiene	6.208	237	5103	1.57	ppm	98
49) 2,4,6-Trichlorophenol	6.299	196	3991	1.08	ppm	92
50) 2,4,5-Trichlorophenol	6.326	196	4510	1.16	ppm	88
52) 2-Chloronaphthalene	6.470	162	13302	1.18	ppm	100
53) Biphenyl	6.454	154	17077	1.15	ppm	99
54) 2-Nitroaniline	6.550	65	3683	1.12	ppm	87
55) Dimethylphthalate	6.710	163	15680	1.16	ppm	98
56) Acenaphthylene	6.838	152	22894	1.18	ppm	100
57) 2,6-Dinitrotoluene	6.764	165	2446	0.89	ppm	80
58) 3-Nitroaniline	6.918	138	3117	0.96	ppm	82
59) Acenaphthene	7.004	153	13466	1.13	ppm	93
61) 4-Nitrophenol	7.073	109	1658	0.89	ppm	84
62) Dibenzofuran	7.180	168	18716	1.16	ppm	98
63) 2,4-Dinitrotoluene	7.159	165	3287	0.87	ppm	97
64) 2,3,4,6-Tetrachlorophenol	7.308	232	3105	0.97	ppm	93
65) Diethylphthalate	7.431	149	14904	1.08	ppm	97
66) Fluorene	7.560	166	15783	1.17	ppm	92
67) 4-Chlorophenyl-phenyle...	7.565	204	7228	1.14	ppm	92
68) 4-Nitroaniline	7.570	138	3106	0.94	ppm	98
71) n-Nitrosodiphenylamine	7.704	169	10843	1.17	ppm	93
72) 1,2-Diphenylhydrazine	7.757	77	15049	1.20	ppm	87
74) 4-Bromophenyl-phenylether	8.195	248	3860	1.05	ppm	85
75) Hexachlorobenzene	8.265	284	4406	1.12	ppm	91
76) Pentachlorophenol	8.548	266	4754	1.86	ppm	94
77) Phenanthrene	8.874	178	21242	1.13	ppm	89
78) Anthracene	8.954	178	21586	1.13	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110739.D
Acq On : 17 May 2016 6:47 pm
Operator : ariellec
Sample : ic5533-1
Misc : op93924,ez5533,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 08:13:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:10:04 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.226	167	20206	1.13	ppm	97
80)	Di-n-butylphthalate	9.948	149	25716	1.11	ppm	97
81)	Fluoranthene	11.000	202	24299	1.15	ppm	97
82)	Octadecane	8.756	57	7257	1.12	ppm	92
84)	Pyrene	11.438	202	24760	1.14	ppm	98
85)	Butyl stearate	13.372	56	5127	1.16	ppm	95
87)	Butylbenzylphthalate	13.067	149	11571	1.13	ppm	98
88)	Benzo[a]anthracene	14.061	228	23497	1.19	ppm	94
89)	3,3'-Dichlorobenzidine	14.109	252	7677	1.11	ppm	91
90)	Chrysene	14.131	228	21829	1.18	ppm	93
91)	bis(2-Ethylhexyl)phtha...	14.494	149	16402	1.20	ppm	92
93)	Di-n-octylphthalate	15.931	149	24256	1.06	ppm	98
94)	Benzo[b]fluoranthene	16.353	252	21719	1.16	ppm	90
95)	Benzo[k]fluoranthene	16.412	252	20317	1.14	ppm	88
96)	Benzo[a]pyrene	16.983	252	20091	1.22	ppm	98
97)	Indeno[1,2,3-cd]pyrene	19.029	276	18201	1.21	ppm	96
98)	Dibenz(a,h)acridine	18.677	279	15951	1.14	ppm	93
99)	Dibenz[a,h]anthracene	19.093	278	18397	1.18	ppm	97
100)	7,12-Dimethylbenz(a)an...	16.374	256	7514	0.97	ppm	91
101)	Benzo[g,h,i]perylene	19.446	276	19245	1.21	ppm	92

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

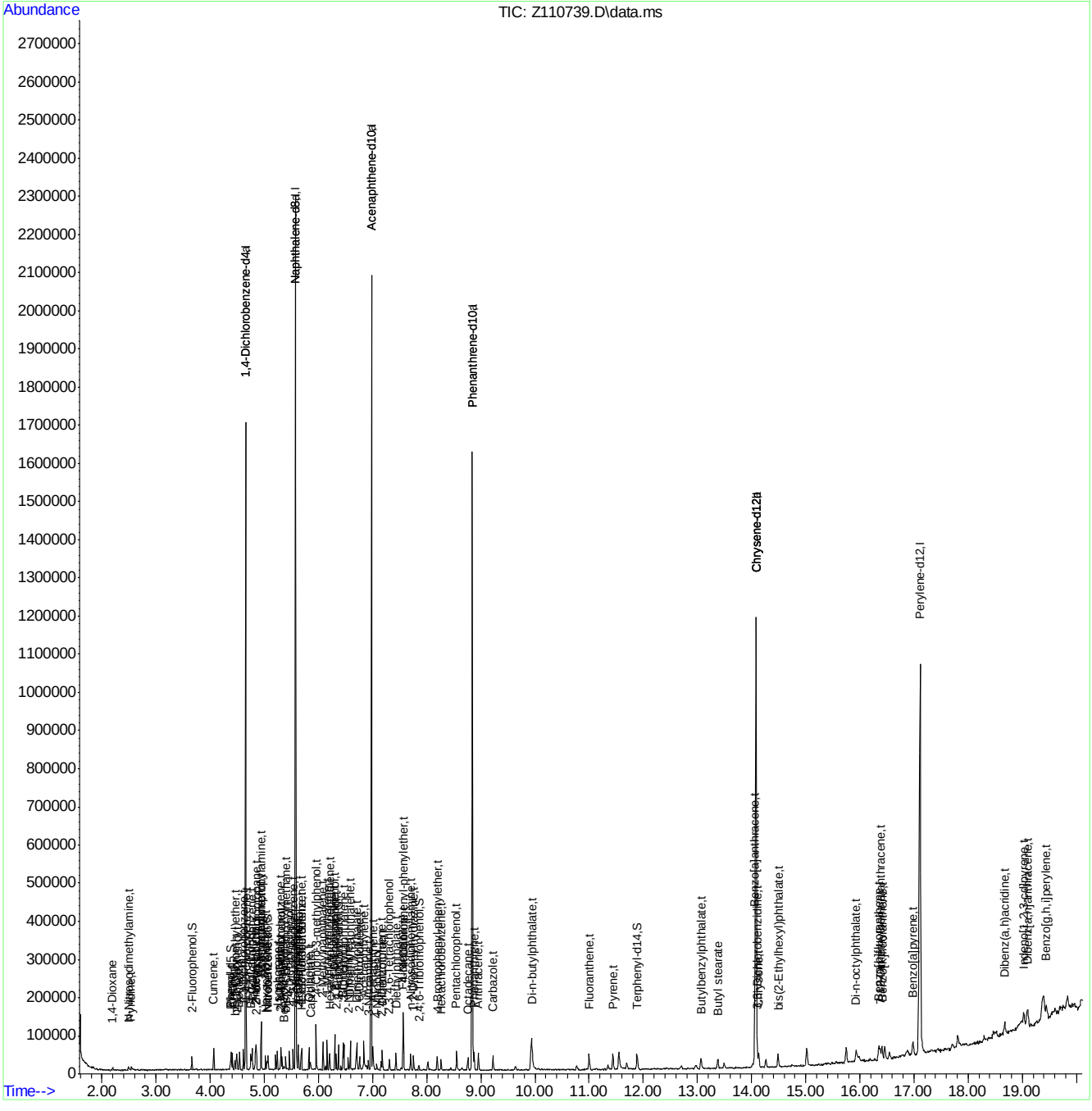
7.6.57

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110739.D
Acq On : 17 May 2016 6:47 pm
Operator : ariellec
Sample : ic5533-1
Misc : op93924,ez5533,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 08:13:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:10:04 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 08:13:17 2016 RTE Page: 4

Manual Integration Approval Summary

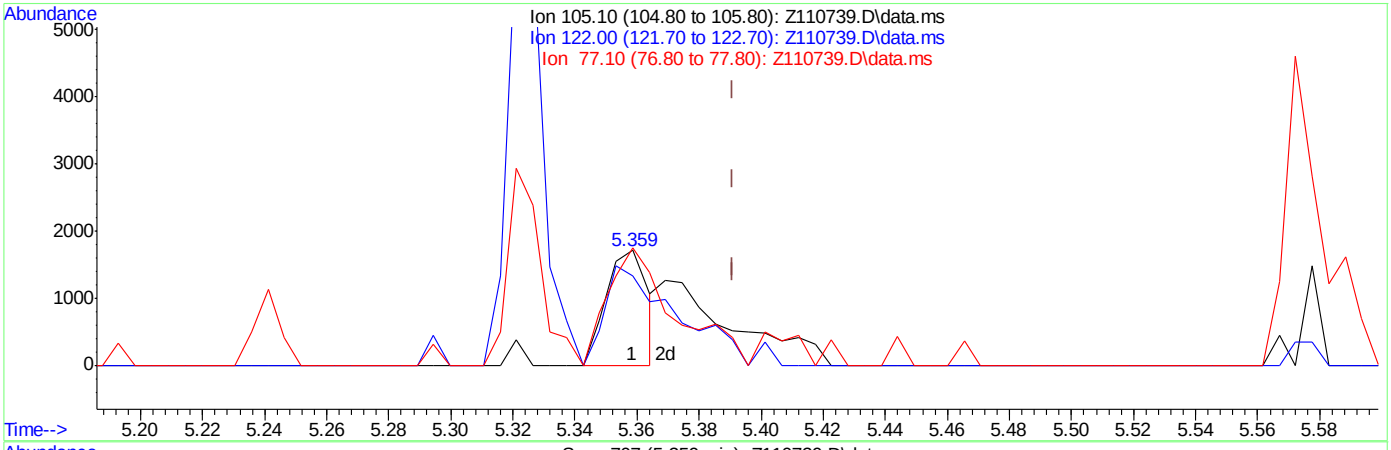
Sample Number:	EZ5533-IC5533	**Method:**	SW846 8270D
Lab FileID:	Z110739.D	**Analyst approved:**	05/18/16 09:20 Arielle Cocozza
Injection Time:	05/17/16 18:47	**Supervisor approved:**	05/18/16 17:00 Nina Pandya

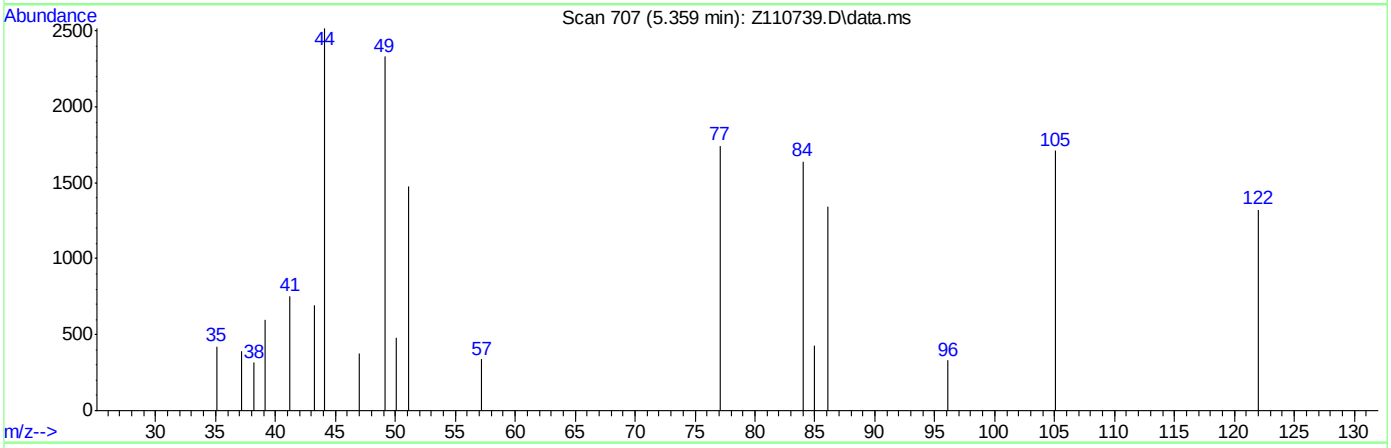
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		5.36	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110739.D
Acq On : 17 May 2016 6:47 pm
Operator : ariellec
Sample : ic5533-1
Misc : op93924,ez5533,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 08:11:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:10:04 2016
Response via : Initial Calibration





TIC: Z110739.D\data.ms

(31) Benzoic Acid

5.359min (-0.032) 0.38ppm

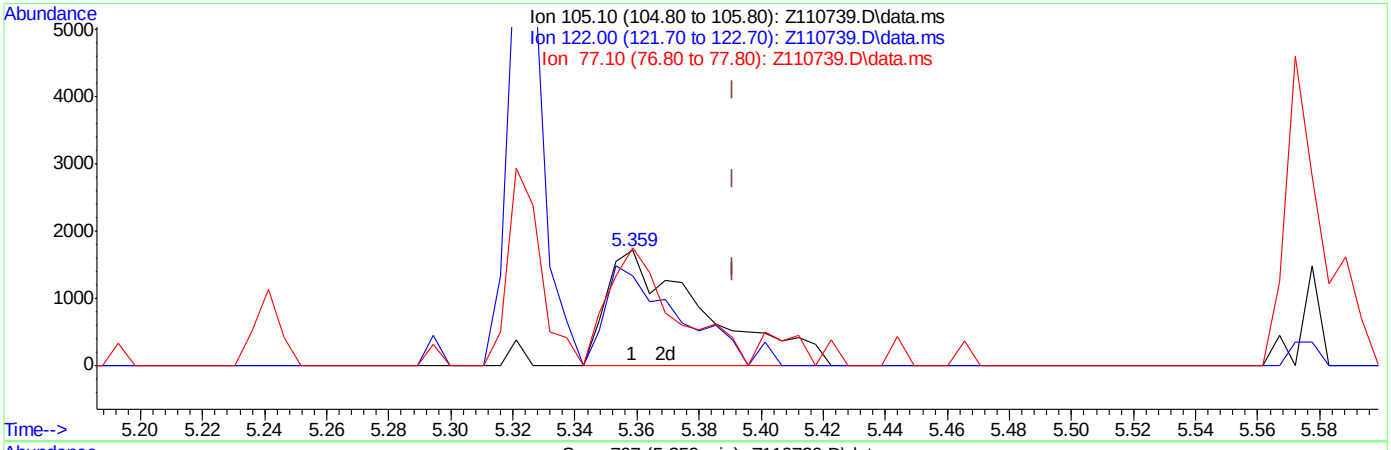
response 1593

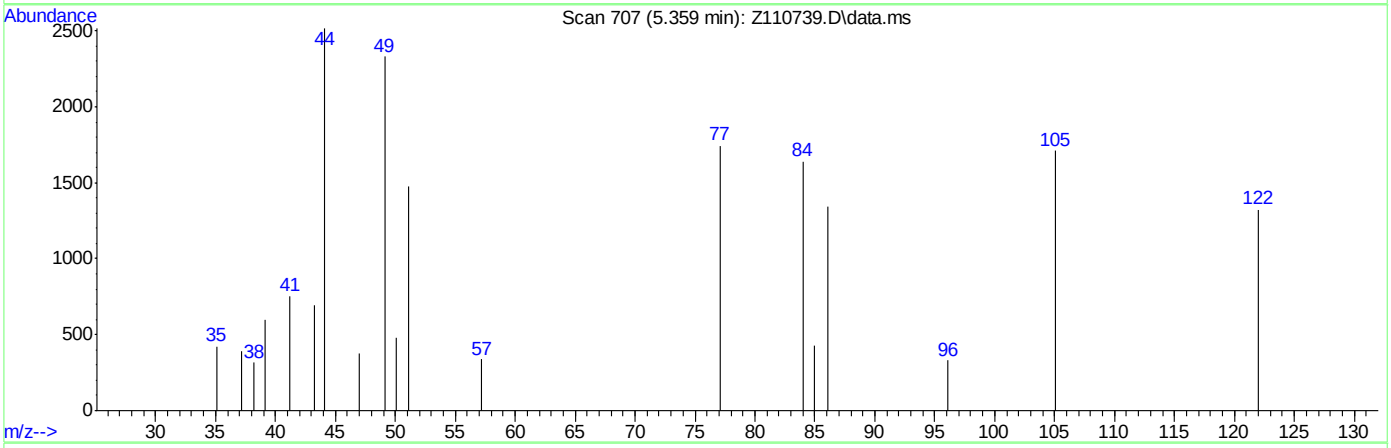
Ion	Exp%	Act%
105.10	100	100
122.00	75.70	72.34
77.10	73.00	89.85
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110739.D
Acq On : 17 May 2016 6:47 pm
Operator : ariellec
Sample : ic5533-1
Misc : op93924,ez5533,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 08:11:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:10:04 2016
Response via : Initial Calibration





TIC: Z110739.D\data.ms

(31) Benzoic Acid

5.359min (-0.032) 0.87ppm m

response 3676

Ion	Exp%	Act%
105.10	100	100
122.00	75.70	77.43
77.10	73.00	101.93#
0.00	0.00	0.00

SGS ACCUTEST JC20314

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/18/16 17:00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110740.D
Acq On : 17 May 2016 7:16 pm
Operator : ariellec
Sample : ic5533-2
Misc : op93924,ez5533,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 08:22:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 07:59:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	207477	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	782724	40.00	ppm	0.00
47) Acenaphthene-d10	6.977	164	456356	40.00	ppm	0.00
69) Phenanthrene-d10	8.837	188	776467	40.00	ppm	0.00
83) Chrysene-d12	14.083	240	748584	40.00	ppm	0.00
92) Perylene-d12	17.106	264	642087	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.654	152	207477	40.00	ppm	0.00
104) Phenanthrene-d10a	8.837	188	776467	40.00	ppm	0.00
108) Chrysene-d12a	14.083	240	748584	40.00	ppm	0.00
110) Acenaphthene-d10a	6.977	164	456356	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	782724	40.00	ppm	0.00
114) Chrysene-d12b	14.083	240	748584	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.660	112	14072	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
8) Phenol-d5	4.376	99	17763	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
25) Nitrobenzene-d5	5.054	82	15436	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
51) 2-Fluorobiphenyl	6.368	172	32869	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
73) 2,4,6-Tribromophenol	7.854	330	3820	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
86) Terphenyl-d14	11.882	244	33297	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
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	2.196	88	6286	1.82	ppm	87
3) Pyridine	2.533	79	12882	1.94	ppm	94
4) N-Nitrosodimethylamine	2.490	74	7123	2.00	ppm	89
6) Indene	4.841	116	25872	2.00	ppm	92
7) Cumene	4.066	105	36861	2.00	ppm	94
9) Phenol	4.386	94	18576	2.00	ppm	95
10) Aniline	4.408	93	21706	2.00	ppm	99
11) bis(2-Chloroethyl)ether	4.461	93	12485	2.00	ppm	94
12) 2-Chlorophenol	4.493	128	15808	2.00	ppm	90
13) Decane	4.536	43	12752	2.00	ppm	90
14) 1,3-Dichlorobenzene	4.611	146	17630	2.00	ppm	95
15) 1,4-Dichlorobenzene	4.670	146	17424	2.00	ppm	93
16) Benzyl alcohol	4.750	108	9343m	1.34	ppm	
17) 1,2-Dichlorobenzene	4.776	146	16442	2.00	ppm	95
18) Acetophenone	4.942	105	20280	2.00	ppm #	64
19) 2-Methylphenol	4.830	108	13966	2.00	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.857	121	4633	2.00	ppm #	32

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110740.D
Acq On : 17 May 2016 7:16 pm
Operator : ariellec
Sample : ic5533-2
Misc : op93924,ez5533,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 08:22:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 07:59:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	4.937	108	13993	2.00	ppm		84
22) n-Nitroso-di-n-propyla...	4.942	70	10033	2.00	ppm		90
23) Hexachloroethane	5.028	201	5931	2.00	ppm	#	77
26) Nitrobenzene	5.065	77	15722	2.00	ppm		90
27) Quinoline	5.824	129	29709	2.00	ppm		93
28) Isophorone	5.241	82	26164	2.00	ppm		97
29) 2-Nitrophenol	5.295	139	7274	2.00	ppm		67
30) 2,4-Dimethylphenol	5.321	107	12242	2.00	ppm		94
31) Benzoic Acid	5.353	105	5820	1.62	ppm		93
32) bis(2-Chloroethoxy)met...	5.391	93	15163	2.00	ppm		98
33) 2,4-Dichlorophenol	5.466	162	11887	2.00	ppm		95
34) 2,6-Dichlorophenol	5.631	162	12203	2.00	ppm		94
35) 1,3,5-Trichlorobenzene	5.305	180	15389	2.00	ppm		97
36) 1,2,4-Trichlorobenzene	5.530	180	13428	2.00	ppm		97
37) 1,2,3-Trichlorobenzene	5.690	180	13350	2.00	ppm		91
38) Naphthalene	5.588	128	44369	2.00	ppm		99
39) 4-Chloroaniline	5.621	127	18902	2.00	ppm		98
40) 2,3-Dichloroaniline	6.299	161	15115	2.00	ppm		89
41) Caprolactam	5.850	55	4916	2.00	ppm		84
42) Hexachlorobutadiene	5.674	225	8078	2.00	ppm		93
43) 4-Chloro-3-methylphenol	5.957	107	12904	2.00	ppm		91
44) 2-Methylnaphthalene	6.085	141	25487	2.00	ppm		87
45) 1-Methylnaphthalene	6.160	141	27395	2.00	ppm		91
46) Dimethylnaphthalene	6.588	156	25963	2.00	ppm		93
48) Hexachlorocyclopentadiene	6.203	237	12683	4.00	ppm		92
49) 2,4,6-Trichlorophenol	6.299	196	8597	1.92	ppm		84
50) 2,4,5-Trichlorophenol	6.326	196	9700	2.10	ppm		96
52) 2-Chloronaphthalene	6.470	162	27958	2.00	ppm		96
53) Biphenyl	6.449	154	36366	2.00	ppm		99
54) 2-Nitroaniline	6.545	65	7120	2.00	ppm	#	59
55) Dimethylphthalate	6.710	163	32951	2.00	ppm		98
56) Acenaphthylene	6.839	152	46972	2.00	ppm		98
57) 2,6-Dinitrotoluene	6.764	165	5645	2.00	ppm		85
58) 3-Nitroaniline	6.919	138	6991	2.00	ppm		73
59) Acenaphthene	7.004	153	29352	2.00	ppm		95
60) 2,4-Dinitrophenol	7.026	184	876m	4.00	ppm		
61) 4-Nitrophenol	7.074	109	3445	2.00	ppm		85
62) Dibenzofuran	7.180	168	39975	2.00	ppm		89
63) 2,4-Dinitrotoluene	7.159	165	7207	2.00	ppm		96
64) 2,3,4,6-Tetrachlorophenol	7.309	232	6862	2.00	ppm		96
65) Diethylphthalate	7.432	149	33309	2.00	ppm		97
66) Fluorene	7.560	166	32556	2.00	ppm		98
67) 4-Chlorophenyl-phenyle...	7.565	204	15497	2.00	ppm		95
68) 4-Nitroaniline	7.565	138	7197	2.00	ppm		85
70) 4,6-Dinitro-2-methylph...	7.613	198	1002	2.00	ppm		85
71) n-Nitrosodiphenylamine	7.704	169	22174	2.00	ppm		93
72) 1,2-Diphenylhydrazine	7.757	77	29672	2.00	ppm		64
74) 4-Bromophenyl-phenylether	8.196	248	8659	2.00	ppm		95
75) Hexachlorobenzene	8.265	284	9667	2.00	ppm		95
76) Pentachlorophenol	8.548	266	10138	4.17	ppm		94

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110740.D
Acq On : 17 May 2016 7:16 pm
Operator : ariellec
Sample : ic5533-2
Misc : op93924,ez5533,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 08:22:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 07:59:47 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.874	178	46765	2.00	ppm	98
78)	Anthracene	8.954	178	46653	2.00	ppm	97
79)	Carbazole	9.221	167	42268	2.00	ppm	97
80)	Di-n-butylphthalate	9.942	149	52630	2.00	ppm	97
81)	Fluoranthene	11.000	202	50606	2.00	ppm	97
82)	Octadecane	8.756	57	14873	2.00	ppm	86
84)	Pyrene	11.438	202	53848	2.00	ppm	92
85)	Butyl stearate	13.372	56	10302	2.00	ppm	87
87)	Butylbenzylphthalate	13.068	149	24471	2.00	ppm	93
88)	Benzo[a]anthracene	14.056	228	49223	2.00	ppm	96
89)	3,3'-Dichlorobenzidine	14.099	252	16030	2.00	ppm	92
90)	Chrysene	14.131	228	45579	2.00	ppm	90
91)	bis(2-Ethylhexyl)phtha...	14.483	149	32212	2.00	ppm	97
93)	Di-n-octylphthalate	15.931	149	53904	2.00	ppm	97
94)	Benzo[b]fluoranthene	16.348	252	45622	2.00	ppm	85
95)	Benzo[k]fluoranthene	16.407	252	44416	2.00	ppm	83
96)	Benzo[a]pyrene	16.978	252	39797	2.01	ppm	92
97)	Indeno[1,2,3-cd]pyrene	19.024	276	36214	2.01	ppm	98
98)	Dibenz(a,h)acridine	18.672	279	33122	2.02	ppm	99
99)	Dibenz[a,h]anthracene	19.094	278	37058	2.00	ppm	88
100)	7,12-Dimethylbenz(a)an...	16.374	256	15995	2.00	ppm	96
101)	Benzo[g,h,i]perylene	19.441	276	38533	2.00	ppm	90

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

7.6.58

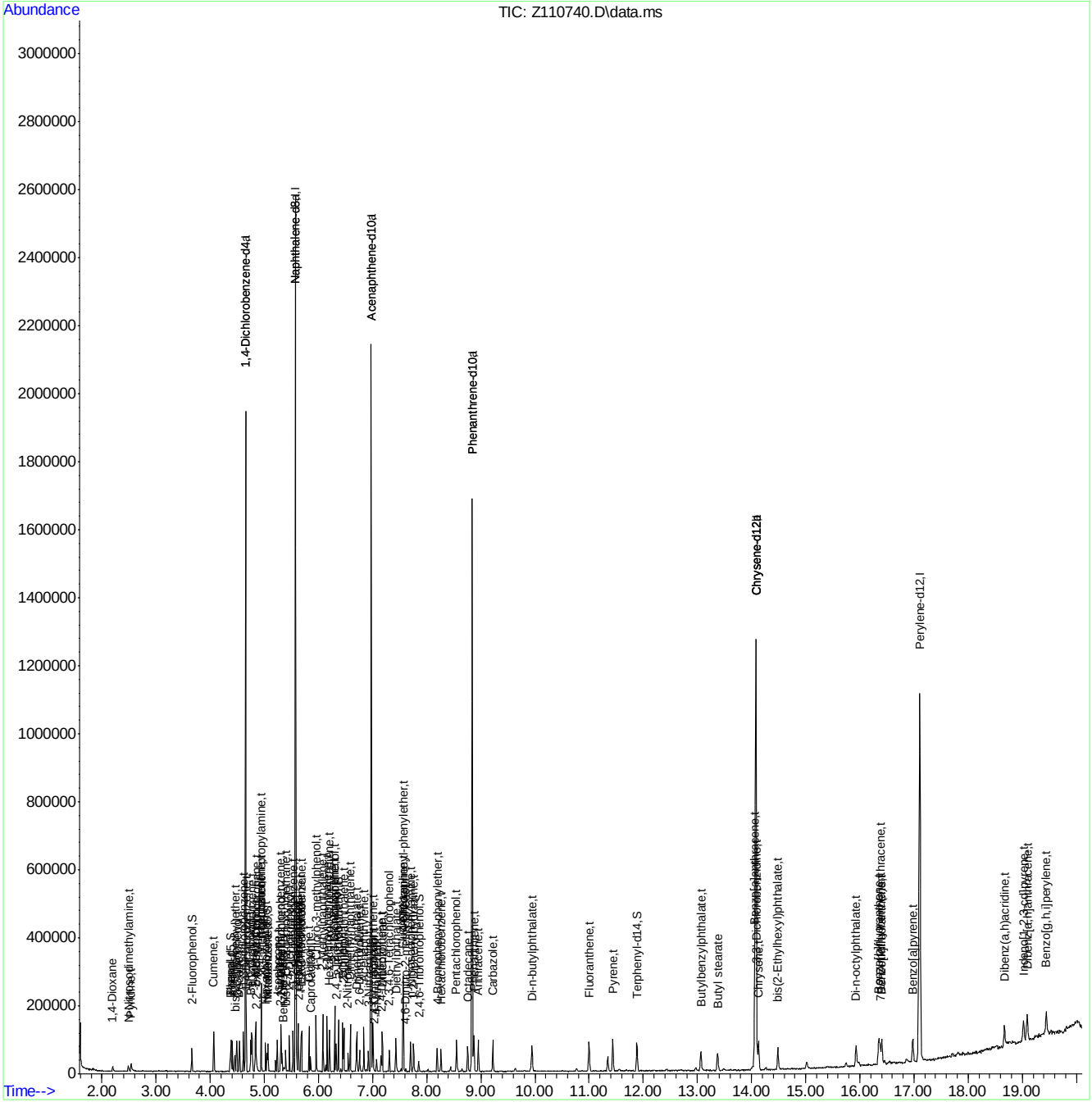
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110740.D
Acq On : 17 May 2016 7:16 pm
Operator : ariellec
Sample : ic5533-2
Misc : op93924,ez5533,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 08:22:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 07:59:47 2016
Response via : Initial Calibration



Manual Integration Approval Summary

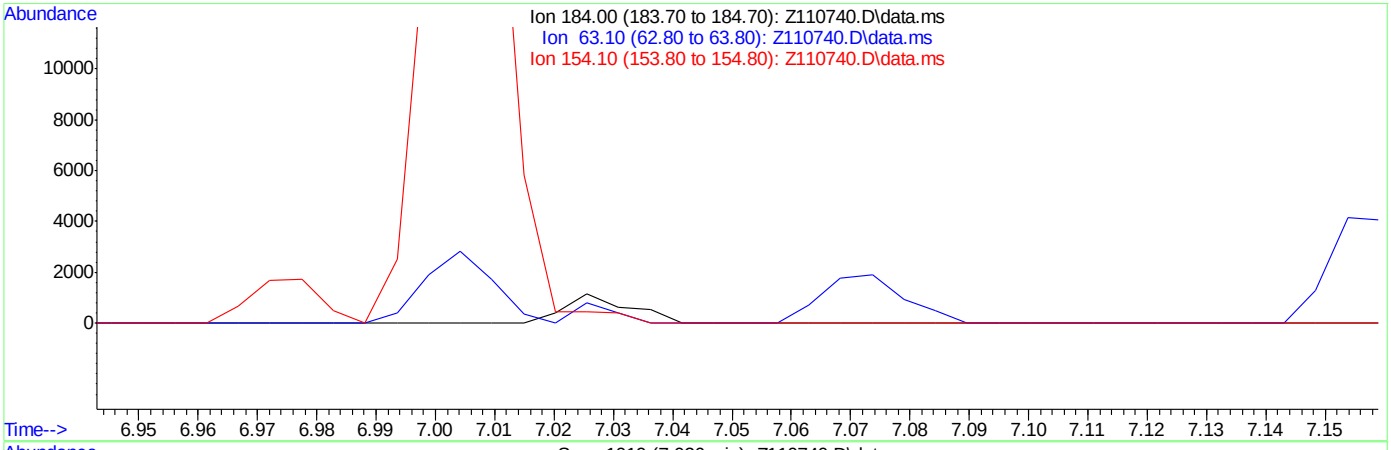
Sample Number:	EZ5533-IC5533	**Method:**	SW846 8270D
Lab FileID:	Z110740.D	**Analyst approved:**	05/18/16 09:20 Arielle Cocozza
Injection Time:	05/17/16 19:16	**Supervisor approved:**	05/18/16 17:00 Nina Pandya

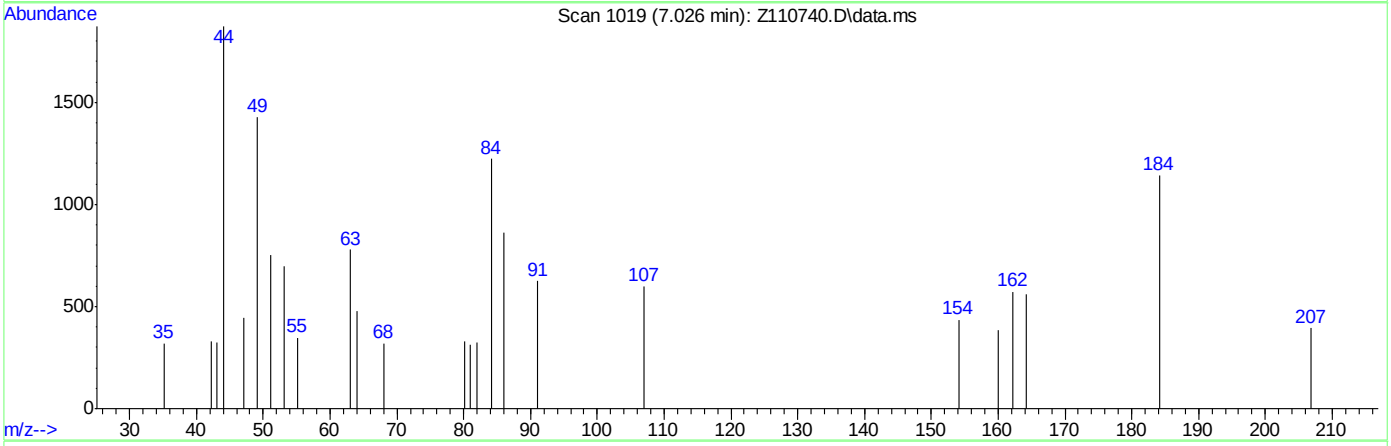
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzyl Alcohol	100-51-6		4.75	Poor instrument integration
2,4-Dinitrophenol	51-28-5		7.03	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110740.D
Acq On : 17 May 2016 7:16 pm
Operator : ariellec
Sample : ic5533-2
Misc : op93924,ez5533,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 07:49:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 07:49:41 2016
Response via : Initial Calibration





TIC: Z110740.D\data.ms

(60) 2,4-Dinitrophenol (t)

7.026min (-7.026) 0.00ppm

response 0

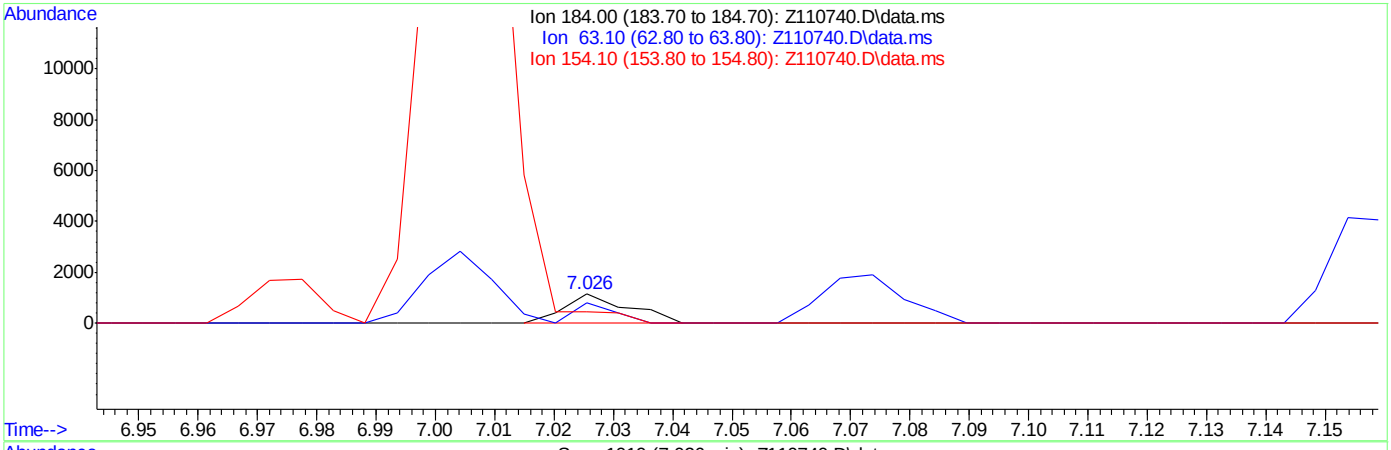
Ion	Exp%	Act%
184.00	100	0.00
63.10	56.60	0.00#
154.10	49.40	0.00#
0.00	0.00	0.00

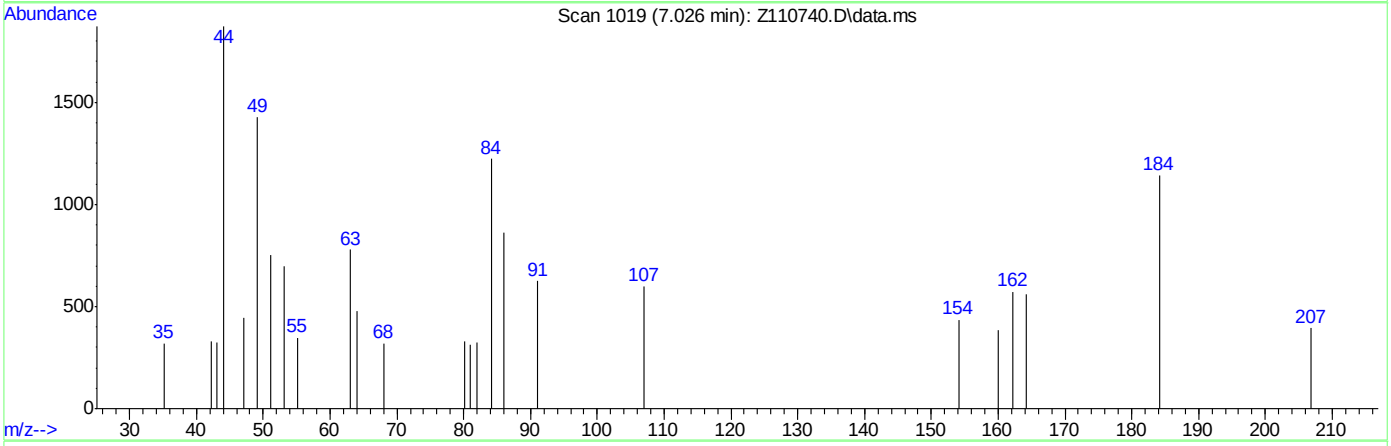
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110740.D
Acq On : 17 May 2016 7:16 pm
Operator : ariellec
Sample : ic5533-2
Misc : op93924,ez5533,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 07:49:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 07:49:41 2016
Response via : Initial Calibration





TIC: Z110740.D\data.ms

(60) 2,4-Dinitrophenol (t)

7.026min (0.000) 4.00ppm m

response 876

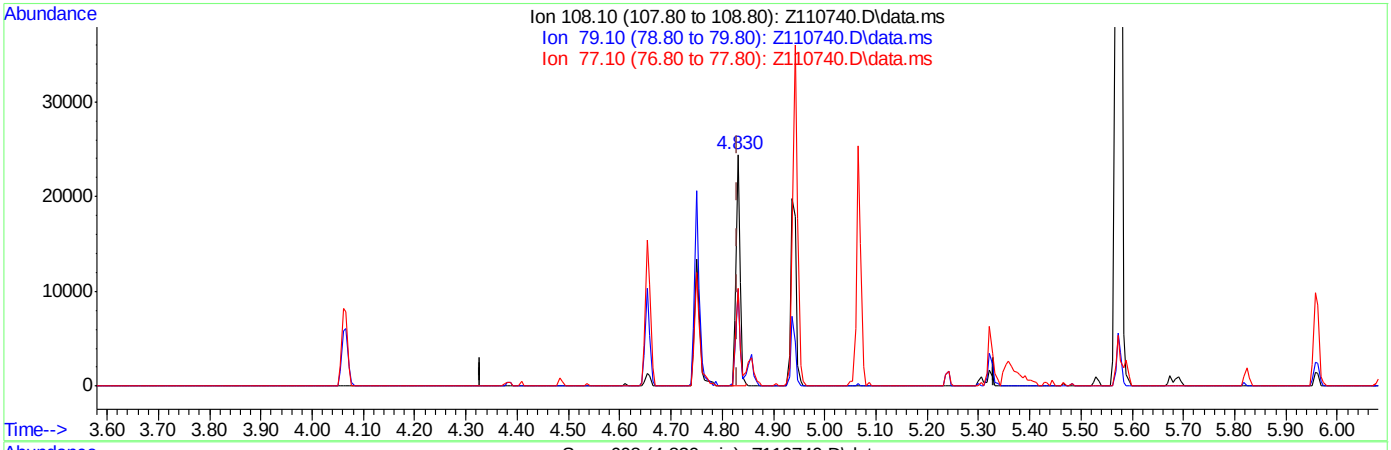
Ion	Exp%	Act%
184.00	100	100
63.10	56.60	68.07
154.10	49.40	38.15
0.00	0.00	0.00

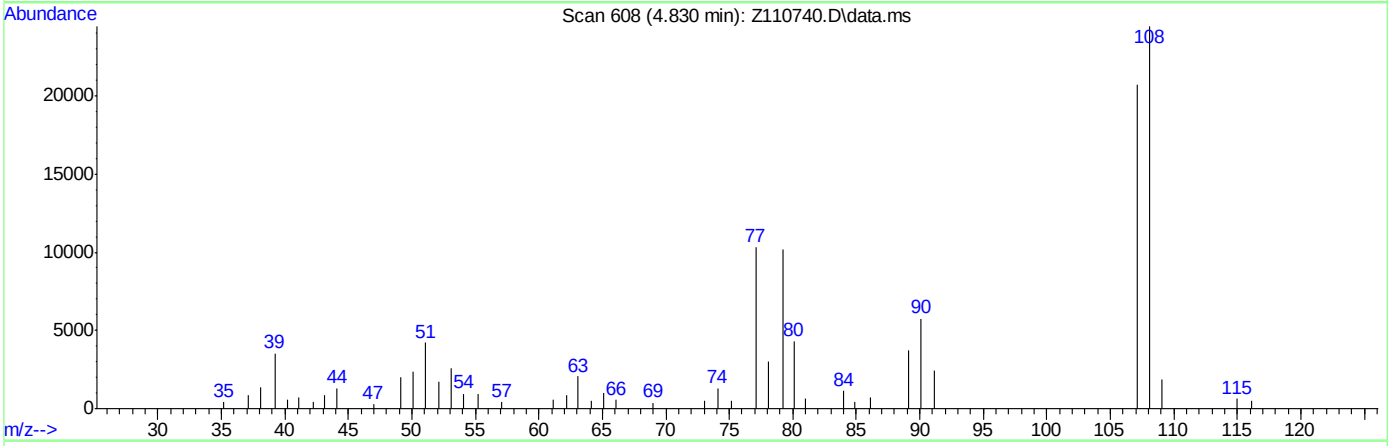
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110740.D
Acq On : 17 May 2016 7:16 pm
Operator : ariellec
Sample : ic5533-2
Misc : op93924,ez5533,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 08:00:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 07:59:47 2016
Response via : Initial Calibration





TIC: Z110740.D\data.ms

(16) Benzyl alcohol (t)

4.830min (0.000) 2.00ppm

response 13966

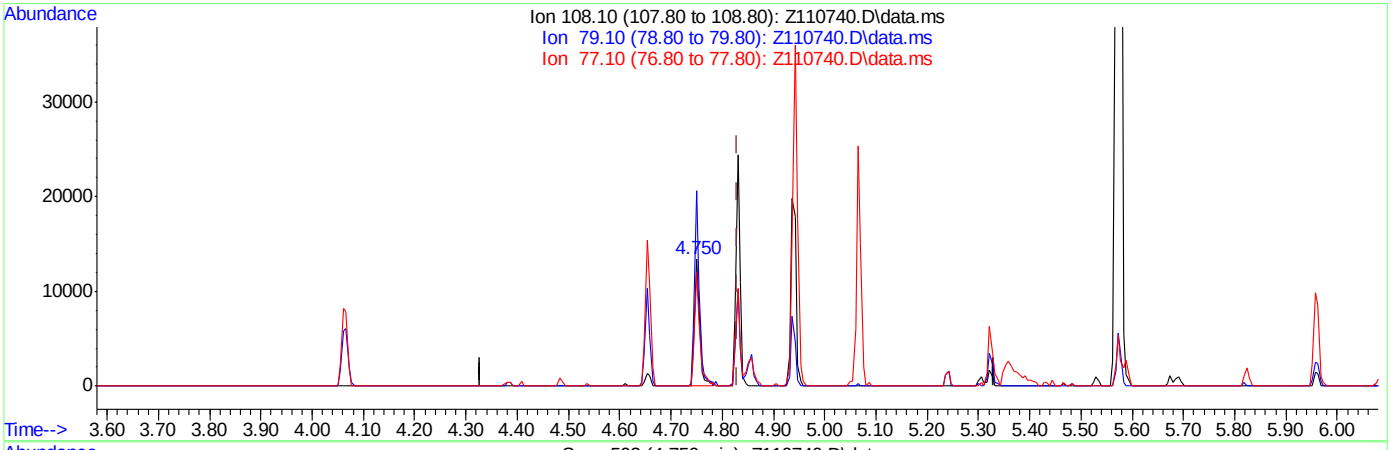
Ion	Exp%	Act%
108.10	100	100
79.10	114.70	38.70#
77.10	68.90	39.41
0.00	0.00	0.00

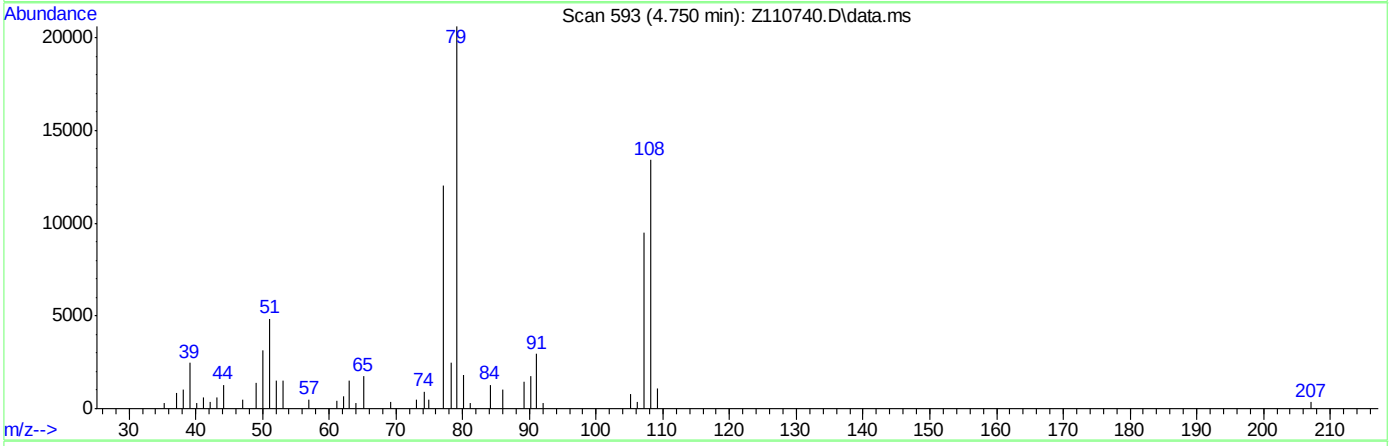
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110740.D
Acq On : 17 May 2016 7:16 pm
Operator : ariellec
Sample : ic5533-2
Misc : op93924,ez5533,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 08:00:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 07:59:47 2016
Response via : Initial Calibration





TIC: Z110740.D\data.ms

(16) Benzyl alcohol (t)

4.750min (-0.080) 1.34ppm m

response 9343

Ion	Exp%	Act%
108.10	100	100
79.10	114.70	153.72#
77.10	68.90	89.67
0.00	0.00	0.00

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110741.D
Acq On : 17 May 2016 7:45 pm
Operator : ariellec
Sample : ic5533-5
Misc : op93924,ez5533,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 18 08:15:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:13:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	177517	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	679322	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	391606	40.00	ppm	0.00
69) Phenanthrene-d10	8.837	188	665784	40.00	ppm	0.00
83) Chrysene-d12	14.077	240	654588	40.00	ppm	0.00
92) Perylene-d12	17.106	264	562085	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.654	152	177517	40.00	ppm	0.00
104) Phenanthrene-d10a	8.837	188	665784	40.00	ppm	0.00
108) Chrysene-d12a	14.077	240	654588	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	391606	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	679322	40.00	ppm	0.00
114) Chrysene-d12b	14.077	240	654588	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.660	112	30605	5.04	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.08%	
8) Phenol-d5	4.376	99	39068	5.25	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.50%	
25) Nitrobenzene-d5	5.054	82	33478	5.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.52%	
51) 2-Fluorobiphenyl	6.368	172	71875	5.64	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.28%	
73) 2,4,6-Tribromophenol	7.854	330	9219	5.61	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.22%	
86) Terphenyl-d14	11.882	244	73971	5.23	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.46%	
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	2.196	88	13049	5.06	ppm	95
3) Pyridine	2.527	79	28698	4.93	ppm	95
4) N-Nitrosodimethylamine	2.485	74	16774	5.14	ppm	98
6) Indene	4.841	116	57049	5.56	ppm	98
7) Cumene	4.066	105	80519	5.40	ppm	99
9) Phenol	4.386	94	41681	5.45	ppm	86
10) Aniline	4.408	93	49171	6.01	ppm	73
11) bis(2-Chloroethyl)ether	4.456	93	27184	5.30	ppm	96
12) 2-Chlorophenol	4.493	128	34589	5.45	ppm	96
13) Decane	4.541	43	26642	5.61	ppm	97
14) 1,3-Dichlorobenzene	4.611	146	38796	5.54	ppm	97
15) 1,4-Dichlorobenzene	4.670	146	38684	5.64	ppm	99
16) Benzyl alcohol	4.750	108	20564	5.01	ppm	99
17) 1,2-Dichlorobenzene	4.776	146	36652	5.72	ppm	95
18) Acetophenone	4.942	105	47577	5.75	ppm	82
19) 2-Methylphenol	4.830	108	29824	5.61	ppm	93
20) 2,2'-oxybis(1-Chloropr...	4.851	121	9662	5.73	ppm #	84

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110741.D
Acq On : 17 May 2016 7:45 pm
Operator : ariellec
Sample : ic5533-5
Misc : op93924,ez5533,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 18 08:15:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:13:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.937	108	30951	5.37	ppm	96
22) n-Nitroso-di-n-propyla...	4.942	70	24765	5.94	ppm	94
23) Hexachloroethane	5.028	201	12192	5.22	ppm	96
26) Nitrobenzene	5.065	77	33421	5.29	ppm	99
27) Quinoline	5.824	129	64929	5.36	ppm	99
28) Isophorone	5.241	82	56871	5.22	ppm	99
29) 2-Nitrophenol	5.295	139	17148	5.37	ppm	91
30) 2,4-Dimethylphenol	5.321	107	29408	5.35	ppm	94
31) Benzoic Acid	5.359	105	17508	4.45	ppm	87
32) bis(2-Chloroethoxy)met...	5.396	93	34279	5.37	ppm	97
33) 2,4-Dichlorophenol	5.466	162	26331	5.23	ppm	99
34) 2,6-Dichlorophenol	5.631	162	25793	5.30	ppm	94
35) 1,3,5-Trichlorobenzene	5.305	180	32407	5.44	ppm	98
36) 1,2,4-Trichlorobenzene	5.530	180	31391	5.51	ppm	94
37) 1,2,3-Trichlorobenzene	5.690	180	29655	5.49	ppm	98
38) Naphthalene	5.588	128	94862	5.27	ppm	100
39) 4-Chloroaniline	5.621	127	41863	5.68	ppm	97
40) 2,3-Dichloroaniline	6.299	161	33360	5.35	ppm	96
41) Caprolactam	5.856	55	11186	5.31	ppm	95
42) Hexachlorobutadiene	5.674	225	17191	5.31	ppm	97
43) 4-Chloro-3-methylphenol	5.962	107	29454	5.33	ppm	90
44) 2-Methylnaphthalene	6.085	141	57186	5.43	ppm	100
45) 1-Methylnaphthalene	6.160	141	59034	5.45	ppm	98
46) Dimethylnaphthalene	6.588	156	58706	5.39	ppm	99
48) Hexachlorocyclopentadiene	6.203	237	31478	10.66	ppm	95
49) 2,4,6-Trichlorophenol	6.299	196	19196	5.37	ppm	95
50) 2,4,5-Trichlorophenol	6.326	196	20906	5.50	ppm	96
52) 2-Chloronaphthalene	6.470	162	62302	5.61	ppm	94
53) Biphenyl	6.449	154	81637	5.61	ppm	99
54) 2-Nitroaniline	6.550	65	17223	5.37	ppm	88
55) Dimethylphthalate	6.710	163	72322	5.47	ppm	98
56) Acenaphthylene	6.839	152	101492	5.33	ppm	99
57) 2,6-Dinitrotoluene	6.764	165	13409	5.25	ppm	83
58) 3-Nitroaniline	6.919	138	16468	5.38	ppm	89
59) Acenaphthene	7.004	153	63383	5.47	ppm	96
60) 2,4-Dinitrophenol	7.026	184	3945	4.55	ppm	91
61) 4-Nitrophenol	7.074	109	9286	5.34	ppm	92
62) Dibenzofuran	7.180	168	89349	5.64	ppm	99
63) 2,4-Dinitrotoluene	7.159	165	17298	4.94	ppm	98
64) 2,3,4,6-Tetrachlorophenol	7.309	232	15802	5.24	ppm	99
65) Diethylphthalate	7.432	149	72129	5.41	ppm	98
66) Fluorene	7.560	166	73586	5.57	ppm	96
67) 4-Chlorophenyl-phenyle...	7.565	204	33454	5.42	ppm	91
68) 4-Nitroaniline	7.570	138	16286	5.27	ppm	95
70) 4,6-Dinitro-2-methylph...	7.613	198	4206	2.90	ppm	86
71) n-Nitrosodiphenylamine	7.704	169	48804	5.33	ppm	97
72) 1,2-Diphenylhydrazine	7.757	77	69882	5.61	ppm	99
74) 4-Bromophenyl-phenylether	8.196	248	19089	5.38	ppm	97
75) Hexachlorobenzene	8.265	284	21200	5.52	ppm	91
76) Pentachlorophenol	8.548	266	24416	10.13	ppm	98

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110741.D
Acq On : 17 May 2016 7:45 pm
Operator : ariellec
Sample : ic5533-5
Misc : op93924,ez5533,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 18 08:15:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:13:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	8.874	178	101466	5.48 ppm	99
78) Anthracene	8.954	178	102674	5.46 ppm	99
79) Carbazole	9.221	167	96276	5.49 ppm	98
80) Di-n-butylphthalate	9.942	149	120879	5.34 ppm	99
81) Fluoranthene	11.000	202	113362	5.43 ppm	98
82) Octadecane	8.756	57	34268	5.39 ppm	96
84) Pyrene	11.438	202	116175	5.25 ppm	97
85) Butyl stearate	13.372	56	22637	5.03 ppm	99
87) Butylbenzylphthalate	13.062	149	52641	5.08 ppm	98
88) Benzo[a]anthracene	14.056	228	105703	5.22 ppm	98
89) 3,3'-Dichlorobenzidine	14.104	252	35598	5.09 ppm	92
90) Chrysene	14.131	228	99369	5.26 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.483	149	71550	5.09 ppm	98
93) Di-n-octylphthalate	15.931	149	120288	5.40 ppm	99
94) Benzo[b]fluoranthene	16.348	252	101418	5.46 ppm	99
95) Benzo[k]fluoranthene	16.407	252	93483	5.29 ppm	98
96) Benzo[a]pyrene	16.978	252	89955	5.42 ppm	96
97) Indeno[1,2,3-cd]pyrene	19.024	276	80101	5.31 ppm	98
98) Dibenz(a,h)acridine	18.672	279	71532	5.16 ppm	96
99) Dibenz[a,h]anthracene	19.094	278	82064	5.26 ppm	95
100) 7,12-Dimethylbenz(a)an...	16.374	256	38111	5.13 ppm	97
101) Benzo[g,h,i]perylene	19.446	276	81502	5.10 ppm	96

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

7.6.59

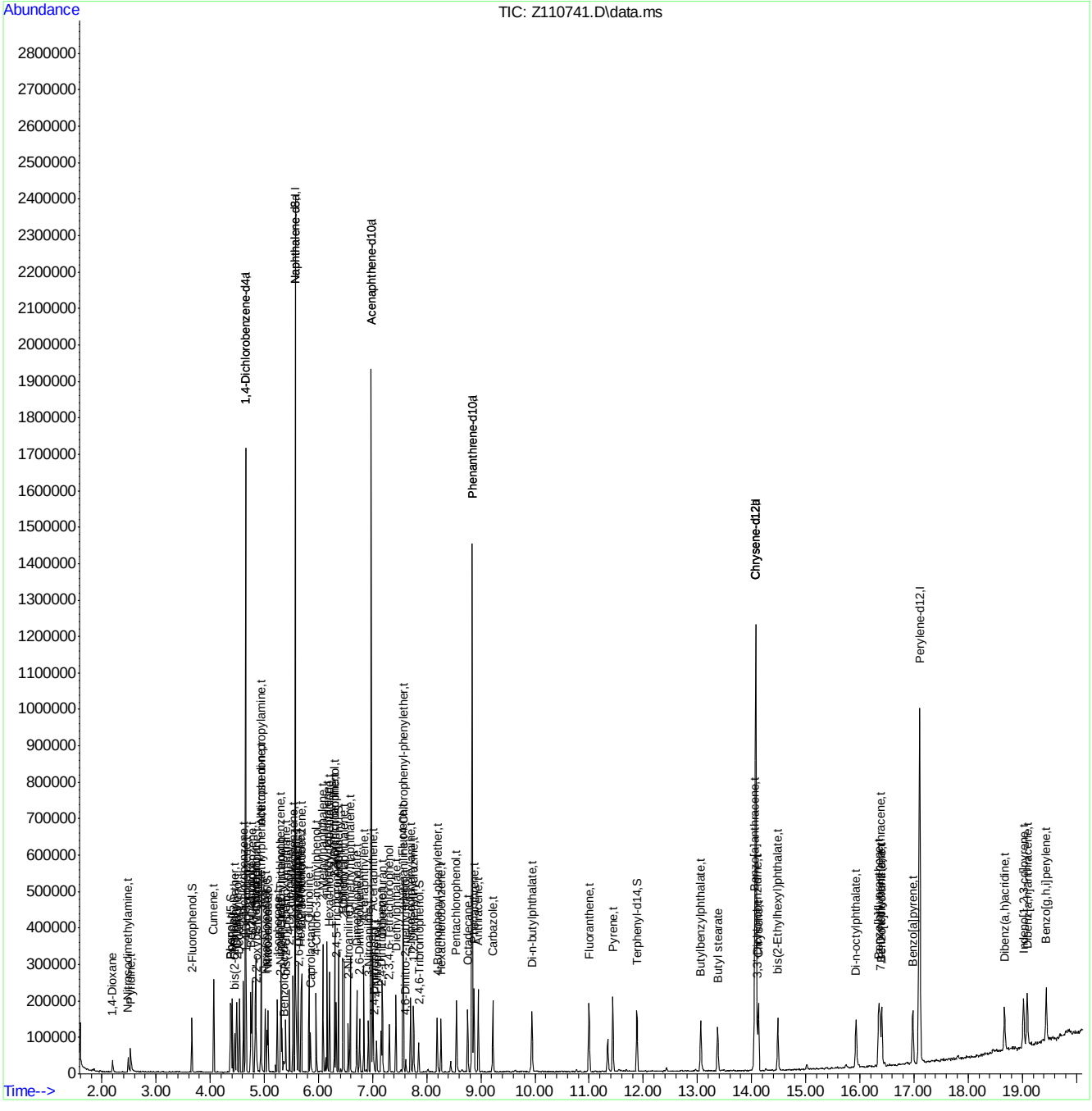
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110741.D
Acq On : 17 May 2016 7:45 pm
Operator : ariellec
Sample : ic5533-5
Misc : op93924,ez5533,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 18 08:15:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:13:15 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 08:15:54 2016 RTE Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110742.D
Acq On : 17 May 2016 8:14 pm
Operator : ariellec
Sample : ic5533-10
Misc : op93924,ez5533,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 18 08:19:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:17:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	184920	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	682351	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	397257	40.00	ppm	0.00
69) Phenanthrene-d10	8.836	188	676445	40.00	ppm	0.00
83) Chrysene-d12	14.077	240	662938	40.00	ppm	0.00
92) Perylene-d12	17.106	264	588047	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.654	152	184920	40.00	ppm	0.00
104) Phenanthrene-d10a	8.836	188	676445	40.00	ppm	0.00
108) Chrysene-d12a	14.077	240	662938	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	397257	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	682351	40.00	ppm	0.00
114) Chrysene-d12b	14.077	240	662938	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.660	112	56886	8.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	17.96%	
8) Phenol-d5	4.376	99	71763	9.18	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.36%	
25) Nitrobenzene-d5	5.054	82	61157	9.48	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.96%	
51) 2-Fluorobiphenyl	6.368	172	127064	9.62	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.24%	
73) 2,4,6-Tribromophenol	7.854	330	16352	9.60	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.20%	
86) Terphenyl-d14	11.882	244	133898	9.28	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.56%	
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	2.196	88	22268	8.27	ppm	99
3) Pyridine	2.522	79	54403	8.99	ppm	99
4) N-Nitrosodimethylamine	2.479	74	29440	8.62	ppm	94
6) Indene	4.840	116	101020	9.27	ppm	98
7) Cumene	4.066	105	146032	9.28	ppm	98
9) Phenol	4.386	94	72402	8.96	ppm	87
10) Aniline	4.408	93	85448	9.70	ppm	78
11) bis(2-Chloroethyl)ether	4.461	93	49279	9.13	ppm	91
12) 2-Chlorophenol	4.499	128	61861	9.22	ppm	95
13) Decane	4.541	43	47459	9.40	ppm	98
14) 1,3-Dichlorobenzene	4.611	146	68543	9.24	ppm	96
15) 1,4-Dichlorobenzene	4.670	146	68399	9.38	ppm	99
16) Benzyl alcohol	4.750	108	35738	8.35	ppm	98
17) 1,2-Dichlorobenzene	4.776	146	64172	9.38	ppm	97
18) Acetophenone	4.942	105	84324	9.54	ppm	92
19) 2-Methylphenol	4.830	108	52340	9.26	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.856	121	16439	9.14	ppm #	83

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110742.D
Acq On : 17 May 2016 8:14 pm
Operator : ariellec
Sample : ic5533-10
Misc : op93924,ez5533,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 18 08:19:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:17:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.937	108	55691	9.16	ppm	97
22) n-Nitroso-di-n-propyla...	4.942	70	41669	9.30	ppm	91
23) Hexachloroethane	5.027	201	22887	9.33	ppm	94
26) Nitrobenzene	5.065	77	60391	9.43	ppm	98
27) Quinoline	5.823	129	112999	9.18	ppm	98
28) Isophorone	5.241	82	104213	9.45	ppm	99
29) 2-Nitrophenol	5.295	139	30566	9.42	ppm	97
30) 2,4-Dimethylphenol	5.321	107	50344	9.02	ppm	98
31) Benzoic Acid	5.369	105	35516	9.16	ppm	92
32) bis(2-Chloroethoxy)met...	5.396	93	60704	9.35	ppm	99
33) 2,4-Dichlorophenol	5.466	162	47773	9.38	ppm	98
34) 2,6-Dichlorophenol	5.631	162	47229	9.57	ppm	97
35) 1,3,5-Trichlorobenzene	5.305	180	58910	9.71	ppm	95
36) 1,2,4-Trichlorobenzene	5.530	180	55154	9.47	ppm	97
37) 1,2,3-Trichlorobenzene	5.690	180	51636	9.37	ppm	98
38) Naphthalene	5.588	128	170976	9.37	ppm	98
39) 4-Chloroaniline	5.620	127	71886	9.50	ppm	97
40) 2,3-Dichloroaniline	6.299	161	58937	9.31	ppm	98
41) Caprolactam	5.861	55	20054	9.38	ppm	97
42) Hexachlorobutadiene	5.674	225	31295	9.52	ppm	98
43) 4-Chloro-3-methylphenol	5.962	107	52697	9.39	ppm	97
44) 2-Methylnaphthalene	6.085	141	101704	9.47	ppm	96
45) 1-Methylnaphthalene	6.160	141	102956	9.32	ppm	97
46) Dimethylnaphthalene	6.587	156	104933	9.46	ppm	97
48) Hexachlorocyclopentadiene	6.203	237	61540	20.31	ppm	95
49) 2,4,6-Trichlorophenol	6.299	196	34075	9.28	ppm	98
50) 2,4,5-Trichlorophenol	6.326	196	36995	9.43	ppm	96
52) 2-Chloronaphthalene	6.470	162	109645	9.55	ppm	98
53) Biphenyl	6.449	154	141859	9.41	ppm	99
54) 2-Nitroaniline	6.550	65	31047	9.43	ppm	94
55) Dimethylphthalate	6.710	163	125110	9.18	ppm	98
56) Acenaphthylene	6.838	152	184661	9.45	ppm	99
57) 2,6-Dinitrotoluene	6.764	165	24321	9.31	ppm	80
58) 3-Nitroaniline	6.919	138	29179	9.28	ppm	98
59) Acenaphthene	7.004	153	112086	9.39	ppm	98
60) 2,4-Dinitrophenol	7.025	184	11209	14.29	ppm	93
61) 4-Nitrophenol	7.074	109	16837	9.44	ppm	94
62) Dibenzofuran	7.180	168	153484	9.35	ppm	97
63) 2,4-Dinitrotoluene	7.159	165	32463	9.16	ppm	95
64) 2,3,4,6-Tetrachlorophenol	7.309	232	29384	9.54	ppm	99
65) Diethylphthalate	7.431	149	126338	9.22	ppm	99
66) Fluorene	7.560	166	126014	9.22	ppm	99
67) 4-Chlorophenyl-phenyle...	7.565	204	60416	9.52	ppm	94
68) 4-Nitroaniline	7.570	138	31150	9.85	ppm	97
70) 4,6-Dinitro-2-methylph...	7.613	198	11758	8.71	ppm	95
71) n-Nitrosodiphenylamine	7.704	169	88716	9.43	ppm	98
72) 1,2-Diphenylhydrazine	7.757	77	120183	9.31	ppm	97
74) 4-Bromophenyl-phenylether	8.195	248	34257	9.38	ppm	96
75) Hexachlorobenzene	8.265	284	36314	9.14	ppm	98
76) Pentachlorophenol	8.548	266	47117	19.21	ppm	99

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110742.D
Acq On : 17 May 2016 8:14 pm
Operator : ariellec
Sample : ic5533-10
Misc : op93924,ez5533,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 18 08:19:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:17:37 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.874	178	178510	9.34	ppm	99
78)	Anthracene	8.954	178	181523	9.36	ppm	99
79)	Carbazole	9.221	167	166589	9.20	ppm	99
80)	Di-n-butylphthalate	9.942	149	213435	9.18	ppm	100
81)	Fluoranthene	11.000	202	199782	9.29	ppm	97
82)	Octadecane	8.756	57	61652	9.42	ppm	99
84)	Pyrene	11.438	202	209355	9.27	ppm	95
85)	Butyl stearate	13.372	56	40348	8.84	ppm	99
87)	Butylbenzylphthalate	13.062	149	94621	8.99	ppm	94
88)	Benzo[a]anthracene	14.056	228	187397	9.07	ppm	97
89)	3,3'-Dichlorobenzidine	14.099	252	66504	9.37	ppm	97
90)	Chrysene	14.131	228	178263	9.23	ppm	99
91)	bis(2-Ethylhexyl)phtha...	14.483	149	127410	8.93	ppm	95
93)	Di-n-octylphthalate	15.931	149	216769	9.18	ppm	99
94)	Benzo[b]fluoranthene	16.348	252	179366	9.09	ppm	100
95)	Benzo[k]fluoranthene	16.406	252	171266	9.17	ppm	99
96)	Benzo[a]pyrene	16.978	252	156049	8.86	ppm	98
97)	Indeno[1,2,3-cd]pyrene	19.024	276	138485	8.69	ppm	93
98)	Dibenz(a,h)acridine	18.677	279	132784	9.11	ppm	97
99)	Dibenz[a,h]anthracene	19.094	278	145239	8.82	ppm	98
100)	7,12-Dimethylbenz(a)an...	16.374	256	70044	8.98	ppm	98
101)	Benzo[g,h,i]perylene	19.446	276	149720	8.93	ppm	97

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

7.6.60

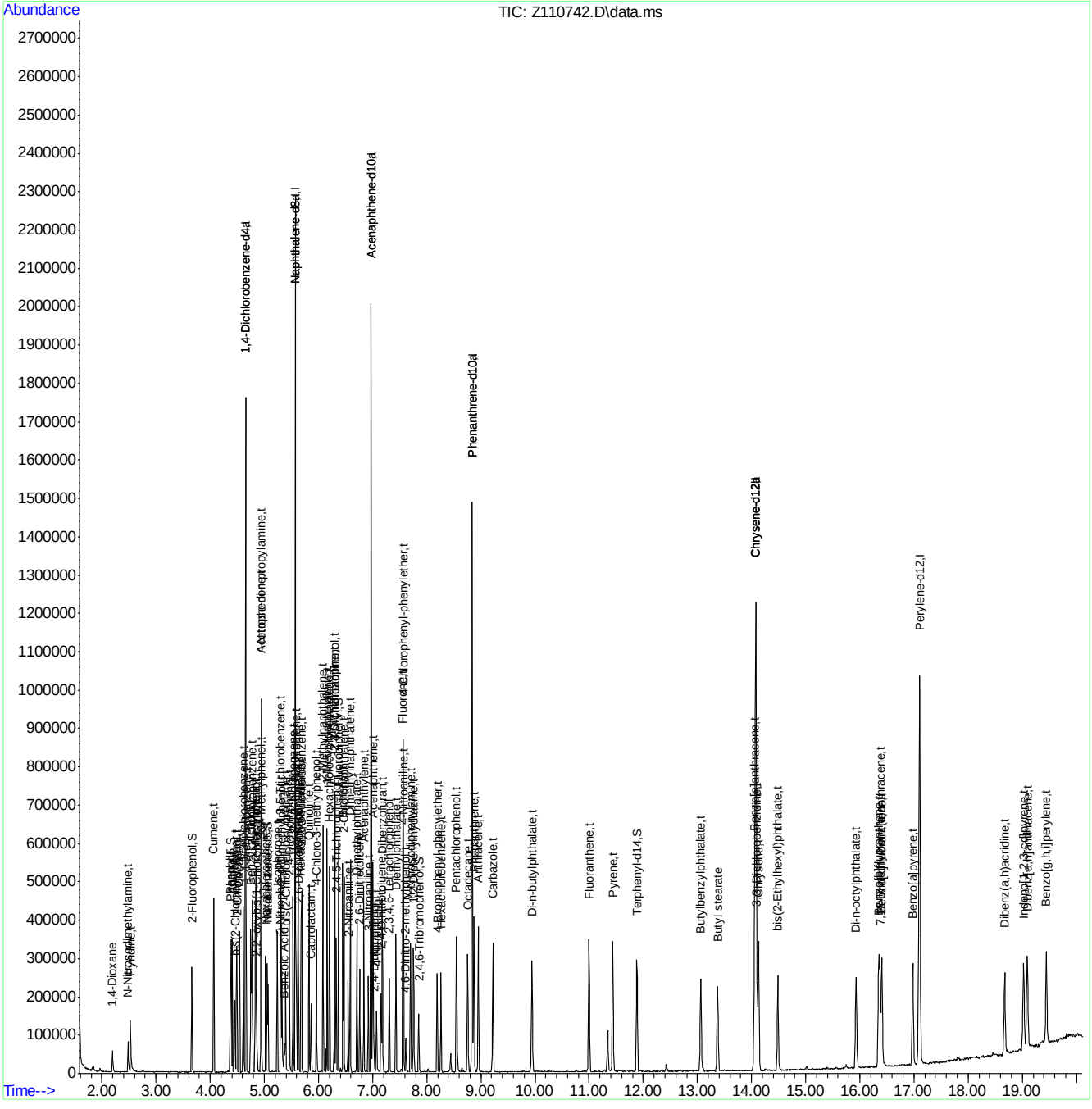
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110742.D
Acq On : 17 May 2016 8:14 pm
Operator : ariellec
Sample : ic5533-10
Misc : op93924,ez5533,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 18 08:19:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:17:37 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Z110743.D

Manual Integrations APPROVED (compounds with "m" flag)

Nina Pandya
05/18/16 17:00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110743.D
Acq On : 17 May 2016 8:44 pm
Operator : ariellec
Sample : ic5533-100
Misc : op93924,ez5533,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 08:03:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:02:43 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.659	152	170330	40.00	ppm	0.00
24) Naphthalene-d8	5.578	136	648830	40.00	ppm	0.00
47) Acenaphthene-d10	6.977	164	391555	40.00	ppm	0.00
69) Phenanthrene-d10	8.842	188	675578	40.00	ppm	0.00
83) Chrysene-d12	14.093	240	657832	40.00	ppm	0.01
92) Perylene-d12	17.117	264	605672	40.00	ppm	0.01
102) 1,4-Dichlorobenzene-d4a	4.659	152	170330	40.00	ppm	0.00
104) Phenanthrene-d10a	8.842	188	675578	40.00	ppm	0.00
108) Chrysene-d12a	14.093	240	657832	40.00	ppm	0.01
110) Acenaphthene-d10a	6.977	164	391555	40.00	ppm	0.00
112) Naphthalene-d8a	5.578	136	648830	40.00	ppm	0.00
114) Chrysene-d12b	14.093	240	657832	40.00	ppm	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.665	112	572854	99.10	ppm	0.00
Spiked Amount 50.000			Recovery	=	198.20%	
8) Phenol-d5	4.386	99	691882	94.82	ppm	0.01
Spiked Amount 50.000			Recovery	=	189.64%	
25) Nitrobenzene-d5	5.059	82	560697	87.64	ppm	0.00
Spiked Amount 50.000			Recovery	=	175.28%	
51) 2-Fluorobiphenyl	6.374	172	1135242	80.51	ppm	0.00
Spiked Amount 50.000			Recovery	=	161.02%	
73) 2,4,6-Tribromophenol	7.864	330	166627	100.22	ppm	0.01
Spiked Amount 50.000			Recovery	=	200.44%	
86) Terphenyl-d14	11.892	244	1336174	91.16	ppm	0.01
Spiked Amount 50.000			Recovery	=	182.32%	
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	2.191	88	215409	76.05	ppm	85
3) Pyridine	2.516	79	557469	102.37	ppm	93
4) N-Nitrosodimethylamine	2.484	74	320369	109.49	ppm	97
6) Indene	4.846	116	876134	82.44	ppm	92
7) Cumene	4.066	105	1346941	88.95	ppm	97
9) Phenol	4.397	94	693532	90.88	ppm	92
10) Aniline	4.413	93	659434	73.95	ppm	67
11) bis(2-Chloroethyl)ether	4.466	93	446496	87.06	ppm	94
12) 2-Chlorophenol	4.504	128	543173	83.64	ppm	97
13) Decane	4.541	43	406345	77.57	ppm	89
14) 1,3-Dichlorobenzene	4.616	146	618739	85.43	ppm	98
15) 1,4-Dichlorobenzene	4.669	146	603998	84.38	ppm	97
16) Benzyl alcohol	4.760	108	336857	58.71	ppm	78
17) 1,2-Dichlorobenzene	4.782	146	553941	82.01	ppm	99
18) Acetophenone	4.953	105	699011	83.90	ppm #	70
19) 2-Methylphenol	4.840	108	467775	81.53	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.856	121	143263	75.27	ppm #	48

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110743.D
Acq On : 17 May 2016 8:44 pm
Operator : ariellec
Sample : ic5533-100
Misc : op93924,ez5533,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 08:03:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:02:43 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21)	3&4-Methylphenol	4.953	108	519739	90.45	ppm		96
22)	n-Nitroso-di-n-propyla...	4.958	70	353950	85.88	ppm		85
23)	Hexachloroethane	5.027	201	213855	87.77	ppm		88
26)	Nitrobenzene	5.075	77	533841	81.92	ppm		94
27)	Quinoline	5.839	129	1116451	90.67	ppm		92
28)	Isophorone	5.252	82	957453	88.29	ppm		94
29)	2-Nitrophenol	5.305	139	308653	102.38	ppm	#	78
30)	2,4-Dimethylphenol	5.332	107	533242	105.09	ppm		87
31)	Benzoic Acid	5.439	105	463077m	155.11	ppm		
32)	bis(2-Chloroethoxy)met...	5.401	93	553615	88.09	ppm		99
33)	2,4-Dichlorophenol	5.476	162	455442	92.44	ppm		96
34)	2,6-Dichlorophenol	5.636	162	423683	83.77	ppm		96
35)	1,3,5-Trichlorobenzene	5.310	180	512034	80.28	ppm		98
36)	1,2,4-Trichlorobenzene	5.535	180	501673	90.14	ppm		94
37)	1,2,3-Trichlorobenzene	5.695	180	468234	84.62	ppm		90
38)	Naphthalene	5.594	128	1559907	84.83	ppm		98
39)	4-Chloroaniline	5.631	127	632784	80.75	ppm		98
40)	2,3-Dichloroaniline	6.304	161	548985	87.63	ppm		92
41)	Caprolactam	5.909	55	205688m	100.95	ppm		
42)	Hexachlorobutadiene	5.679	225	284316	84.92	ppm		97
43)	4-Chloro-3-methylphenol	5.973	107	495047	92.54	ppm		99
44)	2-Methylnaphthalene	6.090	141	928084	87.82	ppm		95
45)	1-Methylnaphthalene	6.165	141	931658	82.04	ppm		94
46)	Dimethylnaphthalene	6.593	156	953118	88.57	ppm		95
48)	Hexachlorocyclopentadiene	6.208	237	652143	239.71	ppm		97
49)	2,4,6-Trichlorophenol	6.304	196	333137	86.83	ppm		93
50)	2,4,5-Trichlorophenol	6.336	196	353412	89.38	ppm		91
52)	2-Chloronaphthalene	6.475	162	971198	80.97	ppm		99
53)	Biphenyl	6.459	154	1313309	84.18	ppm		99
54)	2-Nitroaniline	6.561	65	307823	100.78	ppm	#	77
55)	Dimethylphthalate	6.721	163	1184846	83.82	ppm		98
56)	Acenaphthylene	6.844	152	1700657	84.40	ppm		98
57)	2,6-Dinitrotoluene	6.774	165	264944	109.40	ppm		97
58)	3-Nitroaniline	6.935	138	307524	102.54	ppm		83
59)	Acenaphthene	7.015	153	1048414	83.26	ppm		96
60)	2,4-Dinitrophenol	7.041	184	277302	1475.77	ppm	#	58
61)	4-Nitrophenol	7.095	109	192117	129.99	ppm	#	70
62)	Dibenzofuran	7.191	168	1411211	82.29	ppm		95
63)	2,4-Dinitrotoluene	7.175	165	380062	122.93	ppm		96
64)	2,3,4,6-Tetrachlorophenol	7.314	232	310976	105.64	ppm		95
65)	Diethylphthalate	7.447	149	1253068	87.69	ppm		100
66)	Fluorene	7.570	166	1192758	85.40	ppm		96
67)	4-Chlorophenyl-phenyle...	7.570	204	553243	83.22	ppm		96
68)	4-Nitroaniline	7.602	138	316569	102.53	ppm		73
70)	4,6-Dinitro-2-methylph...	7.634	198	212221	486.63	ppm		98
71)	n-Nitrosodiphenylamine	7.714	169	860634	89.18	ppm		96
72)	1,2-Diphenylhydrazine	7.768	77	1126778	87.25	ppm		61
74)	4-Bromophenyl-phenylether	8.201	248	345251	91.61	ppm		90
75)	Hexachlorobenzene	8.275	284	359834	85.52	ppm		95
76)	Pentachlorophenol	8.559	266	524769	247.94	ppm		95

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110743.D
Acq On : 17 May 2016 8:44 pm
Operator : ariellec
Sample : ic5533-100
Misc : op93924,ez5533,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 08:03:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:02:43 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.884	178	1710935	84.06	ppm	99
78)	Anthracene	8.965	178	1741731	85.78	ppm	99
79)	Carbazole	9.242	167	1666421	90.58	ppm	99
80)	Di-n-butylphthalate	9.953	149	2207927	96.39	ppm	97
81)	Fluoranthene	11.016	202	1978900	89.85	ppm	98
82)	Octadecane	8.767	57	601037	92.85	ppm	92
84)	Pyrene	11.459	202	2020189	85.22	ppm	92
85)	Butyl stearate	13.383	56	423585	93.40	ppm	82
87)	Butylbenzylphthalate	13.078	149	981177	91.08	ppm	98
88)	Benzo[a]anthracene	14.072	228	1878613	86.70	ppm	94
89)	3,3'-Dichlorobenzidine	14.125	252	673261	95.41	ppm	95
90)	Chrysene	14.157	228	1744492	86.94	ppm	91
91)	bis(2-Ethylhexyl)phtha...	14.494	149	1327323	93.60	ppm	98
93)	Di-n-octylphthalate	15.947	149	2268721	89.24	ppm	99
94)	Benzo[b]fluoranthene	16.380	252	1849114	85.94	ppm	83
95)	Benzo[k]fluoranthene	16.454	252	1708740	81.57	ppm	98
96)	Benzo[a]pyrene	17.010	252	1621279	86.65	ppm	95
97)	Indeno[1,2,3-cd]pyrene	19.061	276	1453813	85.70	ppm	97
98)	Dibenz(a,h)acridine	18.703	279	1371191	88.63	ppm	100
99)	Dibenz[a,h]anthracene	19.126	278	1514015	86.62	ppm	87
100)	7,12-Dimethylbenz(a)an...	16.406	256	816096	108.18	ppm	91
101)	Benzo[g,h,i]perylene	19.489	276	1534876	84.46	ppm	88

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

7.6.61

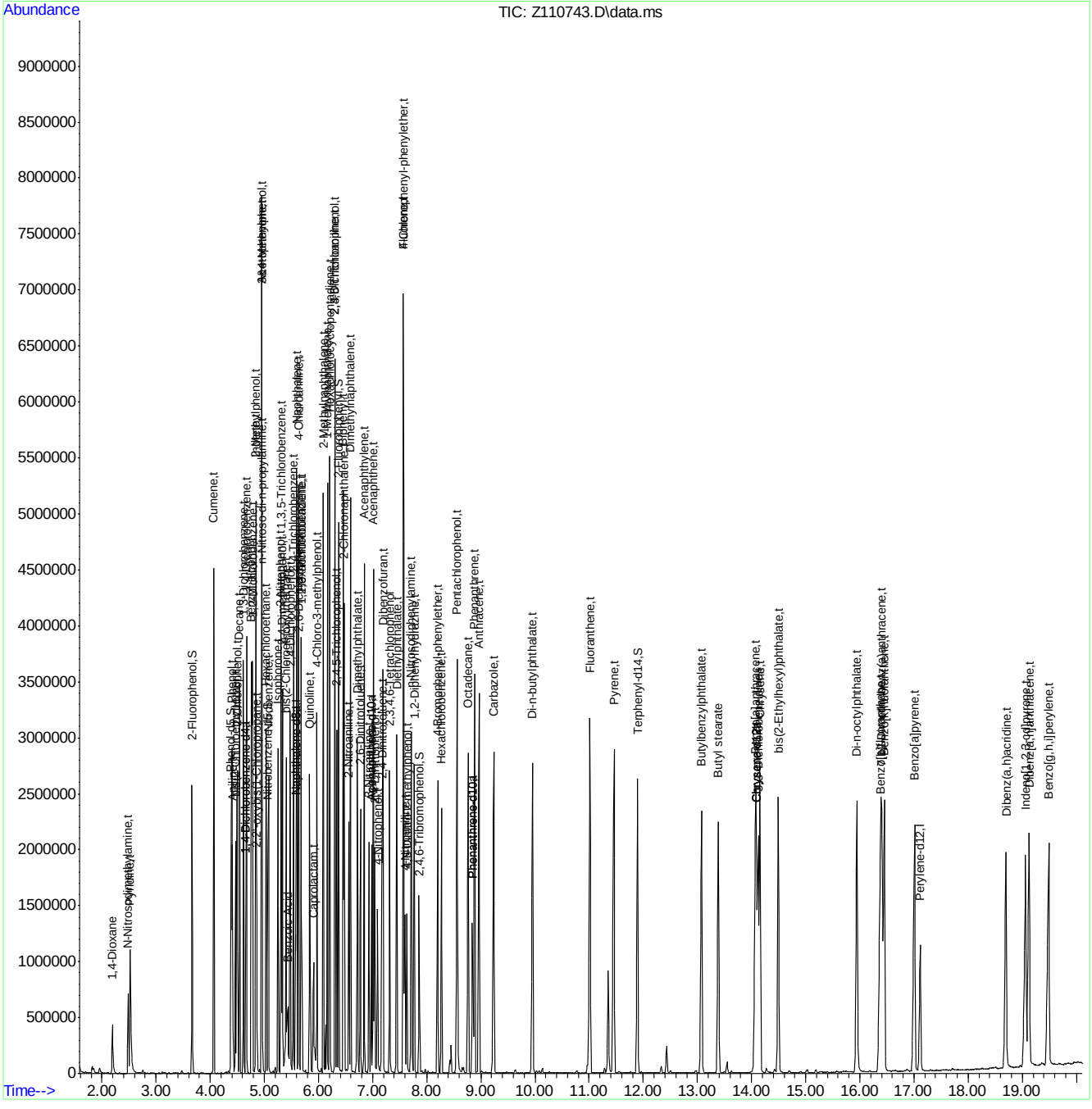
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110743.D
Acq On : 17 May 2016 8:44 pm
Operator : ariellec
Sample : ic5533-100
Misc : op93924,ez5533,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 08:03:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:02:43 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 08:04:01 2016 RTE Page: 4

SGS ACCUTEST JC20314

Manual Integration Approval Summary

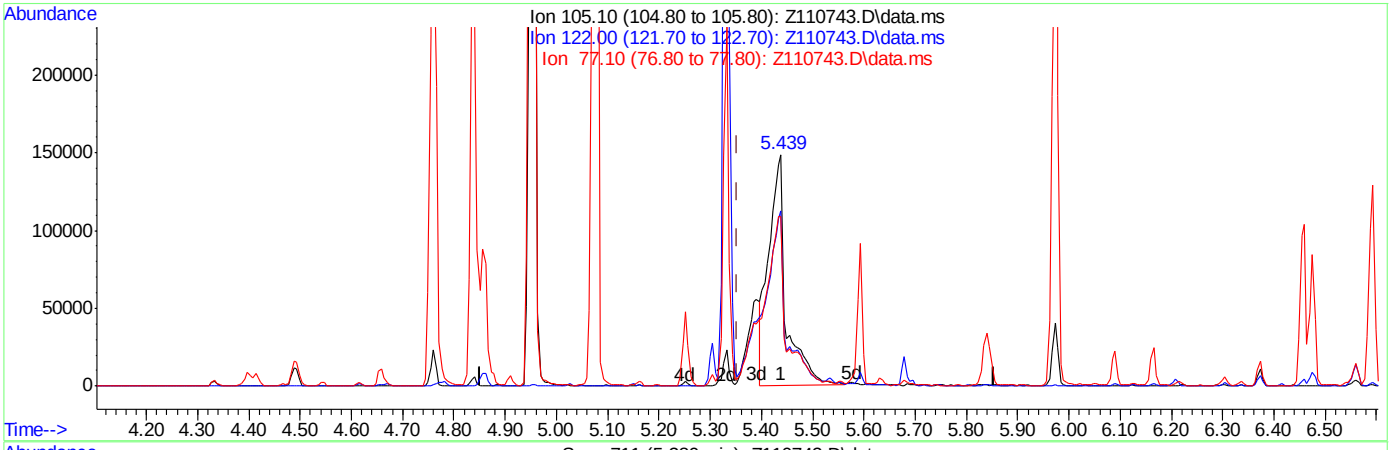
Sample Number:	EZ5533-IC5533	**Method:**	SW846 8270D
Lab FileID:	Z110743.D	**Analyst approved:**	05/18/16 09:20 Arielle Cocozza
Injection Time:	05/17/16 20:44	**Supervisor approved:**	05/18/16 17:00 Nina Pandya

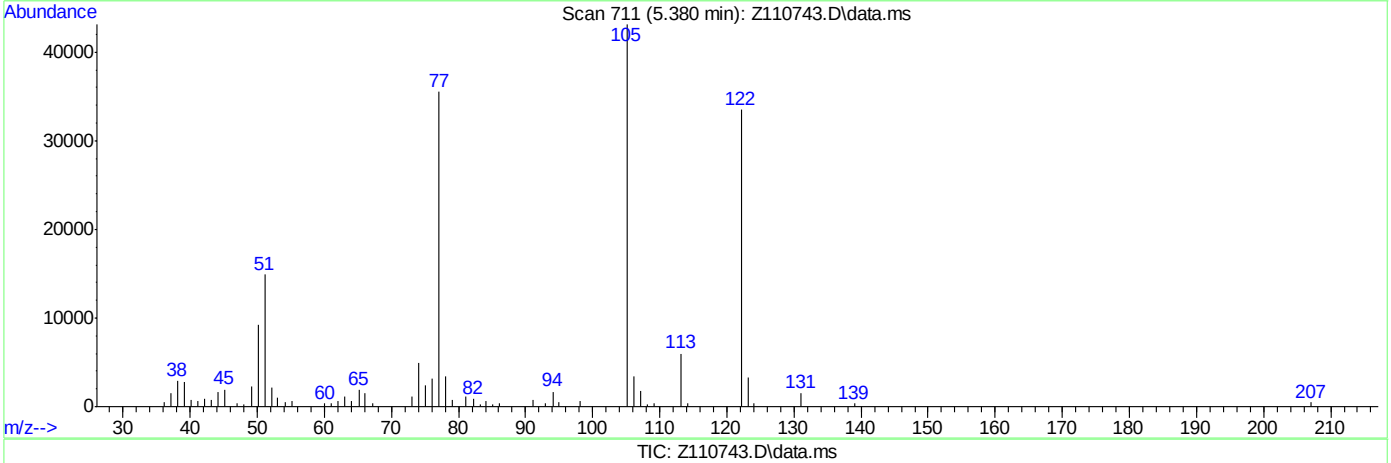
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		5.44	Poor instrument integration
Caprolactam	105-60-2		5.91	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110743.D
Acq On : 17 May 2016 8:44 pm
Operator : ariellec
Sample : ic5533-100
Misc : op93924,ez5533,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 08:00:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 07:59:47 2016
Response via : Initial Calibration





TIC: Z110743.D\data.ms

(31) Benzoic Acid

5.439min (+0.085) 120.65ppm

response 360179

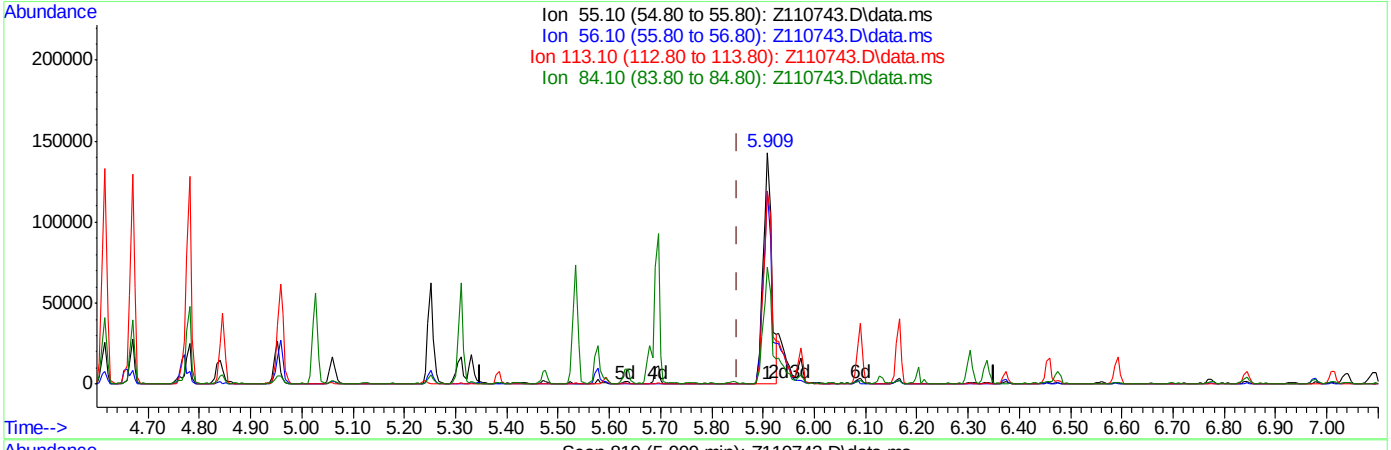
Ion	Exp%	Act%
105.10	100	100
122.00	75.90	74.04
77.10	69.00	72.00
0.00	0.00	0.00

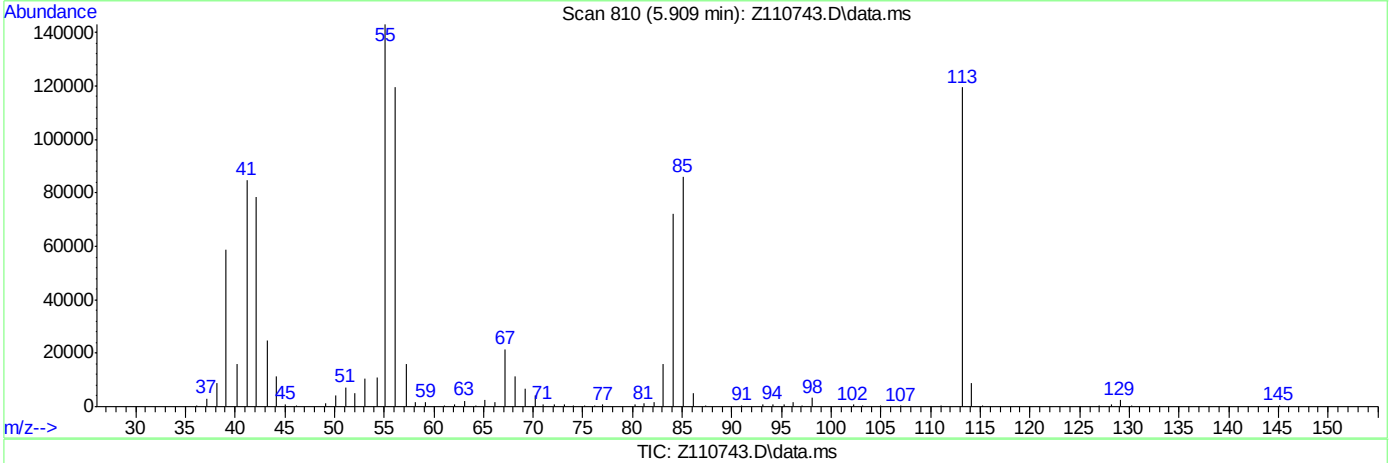
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110743.D
Acq On : 17 May 2016 8:44 pm
Operator : ariellec
Sample : ic5533-100
Misc : op93924,ez5533,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 08:00:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 07:59:47 2016
Response via : Initial Calibration





TIC: Z110743.D\data.ms

(41) Caprolactam (t)

5.909min (+0.059) 77.43ppm

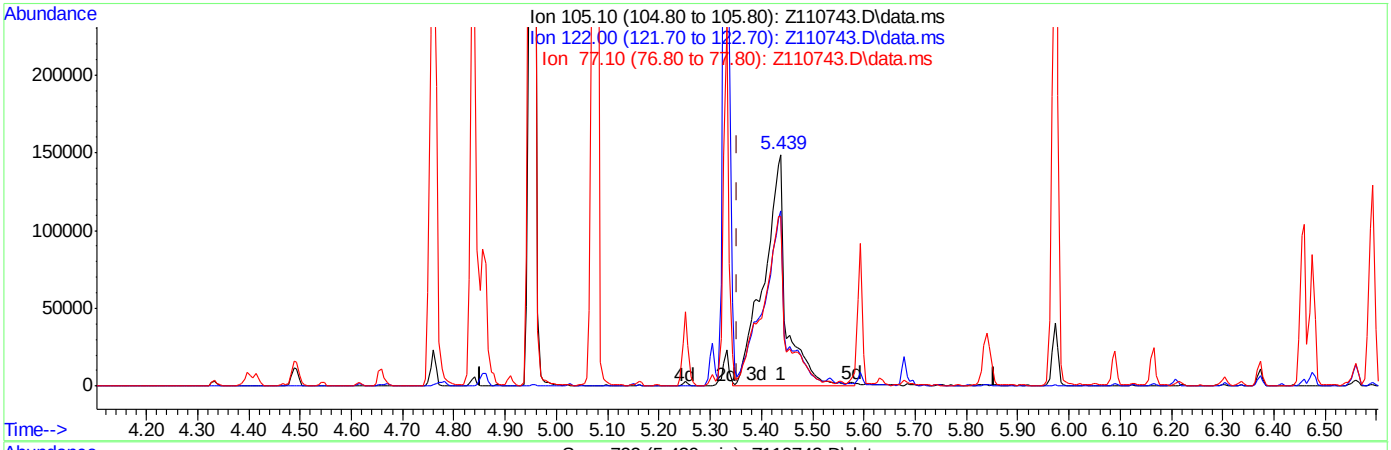
response 157769

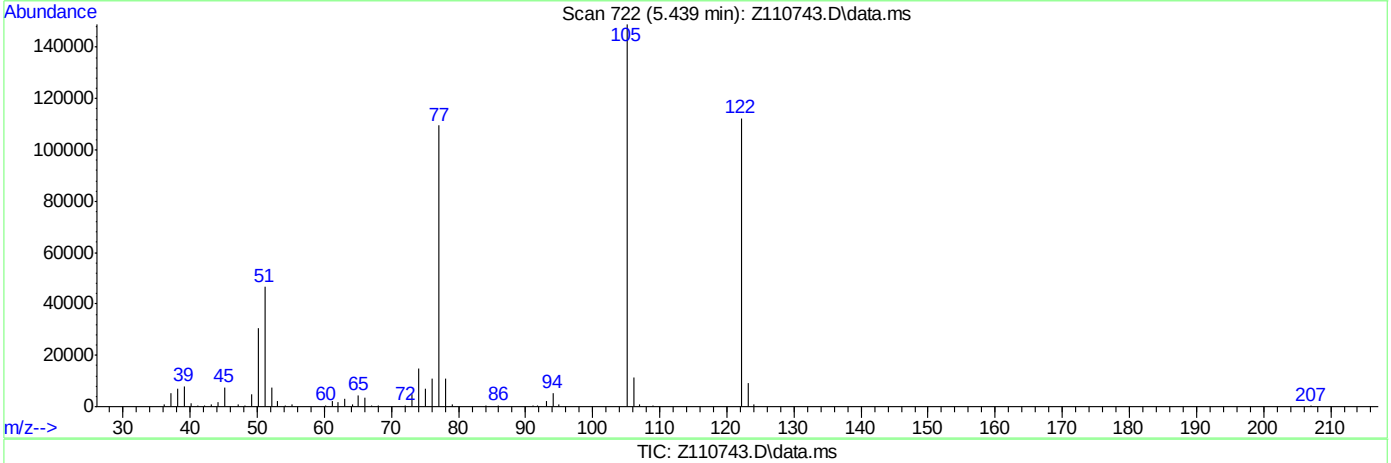
Ion	Exp%	Act%
55.10	100	100
56.10	74.30	83.69
113.10	65.40	83.11
84.10	40.60	50.17

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110743.D
Acq On : 17 May 2016 8:44 pm
Operator : ariellec
Sample : ic5533-100
Misc : op93924,ez5533,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 08:02:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:02:43 2016
Response via : Initial Calibration





TIC: Z110743.D\data.ms

(31) Benzoic Acid

5.439min (+0.085) 155.11ppm m

response 463077

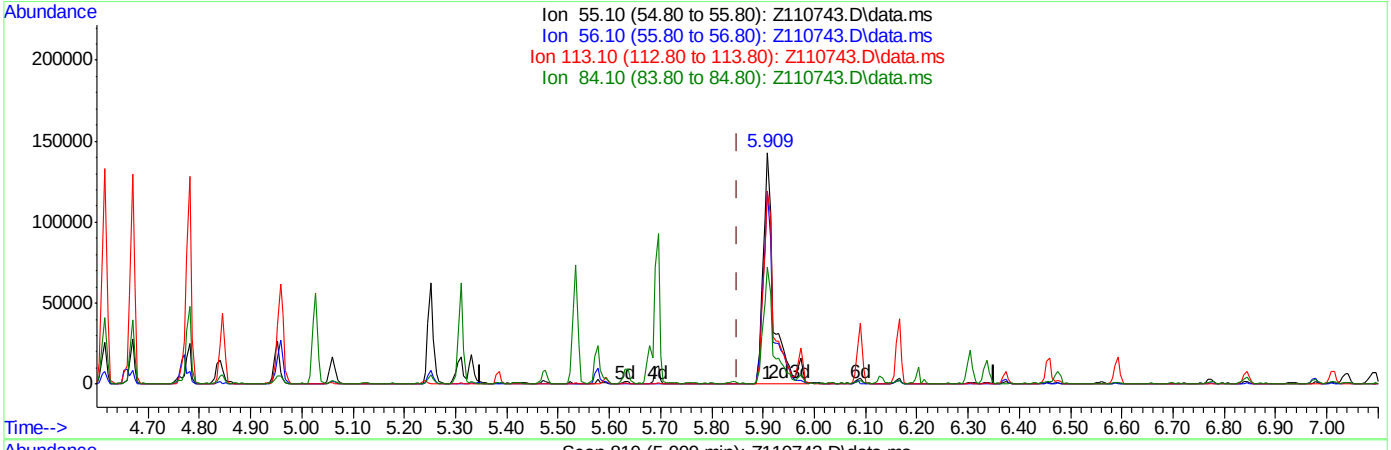
Ion	Exp%	Act%
105.10	100	100
122.00	75.90	75.43
77.10	69.00	73.48
0.00	0.00	0.00

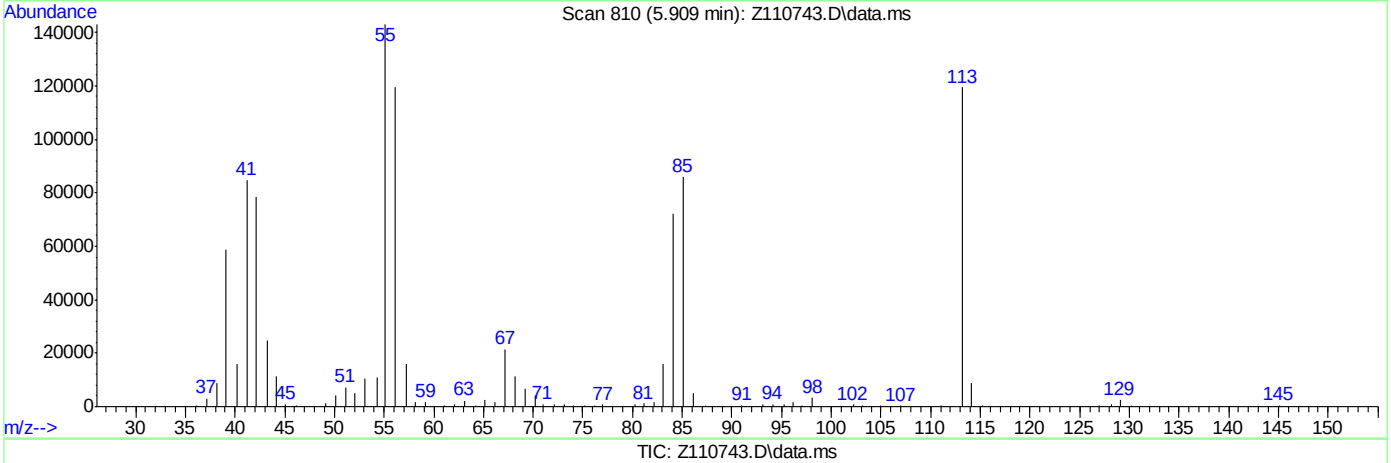
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110743.D
Acq On : 17 May 2016 8:44 pm
Operator : ariellec
Sample : ic5533-100
Misc : op93924,ez5533,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 08:02:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:02:43 2016
Response via : Initial Calibration





TIC: Z110743.D\data.ms

(41) Caprolactam (t)

5.909min (+0.059) 100.95ppm m

response 205688

Ion	Exp%	Act%
55.10	100	100
56.10	74.30	83.53
113.10	65.40	83.50
84.10	40.60	50.45

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/18/16 17:00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110744.D
Acq On : 17 May 2016 9:13 pm
Operator : ariellec
Sample : ic5533-80
Misc : op93924,ez5533,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 18 08:21:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:19:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.659	152	172530	40.00	ppm	0.00
24) Naphthalene-d8	5.578	136	647526	40.00	ppm	0.00
47) Acenaphthene-d10	6.977	164	386392	40.00	ppm	0.00
69) Phenanthrene-d10	8.842	188	670092	40.00	ppm	0.00
83) Chrysene-d12	14.093	240	649603	40.00	ppm	0.02
92) Perylene-d12	17.112	264	597798	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.659	152	172530	40.00	ppm	0.00
104) Phenanthrene-d10a	8.842	188	670092	40.00	ppm	0.00
108) Chrysene-d12a	14.093	240	649603	40.00	ppm	0.02
110) Acenaphthene-d10a	6.977	164	386392	40.00	ppm	0.00
112) Naphthalene-d8a	5.578	136	647526	40.00	ppm	0.00
114) Chrysene-d12b	14.093	240	649603	40.00	ppm	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.665	112	464881	79.79	ppm	0.00
Spiked Amount 50.000			Recovery	=	159.58%	
8) Phenol-d5	4.386	99	563611	78.23	ppm	0.01
Spiked Amount 50.000			Recovery	=	156.46%	
25) Nitrobenzene-d5	5.059	82	460345	75.75	ppm	0.00
Spiked Amount 50.000			Recovery	=	151.50%	
51) 2-Fluorobiphenyl	6.374	172	930928	72.89	ppm	0.00
Spiked Amount 50.000			Recovery	=	145.78%	
73) 2,4,6-Tribromophenol	7.859	330	138067	82.29	ppm	0.00
Spiked Amount 50.000			Recovery	=	164.58%	
86) Terphenyl-d14	11.887	244	1079216	77.13	ppm	0.00
Spiked Amount 50.000			Recovery	=	154.26%	
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	2.191	88	177018	72.25	ppm	99
3) Pyridine	2.517	79	456151	81.95	ppm	98
4) N-Nitrosodimethylamine	2.484	74	259509	83.07	ppm	99
6) Indene	4.846	116	718410	71.43	ppm	98
7) Cumene	4.066	105	1110220	76.43	ppm	99
9) Phenol	4.397	94	599301	80.65	ppm	85
10) Aniline	4.413	93	549317	67.10	ppm	81
11) bis(2-Chloroethyl)ether	4.466	93	367741	73.96	ppm	94
12) 2-Chlorophenol	4.504	128	447048	72.25	ppm	93
13) Decane	4.541	43	334194	71.53	ppm	99
14) 1,3-Dichlorobenzene	4.616	146	508085	74.19	ppm	99
15) 1,4-Dichlorobenzene	4.669	146	495940	73.54	ppm	98
16) Benzyl alcohol	4.760	108	276835	71.00	ppm	95
17) 1,2-Dichlorobenzene	4.782	146	450736	71.27	ppm	99
18) Acetophenone	4.953	105	587405	71.70	ppm	79
19) 2-Methylphenol	4.835	108	381683	73.14	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.856	121	119534	72.11	ppm	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110744.D
Acq On : 17 May 2016 9:13 pm
Operator : ariellec
Sample : ic5533-80
Misc : op93924,ez5533,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 18 08:21:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:19:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.947	108	419993	74.95	ppm	99
22) n-Nitroso-di-n-propyla...	4.958	70	292366	70.65	ppm	98
23) Hexachloroethane	5.027	201	174311	76.91	ppm	98
26) Nitrobenzene	5.075	77	449060	74.47	ppm	94
27) Quinoline	5.839	129	910159	78.81	ppm	99
28) Isophorone	5.252	82	783922	75.49	ppm	97
29) 2-Nitrophenol	5.300	139	250133	81.89	ppm	97
30) 2,4-Dimethylphenol	5.332	107	428695	82.07	ppm	97
31) Benzoic Acid	5.428	105	372202m	102.41	ppm	
32) bis(2-Chloroethoxy)met...	5.401	93	454260	74.45	ppm	98
33) 2,4-Dichlorophenol	5.471	162	372892	77.85	ppm	98
34) 2,6-Dichlorophenol	5.636	162	348099	74.80	ppm	96
35) 1,3,5-Trichlorobenzene	5.311	180	421690	73.54	ppm	99
36) 1,2,4-Trichlorobenzene	5.535	180	413062	75.33	ppm	98
37) 1,2,3-Trichlorobenzene	5.695	180	387243	74.71	ppm	99
38) Naphthalene	5.594	128	1277122	74.43	ppm	99
39) 4-Chloroaniline	5.631	127	520375	72.98	ppm	95
40) 2,3-Dichloroaniline	6.304	161	453322	76.19	ppm	97
41) Caprolactam	5.904	55	155897	77.51	ppm	98
42) Hexachlorobutadiene	5.679	225	230271	74.33	ppm	99
43) 4-Chloro-3-methylphenol	5.973	107	408747	77.40	ppm	95
44) 2-Methylnaphthalene	6.090	141	754048	74.57	ppm	100
45) 1-Methylnaphthalene	6.165	141	769891	74.14	ppm	98
46) Dimethylnaphthalene	6.593	156	790218	75.67	ppm	99
48) Hexachlorocyclopentadiene	6.208	237	530170	179.52	ppm	99
49) 2,4,6-Trichlorophenol	6.304	196	267852	75.81	ppm	99
50) 2,4,5-Trichlorophenol	6.336	196	283138	74.83	ppm	100
52) 2-Chloronaphthalene	6.475	162	800845	72.15	ppm	99
53) Biphenyl	6.459	154	1075106	73.97	ppm	99
54) 2-Nitroaniline	6.561	65	254590	80.13	ppm	91
55) Dimethylphthalate	6.721	163	983169	75.06	ppm	99
56) Acenaphthylene	6.844	152	1387001	73.59	ppm	99
57) 2,6-Dinitrotoluene	6.774	165	213548	84.90	ppm	93
58) 3-Nitroaniline	6.935	138	254376	84.03	ppm	95
59) Acenaphthene	7.009	153	850385	73.91	ppm	99
60) 2,4-Dinitrophenol	7.036	184	222786	306.61	ppm	82
61) 4-Nitrophenol	7.090	109	155269	90.25	ppm	96
62) Dibenzofuran	7.191	168	1160753	73.39	ppm	98
63) 2,4-Dinitrotoluene	7.170	165	304088	89.29	ppm	97
64) 2,3,4,6-Tetrachlorophenol	7.314	232	246735	82.87	ppm	97
65) Diethylphthalate	7.442	149	1013128	76.84	ppm	99
66) Fluorene	7.570	166	977743	74.39	ppm	97
67) 4-Chlorophenyl-phenyle...	7.570	204	457751	74.64	ppm	98
68) 4-Nitroaniline	7.597	138	253204	82.50	ppm	98
70) 4,6-Dinitro-2-methylph...	7.629	198	170230	130.08	ppm	97
71) n-Nitrosodiphenylamine	7.715	169	689316	74.58	ppm	99
72) 1,2-Diphenylhydrazine	7.763	77	921526	72.79	ppm	98
74) 4-Bromophenyl-phenylether	8.201	248	277953	77.51	ppm	98
75) Hexachlorobenzene	8.270	284	290381	74.71	ppm	93
76) Pentachlorophenol	8.559	266	425998	176.29	ppm	99

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110744.D
Acq On : 17 May 2016 9:13 pm
Operator : ariellec
Sample : ic5533-80
Misc : op93924,ez5533,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 18 08:21:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:19:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	8.884	178	1385696	73.88	ppm	99
78) Anthracene	8.965	178	1421359	74.69	ppm	99
79) Carbazole	9.237	167	1338323	75.45	ppm	99
80) Di-n-butylphthalate	9.953	149	1771204	77.83	ppm	99
81) Fluoranthene	11.011	202	1606370	76.18	ppm	99
82) Octadecane	8.762	57	490915	76.37	ppm	99
84) Pyrene	11.454	202	1625809	74.24	ppm	97
85) Butyl stearate	13.383	56	347456	79.02	ppm	98
87) Butylbenzylphthalate	13.073	149	796392	78.37	ppm	98
88) Benzo[a]anthracene	14.066	228	1511957	75.68	ppm	99
89) 3,3'-Dichlorobenzidine	14.115	252	546127	79.21	ppm	98
90) Chrysene	14.152	228	1407933	75.24	ppm	100
91) bis(2-Ethylhexyl)phtha...	14.489	149	1065851	77.40	ppm	99
93) Di-n-octylphthalate	15.942	149	1834273	77.33	ppm	100
94) Benzo[b]fluoranthene	16.374	252	1506117	76.08	ppm	100
95) Benzo[k]fluoranthene	16.444	252	1366838	72.88	ppm	99
96) Benzo[a]pyrene	17.005	252	1307722	74.23	ppm	99
97) Indeno[1,2,3-cd]pyrene	19.056	276	1171700	73.69	ppm	98
98) Dibenz(a,h)acridine	18.698	279	1105275	75.58	ppm	99
99) Dibenz[a,h]anthracene	19.120	278	1236325	75.09	ppm	99
100) 7,12-Dimethylbenz(a)an...	16.401	256	654561	83.77	ppm	98
101) Benzo[g,h,i]perylene	19.478	276	1232200	73.38	ppm	98

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

7.6.62

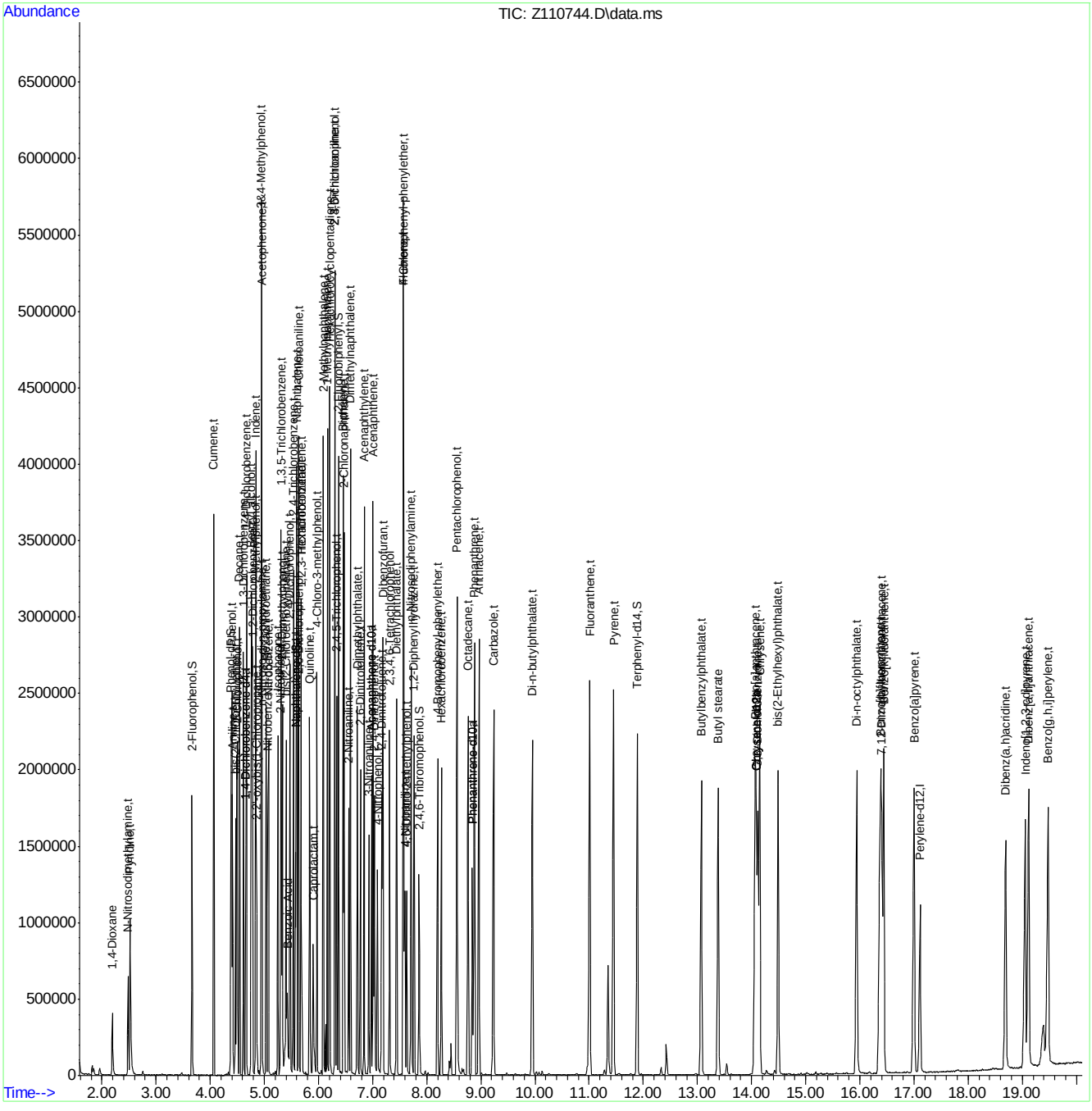
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110744.D
Acq On : 17 May 2016 9:13 pm
Operator : ariellec
Sample : ic5533-80
Misc : op93924,ez5533,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 18 08:21:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:19:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Manual Integration Approval Summary

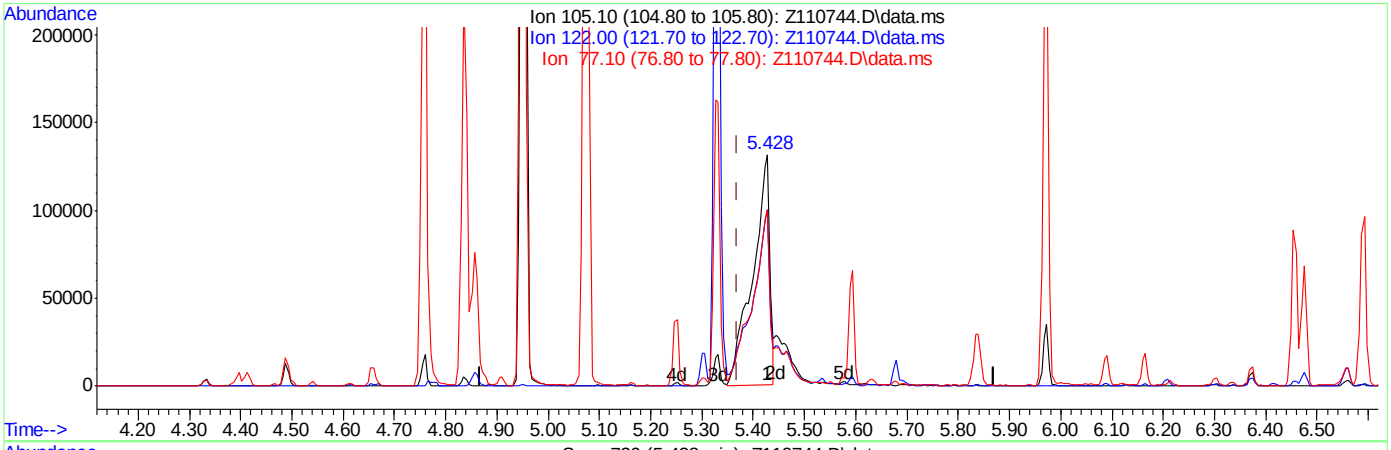
Sample Number:	EZ5533-IC5533	**Method:**	SW846 8270D
Lab FileID:	Z110744.D	**Analyst approved:**	05/18/16 09:20 Arielle Cocozza
Injection Time:	05/17/16 21:13	**Supervisor approved:**	05/18/16 17:00 Nina Pandya

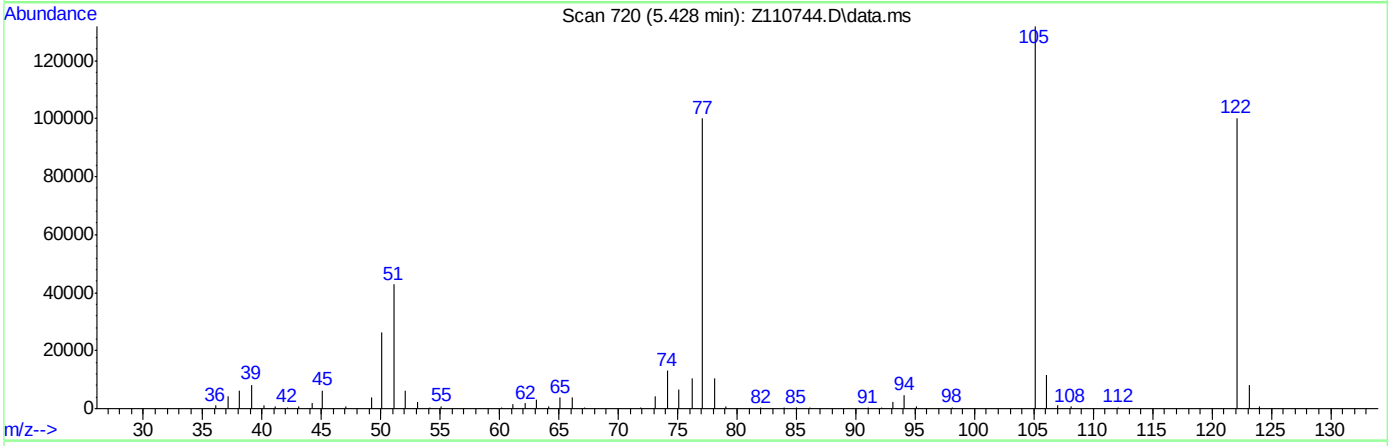
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		5.43	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110744.D
Acq On : 17 May 2016 9:13 pm
Operator : ariellec
Sample : ic5533-80
Misc : op93924,ez5533,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 18 08:20:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:19:31 2016
Response via : Initial Calibration





TIC: Z110744.D\data.ms

(31) Benzoic Acid

5.428min (+0.059) 83.13ppm

response 302129

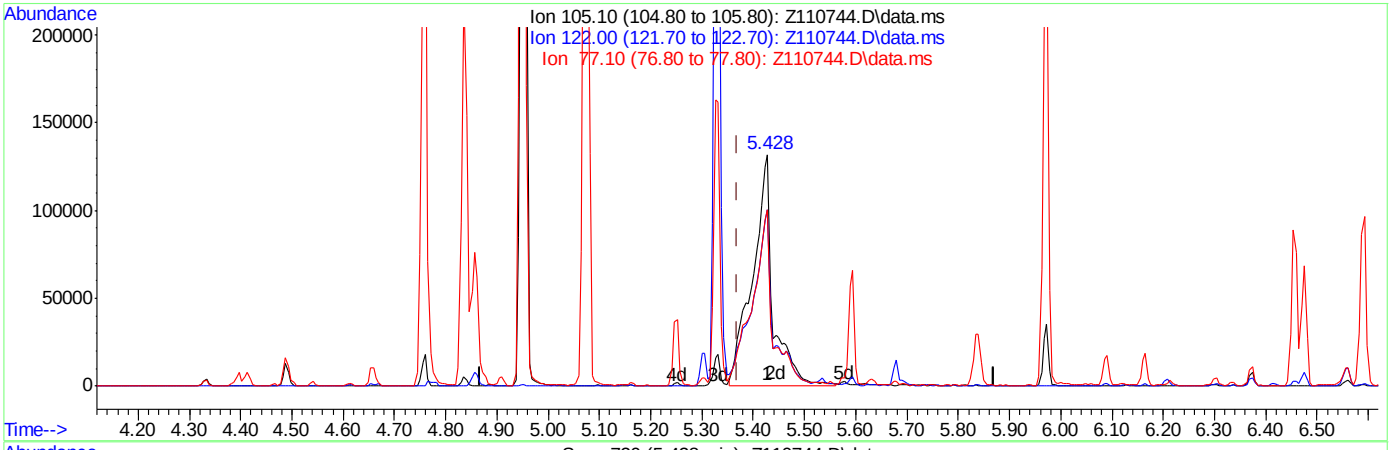
Ion	Exp%	Act%
105.10	100	100
122.00	75.70	73.06
77.10	73.00	74.77
0.00	0.00	0.00

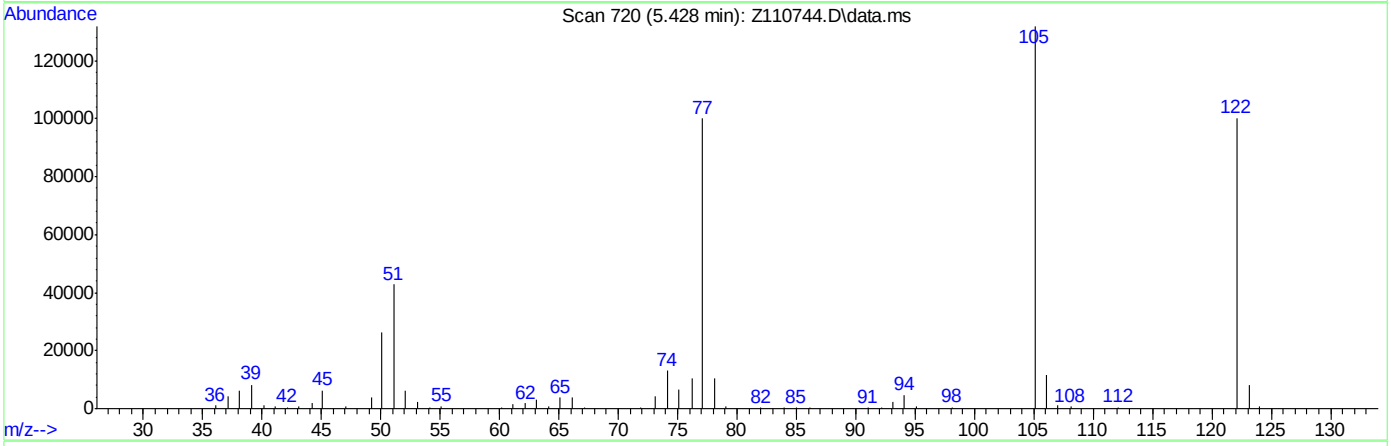
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5533\
Data File : Z110744.D
Acq On : 17 May 2016 9:13 pm
Operator : ariellec
Sample : ic5533-80
Misc : op93924,ez5533,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 18 08:20:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:19:31 2016
Response via : Initial Calibration





TIC: Z110744.D\data.ms

(31) Benzoic Acid

5.428min (+0.059) 102.41ppm m

response 372202

Ion	Exp%	Act%
105.10	100	100
122.00	75.70	75.98
77.10	73.00	75.94
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110746.D
Acq On : 17 May 2016 10:56 pm
Operator : seanb1
Sample : icc5534-50
Misc : op93924,ez5534
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 08:41:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:41:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.653	152	153814	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	584328	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	335126	40.00	ppm	0.00
69) Phenanthrene-d10	8.836	188	571616	40.00	ppm	0.00
83) Chrysene-d12	14.072	240	557433	40.00	ppm	-0.02
92) Perylene-d12	17.101	264	497632	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.653	152	153814	40.00	ppm	0.00
104) Phenanthrene-d10a	8.836	188	571616	40.00	ppm	0.00
108) Chrysene-d12a	14.072	240	557433	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	335126	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	584328	40.00	ppm	0.00
114) Chrysene-d12b	14.072	240	557433	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%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	10.995	57	178400	50.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	100.00%	
106) o-terphenyl	9.515	230	406995	50.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	100.00%	
Target Compounds						Qvalue
103) Benzaldehyde	4.328	105	193810	50.00	ppm	100
107) Atrazine	8.452	215	73087	50.00	ppm	100
109) Benzidine	11.347	184	308554	50.00	ppm	100
111) 1,2,4,5-Tetrachloroben...	6.213	216	223857	50.00	ppm	100
113) Hydroquinone	5.845	110	249402	49.04	ppm	100

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

7.6.63

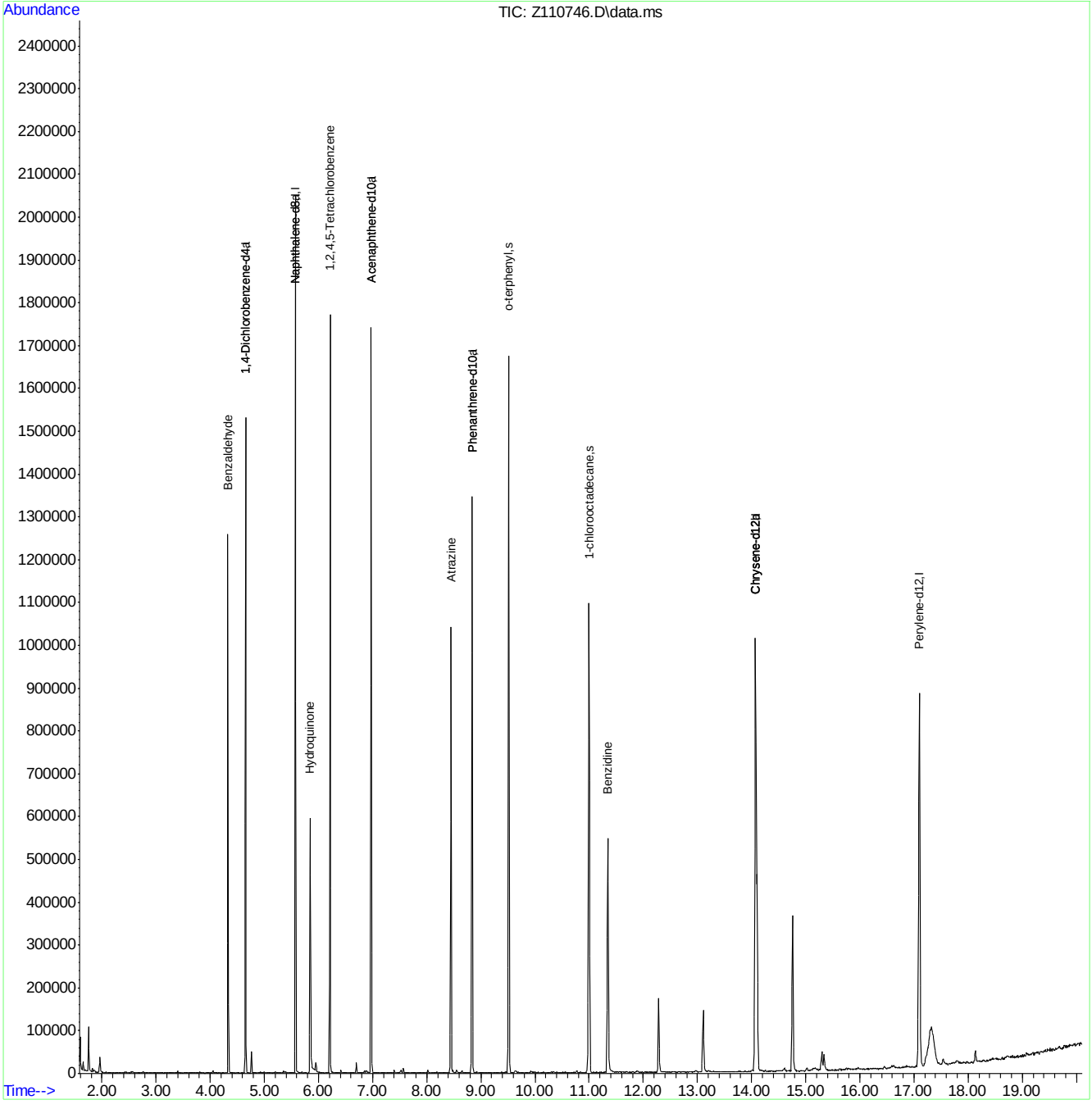
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110746.D
Acq On : 17 May 2016 10:56 pm
Operator : seanb1
Sample : icc5534-50
Misc : op93924,ez5534
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 08:41:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:41:20 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 08:41:58 2016 RTE

Page: 2

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/18/16 17:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110747.D
Acq On : 17 May 2016 11:25 pm
Operator : seanb1
Sample : ic5534-25
Misc : op93924,ez5534
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 08:52:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:47:43 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.653	152	157642	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	606815	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	351093	40.00	ppm	0.00
69) Phenanthrene-d10	8.836	188	599714	40.00	ppm	0.00
83) Chrysene-d12	14.072	240	587981	40.00	ppm	-0.02
92) Perylene-d12	17.101	264	523233	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.653	152	157642	40.00	ppm	0.00
104) Phenanthrene-d10a	8.836	188	599714	40.00	ppm	0.00
108) Chrysene-d12a	14.072	240	587981	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	351093	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	606815	40.00	ppm	0.00
114) Chrysene-d12b	14.072	240	587981	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%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	10.989	57	90473	24.04	ppm	0.00
Spiked Amount 50.000			Recovery = 48.08%			
106) o-terphenyl	9.515	230	213759	24.64	ppm	0.00
Spiked Amount 50.000			Recovery = 49.28%			
Target Compounds						Qvalue
103) Benzaldehyde	4.328	105	102065	26.34	ppm	98
107) Atrazine	8.446	215	37621	24.49	ppm	97
109) Benzidine	11.342	184	107873m	22.13	ppm	
111) 1,2,4,5-Tetrachloroben...	6.213	216	117913	24.69	ppm	98
113) Hydroquinone	5.839	110	122271	25.04	ppm	95

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

7.6.64

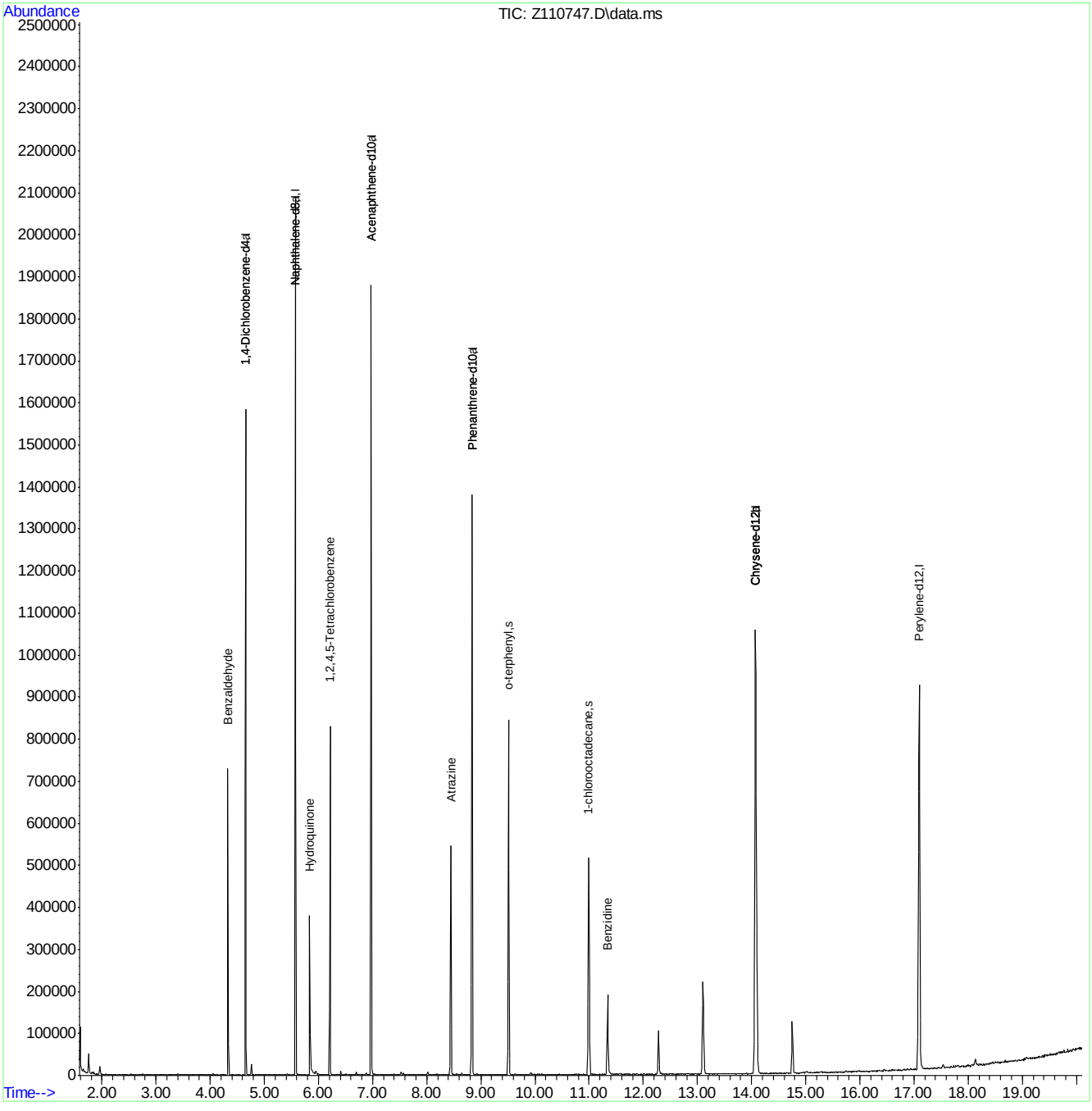
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110747.D
Acq On : 17 May 2016 11:25 pm
Operator : seanb1
Sample : ic5534-25
Misc : op93924,ez5534
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 08:52:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:47:43 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 08:53:13 2016 RTE

SGS ACCUTEST JC20314

Manual Integration Approval Summary

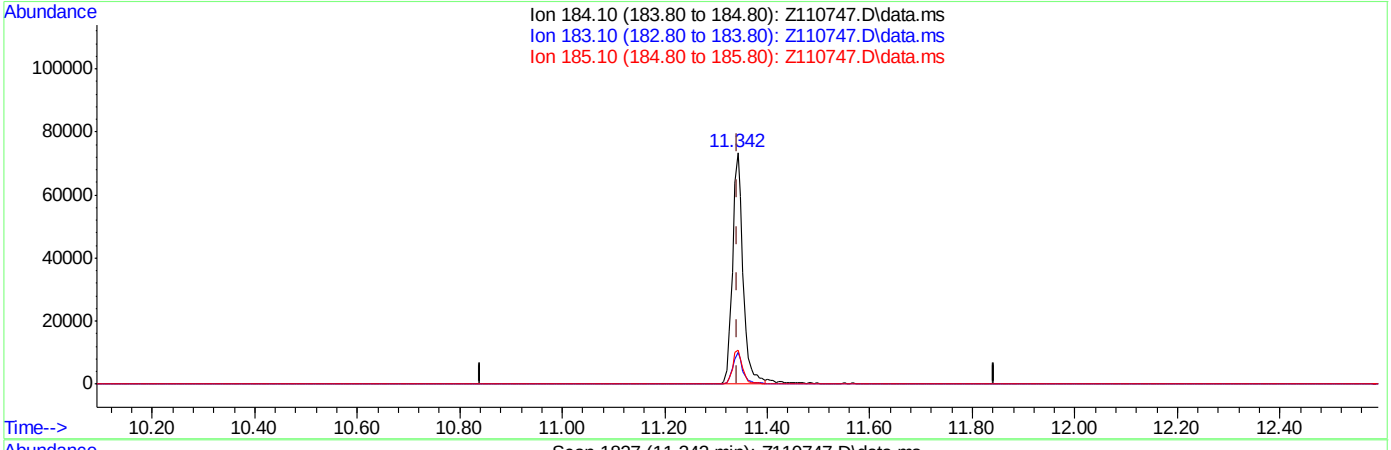
Sample Number:	EZ5534-IC5534	**Method:**	SW846 8270D
Lab FileID:	Z110747.D	**Analyst approved:**	05/18/16 10:17 Arielle Cocozza
Injection Time:	05/17/16 23:25	**Supervisor approved:**	05/18/16 17:01 Nina Pandya

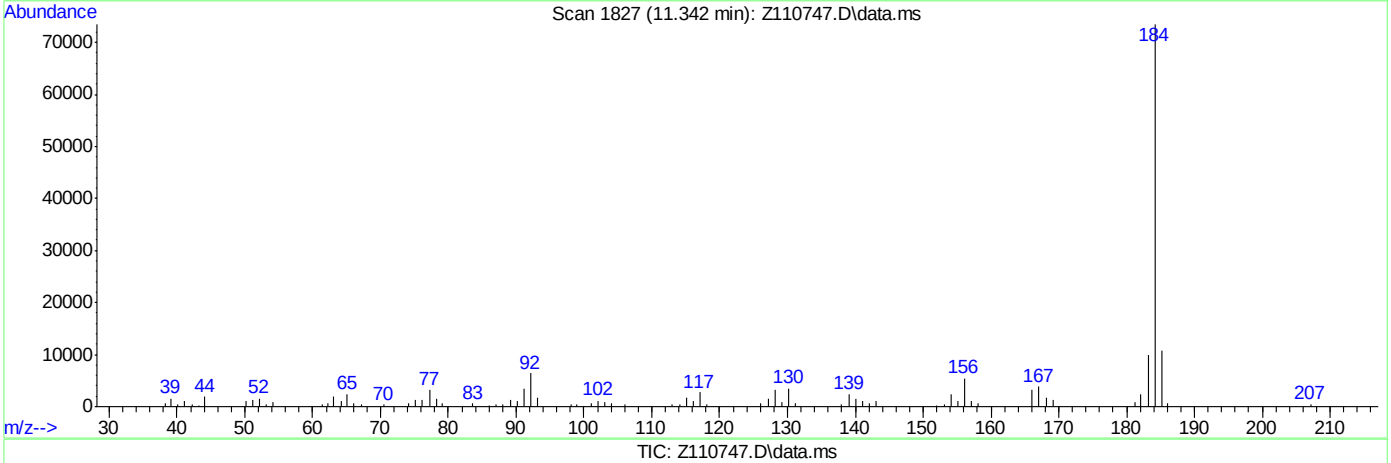
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzidine	92-87-5		11.34	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110747.D
Acq On : 17 May 2016 11:25 pm
Operator : seanb1
Sample : ic5534-25
Misc : op93924,ez5534
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 08:47:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:47:43 2016
Response via : Initial Calibration





TIC: Z110747.D\data.ms

(109) Benzidine

11.342min (0.000) 21.67ppm

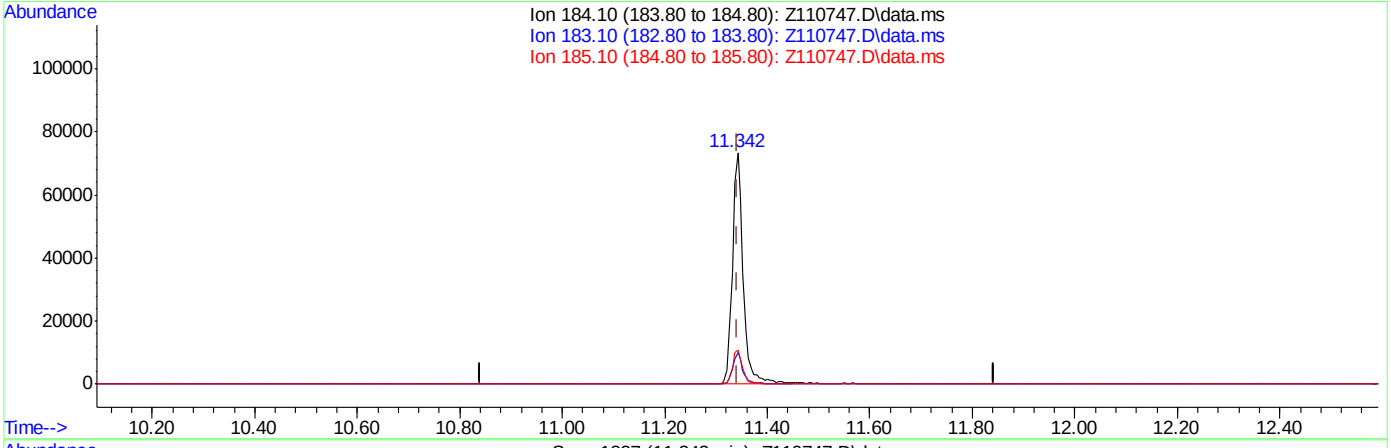
response 105633

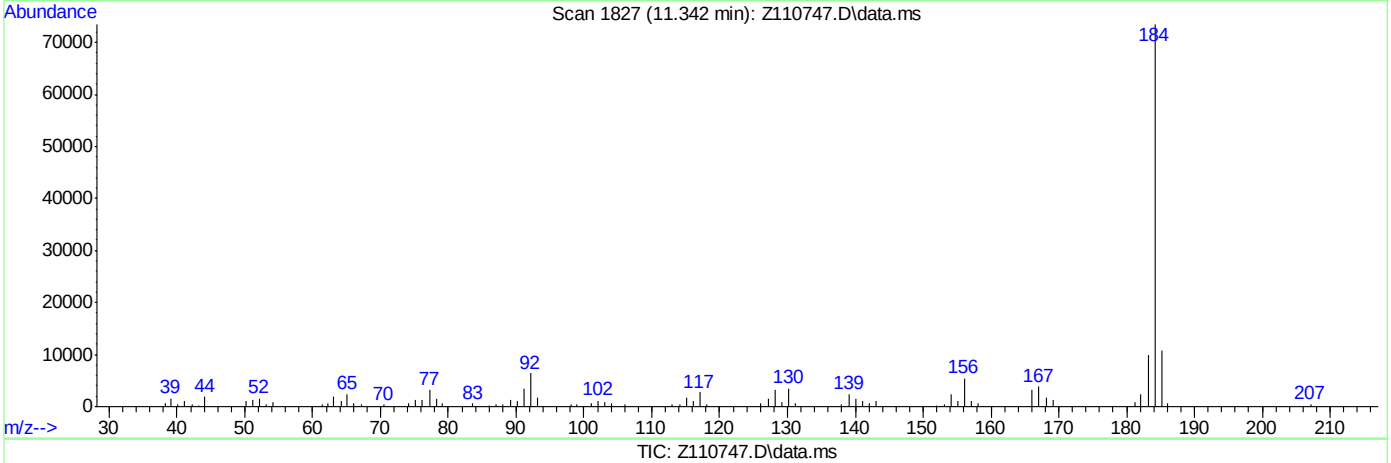
Ion	Exp%	Act%
184.10	100	100
183.10	13.20	13.71
185.10	14.00	14.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110747.D
Acq On : 17 May 2016 11:25 pm
Operator : seanb1
Sample : ic5534-25
Misc : op93924,ez5534
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 08:47:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:47:43 2016
Response via : Initial Calibration





TIC: Z110747.D\data.ms

(109) Benzidine

11.342min (0.000) 22.13ppm m

response 107873

Ion	Exp%	Act%
184.10	100	100
183.10	13.20	13.61
185.10	14.00	14.62
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110748.D
Acq On : 17 May 2016 11:54 pm
Operator : seanb1
Sample : ic5534-1
Misc : op93924,ez5534
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 08:55:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:54:41 2016
Response via : Initial Calibration

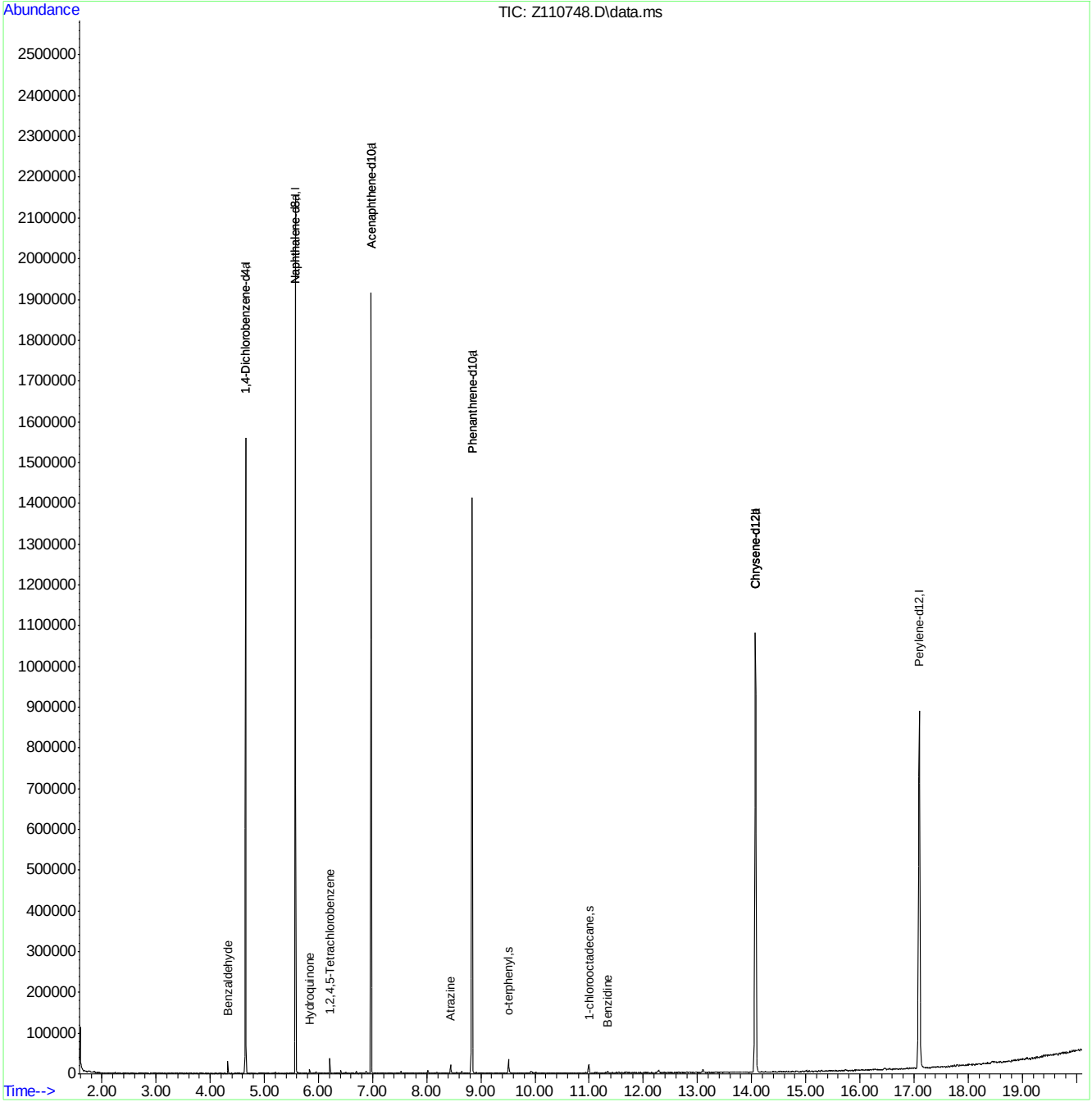
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	159625	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	609072	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	357922	40.00	ppm	0.00
69) Phenanthrene-d10	8.837	188	613726	40.00	ppm	0.00
83) Chrysene-d12	14.072	240	594923	40.00	ppm	-0.02
92) Perylene-d12	17.101	264	528141	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.654	152	159625	40.00	ppm	0.00
104) Phenanthrene-d10a	8.837	188	613726	40.00	ppm	0.00
108) Chrysene-d12a	14.072	240	594923	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	357922	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	609072	40.00	ppm	0.00
114) Chrysene-d12b	14.072	240	594923	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%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	10.995	57	3718	0.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.94%	
106) o-terphenyl	9.510	230	9916	1.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.18%	
Target Compounds						Qvalue
103) Benzaldehyde	4.328	105	4318	1.08	ppm	93
107) Atrazine	8.441	215	1598	1.01	ppm	88
109) Benzidine	11.342	184	2327	0.53	ppm	78
111) 1,2,4,5-Tetrachloroben...	6.208	216	4868	1.00	ppm	84
113) Hydroquinone	5.840	110	3803	0.81	ppm	91

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110748.D
Acq On : 17 May 2016 11:54 pm
Operator : seanb1
Sample : ic5534-1
Misc : op93924,ez5534
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 08:55:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:54:41 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 08:55:06 2016 RTE

Page: 2

SGS ACCUTEST JC20314

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/18/16 17:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110749.D
Acq On : 18 May 2016 12:24 am
Operator : seanb1
Sample : ic5534-2
Misc : op93924,ez5534
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 08:46:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:45:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	158604	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	613372	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	363722	40.00	ppm	0.00
69) Phenanthrene-d10	8.836	188	620189	40.00	ppm	0.00
83) Chrysene-d12	14.072	240	617122	40.00	ppm	-0.02
92) Perylene-d12	17.101	264	543655	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.654	152	158604	40.00	ppm	0.00
104) Phenanthrene-d10a	8.836	188	620189	40.00	ppm	0.00
108) Chrysene-d12a	14.072	240	617122	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	363722	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	613372	40.00	ppm	0.00
114) Chrysene-d12b	14.072	240	617122	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%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	10.995	57	8196	2.08	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.16%	
106) o-terphenyl	9.510	230	19090	2.12	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.24%	
Target Compounds						Qvalue
103) Benzaldehyde	4.328	105	8832	2.31	ppm	96
107) Atrazine	8.441	215	3253	2.03	ppm	94
109) Benzidine	11.347	184	5333m	1.00	ppm	
111) 1,2,4,5-Tetrachloroben...	6.208	216	10782	2.17	ppm	98
113) Hydroquinone	5.840	110	7712	1.56	ppm	94

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

7.6.66

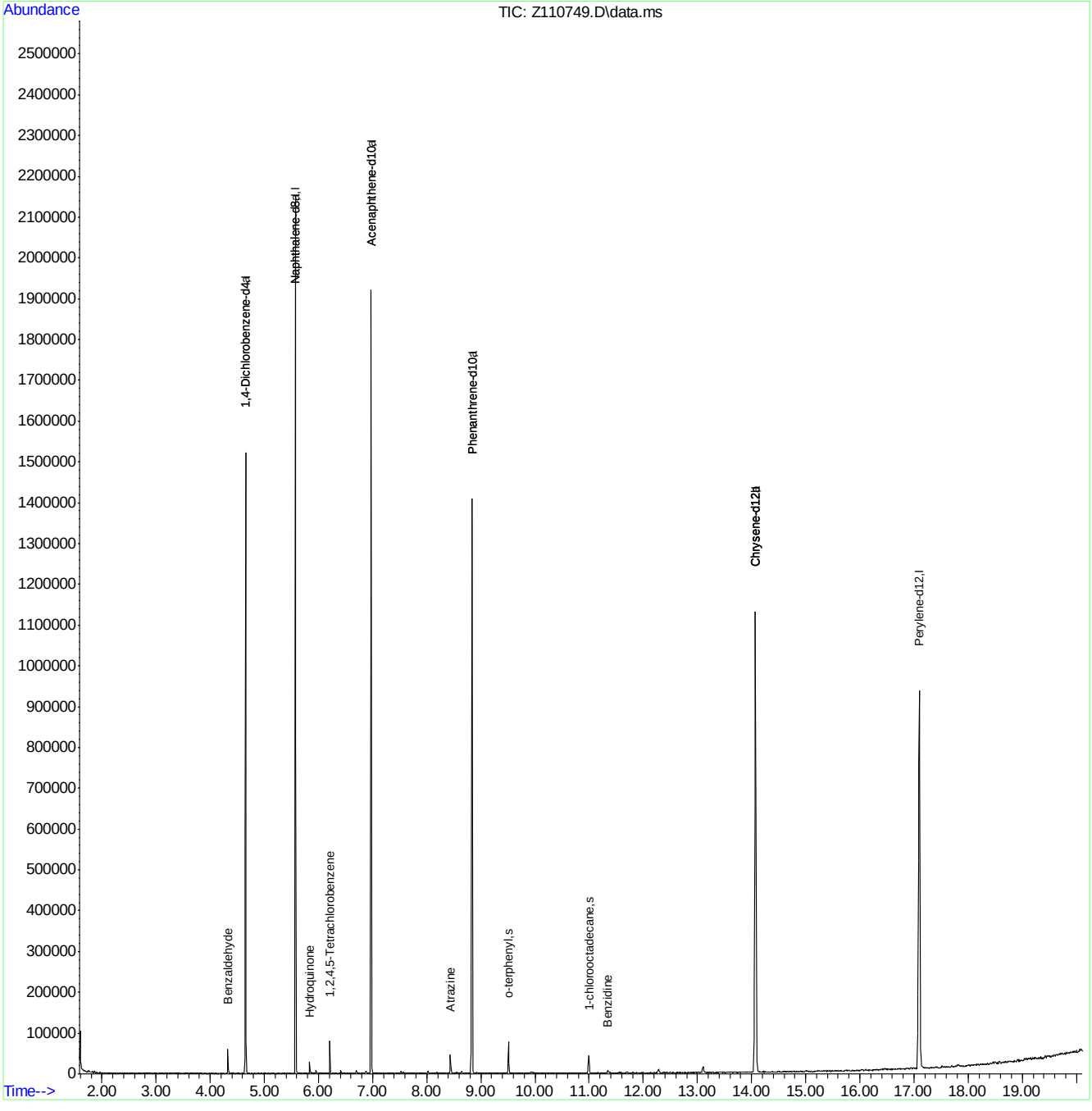
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110749.D
Acq On : 18 May 2016 12:24 am
Operator : seanb1
Sample : ic5534-2
Misc : op93924,ez5534
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 08:46:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:45:19 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 08:46:22 2016 RTE Page: 2

Manual Integration Approval Summary

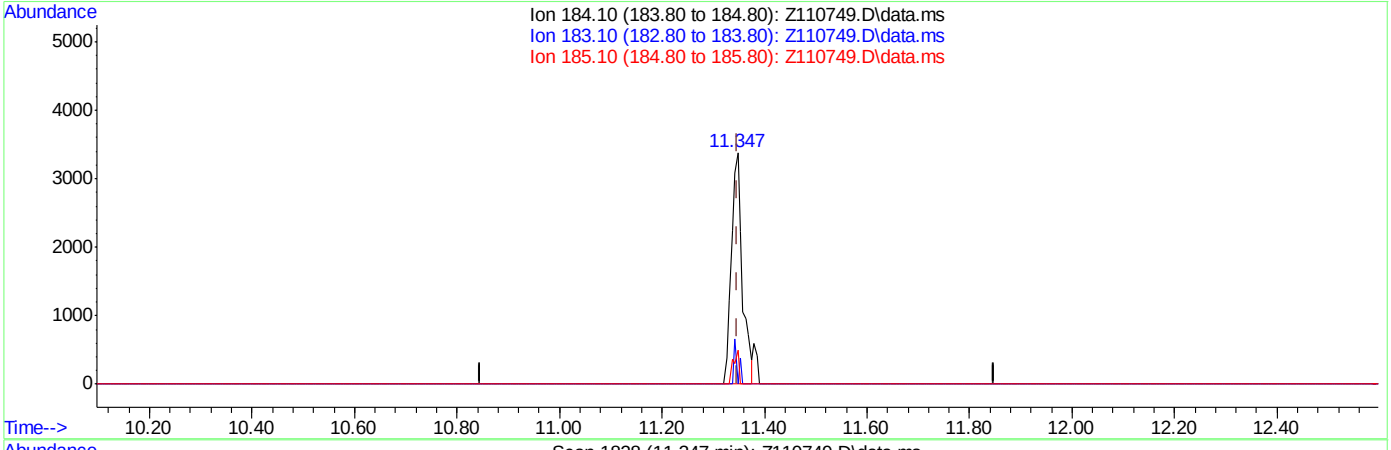
Sample Number:	EZ5534-IC5534	**Method:**	SW846 8270D
Lab FileID:	Z110749.D	**Analyst approved:**	05/18/16 10:17 Arielle Cocozza
Injection Time:	05/18/16 00:24	**Supervisor approved:**	05/18/16 17:01 Nina Pandya

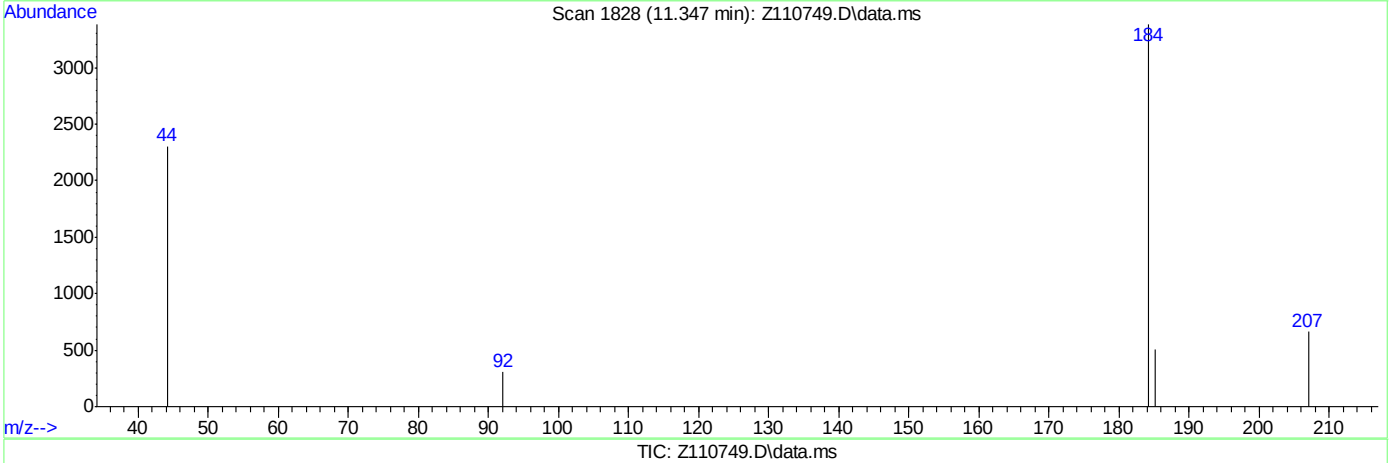
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzidine	92-87-5		11.35	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110749.D
Acq On : 18 May 2016 12:24 am
Operator : seanb1
Sample : ic5534-2
Misc : op93924,ez5534
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 08:45:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:45:19 2016
Response via : Initial Calibration





TIC: Z110749.D\data.ms

(109) Benzidine

11.347min (0.000) 0.94ppm

response 5010

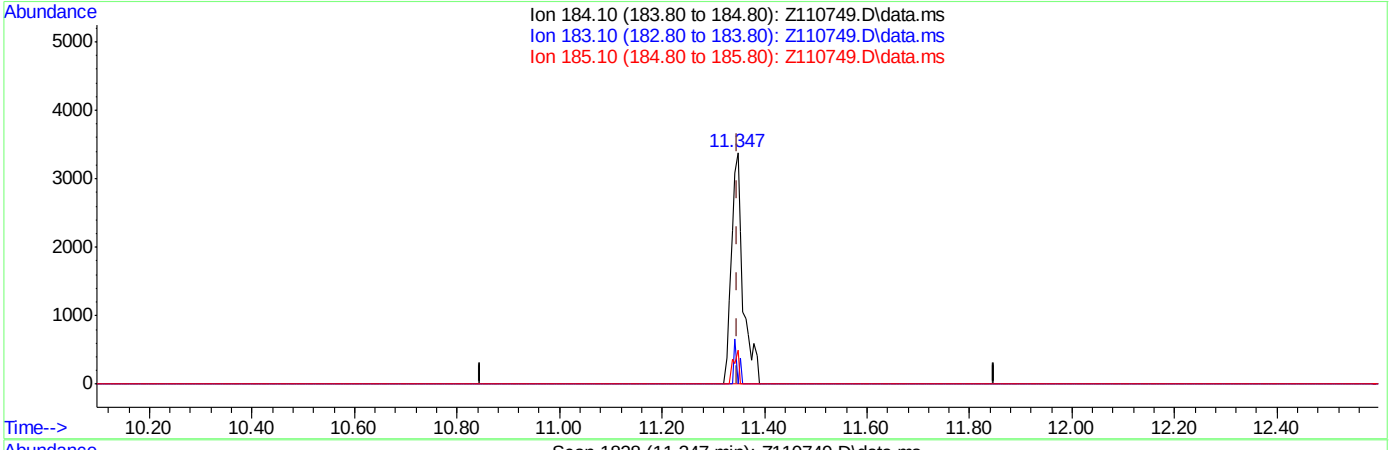
Ion	Exp%	Act%
184.10	100	100
183.10	13.20	0.00
185.10	14.00	15.72
0.00	0.00	0.00

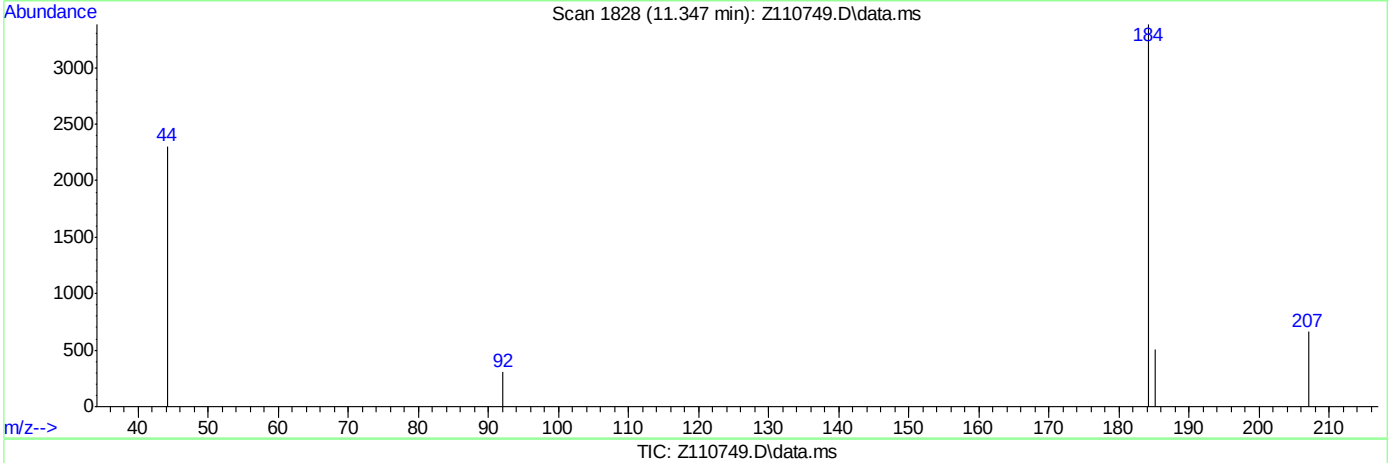
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110749.D
Acq On : 18 May 2016 12:24 am
Operator : seanb1
Sample : ic5534-2
Misc : op93924,ez5534
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 08:45:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:45:19 2016
Response via : Initial Calibration





TIC: Z110749.D\data.ms

(109) Benzidine

11.347min (0.000) 1.00ppm m

response 5333

Ion	Exp%	Act%
184.10	100	100
183.10	13.20	0.00
185.10	14.00	14.90
0.00	0.00	0.00

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110750.D
Acq On : 18 May 2016 12:53 am
Operator : seanb1
Sample : ic5534-5
Misc : op93924,ez5534
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 18 09:00:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:00:05 2016
Response via : Initial Calibration

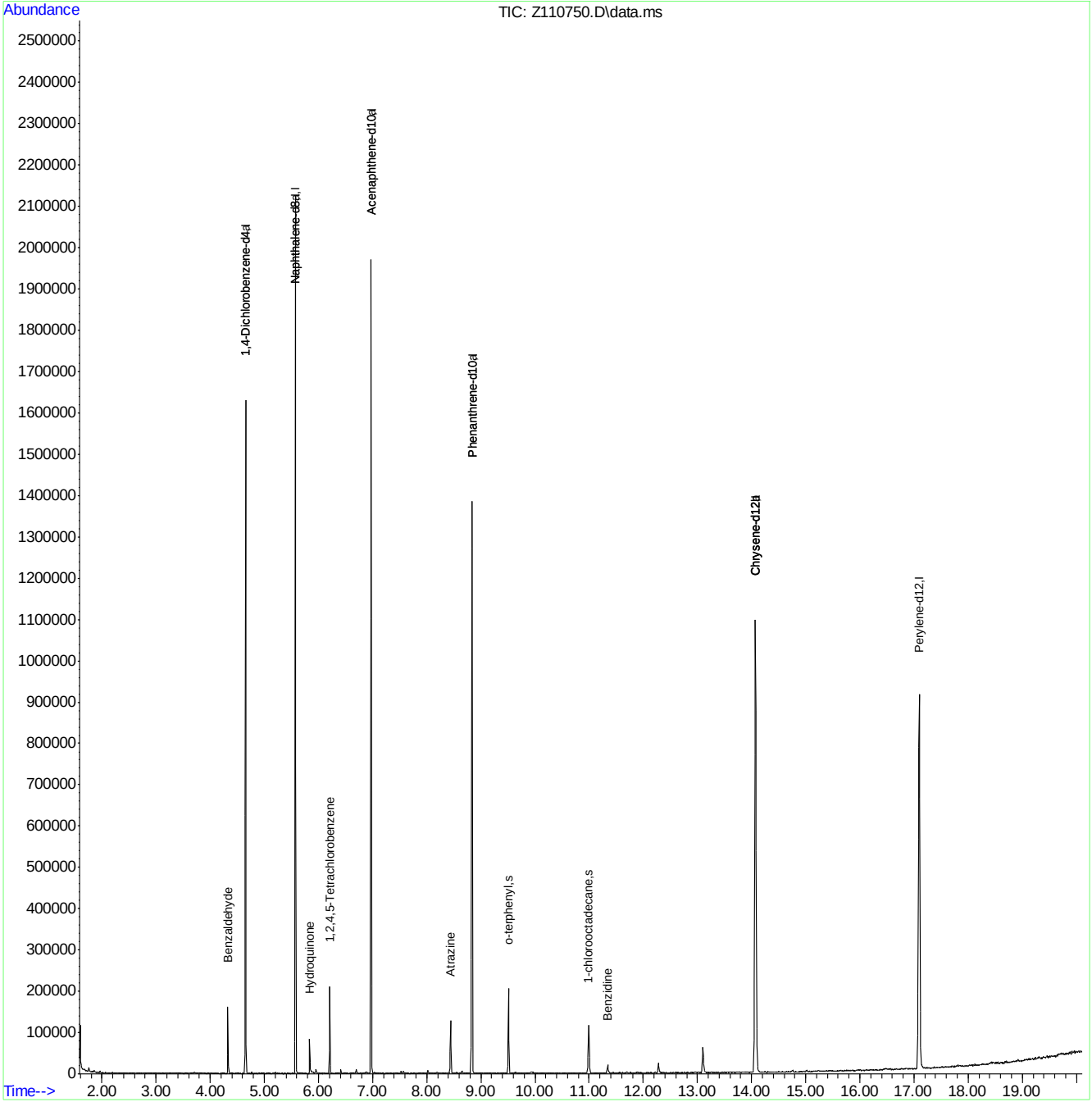
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	161178	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	612879	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	361840	40.00	ppm	0.00
69) Phenanthrene-d10	8.837	188	618455	40.00	ppm	0.00
83) Chrysene-d12	14.072	240	603319	40.00	ppm	-0.02
92) Perylene-d12	17.096	264	542044	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.654	152	161178	40.00	ppm	0.00
104) Phenanthrene-d10a	8.837	188	618455	40.00	ppm	0.00
108) Chrysene-d12a	14.072	240	603319	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	361840	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	612879	40.00	ppm	0.00
114) Chrysene-d12b	14.072	240	603319	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%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	10.989	57	19965	5.21	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.42%	
106) o-terphenyl	9.510	230	48329	5.30	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.60%	
Target Compounds						Qvalue
103) Benzaldehyde	4.328	105	21803	5.39	ppm	98
107) Atrazine	8.441	215	8068	5.13	ppm	84
109) Benzidine	11.342	184	14504	3.35	ppm	94
111) 1,2,4,5-Tetrachloroben...	6.208	216	25595	5.22	ppm	98
113) Hydroquinone	5.840	110	25988	5.55	ppm	94

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110750.D
Acq On : 18 May 2016 12:53 am
Operator : seanb1
Sample : ic5534-5
Misc : op93924,ez5534
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 18 09:00:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:00:05 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 09:00:33 2016 RTE Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110751.D
Acq On : 18 May 2016 1:22 am
Operator : seanb1
Sample : ic5534-10
Misc : op93924,ez5534
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 18 08:59:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:58:53 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	162332	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	625220	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	356695	40.00	ppm	0.00
69) Phenanthrene-d10	8.837	188	615327	40.00	ppm	0.00
83) Chrysene-d12	14.072	240	605817	40.00	ppm	-0.02
92) Perylene-d12	17.096	264	553631	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.654	152	162332	40.00	ppm	0.00
104) Phenanthrene-d10a	8.837	188	615327	40.00	ppm	0.00
108) Chrysene-d12a	14.072	240	605817	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	356695	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	625220	40.00	ppm	0.00
114) Chrysene-d12b	14.072	240	605817	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%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	10.995	57	35423	9.34	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.68%	
106) o-terphenyl	9.510	230	86783	9.65	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.30%	
Target Compounds						Qvalue
103) Benzaldehyde	4.328	105	39119	9.71	ppm	99
107) Atrazine	8.441	215	14361	9.21	ppm	93
109) Benzidine	11.342	184	30941	6.79	ppm	98
111) 1,2,4,5-Tetrachloroben...	6.208	216	46610	9.71	ppm	98
113) Hydroquinone	5.840	110	39487	8.39	ppm	100

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

7.6.68

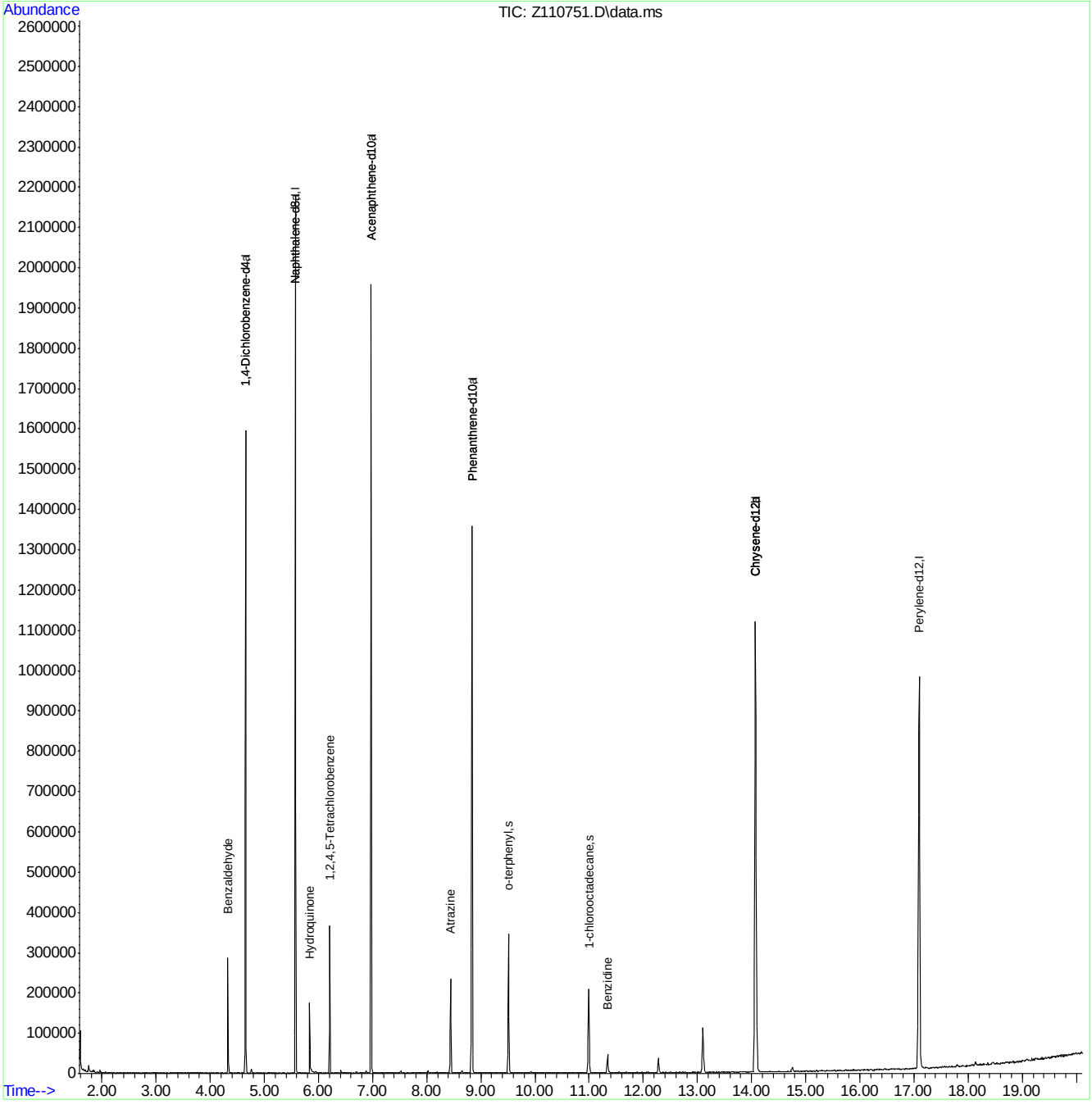
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110751.D
Acq On : 18 May 2016 1:22 am
Operator : seanb1
Sample : ic5534-10
Misc : op93924,ez5534
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 18 08:59:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:58:53 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 08:59:18 2016 RTE Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110752.D
Acq On : 18 May 2016 1:51 am
Operator : seanb1
Sample : ic5534-100
Misc : op93924,ez5534
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 08:43:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:43:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.653	152	153408	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	582930	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	338751	40.00	ppm	0.00
69) Phenanthrene-d10	8.836	188	554095	40.00	ppm	0.00
83) Chrysene-d12	14.066	240	545869	40.00	ppm	-0.03
92) Perylene-d12	17.095	264	495251	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.653	152	153408	40.00	ppm	0.00
104) Phenanthrene-d10a	8.836	188	554095	40.00	ppm	0.00
108) Chrysene-d12a	14.066	240	545869	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	338751	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	582930	40.00	ppm	0.00
114) Chrysene-d12b	14.066	240	545869	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%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
105) 1-chlorooctadecane	11.000	57	344744	99.84	ppm	0.00
Spiked Amount 50.000			Recovery	=	199.68%	
106) o-terphenyl	9.515	230	775325	99.12	ppm	0.00
Spiked Amount 50.000			Recovery	=	198.24%	
Target Compounds						Qvalue
103) Benzaldehyde	4.333	105	297988	87.06	ppm	94
107) Atrazine	8.457	215	141789	100.03	ppm	96
109) Benzidine	11.347	184	568644	96.96	ppm	99
111) 1,2,4,5-Tetrachloroben...	6.213	216	433794	97.88	ppm	99
113) Hydroquinone	5.855	110	490165	98.28	ppm	100

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

7.6.69

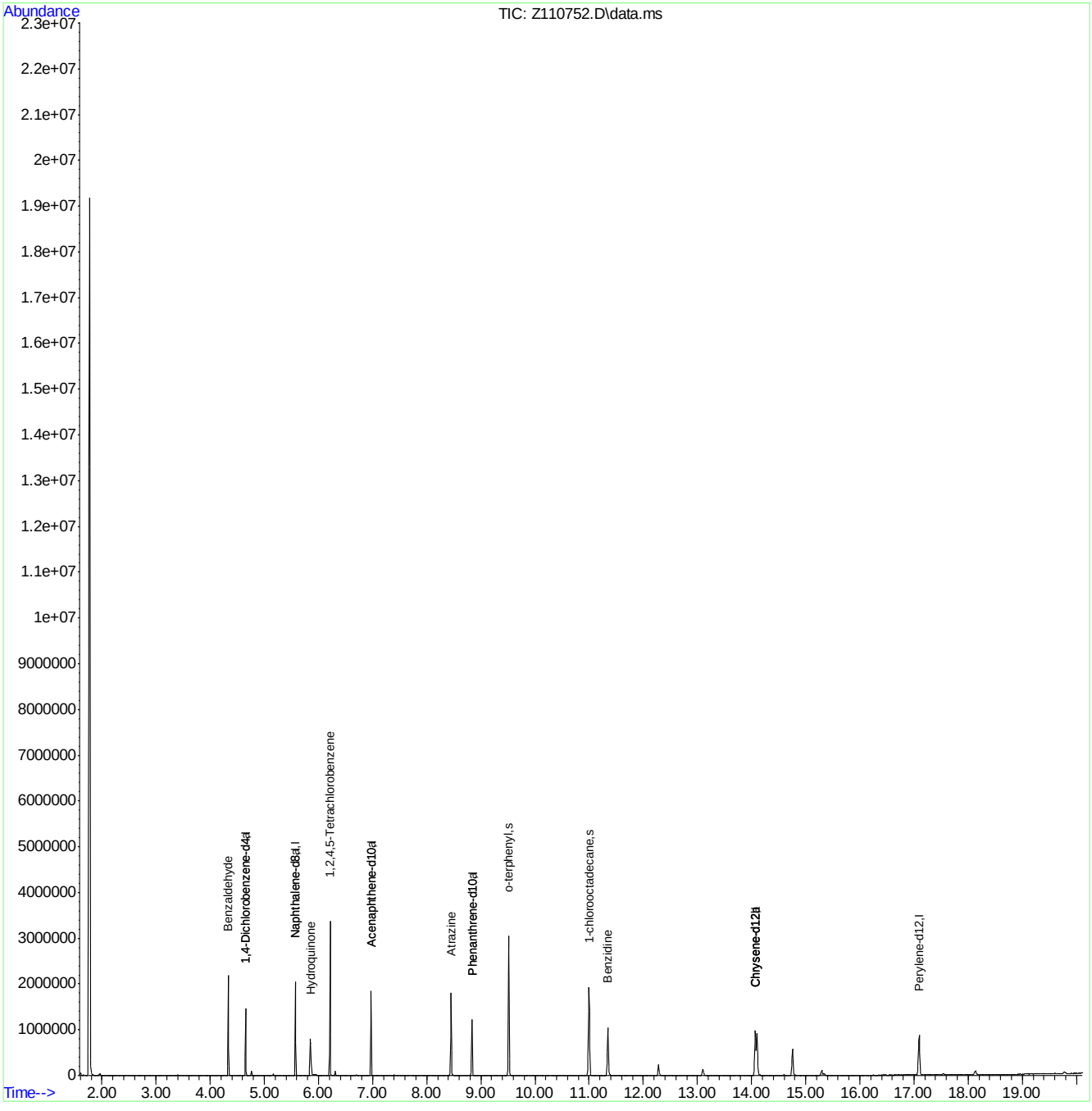
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110752.D
Acq On : 18 May 2016 1:51 am
Operator : seanb1
Sample : ic5534-100
Misc : op93924,ez5534
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 08:43:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:43:04 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 08:43:39 2016 RTE Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110753.D
Acq On : 18 May 2016 2:20 am
Operator : seanb1
Sample : ic5534-80
Misc : op93924,ez5534
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 18 08:57:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:56:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	152359	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	583370	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	328771	40.00	ppm	0.00
69) Phenanthrene-d10	8.837	188	552153	40.00	ppm	0.00
83) Chrysene-d12	14.067	240	536634	40.00	ppm	-0.03
92) Perylene-d12	17.096	264	492986	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.654	152	152359	40.00	ppm	0.00
104) Phenanthrene-d10a	8.837	188	552153	40.00	ppm	0.00
108) Chrysene-d12a	14.067	240	536634	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	328771	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	583370	40.00	ppm	0.00
114) Chrysene-d12b	14.067	240	536634	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%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	10.995	57	274239	79.75	ppm	0.00
Spiked Amount 50.000			Recovery = 159.50%			
106) o-terphenyl	9.515	230	625901	77.12	ppm	0.00
Spiked Amount 50.000			Recovery = 154.24%			
Target Compounds						Qvalue
103) Benzaldehyde	4.333	105	294640	77.58	ppm	93
107) Atrazine	8.452	215	112887	79.63	ppm	98
109) Benzidine	11.347	184	448183	105.47	ppm	99
111) 1,2,4,5-Tetrachloroben...	6.213	216	343763	77.36	ppm	99
113) Hydroquinone	5.856	110	370247	82.13	ppm	98

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

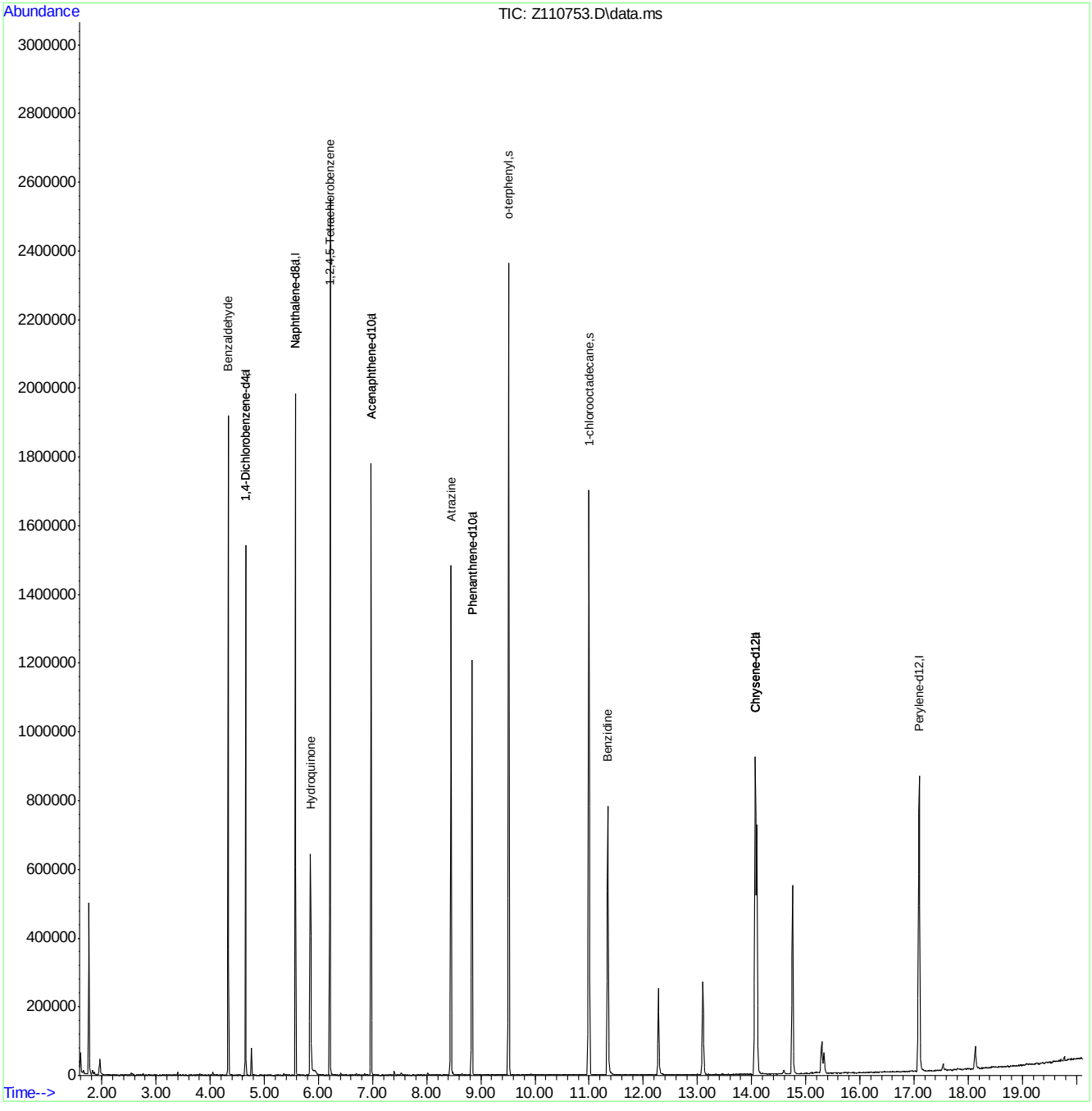
7.6.70

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EZ5534\
Data File : Z110753.D
Acq On : 18 May 2016 2:20 am
Operator : seanb1
Sample : ic5534-80
Misc : op93924,ez5534
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 18 08:57:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 08:56:18 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 08:57:40 2016 RTE Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110755b.D
Acq On : 18 May 2016 10:17 am
Operator : ariellec
Sample : icv5533-50
Misc : op93924,ez5535
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 10:43:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.653	152	177477	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	633544	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	373206	40.00	ppm	0.00
69) Phenanthrene-d10	8.836	188	612044	40.00	ppm	0.00
83) Chrysene-d12	14.072	240	573289	40.00	ppm	-0.02
92) Perylene-d12	17.095	264	506182	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.653	152	177477	40.00	ppm	0.00
104) Phenanthrene-d10a	8.836	188	612044	40.00	ppm	0.00
108) Chrysene-d12a	14.072	240	573289	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	373206	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	633544	40.00	ppm	0.00
114) Chrysene-d12b	14.072	240	573289	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%			
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
9) Phenol	4.386	94	338516	44.24	ppm	78
12) 2-Chlorophenol	4.498	128	290439	46.19	ppm	97
19) 2-Methylphenol	4.830	108	249705	47.02	ppm	99
21) 3&4-Methylphenol	4.942	108	259216	45.33	ppm	98
29) 2-Nitrophenol	5.300	139	147557	49.23	ppm	93
30) 2,4-Dimethylphenol	5.327	107	286734	55.93	ppm	96
33) 2,4-Dichlorophenol	5.465	162	221473	47.42	ppm	99
34) 2,6-Dichlorophenol	5.631	162	217220	48.10	ppm	96
43) 4-Chloro-3-methylphenol	5.957	107	241235	46.88	ppm	96
49) 2,4,6-Trichlorophenol	6.299	196	161144	47.53	ppm	99
50) 2,4,5-Trichlorophenol	6.326	196	155339	42.85	ppm	98
60) 2,4-Dinitrophenol	7.025	184	39627	46.69	ppm #	72
61) 4-Nitrophenol	7.073	109	84378	49.97	ppm	94
64) 2,3,4,6-Tetrachlorophenol	7.309	232	134278	46.49	ppm	94
70) 4,6-Dinitro-2-methylph...	7.613	198	78964	47.94	ppm	98
76) Pentachlorophenol	8.543	266	111539	49.90	ppm	100

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110755b.D
Acq On : 18 May 2016 10:17 am
Operator : ariellec
Sample : icv5533-50
Misc : op93924,ez5535
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 10:43:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

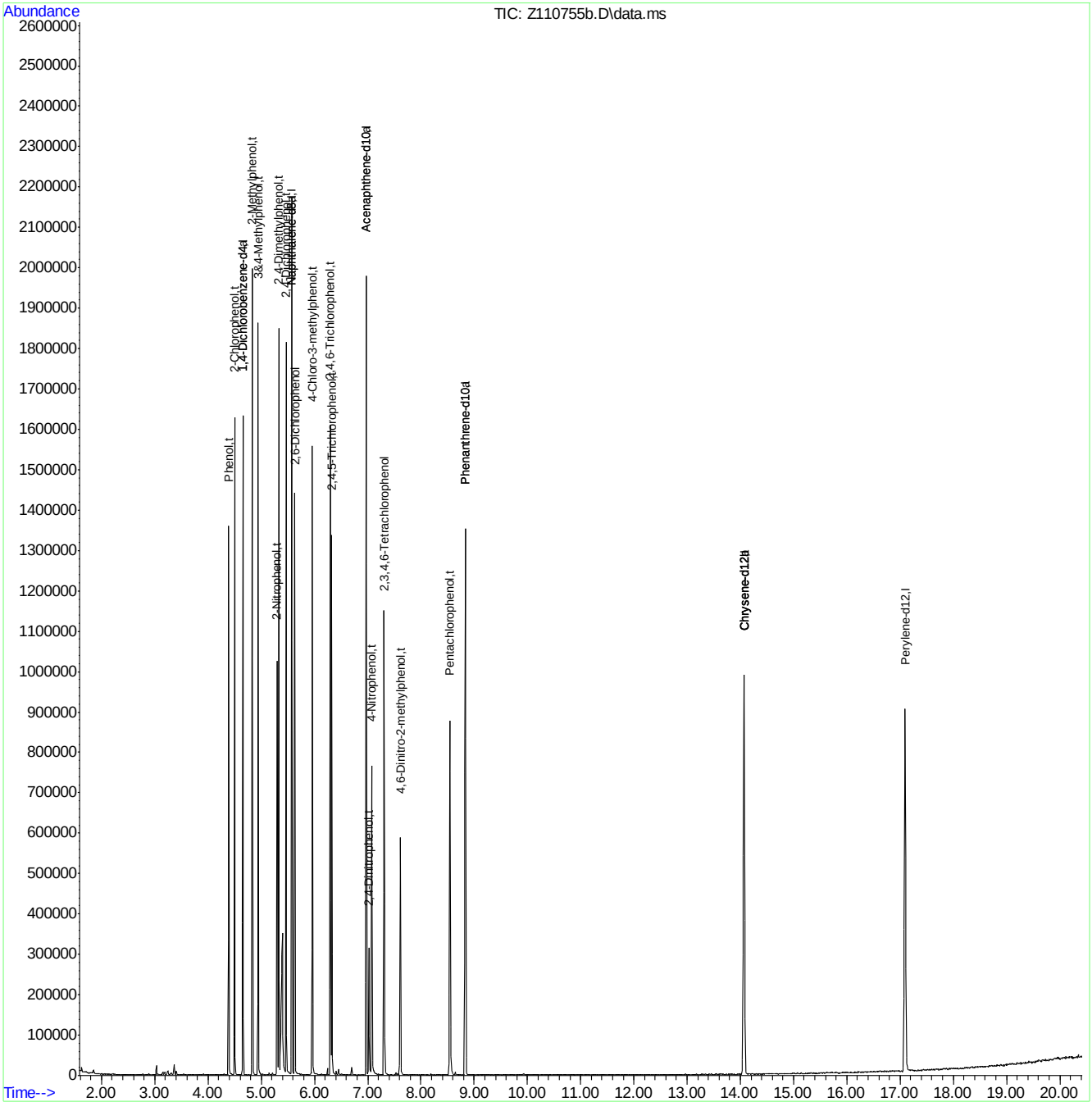
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110755b.D
Acq On : 18 May 2016 10:17 am
Operator : ariellec
Sample : icv5533-50
Misc : op93924,ez5535
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 10:43:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 10:43:45 2016 RTE

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110756a.D
Acq On : 18 May 2016 10:46 am
Operator : ariellec
Sample : icv5533-50
Misc : op93924,ez5535
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 11:19:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	198032	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	742238	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	415073	40.00	ppm	0.00
69) Phenanthrene-d10	8.836	188	686915	40.00	ppm	0.00
83) Chrysene-d12	14.072	240	635426	40.00	ppm	-0.02
92) Perylene-d12	17.101	264	562246	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.654	152	198032	40.00	ppm	0.00
104) Phenanthrene-d10a	8.836	188	686915	40.00	ppm	0.00
108) Chrysene-d12a	14.072	240	635426	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	415073	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	742238	40.00	ppm	0.00
114) Chrysene-d12b	14.072	240	635426	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.665	112	279204	41.77	ppm	0.00
Spiked Amount 50.000			Recovery = 83.54%			
8) Phenol-d5	4.376	99	332092	40.27	ppm	-0.01
Spiked Amount 50.000			Recovery = 80.54%			
25) Nitrobenzene-d5	5.054	82	303314	43.83	ppm	0.00
Spiked Amount 50.000			Recovery = 87.66%			
51) 2-Fluorobiphenyl	6.368	172	605140	44.60	ppm	0.00
Spiked Amount 50.000			Recovery = 89.20%			
73) 2,4,6-Tribromophenol	7.848	330	69166	40.07	ppm	-0.01
Spiked Amount 50.000			Recovery = 80.14%			
86) Terphenyl-d14	11.882	244	577846	42.41	ppm	0.00
Spiked Amount 50.000			Recovery = 84.82%			
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

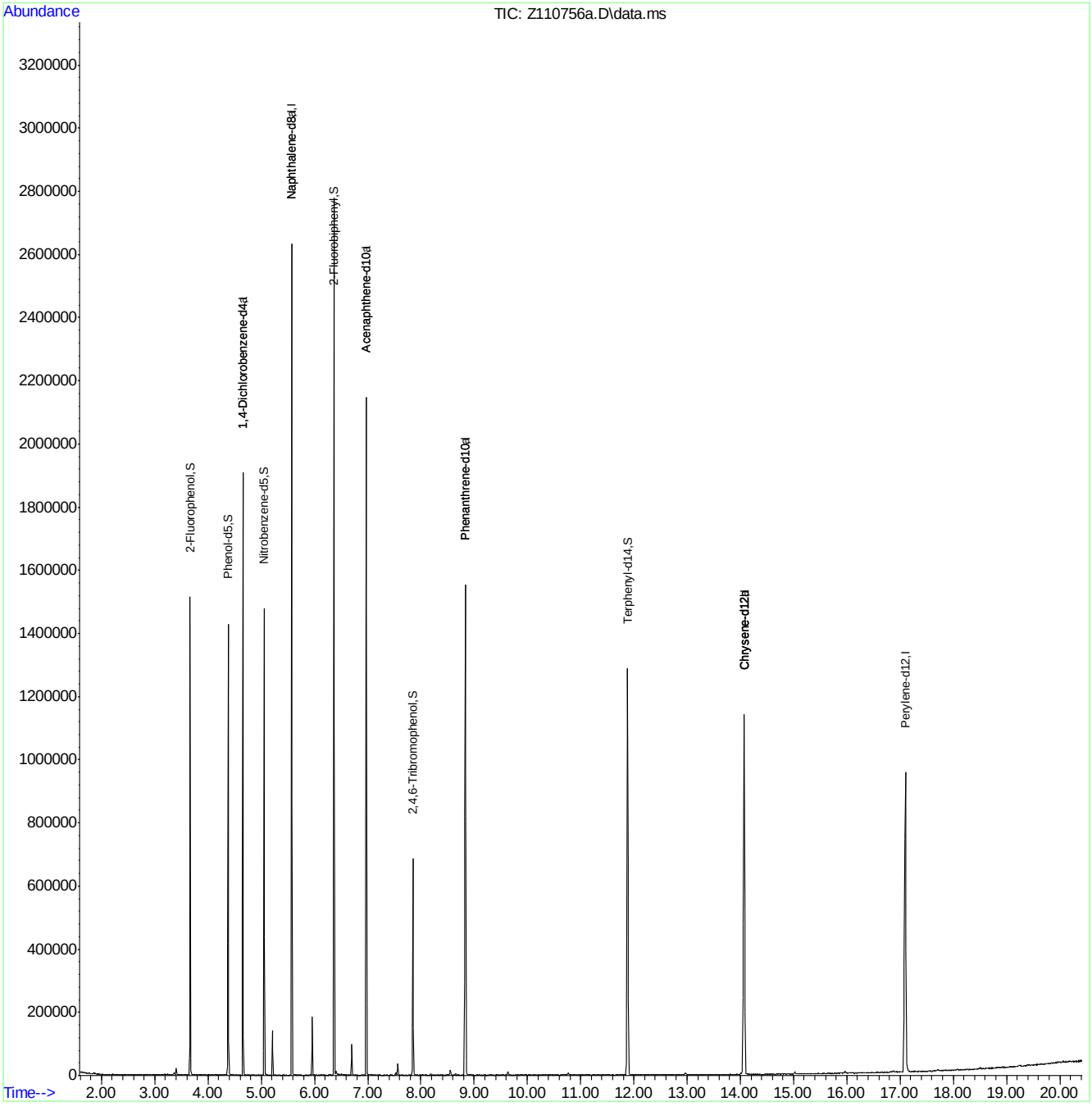
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110756a.D
Acq On : 18 May 2016 10:46 am
Operator : ariellec
Sample : icv5533-50
Misc : op93924,ez5535
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 18 11:19:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 11:19:25 2016 RTE

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110757a.D
Acq On : 18 May 2016 11:16 am
Operator : ariellec
Sample : icv5533-50
Misc : op93924,ez5535
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 11:39:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.659	152	165061	40.00	ppm	0.00
24) Naphthalene-d8	5.573	136	644566	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	363674	40.00	ppm	0.00
69) Phenanthrene-d10	8.832	188	620169	40.00	ppm	-0.01
83) Chrysene-d12	14.072	240	579751	40.00	ppm	-0.02
92) Perylene-d12	17.096	264	422701	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.659	152	165061	40.00	ppm	0.00
104) Phenanthrene-d10a	8.832	188	620169	40.00	ppm	0.00
108) Chrysene-d12a	14.072	240	579751	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	363674	40.00	ppm	0.00
112) Naphthalene-d8a	5.573	136	644566	40.00	ppm	0.00
114) Chrysene-d12b	14.072	240	579751	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%			
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	2.619	79	273905	51.28	ppm	97
10) Aniline	4.413	93	428915	55.89	ppm	67
16) Benzyl alcohol	4.755	108	170656	49.49	ppm	99
39) 4-Chloroaniline	5.621	127	332764	47.40	ppm	100
44) 2-Methylnaphthalene	6.086	141	456506	45.74	ppm	99
54) 2-Nitroaniline	6.550	65	144089	48.17	ppm	97
58) 3-Nitroaniline	6.924	138	133193	46.46	ppm	98
62) Dibenzofuran	7.181	168	717995	48.73	ppm	98
68) 4-Nitroaniline	7.576	138	129049	44.50	ppm	94
79) Carbazole	9.227	167	773447	47.45	ppm	99

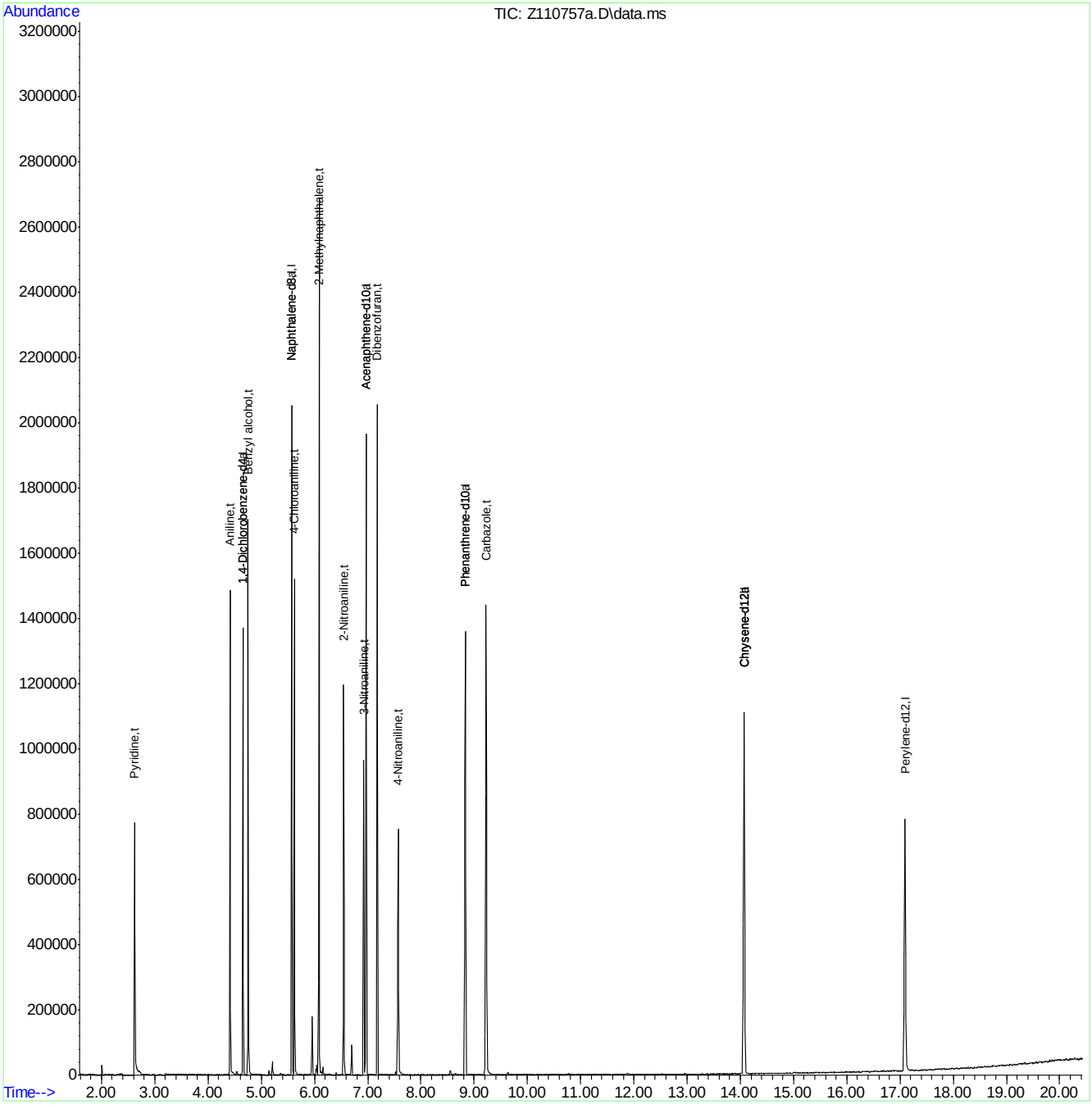
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110757a.D
Acq On : 18 May 2016 11:16 am
Operator : ariellec
Sample : icv5533-50
Misc : op93924,ez5535
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 18 11:39:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 11:39:25 2016 RTE

Page: 2

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/18/16 17:02

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110758.D
Acq On : 18 May 2016 11:46 am
Operator : ariellec
Sample : icv5533-50
Misc : op93924,ez5535
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 13:44:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	178315	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	638030	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	365642	40.00	ppm	0.00
69) Phenanthrene-d10	8.837	188	619935	40.00	ppm	0.00
83) Chrysene-d12	14.077	240	568162	40.00	ppm	-0.02
92) Perylene-d12	17.101	264	495958	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.654	152	178315	40.00	ppm	0.00
104) Phenanthrene-d10a	8.837	188	619935	40.00	ppm	0.00
108) Chrysene-d12a	14.077	240	568162	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	365642	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	638030	40.00	ppm	0.00
114) Chrysene-d12b	14.077	240	568162	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	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	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	2.495	74	147404	45.44	ppm	99
11) bis(2-Chloroethyl)ether	4.461	93	247696	48.66	ppm	95
14) 1,3-Dichlorobenzene	4.611	146	328269	46.81	ppm	96
15) 1,4-Dichlorobenzene	4.670	146	314313	45.56	ppm	100
17) 1,2-Dichlorobenzene	4.777	146	302333	46.89	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.851	121	72675m	42.95	ppm	
22) n-Nitroso-di-n-propyla...	4.947	70	186915	44.35	ppm	97
23) Hexachloroethane	5.028	201	109724	47.07	ppm	91
26) Nitrobenzene	5.070	77	272452	46.25	ppm	93
28) Isophorone	5.241	82	497475	48.97	ppm	98
32) bis(2-Chloroethoxy)met...	5.396	93	270833	45.44	ppm	99
36) 1,2,4-Trichlorobenzene	5.530	180	255555	47.65	ppm	98
38) Naphthalene	5.589	128	771565	46.03	ppm	99
42) Hexachlorobutadiene	5.674	225	145615	48.13	ppm	100
52) 2-Chloronaphthalene	6.470	162	497505	47.95	ppm	98
55) Dimethylphthalate	6.710	163	549122	44.65	ppm	100
56) Acenaphthylene	6.839	152	755776	42.80	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110758.D
Acq On : 18 May 2016 11:46 am
Operator : ariellec
Sample : icv5533-50
Misc : op93924,ez5535
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 13:44:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57)	2,6-Dinitrotoluene	6.769	165	109332	45.59	ppm	95
59)	Acenaphthene	7.004	153	477544	44.28	ppm	98
63)	2,4-Dinitrotoluene	7.159	165	143719	43.96	ppm	81
65)	Diethylphthalate	7.432	149	557007	44.87	ppm	99
66)	Fluorene	7.560	166	540582	43.85	ppm	98
67)	4-Chlorophenyl-phenyle...	7.565	204	251609	43.72	ppm	95
71)	n-Nitrosodiphenylamine	7.704	169	380418	44.87	ppm	98
72)	1,2-Diphenylhydrazine	7.757	77	513121	44.31	ppm	98
74)	4-Bromophenyl-phenylether	8.196	248	151013	45.69	ppm	95
75)	Hexachlorobenzene	8.265	284	158942	44.57	ppm	99
77)	Phenanthrene	8.874	178	756858	44.04	ppm	99
78)	Anthracene	8.954	178	753926	43.18	ppm	100
80)	Di-n-butylphthalate	9.942	149	929245	44.29	ppm	100
81)	Fluoranthene	11.000	202	847277	43.69	ppm	97
84)	Pyrene	11.444	202	857619	45.18	ppm	96
87)	Butylbenzylphthalate	13.068	149	387902	43.75	ppm	96
88)	Benzo[a]anthracene	14.061	228	759672	43.77	ppm	100
89)	3,3'-Dichlorobenzidine	14.104	252	349014	57.95	ppm	98
90)	Chrysene	14.136	228	697877	42.96	ppm	99
91)	bis(2-Ethylhexyl)phtha...	14.489	149	520044	43.36	ppm	98
93)	Di-n-octylphthalate	15.936	149	864484	44.11	ppm	99
94)	Benzo[b]fluoranthene	16.353	252	707402	43.34	ppm	98
95)	Benzo[k]fluoranthene	16.417	252	713368	46.37	ppm	99
96)	Benzo[a]pyrene	16.989	252	662155	45.72	ppm	99
97)	Indeno[1,2,3-cd]pyrene	19.035	276	606368	46.43	ppm	98
99)	Dibenz[a,h]anthracene	19.104	278	607316	44.80	ppm	99
101)	Benzo[g,h,i]perylene	19.457	276	643954	46.71	ppm	98

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

7.6.74

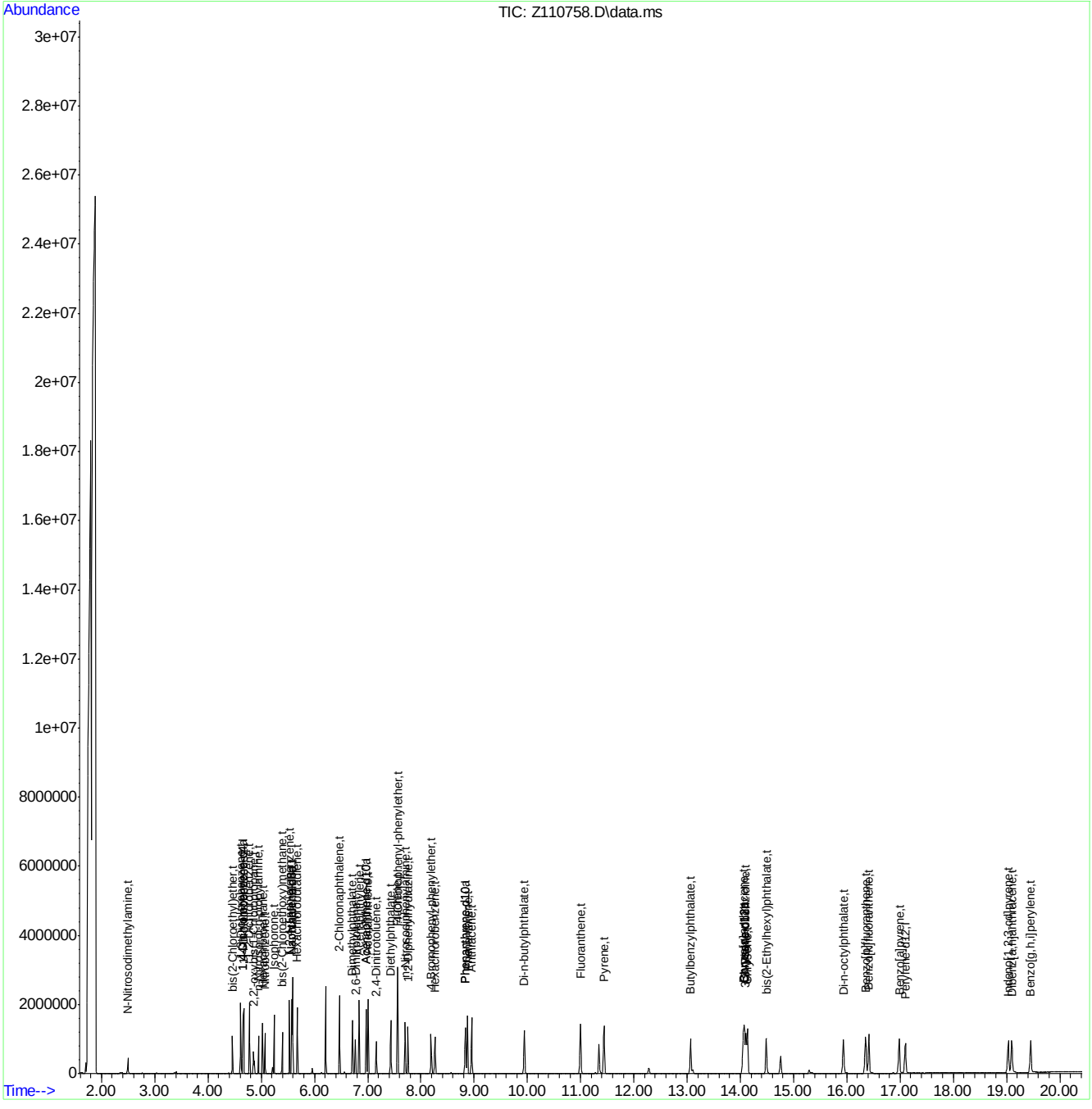
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110758.D
Acq On : 18 May 2016 11:46 am
Operator : ariellec
Sample : icv5533-50
Misc : op93924,ez5535
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 13:44:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 13:44:23 2016 RTE Page: 3

Manual Integration Approval Summary

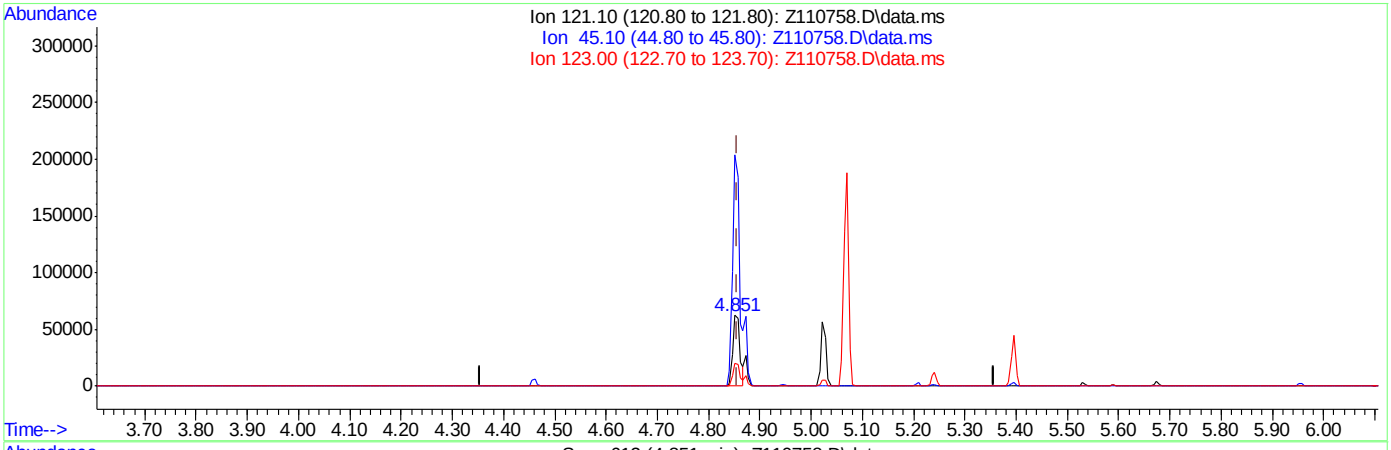
Sample Number:	EZ5535-ICV5533	**Method:**	SW846 8270D
Lab FileID:	Z110758.D	**Analyst approved:**	05/18/16 13:50 Arielle Cocozza
Injection Time:	05/18/16 11:46	**Supervisor approved:**	05/18/16 17:02 Nina Pandya

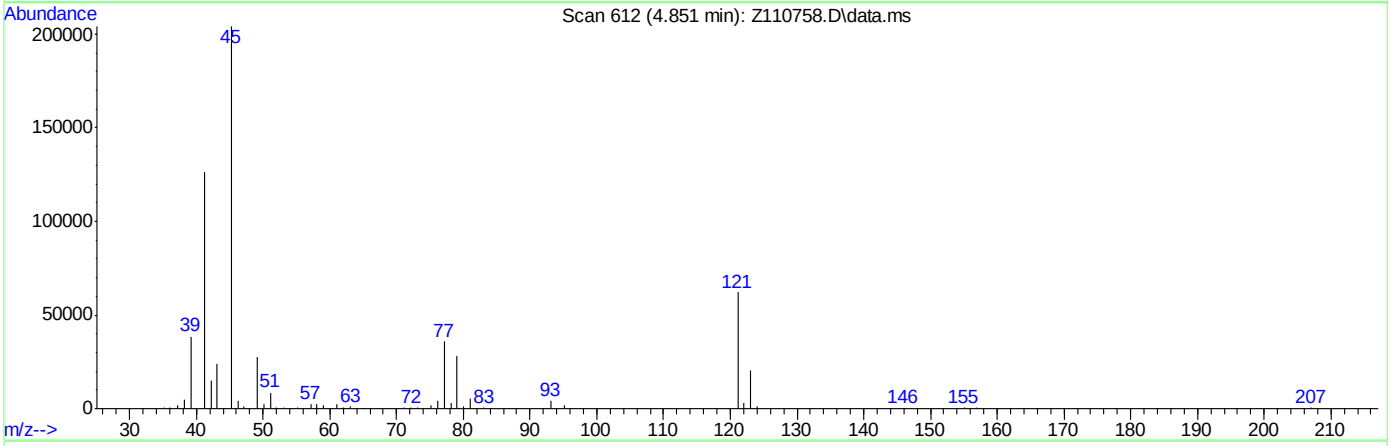
Parameter	CAS	Sig#	R.T. (min.)	Reason
bis(2-Chloroisopropyl)ether	108-60-1		4.85	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110758.D
Acq On : 18 May 2016 11:46 am
Operator : ariellec
Sample : icv5533-50
Misc : op93924,ez5535
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 12:06:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration





TIC: Z110758.D\data.ms

(20) 2,2'-oxybis(1-Chloropropane (t)

4.851min (-0.005) 36.22ppm

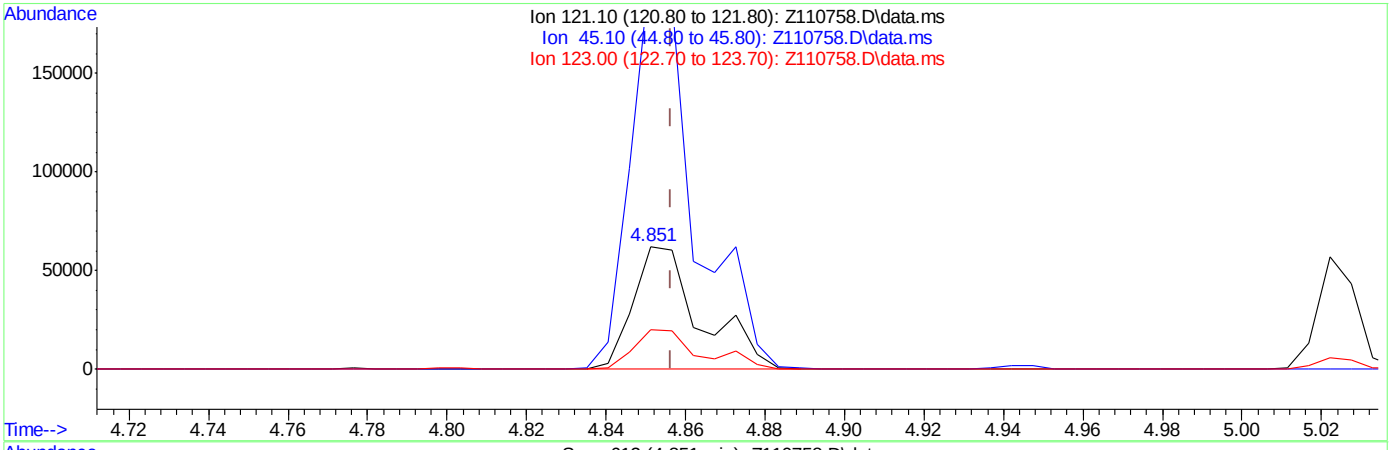
response 61293

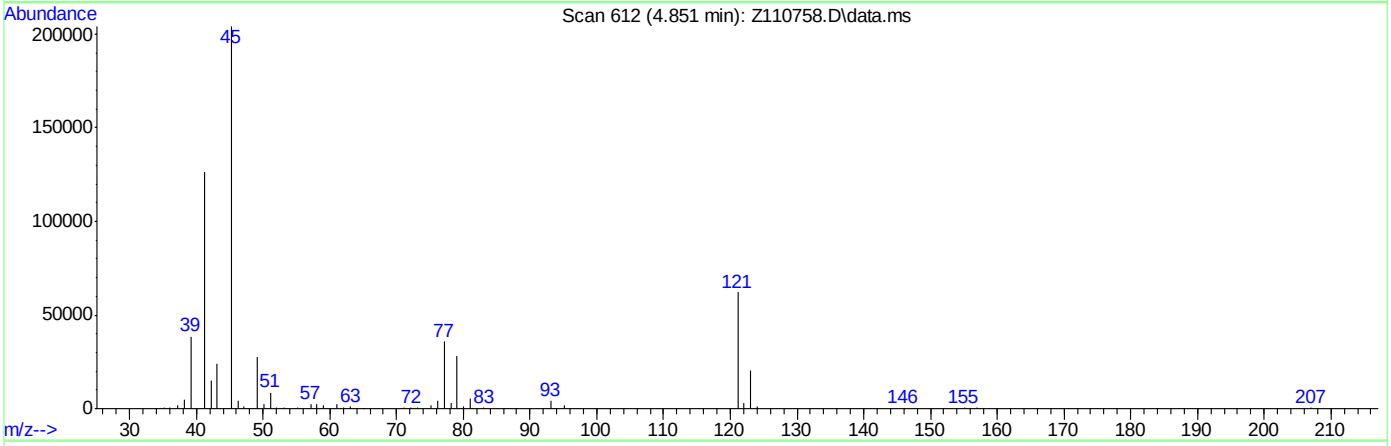
Ion	Exp%	Act%
121.10	100	100
45.10	341.10	334.10
123.00	33.50	32.39
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110758.D
Acq On : 18 May 2016 11:46 am
Operator : ariellec
Sample : icv5533-50
Misc : op93924,ez5535
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 12:06:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration





TIC: Z110758.D\data.ms

(20) 2,2'-oxybis(1-Chloropropane (t)

4.851min (-0.005) 42.95ppm m

response 72675

Ion	Exp%	Act%
121.10	100	100
45.10	341.10	328.27
123.00	33.50	32.31
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110758a.D
Acq On : 18 May 2016 11:46 am
Operator : ariellec
Sample : icv5534-50
Misc : op93924,ez5535
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 13:43:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	178315	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	638030	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	365642	40.00	ppm	0.00
69) Phenanthrene-d10	8.837	188	619935	40.00	ppm	0.00
83) Chrysene-d12	14.077	240	568162	40.00	ppm	-0.02
92) Perylene-d12	17.101	264	495958	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.654	152	178315	40.00	ppm	0.00
104) Phenanthrene-d10a	8.837	188	619935	40.00	ppm	0.00
108) Chrysene-d12a	14.077	240	568162	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	365642	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	638030	40.00	ppm	0.00
114) Chrysene-d12b	14.077	240	568162	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	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	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
111) 1,2,4,5-Tetrachloroben...	6.214	216	264691	53.47	ppm	97

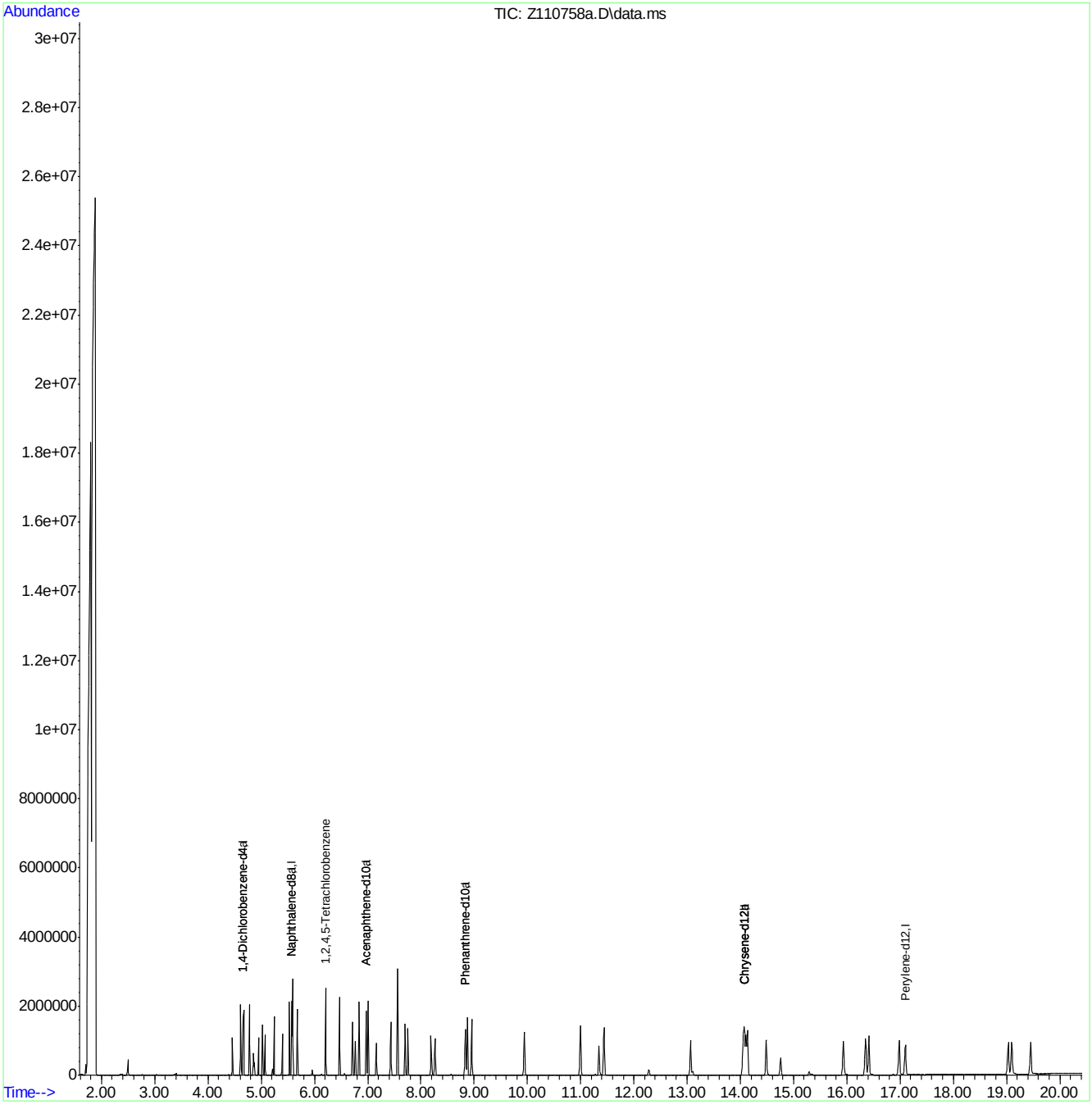
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110758a.D
Acq On : 18 May 2016 11:46 am
Operator : ariellec
Sample : icv5534-50
Misc : op93924,ez5535
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 18 13:43:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 13:43:43 2016 RTE

Page: 2

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110759a.D
Acq On : 18 May 2016 12:15 pm
Operator : ariellec
Sample : icv5534-50
Misc : op93924,ez5535
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 18 13:30:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.653	152	171072	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	661449	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	363847	40.00	ppm	0.00
69) Phenanthrene-d10	8.831	188	589076	40.00	ppm	-0.01
83) Chrysene-d12	14.072	240	584848	40.00	ppm	-0.02
92) Perylene-d12	17.096	264	495180	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.653	152	171072	40.00	ppm	0.00
104) Phenanthrene-d10a	8.831	188	589076	40.00	ppm	0.00
108) Chrysene-d12a	14.072	240	584848	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	363847	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	661449	40.00	ppm	0.00
114) Chrysene-d12b	14.072	240	584848	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	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	4.333	105	236370	55.07	ppm	93
107) Atrazine	8.446	215	78611	52.47	ppm	96

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

7.6.76

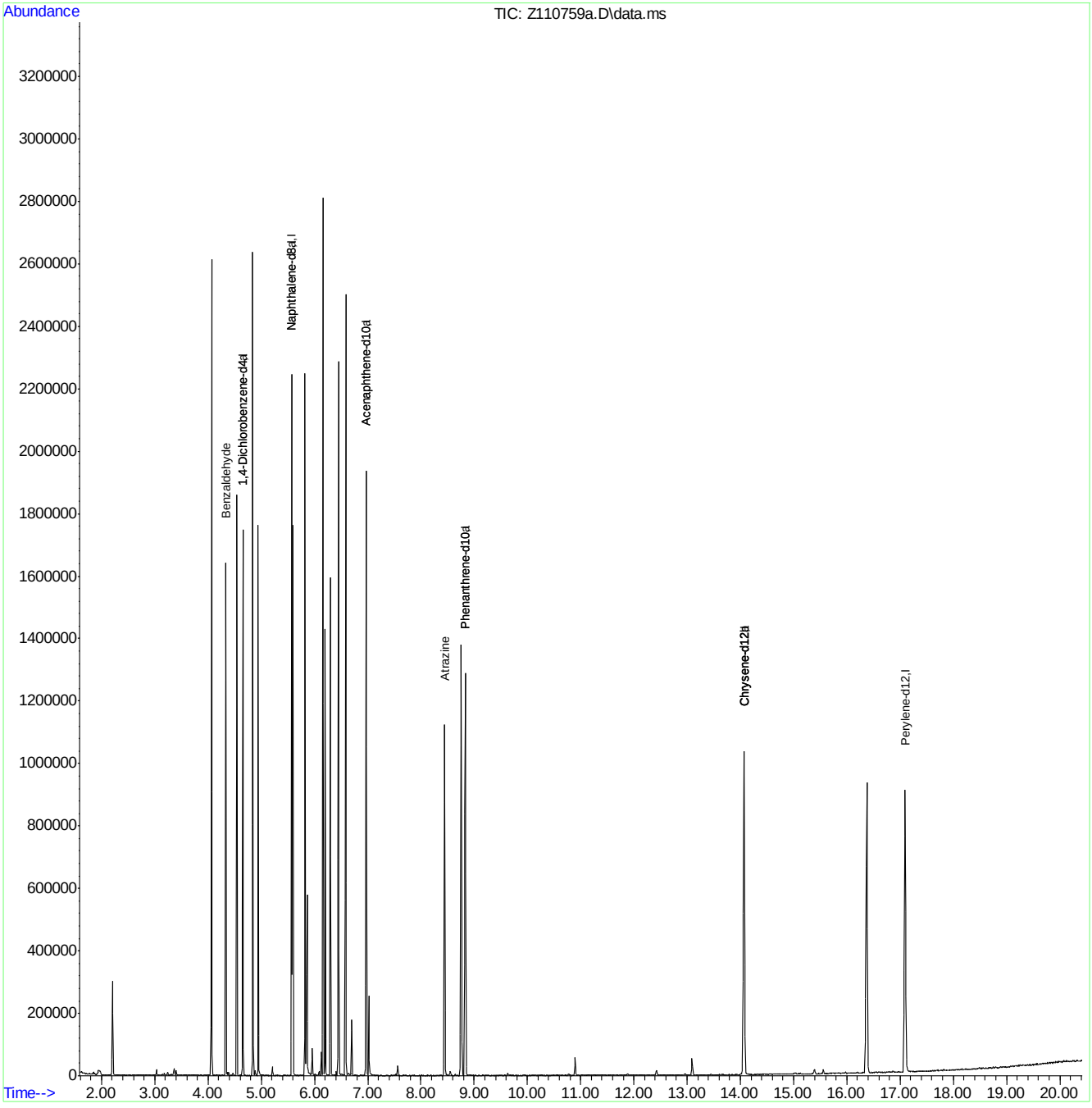
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110759a.D
Acq On : 18 May 2016 12:15 pm
Operator : ariellec
Sample : icv5534-50
Misc : op93924,ez5535
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 18 13:30:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 13:34:09 2016 RTE

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110759.D
Acq On : 18 May 2016 12:15 pm
Operator : ariellec
Sample : icv5533-50
Misc : op93924,ez5535
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 18 13:29:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.653	152	171072	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	661449	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	363847	40.00	ppm	0.00
69) Phenanthrene-d10	8.831	188	589076	40.00	ppm	-0.01
83) Chrysene-d12	14.072	240	584848	40.00	ppm	-0.02
92) Perylene-d12	17.096	264	495180	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.653	152	171072	40.00	ppm	0.00
104) Phenanthrene-d10a	8.831	188	589076	40.00	ppm	0.00
108) Chrysene-d12a	14.072	240	584848	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	363847	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	661449	40.00	ppm	0.00
114) Chrysene-d12b	14.072	240	584848	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	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	2.207	88	104288	43.46	ppm	97
6) Indene	4.840	116	489654	49.76	ppm	100
7) Cumene	4.066	105	686631	47.94	ppm	99
13) Decane	4.541	43	213035	46.60	ppm	98
18) Acetophenone	4.942	105	375740	46.86	ppm #	75
27) Quinoline	5.823	129	521905	44.32	ppm	99
40) 2,3-Dichloroaniline	6.299	161	234161	38.76	ppm	99
41) Caprolactam	5.861	55	84365	41.22	ppm	98
45) 1-Methylnaphthalene	6.160	141	465789	44.32	ppm	99
46) Dimethylnaphthalene	6.587	156	465647	43.95	ppm	99
48) Hexachlorocyclopentadiene	6.203	237	159904	56.64	ppm	97
53) Biphenyl	6.454	154	632231	46.63	ppm	98
82) Octadecane	8.756	57	269383	47.94	ppm	98
100) 7,12-Dimethylbenz(a)an...	16.374	256	308694	47.41	ppm	97

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

MZ5533.M Wed May 18 16:51:08 2016 RTE

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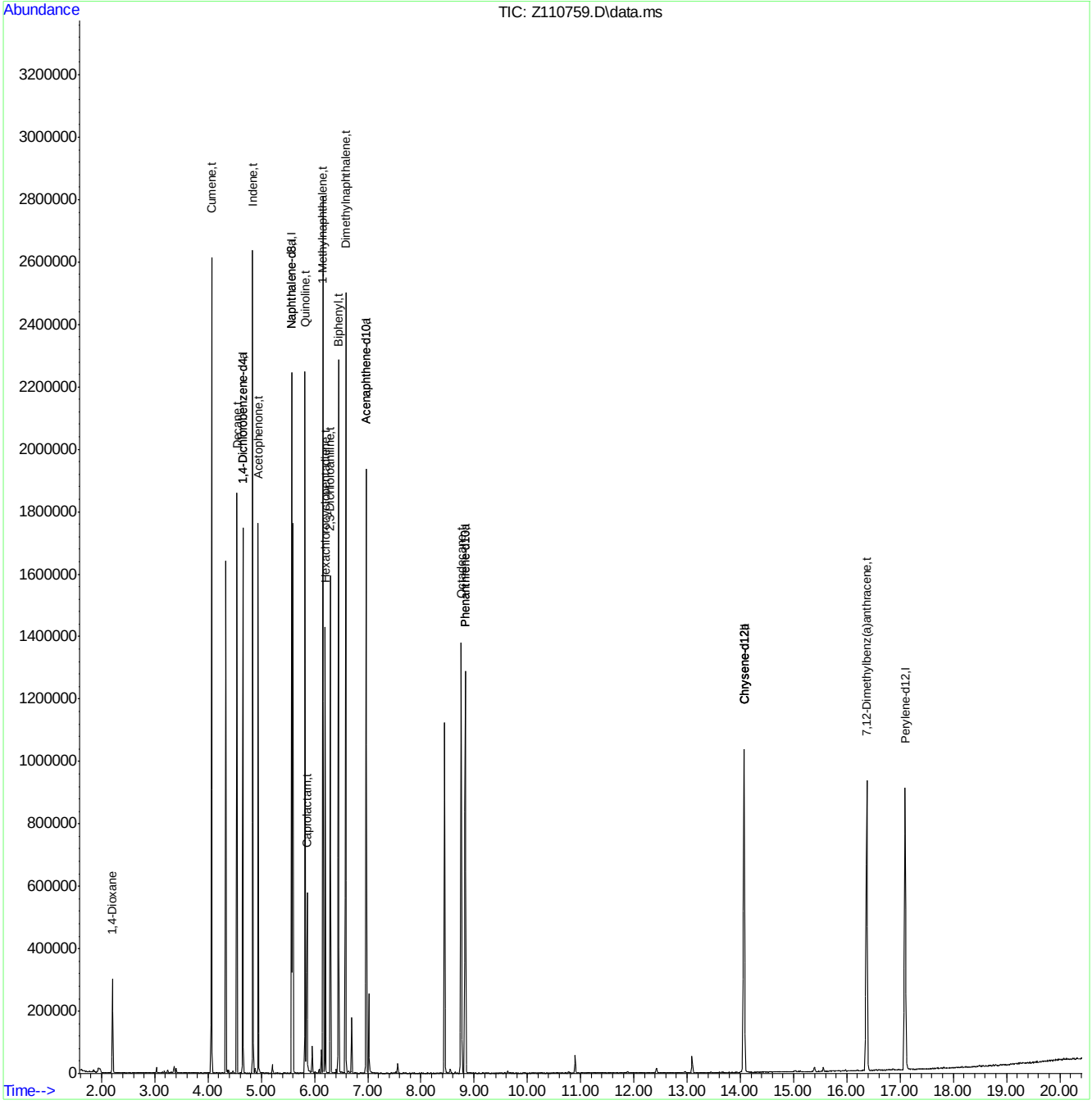
7.6.77

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110759.D
Acq On : 18 May 2016 12:15 pm
Operator : ariellec
Sample : icv5533-50
Misc : op93924,ez5535
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 18 13:29:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 16:51:09 2016 RTE

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110760.D
Acq On : 18 May 2016 12:45 pm
Operator : ariellec
Sample : icv5534-50
Misc : op93924,ez5535
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 18 13:45:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.653	152	178061	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	680655	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	401024	40.00	ppm	0.00
69) Phenanthrene-d10	8.831	188	680721	40.00	ppm	-0.01
83) Chrysene-d12	14.072	240	680459	40.00	ppm	-0.02
92) Perylene-d12	17.101	264	613627	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.653	152	178061	40.00	ppm	0.00
104) Phenanthrene-d10a	8.831	188	680721	40.00	ppm	0.00
108) Chrysene-d12a	14.072	240	680459	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	401024	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	680655	40.00	ppm	0.00
114) Chrysene-d12b	14.072	240	680459	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%	
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	11.347	184	654132	91.17	ppm	99

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

7.6.78

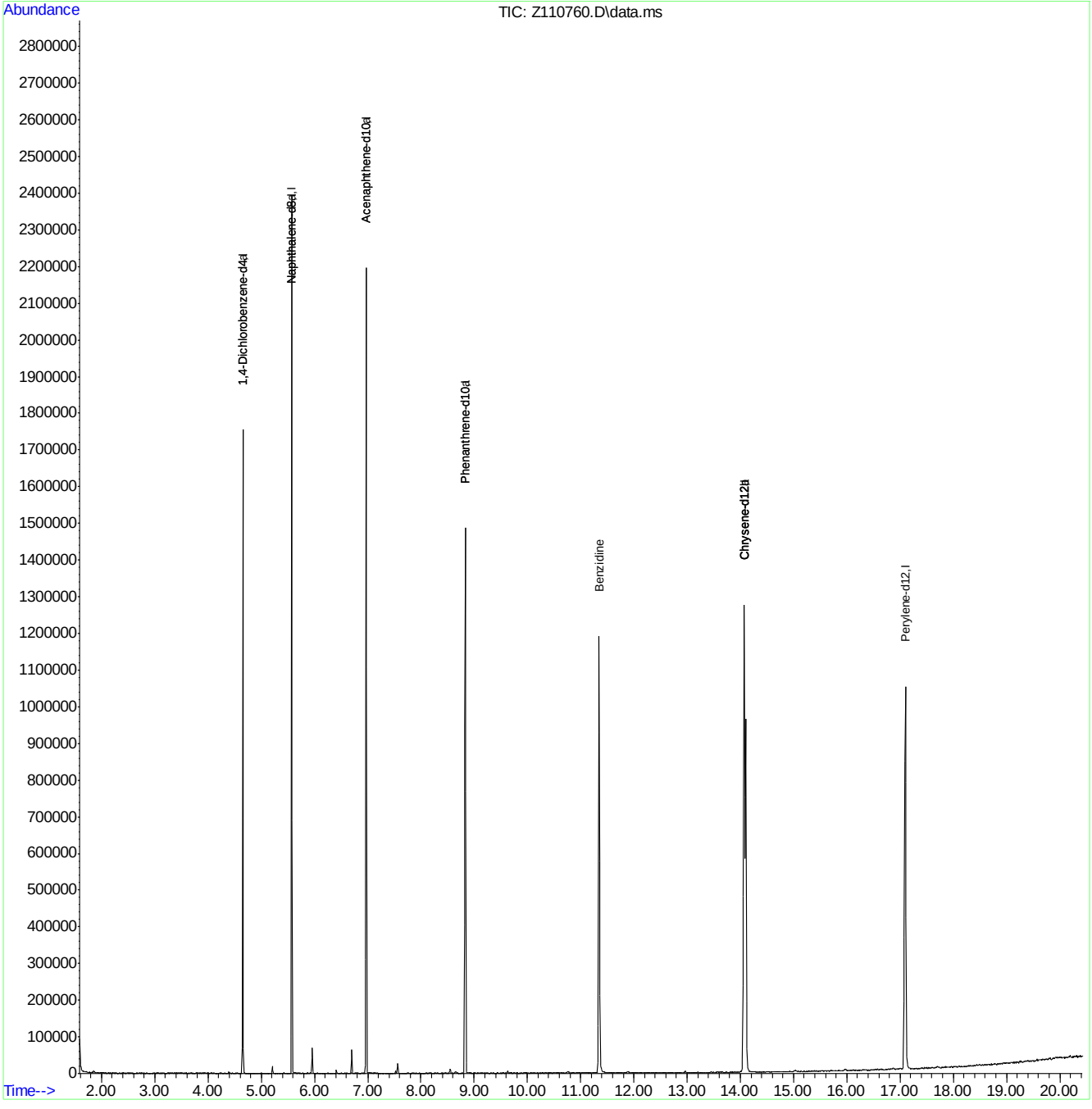
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110760.D
Acq On : 18 May 2016 12:45 pm
Operator : ariellec
Sample : icv5534-50
Misc : op93924,ez5535
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 18 13:45:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 13:45:39 2016 RTE

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110761.D
Acq On : 18 May 2016 1:15 pm
Operator : ariellec
Sample : icv5534-50
Misc : op93924,ez5535
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 13:40:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	157390	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	601062	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	344818	40.00	ppm	0.00
69) Phenanthrene-d10	8.831	188	585176	40.00	ppm	-0.01
83) Chrysene-d12	14.067	240	582765	40.00	ppm	-0.03
92) Perylene-d12	17.096	264	521202	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.654	152	157390	40.00	ppm	0.00
104) Phenanthrene-d10a	8.831	188	585176	40.00	ppm	0.00
108) Chrysene-d12a	14.067	240	582765	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	344818	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	601062	40.00	ppm	0.00
114) Chrysene-d12b	14.067	240	582765	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%	
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	5.845	110	223905	48.73	ppm	99

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

7.6.79

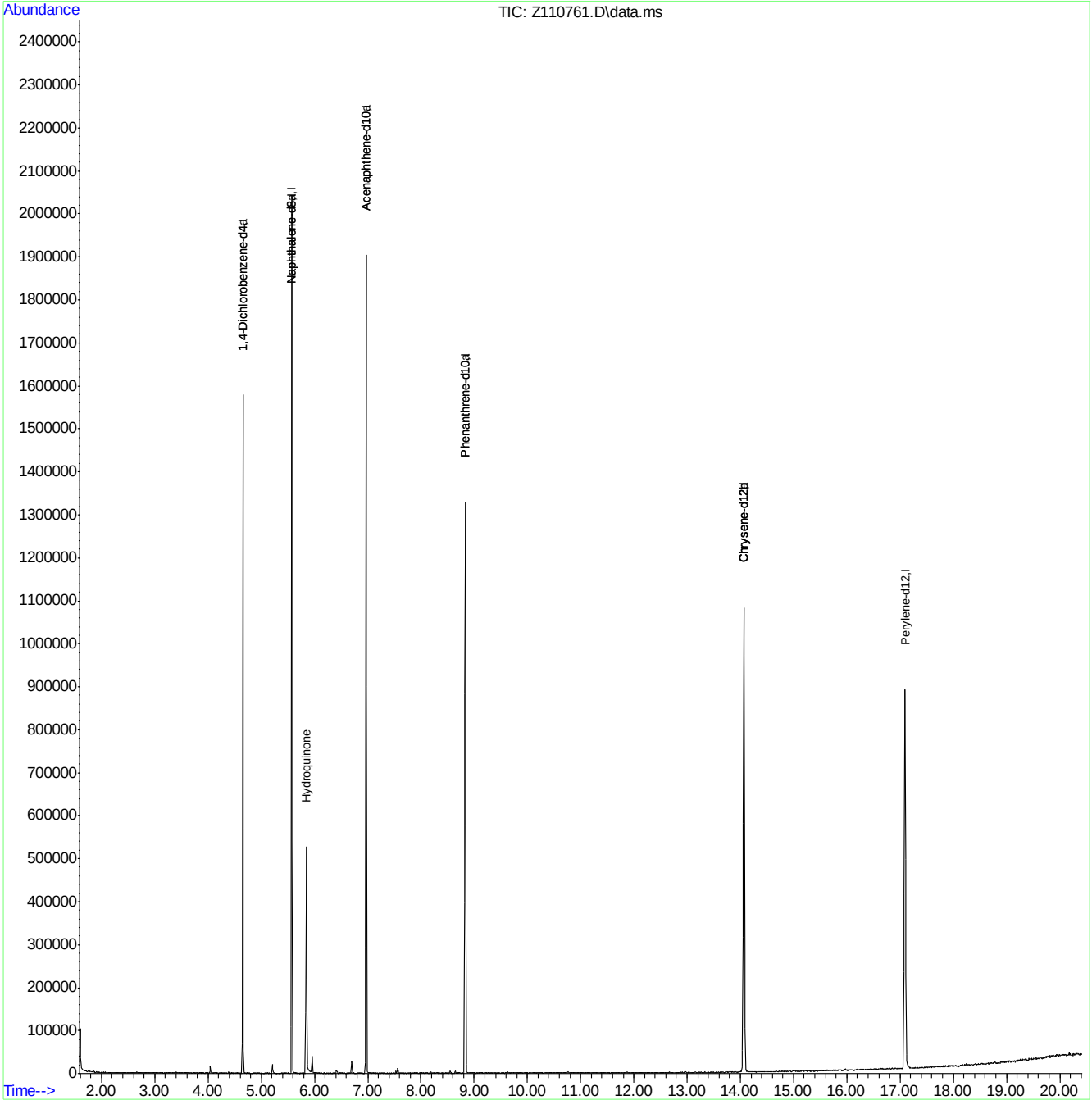
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5535\
Data File : Z110761.D
Acq On : 18 May 2016 1:15 pm
Operator : ariellec
Sample : icv5534-50
Misc : op93924,ez5535
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 18 13:40:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



MZ5533.M Wed May 18 13:51:15 2016 RTE

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110788.D
Acq On : 19 May 2016 8:56 am
Operator : ariellec
Sample : cc5533-25
Misc : op93962,ez5537
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 19 11:57:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	162495	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	614256	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	363287	40.00	ppm	0.00
69) Phenanthrene-d10	8.831	188	635270	40.00	ppm	-0.01
83) Chrysene-d12	14.067	240	634243	40.00	ppm	-0.03
92) Perylene-d12	17.096	264	571648	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.654	152	162495	40.00	ppm	0.00
104) Phenanthrene-d10a	8.831	188	635270	40.00	ppm	0.00
108) Chrysene-d12a	14.067	240	634243	40.00	ppm	0.00
110) Acenaphthene-d10a	6.972	164	363287	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	614256	40.00	ppm	0.00
114) Chrysene-d12b	14.067	240	634243	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.660	112	133407	24.32	ppm	0.00
Spiked Amount 50.000			Recovery	=	48.64%	
8) Phenol-d5	4.381	99	166794	24.65	ppm	0.00
Spiked Amount 50.000			Recovery	=	49.30%	
25) Nitrobenzene-d5	5.054	82	143305	25.02	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.04%	
51) 2-Fluorobiphenyl	6.368	172	289266	24.36	ppm	0.00
Spiked Amount 50.000			Recovery	=	48.72%	
73) 2,4,6-Tribromophenol	7.848	330	40259	25.22	ppm	-0.01
Spiked Amount 50.000			Recovery	=	50.44%	
86) Terphenyl-d14	11.871	244	326677	24.02	ppm	-0.02
Spiked Amount 50.000			Recovery	=	48.04%	
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	2.201	88	54379	23.86	ppm	99
3) Pyridine	2.538	79	138863	26.41	ppm	99
4) N-Nitrosodimethylamine	2.485	74	76197	25.77	ppm	98
6) Indene	4.841	116	227080	24.30	ppm	99
7) Cumene	4.061	105	337719	24.82	ppm	98
9) Phenol	4.386	94	171224	24.44	ppm	87
10) Aniline	4.408	93	167058	22.11	ppm	99
11) bis(2-Chloroethyl)ether	4.456	93	115075	24.81	ppm	97
12) 2-Chlorophenol	4.499	128	140746	24.45	ppm	94
13) Decane	4.536	43	102773	23.67	ppm	97
14) 1,3-Dichlorobenzene	4.611	146	154435	24.16	ppm	96
15) 1,4-Dichlorobenzene	4.664	146	153348	24.39	ppm	97
16) Benzyl alcohol	4.750	108	83642	24.64	ppm	93
17) 1,2-Dichlorobenzene	4.776	146	140726	23.95	ppm	98
18) Acetophenone	4.942	105	188505	24.75	ppm	100
19) 2-Methylphenol	4.830	108	121845	25.06	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.851	121	36717	23.81	ppm	92

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110788.D
Acq On : 19 May 2016 8:56 am
Operator : ariellec
Sample : cc5533-25
Misc : op93962,ez5537
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 19 11:57:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.942	108	131079	25.03	ppm	99
22) n-Nitroso-di-n-propyla...	4.947	70	95917	24.98	ppm	98
23) Hexachloroethane	5.022	201	52785	24.85	ppm	94
26) Nitrobenzene	5.065	77	141047	24.87	ppm	100
27) Quinoline	5.829	129	274858	25.13	ppm	98
28) Isophorone	5.241	82	243526	24.90	ppm	97
29) 2-Nitrophenol	5.295	139	77151	26.55	ppm	96
30) 2,4-Dimethylphenol	5.321	107	122870	24.72	ppm	90
31) Benzoic Acid	5.391	105	105131	29.46	ppm	98
32) bis(2-Chloroethoxy)met...	5.396	93	140459	24.48	ppm	98
33) 2,4-Dichlorophenol	5.466	162	113388	25.04	ppm	98
34) 2,6-Dichlorophenol	5.626	162	106747	24.38	ppm	99
35) 1,3,5-Trichlorobenzene	5.305	180	131410	24.41	ppm	100
36) 1,2,4-Trichlorobenzene	5.530	180	124263	24.07	ppm	99
37) 1,2,3-Trichlorobenzene	5.690	180	118888	24.38	ppm	97
38) Naphthalene	5.588	128	390963	24.23	ppm	100
39) 4-Chloroaniline	5.620	127	159878	23.90	ppm	99
40) 2,3-Dichloroaniline	6.299	161	137994	24.60	ppm	98
41) Caprolactam	5.877	55	49014	25.79	ppm	96
42) Hexachlorobutadiene	5.674	225	70055	24.05	ppm	96
43) 4-Chloro-3-methylphenol	5.962	107	127023	25.46	ppm	99
44) 2-Methylnaphthalene	6.085	141	234427	24.65	ppm	98
45) 1-Methylnaphthalene	6.160	141	239488	24.54	ppm	99
46) Dimethylnaphthalene	6.582	156	243046	24.70	ppm	96
48) Hexachlorocyclopentadiene	6.203	237	158733	56.31	ppm	98
49) 2,4,6-Trichlorophenol	6.299	196	81631	24.73	ppm	97
50) 2,4,5-Trichlorophenol	6.326	196	89306	25.31	ppm	98
52) 2-Chloronaphthalene	6.470	162	251800	24.43	ppm	99
53) Biphenyl	6.449	154	330955	24.45	ppm	98
54) 2-Nitroaniline	6.550	65	80473	26.93	ppm	98
55) Dimethylphthalate	6.710	163	302330	24.74	ppm	99
56) Acenaphthylene	6.833	152	434103	24.74	ppm	100
57) 2,6-Dinitrotoluene	6.764	165	65404	27.45	ppm	90
58) 3-Nitroaniline	6.919	138	74969	26.18	ppm	89
59) Acenaphthene	7.004	153	263591	24.60	ppm	97
60) 2,4-Dinitrophenol	7.026	184	58269	64.31	ppm	92
61) 4-Nitrophenol	7.079	109	47765	29.06	ppm	95
62) Dibenzofuran	7.175	168	366983	24.94	ppm	98
63) 2,4-Dinitrotoluene	7.154	165	93052	28.65	ppm	86
64) 2,3,4,6-Tetrachlorophenol	7.303	232	72594	25.82	ppm	97
65) Diethylphthalate	7.432	149	315550	25.58	ppm	99
66) Fluorene	7.560	166	307051	25.07	ppm	100
67) 4-Chlorophenyl-phenyle...	7.560	204	142142	24.86	ppm	94
68) 4-Nitroaniline	7.576	138	76605	26.44	ppm	98
70) 4,6-Dinitro-2-methylph...	7.613	198	47036	30.07	ppm	100
71) n-Nitrosodiphenylamine	7.704	169	211717	24.37	ppm	99
72) 1,2-Diphenylhydrazine	7.752	77	293475	24.73	ppm	100
74) 4-Bromophenyl-phenylether	8.190	248	83744	24.73	ppm	97
75) Hexachlorobenzene	8.260	284	88620	24.25	ppm	97
76) Pentachlorophenol	8.543	266	129218	55.70	ppm	97

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110788.D
Acq On : 19 May 2016 8:56 am
Operator : ariellec
Sample : cc5533-25
Misc : op93962,ez5537
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 19 11:57:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	8.869	178	430783	24.46	ppm	98
78)	Anthracene	8.949	178	441192	24.66	ppm	99
79)	Carbazole	9.221	167	414157	24.81	ppm	99
80)	Di-n-butylphthalate	9.937	149	554659	25.80	ppm	99
81)	Fluoranthene	10.989	202	497181	25.02	ppm	99
82)	Octadecane	8.751	57	156628	25.85	ppm	98
84)	Pyrene	11.433	202	513753	24.25	ppm	96
85)	Butyl stearate	13.361	56	107658	25.11	ppm	99
87)	Butylbenzylphthalate	13.057	149	245453	24.80	ppm	97
88)	Benzo[a]anthracene	14.045	228	467764	24.14	ppm	98
89)	3,3'-Dichlorobenzidine	14.093	252	162714	24.20	ppm	94
90)	Chrysene	14.125	228	436176	24.05	ppm	99
91)	bis(2-Ethylhexyl)phtha...	14.473	149	334378	24.97	ppm	100
93)	Di-n-octylphthalate	15.920	149	569230	25.20	ppm	99
94)	Benzo[b]fluoranthene	16.342	252	466830	24.81	ppm	99
95)	Benzo[k]fluoranthene	16.406	252	433262	24.43	ppm	98
96)	Benzo[a]pyrene	16.973	252	405553	24.29	ppm	99
97)	Indeno[1,2,3-cd]pyrene	19.019	276	372204	24.72	ppm	98
98)	Dibenz(a,h)acridine	18.666	279	350455	25.23	ppm	99
99)	Dibenz[a,h]anthracene	19.088	278	384135	24.59	ppm	99
100)	7,12-Dimethylbenz(a)an...	16.369	256	194505	25.88	ppm	96
101)	Benzo[g,h,i]perylene	19.441	276	396978	24.98	ppm	98

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

7.6.80

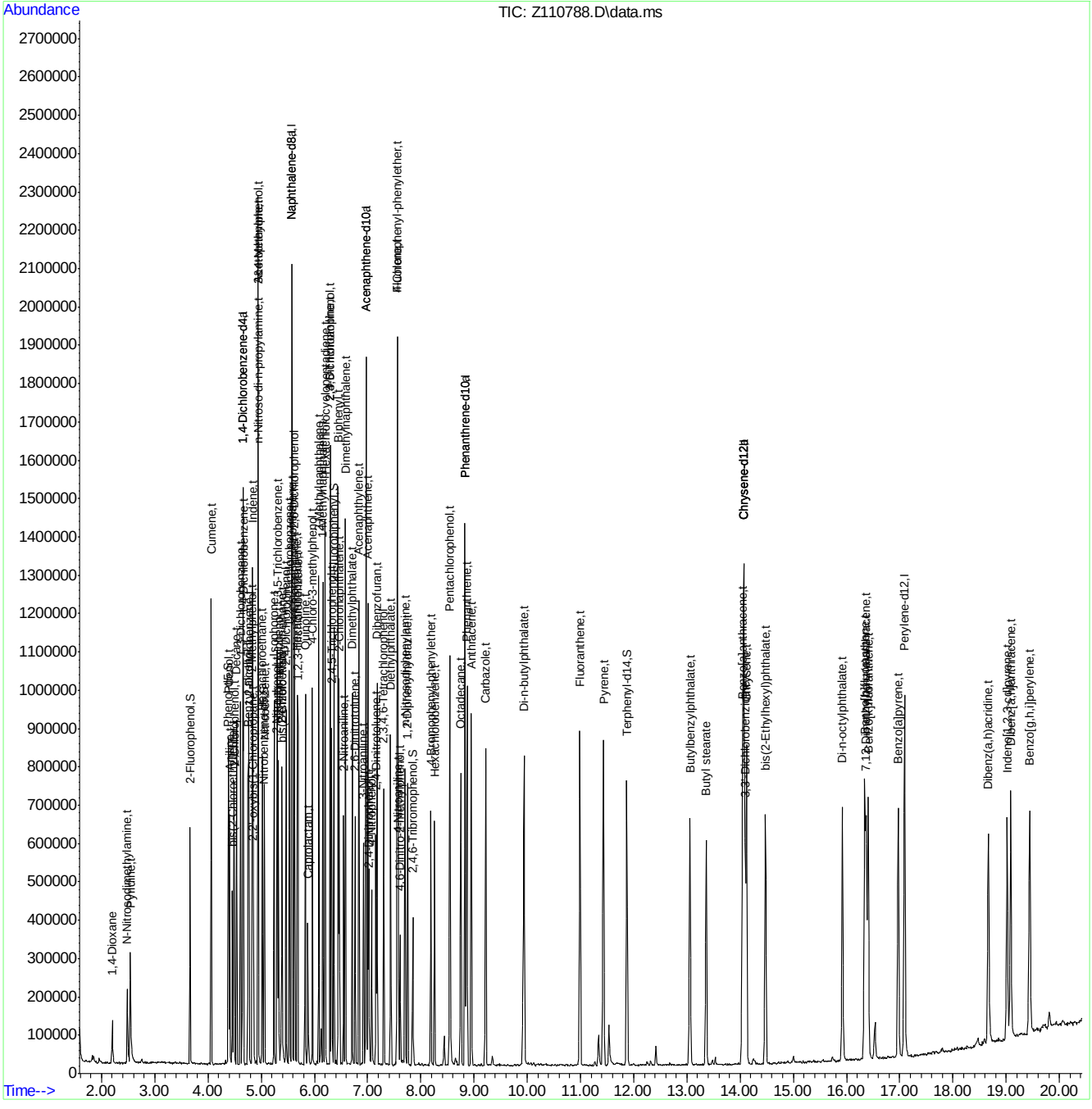
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110788.D
Acq On : 19 May 2016 8:56 am
Operator : ariellec
Sample : cc5533-25
Misc : op93962,ez5537
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 19 11:57:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



MZ5533.M Thu May 19 11:57:13 2016 RTE

Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110789.D
Acq On : 19 May 2016 9:26 am
Operator : ariellec
Sample : cc5534-25
Misc : op93962,ez5537
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 19 11:57:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration

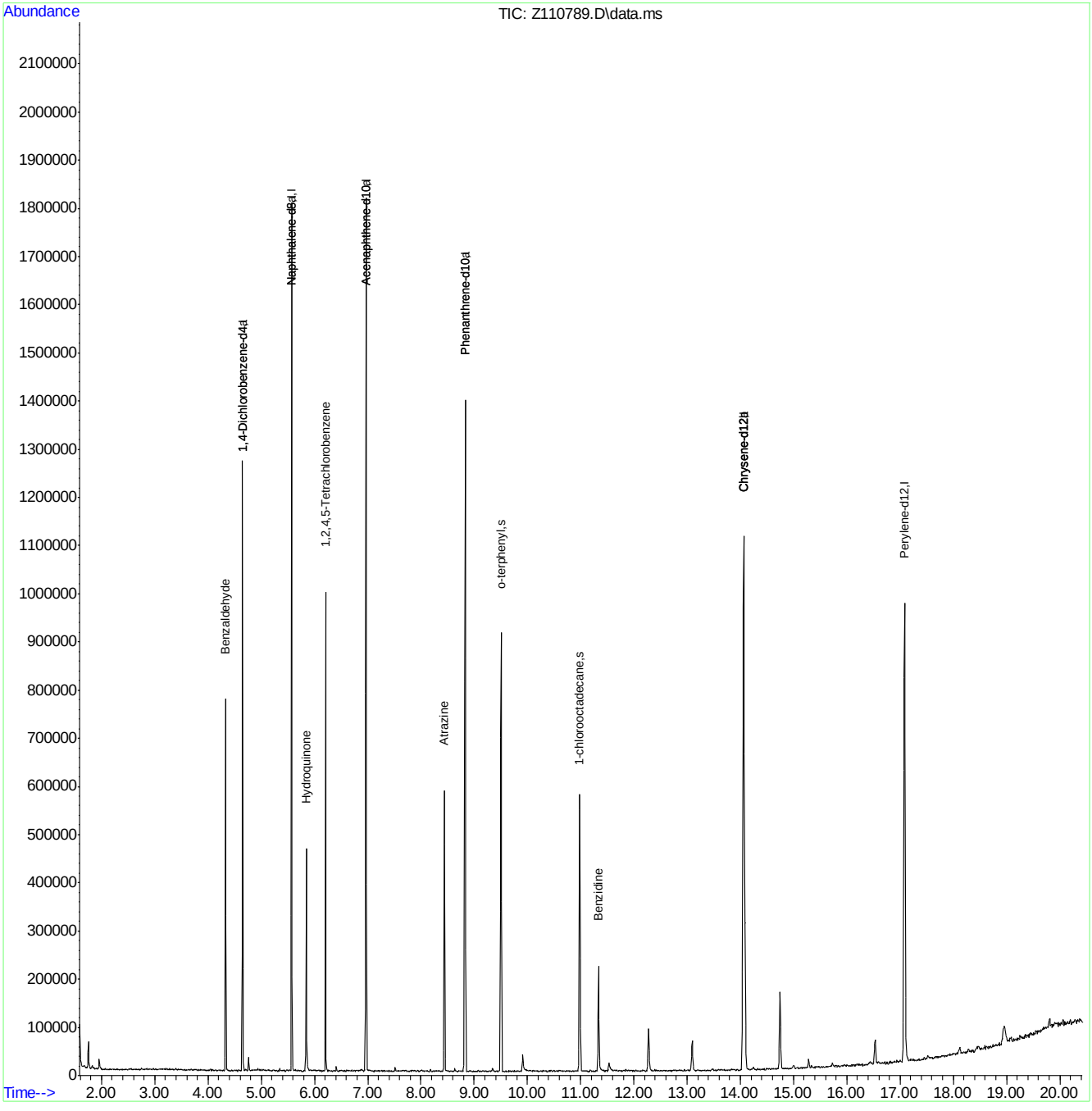
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	152601	40.00	ppm	0.00
24) Naphthalene-d8	5.567	136	602906	40.00	ppm	-0.01
47) Acenaphthene-d10	6.967	164	360325	40.00	ppm	-0.01
69) Phenanthrene-d10	8.831	188	638455	40.00	ppm	-0.01
83) Chrysene-d12	14.061	240	618346	40.00	ppm	-0.03
92) Perylene-d12	17.085	264	551954	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.654	152	152601	40.00	ppm	0.00
104) Phenanthrene-d10a	8.831	188	638455	40.00	ppm	0.00
108) Chrysene-d12a	14.061	240	618346	40.00	ppm	-0.01
110) Acenaphthene-d10a	6.967	164	360325	40.00	ppm	0.00
112) Naphthalene-d8a	5.567	136	602906	40.00	ppm	0.00
114) Chrysene-d12b	14.061	240	618346	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	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%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	10.979	57	96521	24.39	ppm	-0.01
Spiked Amount 50.000			Recovery = 48.78%			
106) o-terphenyl	9.504	230	219308	23.30	ppm	0.00
Spiked Amount 50.000			Recovery = 46.60%			
Target Compounds						Qvalue
103) Benzaldehyde	4.328	105	100171	26.16	ppm	96
107) Atrazine	8.441	215	38501	23.71	ppm	89
109) Benzidine	11.337	184	120606	22.49	ppm	98
111) 1,2,4,5-Tetrachloroben...	6.208	216	116288	23.84	ppm	99
113) Hydroquinone	5.845	110	130447	28.30	ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5537\
Data File : Z110789.D
Acq On : 19 May 2016 9:26 am
Operator : ariellec
Sample : cc5534-25
Misc : op93962,ez5537
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 19 11:57:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Wed May 18 09:02:21 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5538\
Data File : Z110816.D
Acq On : 20 May 2016 8:27 am
Operator : ariellec
Sample : cc5533-50
Misc : op93962,ez5538
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 09:01:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu May 19 16:54:25 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	158244	40.00	ppm	0.00
24) Naphthalene-d8	5.572	136	590249	40.00	ppm	0.00
47) Acenaphthene-d10	6.977	164	345179	40.00	ppm	0.00
69) Phenanthrene-d10	8.842	188	593772	40.00	ppm	0.00
83) Chrysene-d12	14.088	240	578906	40.00	ppm	0.00
92) Perylene-d12	17.117	264	517410	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.654	152	158244	40.00	ppm	-0.02
104) Phenanthrene-d10a	8.842	188	593772	40.00	ppm	0.01
108) Chrysene-d12a	14.088	240	578906	40.00	ppm	0.02
110) Acenaphthene-d10a	6.977	164	345179	40.00	ppm	0.00
112) Naphthalene-d8a	5.572	136	590249	40.00	ppm	0.00
114) Chrysene-d12b	14.088	240	578906	40.00	ppm	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.665	112	255906	47.91	ppm	0.00
Spiked Amount 50.000			Recovery	=	95.82%	
8) Phenol-d5	4.386	99	317080	48.12	ppm	0.00
Spiked Amount 50.000			Recovery	=	96.24%	
25) Nitrobenzene-d5	5.054	82	271045	49.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	98.52%	
51) 2-Fluorobiphenyl	6.368	172	514875	45.63	ppm	0.00
Spiked Amount 50.000			Recovery	=	91.26%	
73) 2,4,6-Tribromophenol	7.859	330	74798	50.13	ppm	0.00
Spiked Amount 50.000			Recovery	=	100.26%	
86) Terphenyl-d14	11.887	244	599100	48.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	96.52%	
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	2.191	88	98471	44.36	ppm	98
3) Pyridine	2.527	79	239250	46.72	ppm	99
4) N-Nitrosodimethylamine	2.479	74	141924	49.30	ppm	97
6) Indene	4.841	116	419864	46.13	ppm	99
7) Cumene	4.061	105	637058	48.08	ppm	99
9) Phenol	4.397	94	337533	49.48	ppm	81
10) Aniline	4.413	93	290512	39.48	ppm	72
11) bis(2-Chloroethyl)ether	4.461	93	211967	46.92	ppm	98
12) 2-Chlorophenol	4.499	128	257101	45.86	ppm	97
13) Decane	4.536	43	193049	45.65	ppm	98
14) 1,3-Dichlorobenzene	4.611	146	289944	46.58	ppm	97
15) 1,4-Dichlorobenzene	4.664	146	280492	45.81	ppm	98
16) Benzyl alcohol	4.755	108	159584	48.28	ppm	96
17) 1,2-Dichlorobenzene	4.776	146	261592	45.72	ppm	98
18) Acetophenone	4.947	105	340404	45.90	ppm	96
19) 2-Methylphenol	4.841	108	214300	45.26	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.851	121	68004	45.28	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5538\
Data File : Z110816.D
Acq On : 20 May 2016 8:27 am
Operator : ariellec
Sample : cc5533-50
Misc : op93962,ez5538
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 09:01:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu May 19 16:54:25 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.947	108	234053	45.90	ppm	98
22) n-Nitroso-di-n-propyla...	4.953	70	173935	46.51	ppm	97
23) Hexachloroethane	5.022	201	98135	47.43	ppm	92
26) Nitrobenzene	5.070	77	259025	47.53	ppm	98
27) Quinoline	5.834	129	499797	47.56	ppm	97
28) Isophorone	5.247	82	440351	46.85	ppm	98
29) 2-Nitrophenol	5.300	139	144188	51.63	ppm	91
30) 2,4-Dimethylphenol	5.332	107	235288	49.26	ppm	97
31) Benzoic Acid	5.423	105	213916	62.39	ppm	97
32) bis(2-Chloroethoxy)met...	5.396	93	259704	47.10	ppm	99
33) 2,4-Dichlorophenol	5.471	162	209911	48.24	ppm	98
34) 2,6-Dichlorophenol	5.631	162	196165	46.62	ppm	99
35) 1,3,5-Trichlorobenzene	5.305	180	239118	46.21	ppm	98
36) 1,2,4-Trichlorobenzene	5.530	180	232402	46.84	ppm	96
37) 1,2,3-Trichlorobenzene	5.690	180	219366	46.81	ppm	98
38) Naphthalene	5.588	128	722243	46.58	ppm	98
39) 4-Chloroaniline	5.626	127	281417	43.78	ppm	99
40) 2,3-Dichloroaniline	6.304	161	252338	46.81	ppm	99
41) Caprolactam	5.893	55	88060	48.22	ppm	97
42) Hexachlorobutadiene	5.674	225	130579	46.66	ppm	100
43) 4-Chloro-3-methylphenol	5.973	107	233698	48.75	ppm	98
44) 2-Methylnaphthalene	6.085	141	432823	47.36	ppm	97
45) 1-Methylnaphthalene	6.160	141	439846	46.90	ppm	98
46) Dimethylnaphthalene	6.587	156	446303	47.20	ppm	97
48) Hexachlorocyclopentadiene	6.203	237	302399	112.90	ppm	95
49) 2,4,6-Trichlorophenol	6.304	196	151667	48.37	ppm	98
50) 2,4,5-Trichlorophenol	6.336	196	162283	48.40	ppm	98
52) 2-Chloronaphthalene	6.475	162	453119	46.26	ppm	100
53) Biphenyl	6.454	154	607620	47.24	ppm	99
54) 2-Nitroaniline	6.555	65	145565	51.27	ppm	100
55) Dimethylphthalate	6.716	163	550257	47.39	ppm	99
56) Acenaphthylene	6.839	152	784028	47.03	ppm	100
57) 2,6-Dinitrotoluene	6.769	165	123399	54.50	ppm	83
58) 3-Nitroaniline	6.929	138	139653	51.32	ppm	96
59) Acenaphthene	7.009	153	477203	46.87	ppm	99
60) 2,4-Dinitrophenol	7.036	184	136863	128.58	ppm	58
61) 4-Nitrophenol	7.095	109	87022	55.73	ppm	94
62) Dibenzofuran	7.186	168	656020	46.91	ppm	99
63) 2,4-Dinitrotoluene	7.170	165	171304	55.50	ppm	99
64) 2,3,4,6-Tetrachlorophenol	7.314	232	138328	51.78	ppm	97
65) Diethylphthalate	7.437	149	574361	49.01	ppm	98
66) Fluorene	7.565	166	558758	48.01	ppm	99
67) 4-Chlorophenyl-phenyle...	7.565	204	259030	47.68	ppm	93
68) 4-Nitroaniline	7.592	138	130725	47.49	ppm	96
70) 4,6-Dinitro-2-methylph...	7.629	198	100664	60.09	ppm	99
71) n-Nitrosodiphenylamine	7.709	169	384879	47.39	ppm	98
72) 1,2-Diphenylhydrazine	7.757	77	534271	48.17	ppm	99
74) 4-Bromophenyl-phenylether	8.195	248	155573	49.15	ppm	98
75) Hexachlorobenzene	8.270	284	161771	47.36	ppm	96
76) Pentachlorophenol	8.559	266	233792	107.82	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5538\
Data File : Z110816.D
Acq On : 20 May 2016 8:27 am
Operator : ariellec
Sample : cc5533-50
Misc : op93962,ez5538
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 09:01:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu May 19 16:54:25 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	8.879	178	772569	46.94	ppm	99
78) Anthracene	8.959	178	791258	47.32	ppm	99
79) Carbazole	9.237	167	750801	48.11	ppm	99
80) Di-n-butylphthalate	9.942	149	1004408	49.98	ppm	99
81) Fluoranthene	11.005	202	893556	48.11	ppm	100
82) Octadecane	8.756	57	284757	50.28	ppm	99
84) Pyrene	11.449	202	919277	47.53	ppm	99
85) Butyl stearate	13.372	56	201581	51.52	ppm	96
87) Butylbenzylphthalate	13.068	149	444844	49.24	ppm	99
88) Benzo[a]anthracene	14.067	228	838753	47.43	ppm	99
89) 3,3'-Dichlorobenzidine	14.115	252	300615	48.99	ppm	100
90) Chrysene	14.147	228	782813	47.29	ppm	98
91) bis(2-Ethylhexyl)phtha...	14.483	149	602795	49.32	ppm	99
93) Di-n-octylphthalate	15.931	149	1020602	49.92	ppm	99
94) Benzo[b]fluoranthene	16.374	252	806259	47.34	ppm	99
95) Benzo[k]fluoranthene	16.439	252	758882	47.28	ppm	100
96) Benzo[a]pyrene	17.005	252	709491	46.96	ppm	100
97) Indeno[1,2,3-cd]pyrene	19.056	276	640238	46.99	ppm	97
98) Dibenz(a,h)acridine	18.704	279	609004	48.45	ppm	99
99) Dibenz[a,h]anthracene	19.120	278	672446	47.55	ppm	99
100) 7,12-Dimethylbenz(a)an...	16.396	256	349417	51.36	ppm	98
101) Benzo[g,h,i]perylene	19.484	276	679302	47.23	ppm	98

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

7.6.82

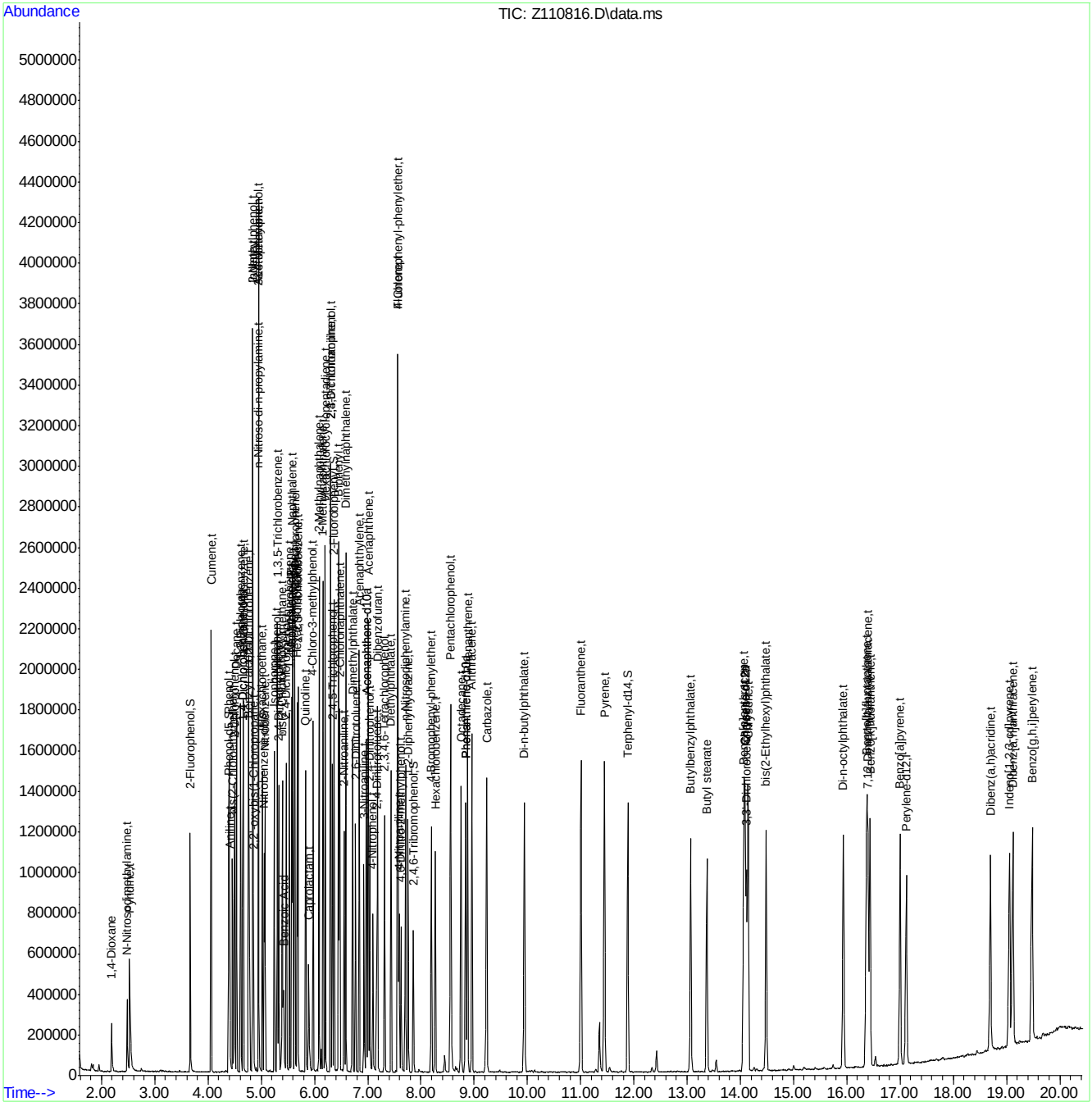
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5538\
Data File : Z110816.D
Acq On : 20 May 2016 8:27 am
Operator : ariellec
Sample : cc5533-50
Misc : op93962,ez5538
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 09:01:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Thu May 19 16:54:25 2016
Response via : Initial Calibration



SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5538\
Data File : Z110817.D
Acq On : 20 May 2016 8:57 am
Operator : ariellec
Sample : cc5534-50
Misc : op93962,ez5538
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 20 11:07:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Fri May 20 09:04:06 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	176155	40.00	ppm	0.00
24) Naphthalene-d8	5.573	136	703976	40.00	ppm	0.00
47) Acenaphthene-d10	6.972	164	416329	40.00	ppm	0.00
69) Phenanthrene-d10	8.837	188	705797	40.00	ppm	0.00
83) Chrysene-d12	14.083	240	682350	40.00	ppm	-0.01
92) Perylene-d12	17.112	264	591553	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.654	152	176155	40.00	ppm	0.00
104) Phenanthrene-d10a	8.837	188	705797	40.00	ppm	0.00
108) Chrysene-d12a	14.083	240	682350	40.00	ppm	-0.01
110) Acenaphthene-d10a	6.972	164	416329	40.00	ppm	0.00
112) Naphthalene-d8a	5.573	136	703976	40.00	ppm	0.00
114) Chrysene-d12b	14.083	240	682350	40.00	ppm	-0.07
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%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
105) 1-chlorooctadecane	10.990	57	204071	46.65	ppm	0.00
Spiked Amount 50.000			Recovery = 93.30%			
106) o-terphenyl	9.515	230	446761	42.94	ppm	0.00
Spiked Amount 50.000			Recovery = 85.88%			
Target Compounds						Qvalue
103) Benzaldehyde	4.328	105	194254	43.95	ppm	98
107) Atrazine	8.457	215	81839	45.59	ppm	98
109) Benzidine	11.353	184	388212	57.03	ppm	99
111) 1,2,4,5-Tetrachloroben...	6.214	216	246819	43.79	ppm	99
113) Hydroquinone	5.861	110	266171	49.46	ppm	99

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

7.6.83

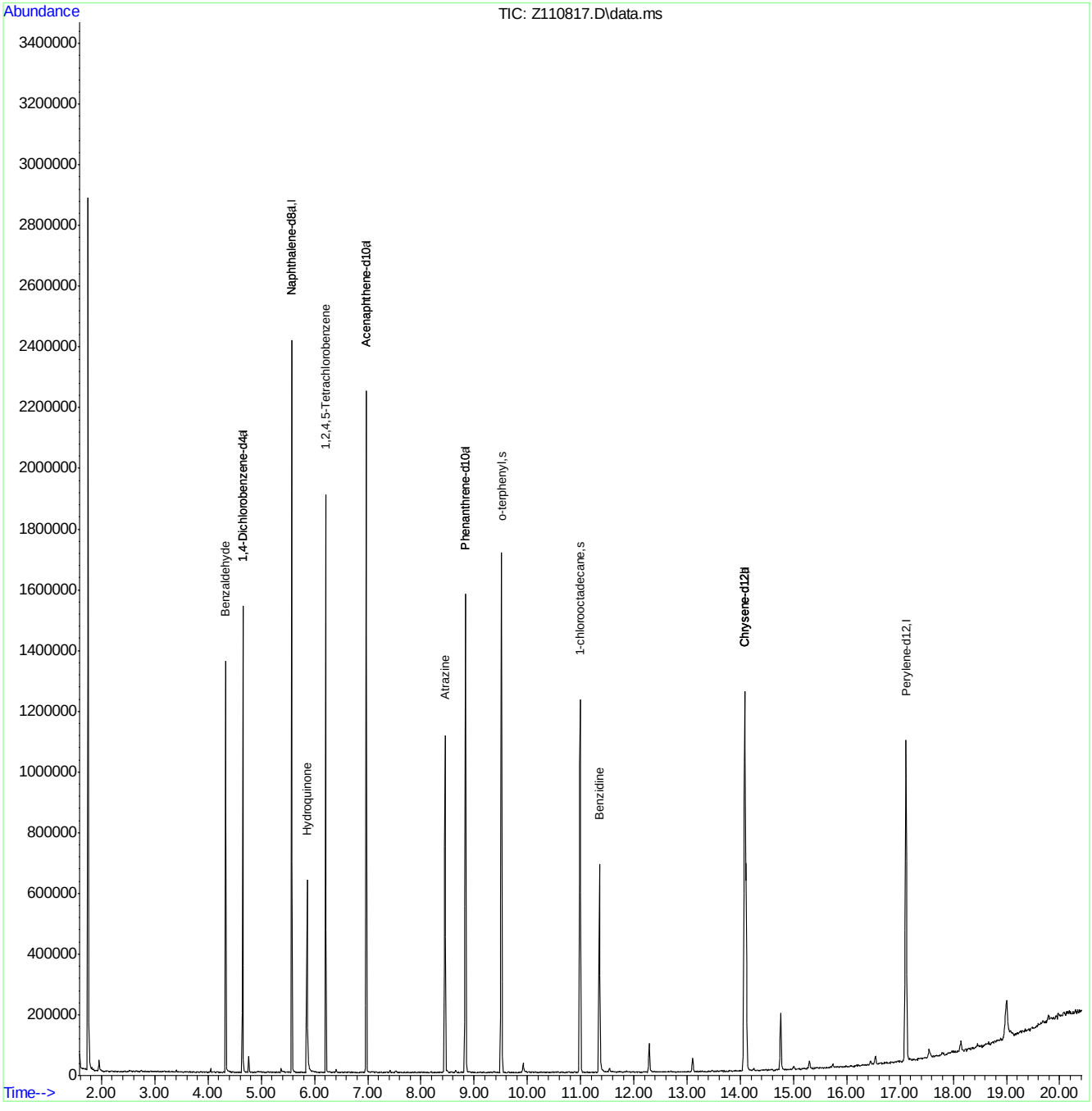
7

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\ez5538\
Data File : Z110817.D
Acq On : 20 May 2016 8:57 am
Operator : ariellec
Sample : cc5534-50
Misc : op93962,ez5538
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 20 11:07:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\MZ5533.M
Quant Title : Semi Volatile GC/MS, ZB-5MS 15m x .25mm x .25um
QLast Update : Fri May 20 09:04:06 2016
Response via : Initial Calibration



MZ5533.M Fri May 20 11:07:37 2016 RTE

Page: 2

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3M2855

Date: 4/21/16

Analyst Signature: JK

Columns: Rxi-5SilMS 30m x .25mm x .25um

Method 8270D/625

Initial Cal. Method M8M2855sim

Injection Volume: 1ul

Standard Data		
Lot #	Description	Conc.
		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 ~~BFB SIM~~	W	1					~~ok~~	deg ↑ reinstead
	60762	DFTPP			W	1					OK	1:31pm
	60763A	ICC2855-1.0			W	2					ok	SVI51827-10AC
	60764A	IC2855-0.5				3					ok	104D
	60765A	IC2855-0.2				4					OK	104E
	60766	IC2855-0.1				5					ok	104F
	60767	IC2855-0.05				6					OK	104G
	60768	IC2855-0.02				7					ok	104H
	60769	IC2855-0.01				8					ok	104I
	60770	IC2855-5.0				9					ok	104A
	60771	IC2855-2.5				10					OK	104B
	60772	ICV2855-1.0		Acid		11					ok	SVI51827-27
	60773	ICV2855-1.0		BN1		12					ok	OP16A12-28
	60774	ICV2855-1.0		BN2		13					ok	SVI51829-85 8:35pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

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All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3M2885

Print Analyst Name: Ashley Page

Date: 5/16/2016

Analyst Signature: AMO

Columns: 2B5MS (D30m x 25mm x 15 µm)

Method 8270D/625

Initial Cal. Method M3M2855sim

Injection Volume: µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV15182905	DFTPP	50 ppm
SV16A2359	simstd	5 ppm
SV16A2359	siminternal	400 ppm
162661	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3M61345	DFTPP				1					not using	abundances & ratios 931 AM
	61346	DFTPP				1					OK	
	61347	CC2855-5		BLASim	W	2					OK	
	61348	op93903mbl	93903-1	BS270	S	3			✓	✓	OK	
	61349	AMO5162016		↓		4			✓	✓	OK	
	61350	JC45790-1		simpak		5			✓	✓	OK	
	61351	-2				6			✓	✓	OK	
	61352	C45791-2				7			✓	✓	OK	
	61353	C45792-7				8			✓	✓	OK	
	61354	C45793-1				9			✓	✓	OK	
	61355	-2				10			✓	✓	OK	
	61356	C45790-7				11			✓	✓	OK	
	61357	C45791-1				12			✓	✓	OK	run by 8270 on 3E
	61358	-7				13			✓	✓	OK	
	61359	C45792-1				14			✓	✓	OK	
	61360	-2				15			✓	✓	OK	
	61361	JC45793-7		↓		16			✓	✓	OK	

AMO 5/16/16 (+)

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.2

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3M2885

Print Analyst Name: Ashley Mayo

Date: 5/16/16

Analyst Signature: AMO

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page 73	

Columns: 2B5ms 30m x 15mm x 5µL

Method 8270D/625

Initial Cal. Method M3M2855sim

Injection Volume: nL

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: ah

Date: 5/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3M61362	op93903ms	939031	8270	S	17			/	/	OK	
	61363	msd		↓		18			/	/	OK	
	61364	op93924-1 ~~BST~~ CSST	93924-1	8270	S	19			/	/	OK	
	61368	MSI BST				20			/	/	OK	
	61366	TC20314-2		napt + 1,4DIOX		21			/	/	OK	
	61367	4				22			/	/	OK	8:33pm

ah 5/17/16

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

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E4P863

Print Analyst Name: LINDSEY K

Analyst Signature: LK

Date: 5/18/16 AMO 5/19/16

Columns: Rxi-5Sil MS 30m x .25mm x .25um

Method: 8270D/1625

Initial Cal. Method: M4P863 SIM

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151827-91	DFTPP	50ppm
SV160935-29	SIM Internal	40ppm
160204-1	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: 5/19/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4P160320	DFTPP			W	1					NG	441↓ reinject
	160321	DFTPP			W	1					↓	441↑ 443↓ retune
	160322	DFTPP			W	1					OK	10:31AM
	160323	ICC863-1.0			W	2					OK	SV160935-41AM LK 5/18/16
	160324	ICC863-0.5				3					OK	-41B
	160325	-0.2				4					OK	SV151827-104E
	160326	-0.1				5					OK	-104F
	160327	-0.05				6					OK	-104G
	160328	-0.02				7					OK	-42H
	160329	-0.01				8					OK	-104I
	160330	-5.0				9					OK	-104A
	160331	-2.5				10					OK	-104B
	160332	ICV863-1.0		Acids		11					OK	SV151827-92
	160333	ICV863-1.0		Bn1		12					OK	OP151624-73
	160334	ICV863-1.0		Bn2		13					OK	SV151829-85 4.2ppm

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 E4P8606

Print Analyst Name: Linsey K

Analyst Signature: LK

Date: 5/19/16

Columns: Rxi-5sil MS 30m x .25mm x .25um

Method 8270D/6725 hk 5/19/16 / hk 5/19/16

Initial Cal. Method E M4P8635im

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV158291	DFTPP	50ppm
SV161935-41	SIMSTD	1.0ppm
-29	SIMTNEW	400ppm
160641	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: 5/31/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4P16346	DFTPP			W	1					ok	2:31pm
	16347	CCS1631.0		Brasim	W	2					ok	
	16348	93918-mb1	93918-1	B8270	S	3			✓		narrow	Sent time notification
	16349 hk 5/19/16	-bs12				4			✓			ms/msd
	16350	-ms				5			✓			8270 MS!
	16351	-msd				6			✓			
	16352	JC20078-2		nap+14dioxane		7					W hk 5/20/16	Cev hk 5/20/16
	16353	-3				8						
	16354	op93998-mb1	93998-1	B8270	S	9			✓	✓	ok	
	16355	-bs12				10			✓	✓	ok	W Cev
	16356	-ms				11			✓	✓	ok	
	16357	-msd				12			✓	✓	ok	
	16358	JC20344-1		nap+14dioxane		13					W	1,4 dioxane MCC
	16359	-3				14						Cev
	16360	JC20386-2		nap+14dioxane		15			✓	✓	ok	11:54pm
	16361	op94042-mb1	94042-1	AB8270	W	16			✓	✓	ok	naphthalene ran after 4P16351
	16362	-bs12				17			✓	✓	ok	naphthalene

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.4

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4P866

Print Analyst Name: Ashley Mdyo

Analyst Signature: AMO

Date: 5/19/16

Columns: RXI-5Sil MS 30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method M4P863sim

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see page 1	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AAL

Date: 5/31/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4P16363	JC20466-1	94042-1	NaP+1ADIOXW	W	18			✓	✓	OK	ran after 4P16351
	16364	-2		↓		19			✓	✓	OK	↓
	16365	-3		↓		20			✓	✓	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07

Rev. Date: 1/19/16

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7.7.4

7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E4P867

Print Analyst Name: Linsey/K

Analyst Signature: [illegible]

Date: 5/20/16

Columns: Rxi-5Sil MS 30m x .25mm x .25um

Method: 8270D/625

Initial Cal. Method: M4P8085im

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
S115827-91	DFTPP	50ppm
S116935-41	SMSTD	0.50ppm
-29	SIM Internal	40ug/m
160500	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: 5/31/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4P16366	DFTPP			W	1					OK	9:29AM
	16367	CCS63-05		BNsim	W	2					OK	5:16A
	16368	OP94049-1mb	940491	B8270	W	3			✓	✓	OK	
	16369	-LBS2				4			✓	✓	OK	
	16370	JC20344-1	939481	NAP+14dioxane	S	5			✓	✓	OK	
	16371	-3				6			✓	✓	OK	HFLT
	16372	JC20145-7	940491	1,4dioxane	W	7			✓	✓	OK	run by 8270!
	16373	-8				8			✓	✓	OK	run by 8270!
	16374	-9				9			✓	✓	OK	run by 8270!
	16375	JC20147-1		1,4dioxane		10			✓	✓	OK	run by 8270!
	16376	-2				11			✓	✓	OK	
	16377	-3				12			✓	✓	OK	
	16378	-4				13			✓	✓	OK	run 1:5 by 8270!
	16379	-5				14			✓	✓	OK	run 1:5 by 8270!
	16380	-6				15			✓	✓	OK	run 1:10 by 8270!
	16381	-7				16			✓	✓	OK	run 1:10 by 8270!
	16382	-8				17			✓	✓	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC20314

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4P867

Print Analyst Name: LINSLEY K

Analyst Signature: [signature]

Date: 5/20/16

Columns: Rxi-5Sil MS 30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method M4P8625im

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	SC8625	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5/31/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4P16383	JC20147-9	94049-1	1,4dioxane	W	18			✓	✓	OK	nm by 8270!
	16384	-10				19					not ran	cut from sequence
	16385	-11				20						
	16386	-12				21						
	16387	-14				22						
	16388	OP94049-MS		B8270		23						
	16389	-MSd				24						
	16390	OP93998-bs	93998-1	B8270		25			✓	✓	OK	ran after 4P16372
	16384	OP94102-mb1	94102	B8270	W	26			✓	37	OK	ran after 16379
	16385	-bs12				27			✓	✓	OK	
	16386	-bsd12				28			✓	37	OK	
	16387	JC20466-1		1,4Dioxane/Nap		29			✓	37	OK	hit for 8
	16388	-2				30			✓	37	OK	hit for 8
	16389	-3				31			✓	37	OK	hit for 8

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 EZ5485

Print Analyst Name: Sara Davis

Analyst Signature: SED

Date: 4/13/2016

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

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)	—

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 JC20314

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-5silms 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 dcsb
	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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7.2.7

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EZ5530

Print Analyst Name: Joelle Lorenzen

Date: 5/16/16

Analyst Signature:

Columns: Rtx-5Sil MS 30m x 0.25mm x 0.25um

Method: 8270D/625

Initial Cal. Method: MZ5485

Injection Volume: 1 uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 1582792	DFTPP	50ppm
W 1582761	BNA	
-1273	TCL 42	25ppm
CMS732	IMA Std	100ppm
1266	PCM (Short)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMW

Date: 5/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	Z110689	DFTPP			W	1					NG	Acceptance Rise +70 Em
	110689	DFTPP			W	1						70/497 reinject
	110690	DFTPP			W	1						442 reject
	110691	DFTPP			W	1						1992 751 PCPT drop 85
	110692	DFTPP			W	1						751 PCPT reinject
	110693	DFTPP			W	1						1921 reinject
	110694	DFTPP			W	1						701 return
	110695	DFTPP			W	1					NG	881 Fixwell
	110696	DFTPP			W	1					NG	701 PCPT Reinject
	110697	DFTPP			W	1					OK	1055AM
	110698	CCS4850		BNA	W	2					OK	42,70T 4/10L
	110699	CCS4850-25/50	Re stroke	TCL 42	W	3					OK	
	110700	BNA verify			W	4					OK	SV15182476 2C
	110701 A	089324-BS1	93924	AB8270	W	5			/	/	OK	Mass spec program shutdown
	110702	BSD				6			/	/	OK	
	110703	MBL				7			/	/	OK	
	110704	JC20314-2		AB8270 MWAP 12MWAP1498IX		8			/	/	OK	Contact Z110705

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 EZ5530

Print Analyst Name: Arelie Cocozza

Date: 5/16/16

Analyst Signature:

Columns: [illegible]

Method 8270D/625

Initial Cal. Method MS5485

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see p173	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMC

Date: 5/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	Z10705	JC20314-4	93924	ABSLF+MMFD 2MMFD+LMBR	W	9			✓	✓	OK	
	110706	QC93835-MB1	93835	AB8270+	W	10		T	✓	✓	OK	Rerun after Z110705
	110708	JC19954-14		MS8270		11			✓	✓	OK	Rerun after Z110706
	110709	5				12			✓	✓	OK	
	110710	4				13			✓	✓	OK	
	110711	3				14			✓	✓	OK	
	110712	8				15			✓	✓	OK	
	110713	9				16			✓	✓	OK	605pm
	~~110714~~											
	~~110715~~	5/17/16										

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC20314

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EZ5533

Print Analyst Name: Arielle Cooper

Analyst Signature:

Date: 5/17/16

Columns: DB5MS+30m x 0.25mm x 0.25um

Method 8270D/625

Initial Cal. Method MZ5533

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SU 1578 2968	DFTPP	50 ppm
(ms732)	int std	4000ppm
162641	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: Annie

Date: 5/18/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	110735	DFTPP			W	1					NG	Baseline Peak, 70% peak height
	110736	DFTPP			W	1					OK	44ppm
	110737	ICC5533-50		BNA	W	2					OK	107 ~~5/15/16~~ G AC 5/16
	110738	ICS533-25				3					OK	107 ~~107~~ H
	110739	-1				4					OK	106 I
	110740	-2				5					OK	106 H
	110741	-5				6					OK	106 G
	110742	-10				7					OK	106 E
	110743	-100				8					OK	106 A
	110744	-80				9					OK	93ppm 106 D
												SB

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

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7.7.9

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EZ5534

Print Analyst Name: Sam Black

Analyst Signature: Sam Black

Date: 5/17/16

Columns: ZB-5ms+ 30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method MZ5533

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 1578291058	DFTPP	50ppm
CM5732	Int Std	400ppm
162641	DCM (Bster)	SU

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: Amos

Date: 5/18/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	110745	DFTPP				1					OK	103ppm
	110746	IC5534-50		8270		2					ok	SV61935-31C
	110747	IC5534-25				3					OK	-31D
	110748	-1				4					ok	-31J
	110749	-2				5					OK	-31H
	110750	-5				6					OK	-31G
	110751	-10				7					OK	-31E
	110752	-100				8					ok	-31A
	110753	-80				9					OK	-31B 220ppm

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: EZ5538

Print Analyst Name: Amelia Cocean

Date: 5/18/16

Analyst Signature:

Columns: RTX-5MS + 30m x 0.25mm x 0.25um

Method: 8270D 1625

Initial Cal. Method: MZ5533

Injection Volume: 1 ul

Standard Data		
Lot #	Description	Conc.

Standard Data		
Lot #	Description	Conc.
SU1582791	DFTPP	50ppm
IM5492	IntStd	40ug/ml
16641	DCM (Rinse)	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMW

Date: 5/18/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	160754	DFTPP			W	1					OK	SU1582791
	160755	IC5538-50		Acid		2					OK	SU1601935-21 RA 1 had injection
	160756A	50		ABN Surr		3					OK	OP1601733 RA 1 all methods error
	160757A	50		Anilines		4					OK	SU1601935-15 RA 1 all methods error
	160758	50		BN2 AC Spiked		5					OK	SU1601935-1
	160759	50		BN2		6					OK	-10
	160760	50		Benzidine 3,3D		7					OK	-14B
	160761	50		HQ		8					OK	SU1582798A 10ppm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.11

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EZ5537

Print Analyst Name: Arelle Corazza

Analyst Signature:

Date: 5/9/16

Columns: ES5MS + 30mx25mmx.25m

Method: 8270D/625

Initial Cal. Method: MZ5533

Injection Volume: 1 µl

Standard Data

Lot #	Description	Conc.

Standard Data

	Lot #	Description	Conc.
SU	157827-91	DFTPP	50ppm
	107F	BNA	25ppm
SU	161935-32L	TCL42	25ppm
	CM5832	Int Std	1000ppm
	162641	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: 5/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	E10785	DFTPP			W	1					NG	Rept reinjected
	110786	DFTPP			W	1					↓	Rept reinstall
	110787	DFTPP			W	1					OK	8270ATM
	110788	CC5533-25		BNA	W	2					OK	60,70+
	110789	CC5534-25		TCL42	W	3					OK	
	110790	op93998-MB1	93998	AB8270+	S	4		H		/	OK	
	110791	BS1				5			/	/	OK	
	110792	JC20328-1		AB8270+		6		H	/	/	OK	
	110793	2				7		H	/	/	OK	
	110794	JC20038-3R				8		H	/	/	OK	
	110795	JC20218-24A				9		H	/	/	OK	
	110796	25A				10		H	/	/	OK	
	110797	26A				11		H	/	/	OK	
	110798	22A				12		H	/	/	OK	
	110799	17A				13		H	/	/	OK	
	110800	23A				14		H	/	/	OK	
	110801	op93998-MS		AB8270		15			/	/	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.12

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EZ5537

Print Analyst Name: Arelle Corcoran

Analyst Signature:

Date: 5/19/16

Columns: ZB5MS+ 30m x 25mm x .25um

Method: 8270D625

Initial Cal. Method: MZ5533

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	SOP191	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO

Date: 5/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	110802	OP93948MSD	93948	8270	S	16			/	/	OK	
	110803	JC20239-14		8270		17		/		/	OK	P-05/TBP low send back
	110804	JC20351-2				18		/	/	/	OK	no tic needed
	110805	3				19		/	/	/	OK	
	110806	4				20		/	/	/	OK	RR 1:5
	110807	JC20352-1				21			/	/	OK	
	110808	2				22			/	/	OK	RR 1:5 65ppm
	110809	JC20351-1				23					not using	had injection
	110810	JC20379-2		BPAH		24					hold	VF=5
	110811	DCM				100						run before 110810 After bad sample

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: EZ5538

Print Analyst Name: Arielle Corona

Analyst Signature: [signature]

Date: 5/20/16

Columns: ZB5MS/ZB-MXT-TMS 30m

Method: SZ 205/625

Initial Cal. Method: MZ5533

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SU 1518791	DFTPP	50ppm
707G	BNA	↓
SU 164354C	TCL 82	↓
732	Int. Std	400ppm
62800	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: 5/23/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	Z110822A	DFTPP			W	1					NG	DDT ↑ reject – clean system error MRA 9/11
	110823	DFTPP			W	1					NG	Abundances injector
	110824	DFTPP			W	1					NG	Abundances injector
	110815	DFTPP			W	1					OK	8:13 AM
	110816	CCS533-50		BNA	W	2					OK	31, 50, 70 Analyst
	110817	CCS534-50		TCL42	W	3					OK	
	110818	0P94056MB1	94056	ABSZ70+	S	4		+	/	/	OK	
	110819	BSI				5			/	/	OK	
	110820	JC20314-1	93998	ABSZ+MMP 2MMP	S	6			/	/	OK	
	110821	3				7			/	\	OK	
	110822	JC20386-2				8			/	\	OK	
	110823	JC20291-1Rx	94056	ABSZ+29DMP 26DCP	S	9			/	↓	OK	CFS
	110824	JC20535-1		BTCL28+		10		+	/	/	OK	
	110825	2				11		+	/	/	OK	
	110826	10				12		+	/	/	OK	
	110827	7				13			/		RR	C/O
	110828A	3				14		+	/	/	OK	Seq. stopped ran as A.

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 EZ5538 8 AC 5/23/16

Print Analyst Name: Arielle Cargill

Date: 5/20/16

Analyst Signature:

Columns: 70 5M x 30m x 0.25mm x 0.25um

Method 8270D/625

Initial Cal. Method MZ5533

Injection Volume: 1 µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See p195	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO. Date: 5/23/16.

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	Z110829	JC20535-8	94056	BTCL20+	S	15		+	✓	/	OK	
	110830	12				16		+	✓	/	OK	
	110831	4				17		+	✓	/	OK	RR 1:5 for 2-methylnaphthalene
	110832	5				18		+	✓	/	OK	809 pm
	110833A	6				19		+	✓	/	NG OK	Instrument Bias, see "A" file 5/23/16 RR 1:5
	110834	9				20					not ran	cut from seq - seq change
	110835	11				21					not ran	cut from sequence, seq change
R	110836	JC20351-4	93998	AGTCL20+	S	22	5				not run	cut from sequence
	110837	JC20468-1	94056	ADPATCL 2,4-DNPH BNZHAC MRZ	S	23						
	110838	JC20379-2	93998	BPAH		24						VF=5
	110839	DCM				100						After dirty sample
R	110840	JC18445A	93791	ABTCL20	S	25	2		/	/	OK	from AB 110826
R	110841 AB	JC19820-1	93751-1	BTCL20	S	26	2	+	/	\	OK	CF: for 3E c/o RR as a file.
	110842	-2				27	2	+	/	\	OK	
	110843	-5				28	2	+	/	\	OK	
	110844	OP93751-MB1		AB8270		29					not ran	Instrument shutoff.
	110844A	-MB1				29		+	/	/	OK	

X = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

strikeouts must be initialed, dated, and reason applied if not transcription error

mple volume/weight used and final volumes refer to extraction log.

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rm: OR015-07
ev. Date: 1/19/16

7.7.13

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ABN Aqueous Extraction Logbook

LOGBOOK ID: 6-1727

Date Started: 5/15/16 Time Started: 11:00am
Date Finished: 5/15/16 Time Finished: 4:00pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM_____
Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH # MS 093924	RACK# C-19
Extracted by:	MS / SG
Concentrated by:	MS / SG
Vialed by:	MS / SG
Relinquished by:	MS
Accepted by:	
Supervisor Review:	DH 5/15/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) <2 H2SO4	pH Adjust(mL) >11 NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
MB1	ABN		DI H2O	1000	1	4	clear	1		
BS1			DI H2O	1000	1	4	~~clear~~ yellow	1		
BS1 MS			DI H2O	1000	1	4	yellow	1		
MSD										
BS	12SIM		DI H2O	1000	1	4	yellow	1		
MS										
MSD										
1 JC20314-2	ABN	1	clear	1000	1	4	clear	1		
2 -4		1	yellow	100*	1	4	clear	1		
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

1DTAT

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	0.5/0.1	75.75	N/A
Waterbath Chiller (GPM)	F2	2	—	—	2
NEVAP (32-38°C, LPM)	2	36	0.1	36	10

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	161712100	50	1.0

WITNESS SIGN: MS SPIKE SIGN: SG

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	SV1613526	50	Acid: 1.0
Acid (for SIM)			A(SIM): 0.1
Base #1	SV1613525	50	1.0
Base #2	SV1613522	50	1.0
Anilines	SV1613520	50	1.0
BSIM			

WITNESS SIGN: MS SPIKE SIGN: SG

SOLVENT	LOT #	BRAND	AMT(mL)
METH CHLOR	162641	Fisher	160

REAGENT	LOT #	BRAND
NaOH	157603	Fisher
H2SO4	[redacted]	Riga
Sodium Sulfate	[redacted]	Fisher
Glass Wool	[redacted]	Jak
Filter Paper		
pH strips		

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Comments:
*reduced due to limited volume → only one bottle for multiple test codes

NOT IN LIMS DH 5/15/16

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

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ABN Aqueous Extraction Logbook

LOGBOOK ID: 6-1727

Date Started: 5/15/16 Time Started: 11:00am
Date Finished: 5/15/16 Time Finished: 4:00pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM_____
Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH #	MS 093924
RACK#	C-19
Extracted by:	MS / SG
Concentrated by:	MS / SG
Vialed by:	MS / SG
Relinquished by:	MS
Accepted by:	
Supervisor Review:	DH 5/15/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) <2 H2SO4	pH Adjust(mL) >11 NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
MB1	ABN		DI H2O	1000	1	4	clear	1		
BS1			DI H2O	1000	1	4	~~clear~~ yellow	1		
BS1 MS			DI H2O	1000	1	4	yellow	1		
MSD										
BS	12SIM		DI H2O	1000	1	4	yellow	1		
MS										
MSD										
1 JC20314-2	ABN	1	clear	1000	1	4	clear	1		
2 -4		1	yellow	100*	1	4	clear	1		
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

1DTAT

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	0.5/0.1	75.75	N/A
Waterbath Chiller (GPM)	F2	2	—	—	2
NEVAP (32-38°C, LPM)	2	36	0.1	36	10

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	161712100	50	1.0

WITNESS SIGN: MS SPIKE SIGN: SG

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	SV1613526	50	Acid: 1.0
Acid (for SIM)			A(SIM): 0.1
Base #1	SV1613525	50	1.0
Base #2	SV1613522	50	1.0
Anilines	SV1613520	50	1.0
BSIM			

WITNESS SIGN: MS SPIKE SIGN: SG

SOLVENT	LOT #	BRAND	AMT(mL)
METH CHLOR	162641	Fisher	160

REAGENT	LOT #	BRAND
NaOH	157603	Fisher
H2SO4	[redacted]	Riga
Sodium Sulfate	[redacted]	Fisher
Glass Wool	[redacted]	Jak
Filter Paper		
pH strips		

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Comments:
*reduced due to limited volume → only one bottle for multiple test codes
NOT IN LIMS 5/15/16

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

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LOGBOOK ID: 6-1717

ABN Extraction Log - Solids

Date started: 05/18/16 Time started: 10:45 am
Date finished: 05/18/16 Time finished: 4:45 pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 √ Sonication SW3550C _____
Waste Dil. SW3580A _____ Soxhlet SW3540C _____

BATCH # MS 93998 RACK# D-19
Weighed/Extracted by: TM
Concentrated by: TM
Vialed by: TM, SM
Relinquished by:
Accepted by:
Supervisor Review: 5/18/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

	Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Wet Wt. (g) Oil (g) Liq (mL)	Decant Y	Decant N	Microwave ID Sonicator ID	Final Extract Color	Final Extract Vol(mL)	GPC Cleanup	Comments
	MB1	ABN		sand	30.0			5	clear	1		
	BS1			sand	30.0			5	yellow	1		
	JC20218-17A MS		1	soil	30.9		/	5	Brown	1		
	MSD		1	soil	30.8		/	5	Brown	1		
	BS 12SIM			sand	30.0			5	Yellow	1		
	JC20314-1 MS		1	soil	30.8		/	5	L.Yellow	1		
	MSD		1	soil	30.7		/	5	L.Yellow	1		
1	JC20218-17A	ABN	1	soil	31.1		/	5	Brown	1		
2	-22A		1	soil	30.2		/	5	Yellow	1		
3	-23A		2	soil	31.4		/	5	Brown	1		
4	-24A		2	soil	30.6		/	5	L.Yellow	1		
5	-25A		1	soil	31.0		/	5	Yellow	1		
6	-26A		1	soil	30.7		/	5	L.Yellow	1		
7	JC20239-1A		1	gravels	30.9		/	5	Brown	1		
8	JC20038-3R		2	soil	30.2		/	5	Brown	1		
9	JC20379-2		1	paper/rubber	5.0		/	5	Brown	5		*
10	JC20314-1		1	soil	30.9		/	5	L.Yellow	1		
11	-3		1	soil	31.8		/	5	Yellow	1		
12	JC20328-1		1	soil	30.9		/	5	Yellow	1		
13	-2		1	soil	30.5		/	5	Yellow	1		
14	JC20351-1		1	soil	31.1		/	5	Black	1		
15	-2		1	soil	31.6		/	5	Brown	1		
16	-3		1	soil	31.5		/	5	Brown	1		
17	-4		1	soil	31.2		/	5	Brown	1		
18	JC20352-1		1	soil	31.7		/	5	Brown	1		
19	-2		1	soil	31.2		/	5	Black	1		
20	JC20386-2		1	soil	31.3		/	5	Brown	1		

30 deg/AT

Comments: * Sample weight reduced due to bad matrix
Δ Final extract mixed to 5mL, could not concentrate to 1mL

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other: please update batch

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	9, 10	75.9/77	-0.6/+1.3	75.3/78.3	N/A
Waterbath Chiller (GPM)	1, 2	16.8	—	—	1.2/1.4
NEVAP (32-38°C, LPM)	2	35.1	0.1	35	10
Balance	B-45	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN OP	161712107	50	1

WITNESS SIGN: TM SPIKE SIGN:

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SV	161935-26	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1 SV	161935-36	50	1
Base #2 SV	161935-29	50	1
Aniline SV	161935-20	50	1
BSIM OP	161712856	1	1.0

WITNESS SIGN: TM SPIKE SIGN:

SOLVENT	LOT #	BRAND	AMT (mL)
1:1 METH CHLOR/ ACETONE	162417 / 158591	Fisher / Fisher	30 ml
METH CHLOR			

REAGENT	LOT #	BRAND
HYDROMATRIX	6280850	Agilent
SODIUM SULFATE	157497	Fisher
FILTER PAPER	9627994	Fisher

MATRIX	LOT #	BRAND
SAND SGL	15080507A	Fisher

SGS ACCUTEST INC.
Form: OP019A-06
Rev Date: 11/20/15

LOGBOOK ID: 6-1717

ABN Extraction Log - Solids

Date started: 05/18/16 Time started: 10:45 am
Date finished: 05/18/16 Time finished: 4:45 pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 √ Sonication SW3550C _____
Waste Dil. SW3580A _____ Soxhlet SW3540C _____

BATCH # MS 93998 RACK# D-19

Weighed/Extracted by: TM
Concentrated by: TM
Vialed by: TM, SM
Relinquished by:
Accepted by:
Supervisor Review: 5/18/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

	Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Wet Wt. (g) Oil (g) Liq (mL)	Decant Y	Decant N	Microwave ID Sonicator ID	Final Extract Color	Final Extract Vol(mL)	GPC Cleanup	Comments
	MB1	ABN		sand	30.0			5	clear	1		
	BS1			sand	30.0			5	yellow	1		
	JC20218-17A MS		1	soil	30.9		/	5	Brown	1		
	MSD		1	soil	30.8		/	5	Brown	1		
	BS 12SIM			sand	30.0			5	Yellow	1		
	JC20314-1 MS		1	soil	30.8		/	5	L.Yellow	1		
	MSD		1	soil	30.7		/	5	L.Yellow	1		
1	JC20218-17A	ABN	1	soil	31.1		/	5	Brown	1		
2	-22A		1	soil	30.2		/	5	Yellow	1		
3	-23A		2	soil	31.4		/	5	Brown	1		
4	-24A		2	soil	30.6		/	5	L.Yellow	1		
5	-25A		1	soil	31.0		/	5	Yellow	1		
6	-26A		1	soil	30.7		/	5	L.Yellow	1		
7	JC20239-1A		1	gravels	30.9		/	5	Brown	1		
8	JC20038-3R		2	soil	30.2		/	5	Brown	1		
9	JC20379-2		1	paper/rubber	5.0		/	5	Brown	5		*
10	JC20314-1		1	soil	30.9		/	5	L.Yellow	1		
11	-3		1	soil	31.8		/	5	Yellow	1		
12	JC20328-1		1	soil	30.9		/	5	Yellow	1		
13	-2		1	soil	30.5		/	5	Yellow	1		
14	JC20351-1		1	soil	31.1		/	5	Black	1		
15	-2		1	soil	31.6		/	5	Brown	1		
16	-3		1	soil	31.5		/	5	Brown	1		
17	-4		1	soil	31.2		/	5	Brown	1		
18	JC20352-1		1	soil	31.7		/	5	Brown	1		
19	-2		1	soil	31.2		/	5	Black	1		
20	JC20386-2		1	soil	31.3		/	5	Brown	1		

30day/AT

Comments: * Sample weight reduced due to bad matrix
Δ Final extract mixed to 5mL could not concentrate to 1mL matrix s/is

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other: please update batch

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	9, 10	75.9/77	-0.6/+1.3	75.3/78.3	N/A
Waterbath Chiller (GPM)	Mini 2	16.8	—	—	1.2/1.4
NEVAP (32-38°C, LPM)	2	35.1	0.1	35	10
Balance	B-45	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN OP	161712107	50	1

WITNESS SIGN: TM SPIKE SIGN:

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SV	161935-26	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1 SV	161935-36	50	1
Base #2 SV	161935-29	50	1
Aniline SV	161935-20	50	1
BSIM OP	161712856	1	1.0

WITNESS SIGN: TM SPIKE SIGN:

SOLVENT	LOT #	BRAND	AMT (mL)
1:1 METH CHLOR/ ACETONE	162417 / 158591	Fisher / Fisher	30 ml
METH CHLOR			

REAGENT	LOT #	BRAND
HYDROMATRIX	6280850	Agilent
SODIUM SULFATE	157497	Fisher
FILTER PAPER	9627994	Fisher

MATRIX	LOT #	BRAND
SAND SGL	15080507A	Fisher

SGS ACCUTEST INC.
Form: OP019A-06
Rev Date: 11/20/15

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5285-MB3 [a]	GH104981.D	1	05/16/16	XPL	n/a	n/a	GGH5285

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC20314-2, JC20314-4

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

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	100%	56-145%

(a) Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.

Method Blank Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5292-MB1	GH105099.D	1	05/19/16	XPL	n/a	n/a	GGH5292

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC20314-1

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	100	69	ug/kg	
78-83-1	Isobutyl Alcohol	ND	100	59	ug/kg	
67-63-0	Isopropyl Alcohol	ND	100	57	ug/kg	
71-23-8	n-Propyl Alcohol	ND	100	40	ug/kg	
71-36-3	n-Butyl Alcohol	ND	100	54	ug/kg	
78-92-2	sec-Butyl Alcohol	ND	100	53	ug/kg	
67-56-1	Methanol	ND	200	48	ug/kg	

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	80%	52-141%
111-27-3	Hexanol	83%	52-141%

Method Blank Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5292-MB2	GH105110.D	1	05/19/16	XPL	n/a	n/a	GGH5292

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC20314-3

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	100	69	ug/kg	
78-83-1	Isobutyl Alcohol	ND	100	59	ug/kg	
67-63-0	Isopropyl Alcohol	ND	100	57	ug/kg	
71-23-8	n-Propyl Alcohol	ND	100	40	ug/kg	
71-36-3	n-Butyl Alcohol	ND	100	54	ug/kg	
78-92-2	sec-Butyl Alcohol	ND	100	53	ug/kg	
67-56-1	Methanol	ND	200	48	ug/kg	

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	78%	52-141%
111-27-3	Hexanol	80%	52-141%

Method Blank Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5285-MB1 [a]	GH104961.D	1	05/16/16	XPL	n/a	n/a	GGH5285

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

GGH5285-BS, JC19644-1MS, JC19644-1MSD

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

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	104%	56-145%

(a) Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.

Blank Spike Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5285-BS [a]	GH104962.D	1	05/16/16	XPL	n/a	n/a	GGH5285

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC20314-2, JC20314-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
64-17-5	Ethanol	5000	5540	111	74-123
78-83-1	Isobutyl Alcohol	5000	6110	122	70-124
67-63-0	Isopropyl Alcohol	5000	8700	174* [b]	76-121
71-23-8	n-Propyl Alcohol	5000	6100	122	73-122
71-36-3	n-Butyl Alcohol	5000	6320	126* [b]	67-116
78-92-2	sec-Butyl Alcohol	5000	5490	110	74-118
67-56-1	Methanol	5000	4810	96	67-121

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	115%	56-145%

(a) Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.
(b) High percent recoveries and no associated positive found in the QC batch.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5292-BS	GH105100.D	1	05/19/16	XPL	n/a	n/a	GGH5292

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC20314-1, JC20314-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
64-17-5	Ethanol	5000	4920	98	75-124
78-83-1	Isobutyl Alcohol	5000	4870	97	67-126
67-63-0	Isopropyl Alcohol	5000	4980	100	76-122
71-23-8	n-Propyl Alcohol	5000	5170	103	72-122
71-36-3	n-Butyl Alcohol	5000	4690	94	62-120
78-92-2	sec-Butyl Alcohol	5000	5140	103	73-120
67-56-1	Methanol	5000	4650	93	66-121

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	91%	52-141%
111-27-3	Hexanol	94%	52-141%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC19644-1MS	GH104964.D	1	05/16/16	XPL	n/a	n/a	GGH5285
JC19644-1MSD	GH104965.D	1	05/16/16	XPL	n/a	n/a	GGH5285
JC19644-1	GH104963.D	1	05/16/16	XPL	n/a	n/a	GGH5285

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC20314-2, JC20314-4

CAS No.	Compound	JC19644-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
64-17-5	Ethanol	ND		5000	5730	115	5000	5830	117	2	58-145/27
78-83-1	Isobutyl Alcohol	ND		5000	6360	127	5000	6620	132* [a]	4	69-131/25
67-63-0	Isopropyl Alcohol	ND		5000	5180	104	5000	5900	118	13	70-133/28
71-23-8	n-Propyl Alcohol	ND		5000	6240	125	5000	6730	135	8	66-137/29
71-36-3	n-Butyl Alcohol	ND		5000	6710	134* [a]	5000	6890	138* [a]	3	63-131/25
78-92-2	sec-Butyl Alcohol	ND		5000	5780	116	5000	6090	122	5	64-136/25
67-56-1	Methanol	ND		5000	4920	98	5000	4970	99	1	48-148/34

CAS No.	Surrogate Recoveries	MS	MSD	JC19644-1	Limits
111-27-3	Hexanol	111%	113%	104%	56-145%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC20464-1MS	GH105102.D	1	05/19/16	XPL	n/a	n/a	GGH5292
JC20464-1MSD	GH105103.D	1	05/19/16	XPL	n/a	n/a	GGH5292
JC20464-1	GH105101.D	1	05/19/16	XPL	n/a	n/a	GGH5292

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC20314-1, JC20314-3

CAS No.	Compound	JC20464-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
64-17-5	Ethanol	ND		5290	5430	103	5290	5740	108	6	64-132/22
78-83-1	Isobutyl Alcohol	ND		5290	5350	101	5290	5140	97	4	59-141/26
67-63-0	Isopropyl Alcohol	ND		5290	5300	100	5290	5270	100	1	69-131/23
71-23-8	n-Propyl Alcohol	ND		5290	5430	103	5290	5490	104	1	66-135/31
71-36-3	n-Butyl Alcohol	ND		5290	3980	75	5290	4830	91	19	50-140/30
78-92-2	sec-Butyl Alcohol	ND		5290	5230	99	5290	4970	94	5	67-131/30
67-56-1	Methanol	ND		5290	5030	95	5290	4290	81	16	58-130/29

CAS No.	Surrogate Recoveries	MS	MSD	JC20464-1	Limits
111-27-3	Hexanol	91%	91%	96%	52-141%
111-27-3	Hexanol	94%	94%	99%	52-141%

* = Outside of Control Limits.

GC Identification Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5292-CC5288	**Injection Date:**	05/19/16
Lab File ID:	GH105109.D	**Injection Time:**	19:32
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC20314-3	**Injection Date:**	05/19/16
Lab File ID:	GH105111.D	**Injection Time:**	20:08
Client ID:	BR4(4.5-5.5)		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Methanol	1	1.11	1.11	362		ug/kg	20.1
Methanol	2 [a]	0.90	0.90	296		ug/kg	

(a) Final result reported from this column.

GC Identification Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104960.D	**Injection Time:**	15:50
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	GGH5285-BS	**Injection Date:**	05/16/16
Lab File ID:	GH104962.D	**Injection Time:**	16:28
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1 [a]	1.49	1.49	5540		ug/l	82.3
Ethanol	2	1.11	1.11	2310		ug/l	
Isobutyl Alcohol	1 [a]	3.36	3.36	6110		ug/l	110.9
Isobutyl Alcohol	2	2.89	2.89	1750		ug/l	
Isopropyl Alcohol	1 [a]	1.80	1.80	8700		ug/l	126.8
Isopropyl Alcohol	2	1.37	1.37	1950		ug/l	
n-Propyl Alcohol	1 [a]	2.56	2.56	6100		ug/l	85.7
n-Propyl Alcohol	2	1.94	1.94	2440		ug/l	
n-Butyl Alcohol	1 [a]	3.80	3.80	6320		ug/l	87.9
n-Butyl Alcohol	2	3.38	3.38	2460		ug/l	
sec-Butyl Alcohol	1 [a]	2.99	2.99	5490		ug/l	91.6
sec-Butyl Alcohol	2	2.51	2.51	2040		ug/l	
Methanol	1 [a]	1.15	1.15	4810		ug/l	51.2
Methanol	2	0.86	0.86	2850		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5291-CC5288	**Injection Date:**	05/19/16
Lab File ID:	GH105098.D	**Injection Time:**	16:32
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	GGH5292-BS	**Injection Date:**	05/19/16
Lab File ID:	GH105100.D	**Injection Time:**	17:08
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1 [a]	1.44	1.44	4920		ug/kg	5.5
Ethanol	2	1.15	1.15	5200		ug/kg	
Isobutyl Alcohol	1	3.30	3.30	5390		ug/kg	10.1
Isobutyl Alcohol	2 [a]	2.94	2.94	4870		ug/kg	
Isopropyl Alcohol	1 [a]	1.74	1.74	4980		ug/kg	3.6
Isopropyl Alcohol	2	1.41	1.41	5160		ug/kg	
n-Propyl Alcohol	1	2.50	2.50	5340		ug/kg	3.2
n-Propyl Alcohol	2 [a]	2.00	2.00	5170		ug/kg	
n-Butyl Alcohol	1	3.75	3.75	5090		ug/kg	8.2
n-Butyl Alcohol	2 [a]	3.42	3.42	4690		ug/kg	
sec-Butyl Alcohol	1 [a]	2.93	2.93	5140		ug/kg	1.7
sec-Butyl Alcohol	2	2.57	2.57	5230		ug/kg	
Methanol	1 [a]	1.11	1.11	4650		ug/kg	17.1
Methanol	2	0.89	0.90	5520		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104960.D	**Injection Time:**	15:50
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC19644-1MS	**Injection Date:**	05/16/16
Lab File ID:	GH104964.D	**Injection Time:**	16:57
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1 [a]	1.49	1.49	5730		ug/l	82.3
Ethanol	2	1.12	1.11	2390		ug/l	
Isobutyl Alcohol	1 [a]	3.35	3.36	6360		ug/l	109.5
Isobutyl Alcohol	2	2.89	2.89	1860		ug/l	
Isopropyl Alcohol	1 [a]	1.79	1.80	5180		ug/l	87.8
Isopropyl Alcohol	2	1.37	1.37	2020		ug/l	
n-Propyl Alcohol	1 [a]	2.56	2.56	6240		ug/l	88.9
n-Propyl Alcohol	2	1.95	1.94	2400		ug/l	
n-Butyl Alcohol	1 [a]	3.80	3.80	6710		ug/l	104.3
n-Butyl Alcohol	2	3.38	3.38	2110		ug/l	
sec-Butyl Alcohol	1 [a]	2.99	2.99	5780		ug/l	94.9
sec-Butyl Alcohol	2	2.52	2.51	2060		ug/l	
Methanol	1 [a]	1.15	1.15	4920		ug/l	47.9
Methanol	2	0.86	0.86	3020		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5291-CC5288	**Injection Date:**	05/19/16
Lab File ID:	GH105098.D	**Injection Time:**	16:32
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC20464-1MS	**Injection Date:**	05/19/16
Lab File ID:	GH105102.D	**Injection Time:**	17:37
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1	1.44	1.44	5080		ug/kg	6.7
Ethanol	2 [a]	1.15	1.15	5430		ug/kg	
Isobutyl Alcohol	1	3.30	3.30	5700		ug/kg	6.3
Isobutyl Alcohol	2 [a]	2.94	2.94	5350		ug/kg	
Isopropyl Alcohol	1	1.74	1.74	5310		ug/kg	0.2
Isopropyl Alcohol	2 [a]	1.41	1.41	5300		ug/kg	
n-Propyl Alcohol	1	2.49	2.50	5780		ug/kg	6.2
n-Propyl Alcohol	2 [a]	2.00	2.00	5430		ug/kg	
n-Butyl Alcohol	1	3.74	3.75	5310		ug/kg	28.6
n-Butyl Alcohol	2 [a]	3.42	3.42	3980		ug/kg	
sec-Butyl Alcohol	1	2.93	2.93	5420		ug/kg	3.6
sec-Butyl Alcohol	2 [a]	2.57	2.57	5230		ug/kg	
Methanol	1	1.11	1.11	4380		ug/kg	13.8
Methanol	2 [a]	0.90	0.90	5030		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104960.D	**Injection Time:**	15:50
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC19644-1MSD	**Injection Date:**	05/16/16
Lab File ID:	GH104965.D	**Injection Time:**	17:12
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1 [a]	1.49	1.49	5830		ug/l	84.0
Ethanol	2	1.11	1.11	2380		ug/l	
Isobutyl Alcohol	1 [a]	3.35	3.36	6620		ug/l	112.3
Isobutyl Alcohol	2	2.89	2.89	1860		ug/l	
Isopropyl Alcohol	1 [a]	1.79	1.80	5900		ug/l	98.0
Isopropyl Alcohol	2	1.36	1.37	2020		ug/l	
n-Propyl Alcohol	1 [a]	2.56	2.56	6730		ug/l	107.7
n-Propyl Alcohol	2	1.94	1.94	2020		ug/l	
n-Butyl Alcohol	1 [a]	3.80	3.80	6890		ug/l	105.9
n-Butyl Alcohol	2	3.38	3.38	2120		ug/l	
sec-Butyl Alcohol	1 [a]	2.99	2.99	6090		ug/l	98.2
sec-Butyl Alcohol	2	2.51	2.51	2080		ug/l	
Methanol	1 [a]	1.15	1.15	4970		ug/l	47.6
Methanol	2	0.86	0.86	3060		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5291-CC5288	**Injection Date:**	05/19/16
Lab File ID:	GH105098.D	**Injection Time:**	16:32
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC20464-1MSD	**Injection Date:**	05/19/16
Lab File ID:	GH105103.D	**Injection Time:**	17:51
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1	1.44	1.44	5410		ug/kg	5.9
Ethanol	2 [a]	1.15	1.15	5740		ug/kg	
Isobutyl Alcohol	1	3.30	3.30	5590		ug/kg	8.4
Isobutyl Alcohol	2 [a]	2.94	2.94	5140		ug/kg	
Isopropyl Alcohol	1	1.74	1.74	5150		ug/kg	2.3
Isopropyl Alcohol	2 [a]	1.41	1.41	5270		ug/kg	
n-Propyl Alcohol	1	2.50	2.50	5330		ug/kg	3.0
n-Propyl Alcohol	2 [a]	2.00	2.00	5490		ug/kg	
n-Butyl Alcohol	1	3.74	3.75	5210		ug/kg	7.6
n-Butyl Alcohol	2 [a]	3.42	3.42	4830		ug/kg	
sec-Butyl Alcohol	1	2.93	2.93	5350		ug/kg	7.4
sec-Butyl Alcohol	2 [a]	2.57	2.57	4970		ug/kg	
Methanol	1	1.11	1.11	4630		ug/kg	7.6
Methanol	2 [a]	0.90	0.90	4290		ug/kg	

(a) QC results reported from this column.

Volatile Surrogate Recovery Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Method: SW846-8015C (DAI) **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
JC20314-2	GH104985.D	103
JC20314-4	GH104986.D	102
GGH5285-BS	GH104962.D	115
GGH5285-MB3	GH104981.D	100
JC19644-1MS	GH104964.D	111
JC19644-1MSD	GH104965.D	113
GGH5285-MB1	GH104961.D	104

Surrogate Compounds	Recovery Limits
S1 = Hexanol	56-145%

(a) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Method: SW846-8015C (DAI) **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]
JC20314-1	GH105108.D	96	101
JC20314-3	GH105111.D	105	109
GGH5292-BS	GH105100.D	91	94
GGH5292-MB1	GH105099.D	80	83
GGH5292-MB2	GH105110.D	78	80
JC20464-1MS	GH105102.D	91	94
JC20464-1MSD	GH105103.D	91	94

Surrogate Compounds	Recovery Limits
S1 = Hexanol	52-141%

(a) Recovery from GC signal #2
(b) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104960.D	**Injection Time:**	15:50
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] **RT**
Check Std	5.60

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GGH5285-MB1	GH104961.D	05/16/16	16:06	5.60
GGH5285-BS	GH104962.D	05/16/16	16:28	5.60
JC19644-1	GH104963.D	05/16/16	16:45	5.60
JC19644-1MS	GH104964.D	05/16/16	16:57	5.60
JC19644-1MSD	GH104965.D	05/16/16	17:12	5.60
ZZZZZZ	GH104966.D	05/16/16	17:30	5.60
ZZZZZZ	GH104967.D	05/16/16	17:45	5.60
ZZZZZZ	GH104968.D	05/16/16	18:07	5.59
ZZZZZZ	GH104969.D	05/16/16	18:21	5.60

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104980.D	**Injection Time:**	21:21
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] **RT**
Check Std	5.60

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GGH5285-MB3	GH104981.D	05/16/16	21:36	5.60
ZZZZZZ	GH104982.D	05/16/16	21:58	5.60
ZZZZZZ	GH104983.D	05/16/16	22:12	5.60
ZZZZZZ	GH104984.D	05/16/16	22:26	5.60
JC20314-2	GH104985.D	05/16/16	22:41	5.60
JC20314-4	GH104986.D	05/16/16	23:03	5.60

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5291-CC5288	**Injection Date:**	05/19/16
Lab File ID:	GH105098.D	**Injection Time:**	16:32
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] RT	S1 [b] RT
Check Std	5.50	5.55

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
GGH5292-MB1	GH105099.D	05/19/16	16:46	5.50	5.56
GGH5292-BS	GH105100.D	05/19/16	17:08	5.49	5.56
JC20464-1	GH105101.D	05/19/16	17:22	5.50	5.55
JC20464-1MS	GH105102.D	05/19/16	17:37	5.50	5.55
JC20464-1MSD	GH105103.D	05/19/16	17:51	5.50	5.55
ZZZZZZ	GH105105.D	05/19/16	18:27	5.49	5.55
ZZZZZZ	GH105106.D	05/19/16	18:42	5.50	5.55
ZZZZZZ	GH105107.D	05/19/16	19:03	5.50	5.55
JC20314-1	GH105108.D	05/19/16	19:18	5.50	5.55

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5292-CC5288	**Injection Date:**	05/19/16
Lab File ID:	GH105109.D	**Injection Time:**	19:32
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] RT	S1 [b] RT
Check Std	5.50	5.55

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
GGH5292-MB2	GH105110.D	05/19/16	19:46	5.50	5.55
JC20314-3	GH105111.D	05/19/16	20:08	5.50	5.55
ZZZZZZ	GH105112.D	05/19/16	20:23	5.49	5.55
ZZZZZZ	GH105113.D	05/19/16	20:37	5.50	5.55
ZZZZZZ	GH105114.D	05/19/16	20:59	5.50	5.55
ZZZZZZ	GH105115.D	05/19/16	21:13	5.50	5.55
ZZZZZZ	GH105116.D	05/19/16	21:28	5.50	5.55
ZZZZZZ	GH105117.D	05/19/16	21:42	5.50	5.56
ZZZZZZ	GH105118.D	05/19/16	22:04	5.50	5.56

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: GGH5269-ICC5269
Lab FileID: GH104677.D

Response Factor Report GCGH

Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Tue May 10 11:06:41 2016
Response via : Initial Calibration

Calibration Files
0.5 =GH104675.D 1 =GH104676.D 5 =GH104677.D 10 =GH104678.D
50 =GH104679.D 0.1 =GH104674.D = =

Compound	0.5	1	5	10	50	0.1	Avg	%RSD
1) Methanol	1.593	1.539	1.394	1.397	1.324	1.614	1.477 E1	8.16
2) Ethanol	1.886	1.927	1.846	1.938	1.739	1.891	1.871 E1	3.88
3) Tert-Butyl A	2.841	2.742	2.685	2.870	2.582	2.661	2.730 E1	4.04
4) 1-Propanol	2.460	2.397	2.412	2.420	2.246	1.437	2.229 E1	17.71
5) 2-Propanol	2.027	2.007	1.963	2.223	1.850	2.379	2.075 E1	9.26
6) Isobutanol	3.098	2.831	2.858	2.791	2.576	2.339	2.749 E1	9.48
7) 1-Butanol	1.745	2.588	2.859	2.723	2.489	2.288	2.449 E1	16.19
8) 2-Butanol	2.464	3.139	2.505	2.469	2.291	2.251	2.520 E1	12.72
9) Hexanol	7.782	7.590	7.989	8.011	8.288	6.248	7.651 E1	9.50

Signal #2

1) Methanol	1.288	3.166	1.383	1.032	2.946	2.383	2.033 E1	45.20
2) Ethanol	2.817	4.146	3.410	2.123	3.657	2.911	3.177 E1	22.41
3) Tert-Butyl A	6.834	6.135	8.110	5.969	5.847	6.282	6.529 E1	12.97
4) 1-Propanol	4.091	3.958	7.681	4.455	4.689	4.687	4.927 E1	28.06
5) 2-Propanol	4.552	4.456	4.692	3.160	4.050	4.175	4.181 E1	13.25
6) Isobutanol	9.360	5.533	5.494	4.786	5.166	6.882	6.204 E1	27.41
7) 1-Butanol	5.498	5.794	5.135	4.164	5.031	5.438	5.177 E1	10.93
8) 2-Butanol	4.534	5.210	5.963	4.341	4.794	4.806	4.941 E1	11.74
9) Hexanol	1.693	1.682	1.706	1.575	1.818	1.401	1.646 E2	8.66

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

MGH5269.M Tue May 10 11:10:00 2016 GCGH

Initial Calibration Verification

Job Number: JC20314 **Sample:** GGH5269-ICV5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH104683.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH104683.D\FID1A.CH        Vial: 10
Acq On    :  9 May 2016   5:42 pm                   Operator: XULIU
Sample    : ICV5269-5000                            Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104683.D\FID2B.CH        Vial: 10
Acq On    :  9 May 2016   6:04 pm                   Operator: XULIU
Sample    : ICV5269-5000                            Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:29:55 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	14.769	13.949	5.6	100	0.00	1.11- 1.17
2	Ethanol	18.712	19.655	-5.0	106	0.00	1.44- 1.53
3	Tert-Butyl Alcohol	27.303	28.294	-3.6	105	0.00	2.01- 2.13
4	1-Propanol	22.287	23.452	-5.2	97	0.00	2.50- 2.62
5	2-Propanol	20.750	19.885	4.2	101	0.00	1.75- 1.84
6	Isobutanol	27.487	29.253	-6.4	102	-0.01	3.31- 3.41
7	1-Butanol	24.487	27.754	-13.3	97	0.00	3.80- 3.86
8	2-Butanol	25.198	24.667	2.1	98	0.00	2.93- 3.05
9 S	Hexanol	76.514	69.300	9.4	87	0.00	5.57- 5.63
*****	Signal #2 *****						
1	Methanol	18.183	29.885	-64.4#	216#	0.00	0.85- 0.91
2	Ethanol	31.774	39.803	-25.3#	117	-0.01	1.10- 1.16
3	Tert-Butyl Alcohol	65.293	63.130	3.3	78	-0.01	1.59- 1.65
4	1-Propanol	49.271	52.689	-6.9	69	0.00	1.93- 2.00
5	2-Propanol	41.806	43.484	-4.0	93	-0.01	1.35- 1.41
6	Isobutanol	62.036	58.038	6.4	106	0.00	2.87- 2.93
7	1-Butanol	51.767	64.401	-24.4#	125	-0.01	3.35- 3.41
8	2-Butanol	49.414	52.519	-6.3	88	0.00	2.50- 2.56
9 S	Hexanol	164.574	152.865	7.1	90	0.01	5.41- 5.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH104677.D MGH5269.M Tue May 10 10:47:36 2016 GCGH

Continuing Calibration Summary

Job Number: JC20314 **Sample:** GGH5285-CC5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH104960.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH104960.D\FID1A.CH        Vial: 90
Acq On    : 16 May 2016   3:50 pm                   Operator: XULIU
Sample    : CC5269-5000                             Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104960.D\FID2B.CH        Vial: 90
Acq On    : 16 May 2016   4:06 pm                   Operator: XULIU
Sample    : CC5269-5000                             Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 11:06:41 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	14.769	15.539	-5.2	111	0.00	1.12- 1.18
2	Ethanol	18.712	20.181	-7.9	109	0.00	1.45- 1.54
3	Tert-Butyl Alcohol	27.303	27.932	-2.3	104	0.00	2.01- 2.13
4	1-Propanol	22.287	26.640	-19.5	110	0.00	2.50- 2.62
5	2-Propanol	20.750	21.265	-2.5	108	0.00	1.75- 1.84
6	Isobutanol	27.487	29.690	-8.0	104	0.00	3.31- 3.40
7	1-Butanol	24.487	30.580	-24.9#	107	0.00	3.77- 3.83
8	2-Butanol	25.198	26.836	-6.5	107	0.00	2.93- 3.05
9 S	Hexanol	76.514	79.188	-3.5	99	0.00	5.57- 5.63
*****	Signal #2 *****						
1	Methanol	20.329	12.123	40.4#	88	-0.03	0.83- 0.89
2	Ethanol	31.774	14.023	55.9#	41#	-0.03	1.08- 1.14
3	Tert-Butyl Alcohol	65.293	24.578	62.4#	30#	-0.03	1.57- 1.63
4	1-Propanol	49.271	17.818	63.8#	23#	-0.02	1.91- 1.98
5	2-Propanol	41.806	15.827	62.1#	34#	-0.02	1.34- 1.40
6	Isobutanol	62.036	20.449	67.0#	37#	0.00	2.86- 2.92
7	1-Butanol	51.767	20.165	61.0#	39#	-0.01	3.35- 3.41
8	2-Butanol	49.414	18.847	61.9#	32#	-0.02	2.48- 2.54
9 S	Hexanol	164.574	55.647	66.2#	33#	0.05	5.45- 5.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH104677.D MGH5269.M Tue May 17 07:43:54 2016 GCGH

Continuing Calibration Summary

Job Number: JC20314 **Sample:** GGH5285-CC5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH104970.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH104970.D\FID1A.CH        Vial: 95
Acq On    : 16 May 2016   6:35 pm                   Operator: XULIU
Sample    : CC5269-10000                            Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104970.D\FID2B.CH        Vial: 95
Acq On    : 16 May 2016   6:50 pm                   Operator: XULIU
Sample    : CC5269-10000                            Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 11:06:41 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	14.769	15.639	-5.9	112	0.00	1.11- 1.17
2	Ethanol	18.712	19.990	-6.8	103	0.00	1.44- 1.53
3	Tert-Butyl Alcohol	27.303	29.597	-8.4	103	0.00	2.01- 2.13
4	1-Propanol	22.287	26.594	-19.3	110	0.00	2.50- 2.62
5	2-Propanol	20.750	21.147	-1.9	95	0.00	1.75- 1.84
6	Isobutanol	27.487	30.720	-11.8	110	-0.02	3.31- 3.40
7	1-Butanol	24.487	29.375	-20.0	108	-0.03	3.77- 3.83
8	2-Butanol	25.198	27.070	-7.4	110	0.00	2.93- 3.05
9 S	Hexanol	76.514	68.194	10.9	85	-0.01	5.57- 5.63
*****	Signal #2 *****						
1	Methanol	20.329	8.116	60.1#	79	-0.02	0.84- 0.90
2	Ethanol	31.774	8.863	72.1#	42#	-0.03	1.08- 1.14
3	Tert-Butyl Alcohol	65.293	15.588	76.1#	26#	-0.03	1.57- 1.63
4	1-Propanol	49.271	10.781	78.1#	24#	-0.02	1.90- 1.97
5	2-Propanol	41.806	8.923	78.7#	28#	-0.03	1.33- 1.39
6	Isobutanol	62.036	16.062	74.1#	34#	0.00	2.87- 2.93
7	1-Butanol	51.767	15.372	70.3#	37#	0.00	3.36- 3.42
8	2-Butanol	49.414	14.363	70.9#	33#	-0.02	2.48- 2.54
9 S	Hexanol	164.574	39.514	76.0#	25#	0.05	5.45- 5.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH104678.D MGH5269.M Tue May 17 08:00:40 2016 GCGH

Continuing Calibration Summary

Job Number: JC20314 **Sample:** GGH5285-CC5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH104980.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH104980.D\FID1A.CH        Vial: 90
Acq On    : 16 May 2016   9:21 pm                   Operator: XULIU
Sample    : CC5269-5000                             Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104980.D\FID2B.CH        Vial: 90
Acq On    : 16 May 2016   9:36 pm                   Operator: XULIU
Sample    : CC5269-5000                             Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 11:06:41 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	14.769	14.527	1.6	104	0.00	1.12- 1.18
2	Ethanol	18.712	19.163	-2.4	104	0.00	1.45- 1.54
3	Tert-Butyl Alcohol	27.303	28.737	-5.3	107	0.00	2.01- 2.13
4	1-Propanol	22.287	26.006	-16.7	108	0.00	2.50- 2.62
5	2-Propanol	20.750	20.257	2.4	103	0.00	1.75- 1.84
6	Isobutanol	27.487	30.840	-12.2	108	0.00	3.31- 3.41
7	1-Butanol	24.487	29.313	-19.7	103	0.00	3.77- 3.83
8	2-Butanol	25.198	26.896	-6.7	107	0.00	2.93- 3.05
9 S	Hexanol	76.514	76.705	-0.2	96	0.00	5.57- 5.63
*****	Signal #2 *****						
1	Methanol	20.329	12.266	39.7#	89	-0.03	0.83- 0.89
2	Ethanol	31.774	13.387	57.9#	39#	-0.03	1.08- 1.14
3	Tert-Butyl Alcohol	65.293	21.949	66.4#	27#	-0.03	1.57- 1.63
4	1-Propanol	49.271	17.420	64.6#	23#	-0.02	1.91- 1.98
5	2-Propanol	41.806	15.199	63.6#	32#	-0.03	1.33- 1.39
6	Isobutanol	62.036	19.832	68.0#	36#	0.00	2.86- 2.92
7	1-Butanol	51.767	19.625	62.1#	38#	-0.01	3.35- 3.41
8	2-Butanol	49.414	18.338	62.9#	31#	-0.02	2.48- 2.54
9 S	Hexanol	164.574	53.755	67.3#	32#	0.05	5.45- 5.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH104677.D MGH5269.M Tue May 17 08:19:24 2016 GCGH

Continuing Calibration Summary

Job Number: JC20314 **Sample:** GGH5285-CC5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH104987.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH104987.D\FID1A.CH        Vial: 95
Acq On    : 16 May 2016  11:17 pm                   Operator: XULIU
Sample    : CC5269-10000                            Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104987.D\FID2B.CH        Vial: 95
Acq On    : 16 May 2016  11:31 pm                   Operator: XULIU
Sample    : CC5269-10000                            Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 11:06:41 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	14.769	15.927	-7.8	114	0.00	1.12- 1.18
2	Ethanol	18.712	19.526	-4.4	101	0.00	1.45- 1.54
3	Tert-Butyl Alcohol	27.303	28.688	-5.1	100	0.00	2.01- 2.13
4	1-Propanol	22.287	26.535	-19.1	110	0.00	2.50- 2.62
5	2-Propanol	20.750	20.740	0.0	93	0.00	1.75- 1.85
6	Isobutanol	27.487	29.916	-8.8	107	0.00	3.31- 3.41
7	1-Butanol	24.487	28.850	-17.8	106	0.00	3.77- 3.83
8	2-Butanol	25.198	26.500	-5.2	107	0.00	2.93- 3.05
9 S	Hexanol	76.514	64.512	15.7	81	0.00	5.57- 5.63
*****	Signal #2 *****						
1	Methanol	20.329	11.614	42.9#	113	-0.03	0.83- 0.89
2	Ethanol	31.774	13.333	58.0#	63	-0.03	1.08- 1.14
3	Tert-Butyl Alcohol	65.293	21.428	67.2#	36#	-0.03	1.57- 1.63
4	1-Propanol	49.271	17.206	65.1#	39#	-0.02	1.91- 1.98
5	2-Propanol	41.806	15.020	64.1#	48#	-0.03	1.33- 1.39
6	Isobutanol	62.036	26.984	56.5#	56	-0.01	2.86- 2.92
7	1-Butanol	51.767	19.070	63.2#	46#	-0.01	3.35- 3.41
8	2-Butanol	49.414	18.319	62.9#	42#	-0.02	2.48- 2.54
9 S	Hexanol	164.574	45.374	72.4#	29#	0.05	5.45- 5.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH104678.D MGH5269.M Tue May 17 08:52:13 2016 GCGH

Initial Calibration Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: GGH5288-ICC5288
Lab FileID: GH105020.D

Response Factor Report GCGH

Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Wed May 18 08:55:49 2016
Response via : Initial Calibration

Calibration Files
0.5 =GH105018.D 1 =GH105019.D 5 =GH105020.D 10 =GH105021.D
50 =GH105022.D 100 =GH105023.D 0.1 =GH105017.D =

Compound	0.5	1	5	10	50	100	0.1	Avg		%RSD
1) Methanol	1.474	1.617	1.549	1.574	1.441	1.381	1.784	1.546	E1	8.59
2) Ethanol	1.481	1.886	1.989	2.027	1.870	1.914	2.099	1.895	E1	10.57
3) Tert-Butyl A	2.644	2.895	2.860	2.948	2.724	2.958	2.806	2.833	E1	4.12
4) 1-Propanol	2.265	2.525	2.568	2.579	2.395	2.511	2.187	2.433	E1	6.38
5) 2-Propanol	1.765	2.050	2.101	2.139	1.981	2.028	1.888	1.993	E1	6.50
6) Isobutanol	2.804	2.950	2.948	2.988	2.739	2.927	2.784	2.877	E1	3.42
7) 1-Butanol	2.898	2.941	2.862	2.890	2.632	2.755	3.014	2.856	E1	4.42
8) 2-Butanol	2.368	2.558	2.588	2.626	2.424	2.540	2.840	2.563	E1	5.95
9) Hexanol	6.661	6.854	6.904	7.104	6.883		6.152	6.760	E1	4.87

Signal #2

1) Methanol	3.395	2.969	3.474	3.464	3.153	3.141	2.982	3.225	E1	6.76
2) Ethanol	4.063	3.635	4.347	4.327	3.993	4.176	3.361	3.986	E1	9.18
3) Tert-Butyl A	6.528	6.375	6.640	6.640	6.134	6.562	5.629	6.358	E1	5.79
4) 1-Propanol	5.216	5.281	5.494	5.499	5.155	5.488	3.458	5.084	E1	14.38
5) 2-Propanol	4.929	4.342	4.733	4.727	4.363	4.597	4.004	4.528	E1	6.88
6) Isobutanol	6.364	5.960	6.233	6.327	5.766	6.160	6.044	6.122	E1	3.48
7) 1-Butanol	7.458	7.365	6.389	6.043	5.678	5.940	7.445	6.617	E1	11.83
8) 2-Butanol	5.511	5.860	5.620	5.660	5.265	5.573	4.510	5.428	E1	8.15
9) Hexanol	1.546	1.555	1.589	1.628	1.578		1.424	1.553	E2	4.50

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

MGH5288.M Wed May 18 09:03:27 2016 GCGH

8.7.7

8

Initial Calibration Verification

Job Number: JC20314 **Sample:** GGH5288-ICV5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105024.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105024.D\FID1A.CH        Vial: 9
Acq On    : 17 May 2016   6:02 pm                   Operator: XULIU
Sample    : ICV5288-5000                            Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105024.D\FID2B.CH        Vial: 9
Acq On    : 17 May 2016   6:24 pm                   Operator: XULIU
Sample    : ICV5288-5000                            Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	15.459	13.025	15.7	84	0.00	1.09- 1.15
2	Ethanol	18.950	20.029	-5.7	101	0.00	1.41- 1.50
3	Tert-Butyl Alcohol	28.335	29.971	-5.8	105	0.00	1.96- 2.08
4	1-Propanol	24.326	25.536	-5.0	99	0.00	2.46- 2.58
5	2-Propanol	19.931	21.074	-5.7	100	0.00	1.71- 1.80
6	Isobutanol	28.771	30.222	-5.0	103	0.00	3.27- 3.36
7	1-Butanol	28.561	29.118	-2.0	102	0.00	3.73- 3.79
8	2-Butanol	25.634	26.603	-3.8	103	0.00	2.89- 3.01
9 S	Hexanol	67.597	69.942	-3.5	101	0.00	5.54- 5.60
*****	Signal #2 *****						
1	Methanol	32.254	34.546	-7.1	99	0.00	0.87- 0.93
2	Ethanol	39.861	45.328	-13.7	104	0.00	1.13- 1.19
3	Tert-Butyl Alcohol	63.583	66.584	-4.7	100	0.00	1.63- 1.69
4	1-Propanol	50.842	57.021	-12.2	104	0.01	1.99- 2.06
5	2-Propanol	45.279	47.646	-5.2	101	0.00	1.38- 1.44
6	Isobutanol	61.221	66.607	-8.8	107	0.00	2.91- 2.97
7	1-Butanol	66.170	65.238	1.4	102	0.01	3.39- 3.45
8	2-Butanol	54.284	60.860	-12.1	108	0.00	2.54- 2.60
9 S	Hexanol	155.348	158.160	-1.8	100	0.00	5.47- 5.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH105020.D MGH5288.M Wed May 18 09:09:59 2016 GCGH

Continuing Calibration Summary

Job Number: JC20314 **Sample:** GGH5291-CC5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105098.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105098.D\FID1A.CH        Vial: 95
Acq On    : 19 May 2016   4:32 pm                   Operator: XULIU
Sample    : CC5288-10000                            Inst    : GCGH
Misc      : GC48427,GGH5291,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105098.D\FID2B.CH        Vial: 95
Acq On    : 19 May 2016   4:46 pm                   Operator: XULIU
Sample    : CC5288-10000                            Inst    : GCGH
Misc      : GC48427,GGH5291,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	15.459	14.950	3.3	95	0.00	1.08- 1.14
2	Ethanol	18.950	18.793	0.8	93	0.00	1.40- 1.49
3	Tert-Butyl Alcohol	28.335	28.819	-1.7	98	0.00	1.94- 2.06
4	1-Propanol	24.326	25.322	-4.1	98	0.00	2.44- 2.56
5	2-Propanol	19.931	19.462	2.4	91	0.00	1.69- 1.78
6	Isobutanol	28.771	29.229	-1.6	98	0.00	3.25- 3.34
7	1-Butanol	28.561	28.021	1.9	97	0.00	3.72- 3.78
8	2-Butanol	25.634	25.618	0.1	98	0.00	2.87- 2.99
9 S	Hexanol	67.597	61.017	9.7	86	0.00	5.52- 5.58
*****	Signal #2 *****						
1	Methanol	32.254	34.021	-5.5	98	0.00	0.87- 0.93
2	Ethanol	39.861	41.706	-4.6	96	0.00	1.12- 1.18
3	Tert-Butyl Alcohol	63.583	64.954	-2.2	98	0.00	1.62- 1.68
4	1-Propanol	50.842	53.445	-5.1	97	0.00	1.97- 2.04
5	2-Propanol	45.279	46.153	-1.9	98	0.00	1.38- 1.44
6	Isobutanol	61.221	58.834	3.9	93	0.00	2.91- 2.97
7	1-Butanol	66.170	56.603	14.5	94	0.00	3.39- 3.45
8	2-Butanol	54.284	53.909	0.7	95	0.00	2.54- 2.60
9 S	Hexanol	155.348	134.497	13.4	83	0.00	5.47- 5.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH105021.D MGH5288.M Fri May 20 08:34:31 2016 GCGH

Continuing Calibration Summary

Job Number: JC20314 **Sample:** GGH5292-CC5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105109.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105109.D\FID1A.CH        Vial: 90
Acq On    : 19 May 2016   7:32 pm                   Operator: XULIU
Sample    : CC5288-5000                             Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105109.D\FID2B.CH        Vial: 90
Acq On    : 19 May 2016   7:46 pm                   Operator: XULIU
Sample    : CC5288-5000                             Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	15.459	15.126	2.2	98	0.00	1.08- 1.14
2	Ethanol	18.950	19.466	-2.7	98	0.00	1.39- 1.49
3	Tert-Butyl Alcohol	28.335	28.403	-0.2	99	0.00	1.94- 2.06
4	1-Propanol	24.326	25.529	-4.9	99	0.00	2.43- 2.55
5	2-Propanol	19.931	20.536	-3.0	98	0.00	1.69- 1.78
6	Isobutanol	28.771	29.265	-1.7	99	0.00	3.25- 3.34
7	1-Butanol	28.561	27.489	3.8	96	0.00	3.71- 3.77
8	2-Butanol	25.634	25.881	-1.0	100	0.00	2.86- 2.98
9 S	Hexanol	67.597	57.966	14.2	84	0.00	5.52- 5.58
*****	Signal #2 *****						
1	Methanol	32.254	31.293	3.0	90	0.00	0.87- 0.93
2	Ethanol	39.861	40.292	-1.1	93	0.00	1.12- 1.18
3	Tert-Butyl Alcohol	63.583	64.281	-1.1	97	0.00	1.62- 1.68
4	1-Propanol	50.842	52.703	-3.7	96	0.00	1.97- 2.04
5	2-Propanol	45.279	45.854	-1.3	97	0.00	1.38- 1.44
6	Isobutanol	61.221	58.208	4.9	93	0.00	2.91- 2.97
7	1-Butanol	66.170	57.279	13.4	90	0.00	3.39- 3.45
8	2-Butanol	54.284	53.810	0.9	96	0.00	2.54- 2.60
9 S	Hexanol	155.348	132.176	14.9	83	0.00	5.47- 5.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH105020.D MGH5288.M Fri May 20 09:15:21 2016 GCGH

Continuing Calibration Summary

Job Number: JC20314 **Sample:** GGH5292-CC5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105119.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105119.D\FID1A.CH         Vial: 95
Acq On    : 19 May 2016  10:18 pm                    Operator: XULIU
Sample    : CC5288-10000                             Inst    : GCGH
Misc      : GC48440,GGH5292,5.0,,,,1                 Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105119.D\FID2B.CH         Vial: 95
Acq On    : 19 May 2016  10:33 pm                    Operator: XULIU
Sample    : CC5288-10000                             Inst    : GCGH
Misc      : GC48440,GGH5292,5.0,,,,1                 Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	15.459	14.594	5.6	93	0.00	1.09- 1.15
2	Ethanol	18.950	19.285	-1.8	95	0.00	1.40- 1.49
3	Tert-Butyl Alcohol	28.335	27.779	2.0	94	0.00	1.94- 2.06
4	1-Propanol	24.326	24.585	-1.1	95	0.00	2.44- 2.56
5	2-Propanol	19.931	20.190	-1.3	94	0.00	1.69- 1.78
6	Isobutanol	28.771	28.734	0.1	96	0.00	3.25- 3.34
7	1-Butanol	28.561	27.009	5.4	93	0.00	3.72- 3.78
8	2-Butanol	25.634	27.493	-7.3	105	0.00	2.87- 2.99
9 S	Hexanol	67.597	57.751	14.6	81	0.00	5.53- 5.59

***** Signal #2 *****

1	Methanol	32.254	32.944	-2.1	95	0.00	0.86- 0.92
2	Ethanol	39.861	40.855	-2.5	94	0.00	1.12- 1.18
3	Tert-Butyl Alcohol	63.583	64.319	-1.2	97	0.00	1.62- 1.68
4	1-Propanol	50.842	52.819	-3.9	96	0.00	1.96- 2.03
5	2-Propanol	45.279	45.577	-0.7	96	0.00	1.37- 1.43
6	Isobutanol	61.221	58.580	4.3	93	0.00	2.91- 2.97
7	1-Butanol	66.170	58.319	11.9	97	0.00	3.38- 3.44
8	2-Butanol	54.284	53.739	1.0	95	0.00	2.54- 2.60
9 S	Hexanol	155.348	129.415	16.7	79	0.00	5.47- 5.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH105021.D MGH5288.M Fri May 20 09:43:35 2016 GCGH

GC Volatiles

Raw Data

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105108.D\FID1A.CH          Vial: 12
Acq On    : 19 May 2016   7:18 pm                     Operator: XULIU
Sample    : JC20314-1                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105108.D\FID2B.CH          Vial: 12
Acq On    : 19 May 2016   7:32 pm                     Operator: XULIU
Sample    : JC20314-1                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  9:04 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol          5.55   5.50    340295   745156 5034.194  4796.702
 Spiked Amount   5000.000                 Recovery     =  100.68%    95.93%

Target Compounds
```

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH105108.D  MGH5288.M      Fri May 20 09:04:35 2016      GCGH
```

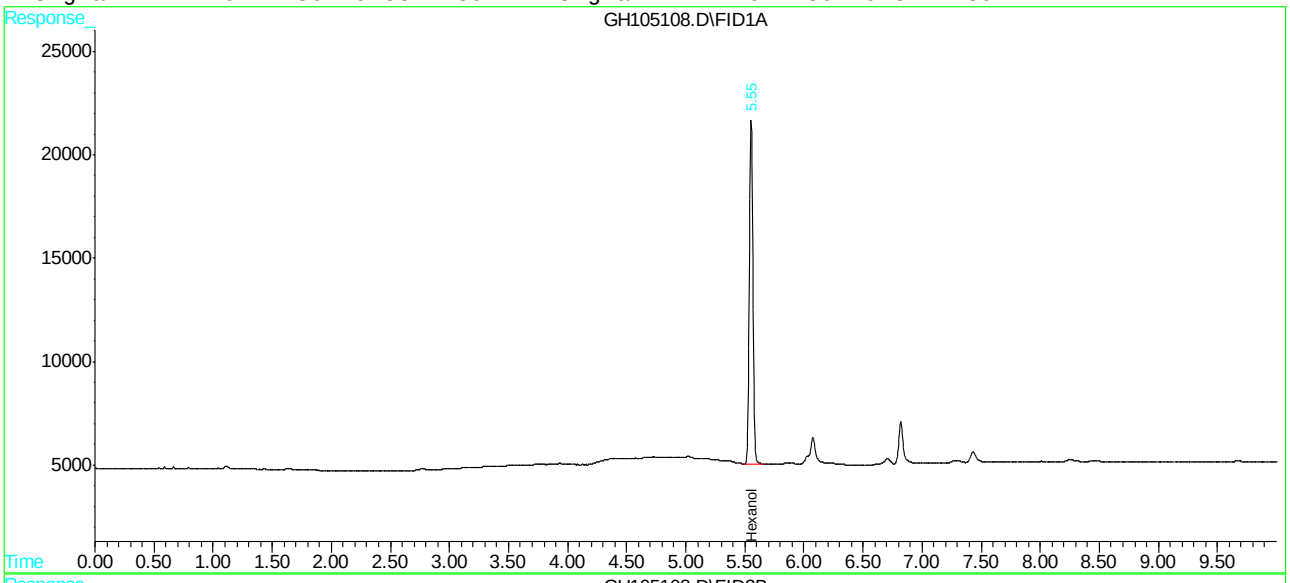
Quantitation Report (QT Reviewed)

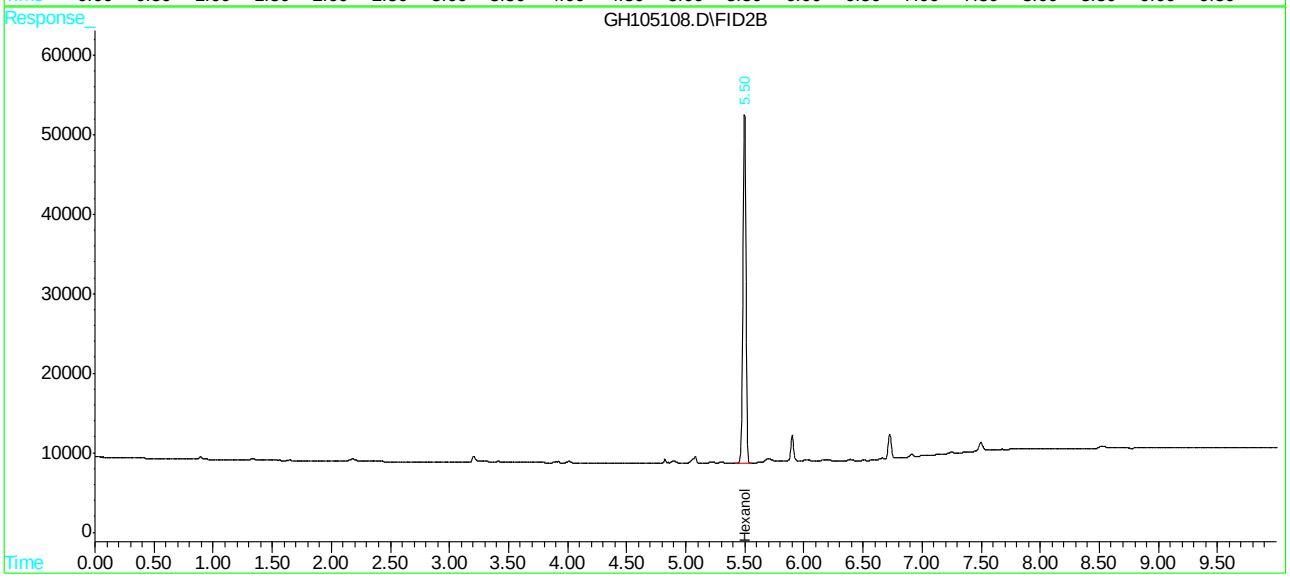
```
Data File : C:\HPCHEM\1\DATA\GH105108.D\FID1A.CH          Vial: 12
Acq On    : 19 May 2016   7:18 pm                     Operator: XULIU
Sample    : JC20314-1                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105108.D\FID2B.CH          Vial: 12
Acq On    : 19 May 2016   7:32 pm                     Operator: XULIU
Sample    : JC20314-1                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  9:04 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104985.D\FID1A.CH          Vial: 21
Acq On    : 16 May 2016  10:41 pm                     Operator: XULIU
Sample    : JC20314-2                                 Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104985.D\FID2B.CH          Vial: 21
Acq On    : 16 May 2016  11:03 pm                     Operator: XULIU
Sample    : JC20314-2                                 Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:27 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol           5.60   5.48    394542   273230 5156.473  1660.227 #
 Spiked Amount   5000.000                  Recovery     =  103.13%    33.20%

Target Compounds
```

9.1.2

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH104985.D  MGH5269.M      Tue May 17 08:27:12 2016      GCGH
```

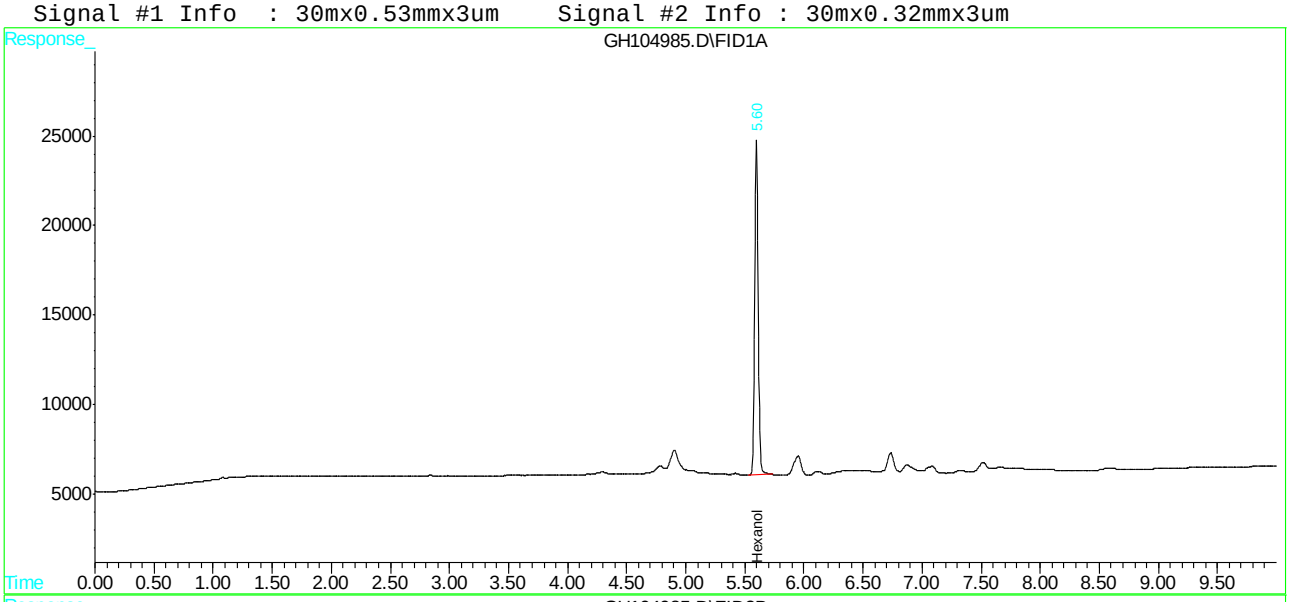
Quantitation Report (QT Reviewed)

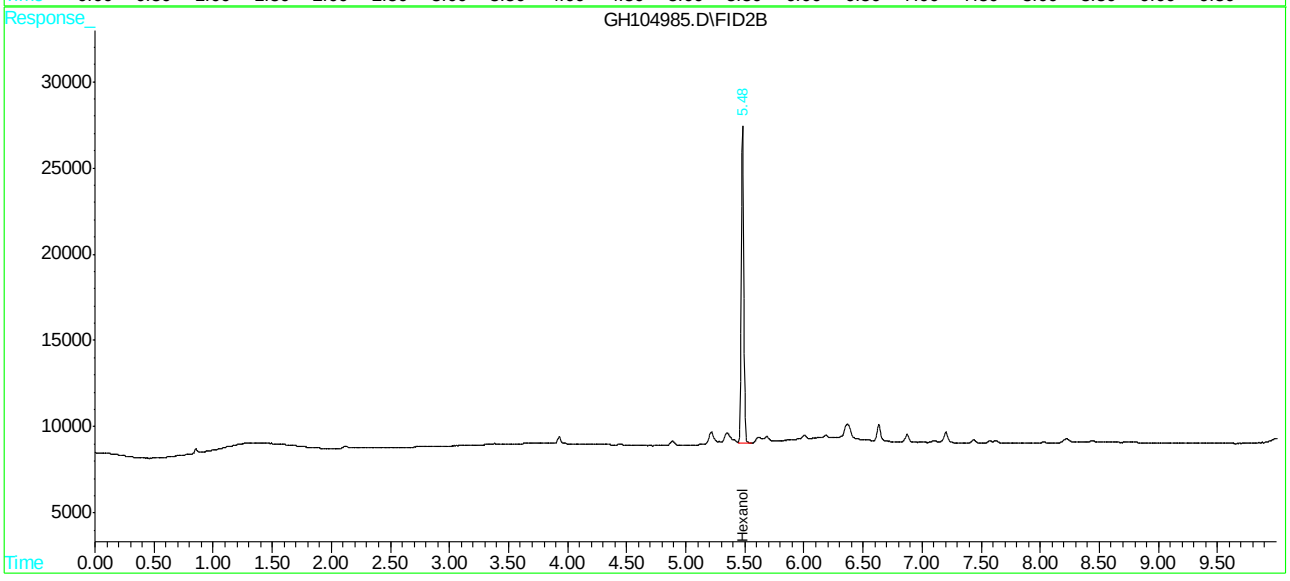
Data File : C:\HPCHEM\1\DATA\GH104985.D\FID1A.CH Vial: 21
Acq On : 16 May 2016 10:41 pm Operator: XULIU
Sample : JC20314-2 Inst : GCGH
Misc : GC48423,GGH5285,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104985.D\FID2B.CH Vial: 21
Acq On : 16 May 2016 11:03 pm Operator: XULIU
Sample : JC20314-2 Inst : GCGH
Misc : GC48423,GGH5285,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 17 8:27 2016 Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Tue May 17 07:48:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj. : 2ul
Signal #1 Phase : ZB-624 Signal #2 Phase: RTX-1
Signal #1 Info : 30mx0.53mmx3um Signal #2 Info : 30mx0.32mmx3um





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105111.D\FID1A.CH          Vial: 15
Acq On    : 19 May 2016   8:08 pm                     Operator: XULIU
Sample    : JC20314-3                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105111.D\FID2B.CH          Vial: 15
Acq On    : 19 May 2016   8:23 pm                     Operator: XULIU
Sample    : JC20314-3                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  9:30 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
9) S Hexanol	5.55	5.50	368405	815880	5450.046	5251.965
Spiked Amount 5000.000			Recovery	=	109.00%	105.04%
Target Compounds						
1) Methanol	1.11	0.90	5013	8564	324.278	265.517

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

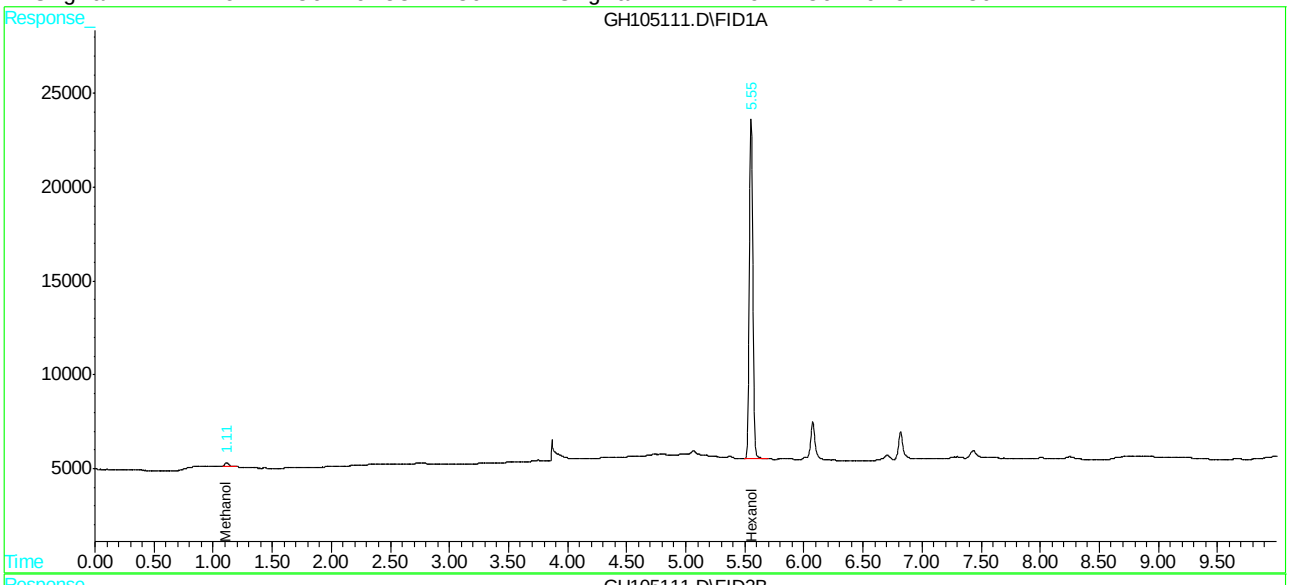
Quantitation Report (QT Reviewed)

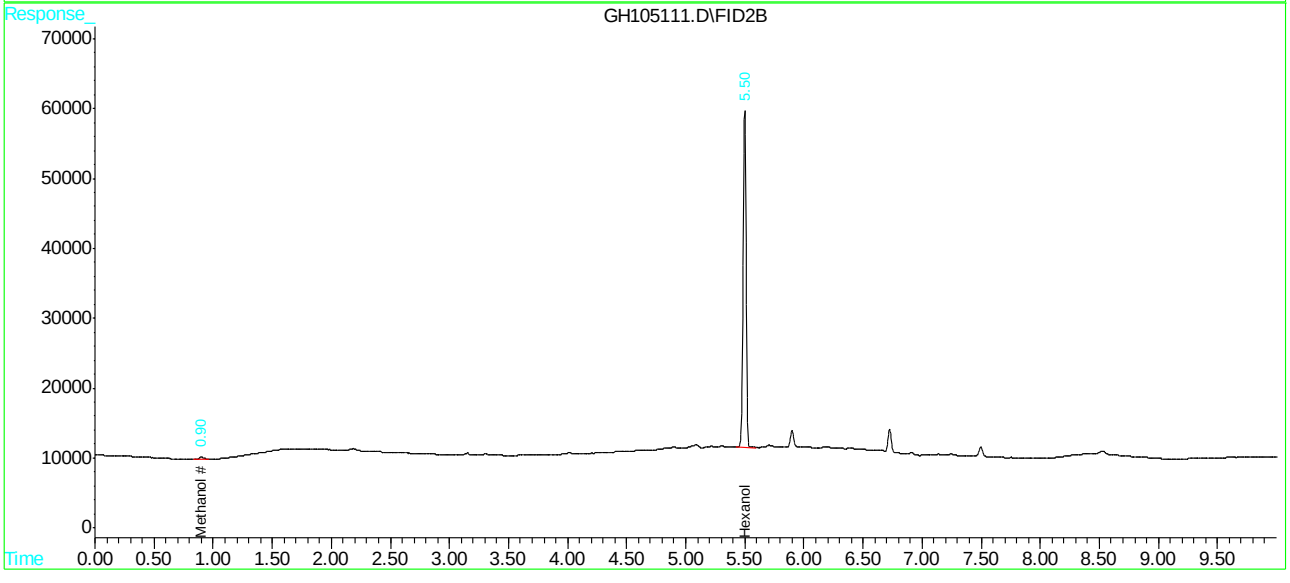
```
Data File : C:\HPCHEM\1\DATA\GH105111.D\FID1A.CH          Vial: 15
Acq On    : 19 May 2016   8:08 pm                     Operator: XULIU
Sample    : JC20314-3                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105111.D\FID2B.CH          Vial: 15
Acq On    : 19 May 2016   8:23 pm                     Operator: XULIU
Sample    : JC20314-3                                 Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  9:30 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104986.D\FID1A.CH          Vial: 22
Acq On    : 16 May 2016  11:03 pm                     Operator: XULIU
Sample    : JC20314-4                                 Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104986.D\FID2B.CH          Vial: 22
Acq On    : 16 May 2016  11:17 pm                     Operator: XULIU
Sample    : JC20314-4                                 Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:27 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol           5.60   5.48    390223   279971 5100.017  1701.189 #
 Spiked Amount   5000.000                  Recovery     =  102.00%    34.02%

Target Compounds
```

9.1.4

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH104986.D  MGH5269.M      Tue May 17 08:27:26 2016      GCGH
```

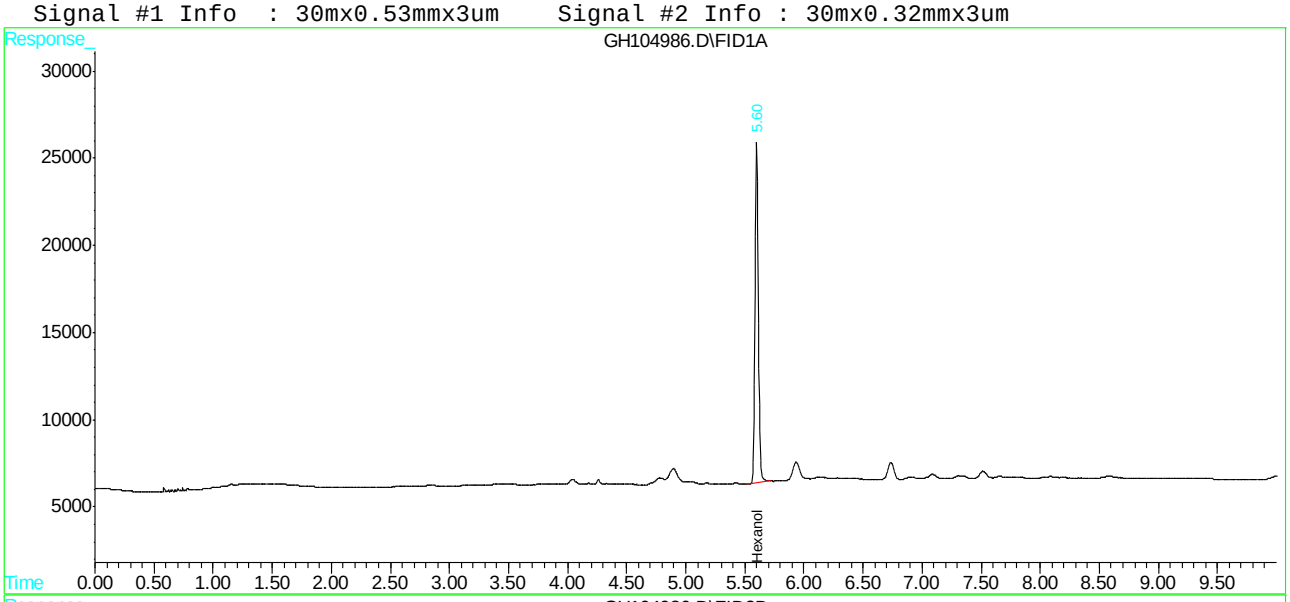
Quantitation Report (QT Reviewed)

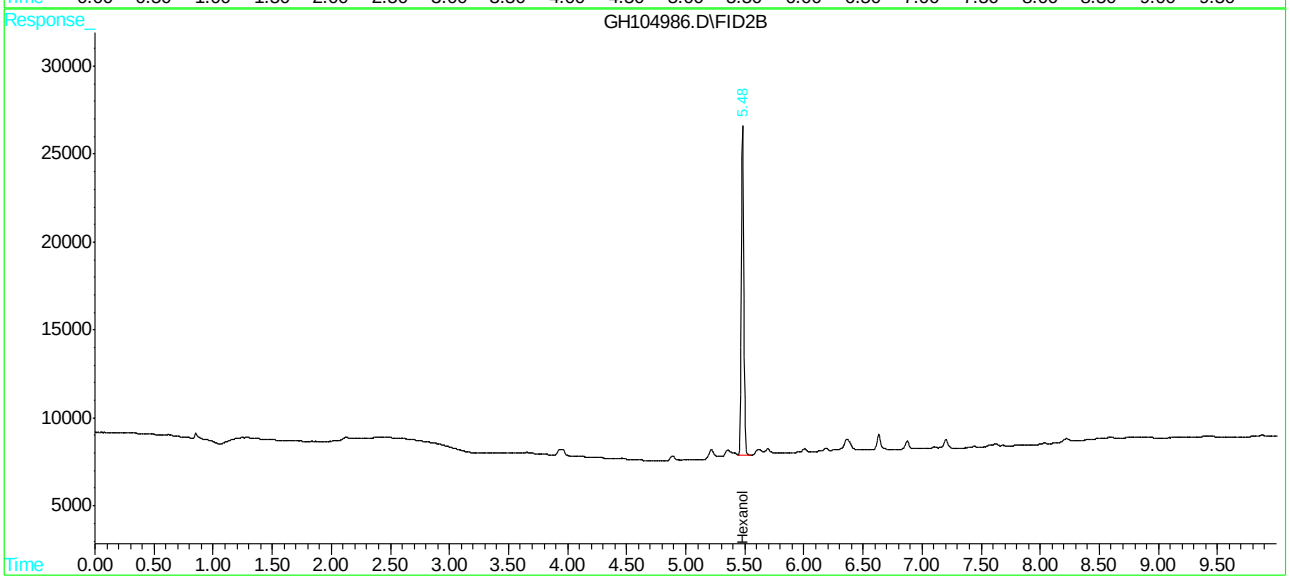
```
Data File : C:\HPCHEM\1\DATA\GH104986.D\FID1A.CH          Vial: 22
Acq On    : 16 May 2016  11:03 pm                     Operator: XULIU
Sample    : JC20314-4                                 Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104986.D\FID2B.CH          Vial: 22
Acq On    : 16 May 2016  11:17 pm                     Operator: XULIU
Sample    : JC20314-4                                 Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:27 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104981.D\FID1A.CH          Vial: 91
Acq On    : 16 May 2016   9:36 pm                     Operator: XULIU
Sample    : MB3                                       Inst    : GCGH
Misc      : GC48422,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104981.D\FID2B.CH          Vial: 91
Acq On    : 16 May 2016   9:58 pm                     Operator: XULIU
Sample    : MB3                                       Inst    : GCGH
Misc      : GC48422,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:23 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol           5.60   5.48    383448   268039 5011.474  1628.684 #
 Spiked Amount   5000.000                  Recovery     =  100.23%    32.57%

Target Compounds
```

9.2.1

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH104981.D  MGH5269.M      Tue May 17 08:26:09 2016      GCGH
```

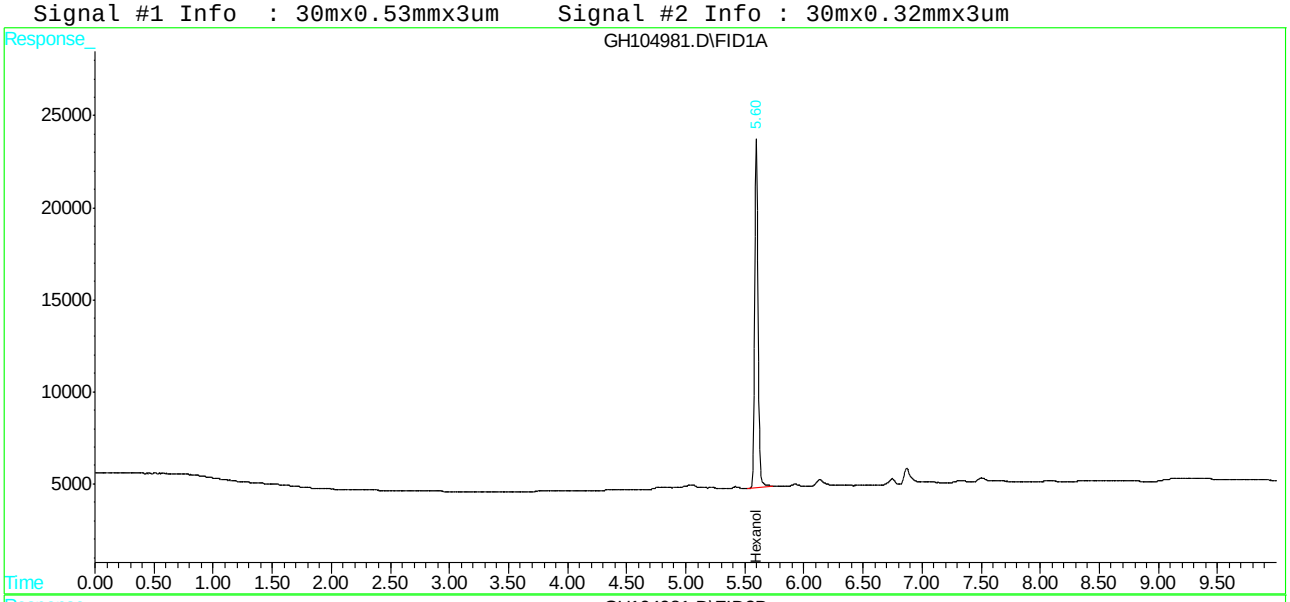
Quantitation Report (QT Reviewed)

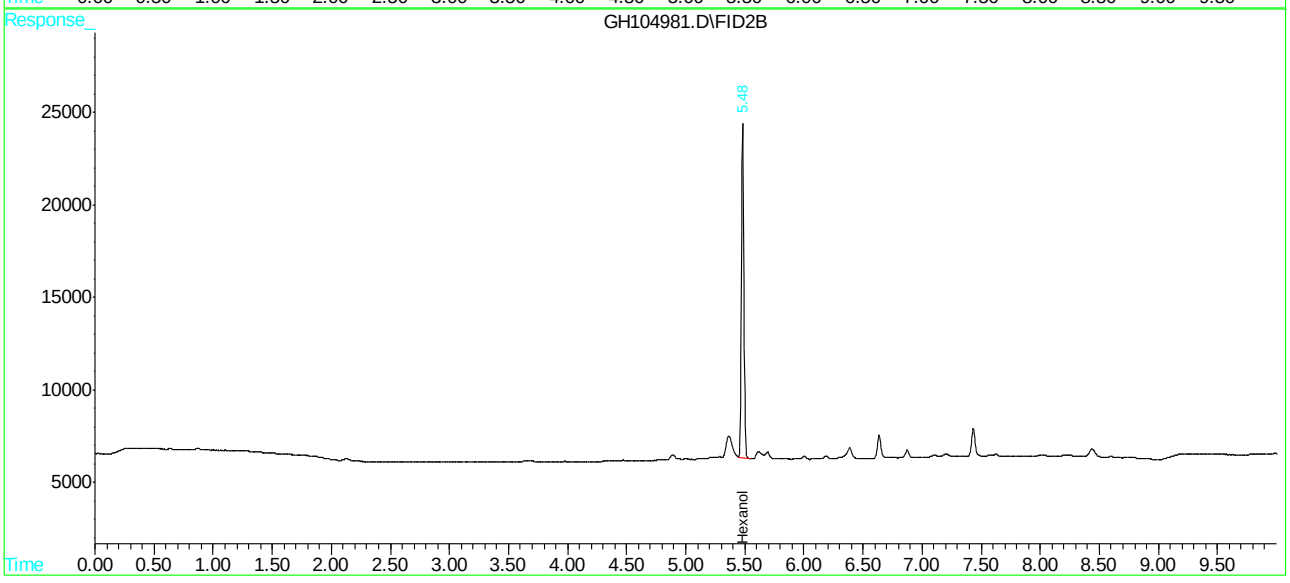
```
Data File : C:\HPCHEM\1\DATA\GH104981.D\FID1A.CH          Vial: 91
Acq On    : 16 May 2016   9:36 pm                     Operator: XULIU
Sample    : MB3                                       Inst    : GCGH
Misc      : GC48422,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104981.D\FID2B.CH          Vial: 91
Acq On    : 16 May 2016   9:58 pm                     Operator: XULIU
Sample    : MB3                                       Inst    : GCGH
Misc      : GC48422,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:23 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105099.D\FID1A.CH          Vial: 91
Acq On    : 19 May 2016   4:46 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105099.D\FID2B.CH          Vial: 91
Acq On    : 19 May 2016   5:08 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol           5.56   5.50    280009   617591 4142.352  3975.545
 Spiked Amount   5000.000                 Recovery     =   82.85%    79.51%

Target Compounds
```

9.2.2

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH105099.D  MGH5288.M      Fri May 20 09:01:49 2016      GCGH
```


SGS ACCUTEST JC20314

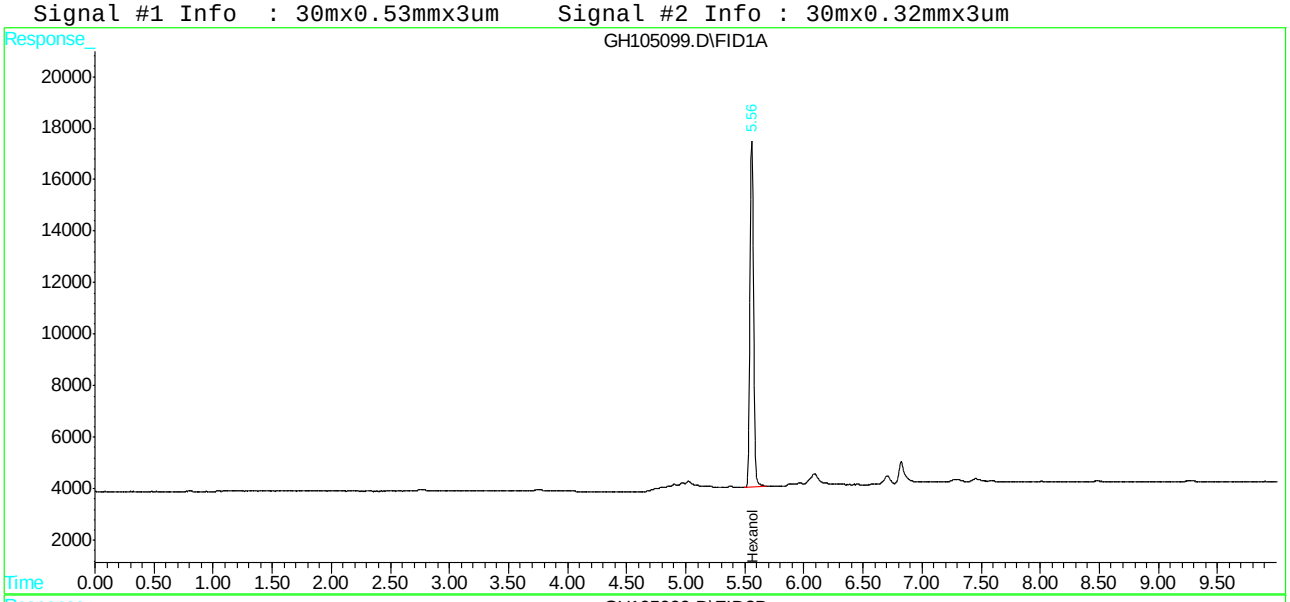
Quantitation Report (QT Reviewed)

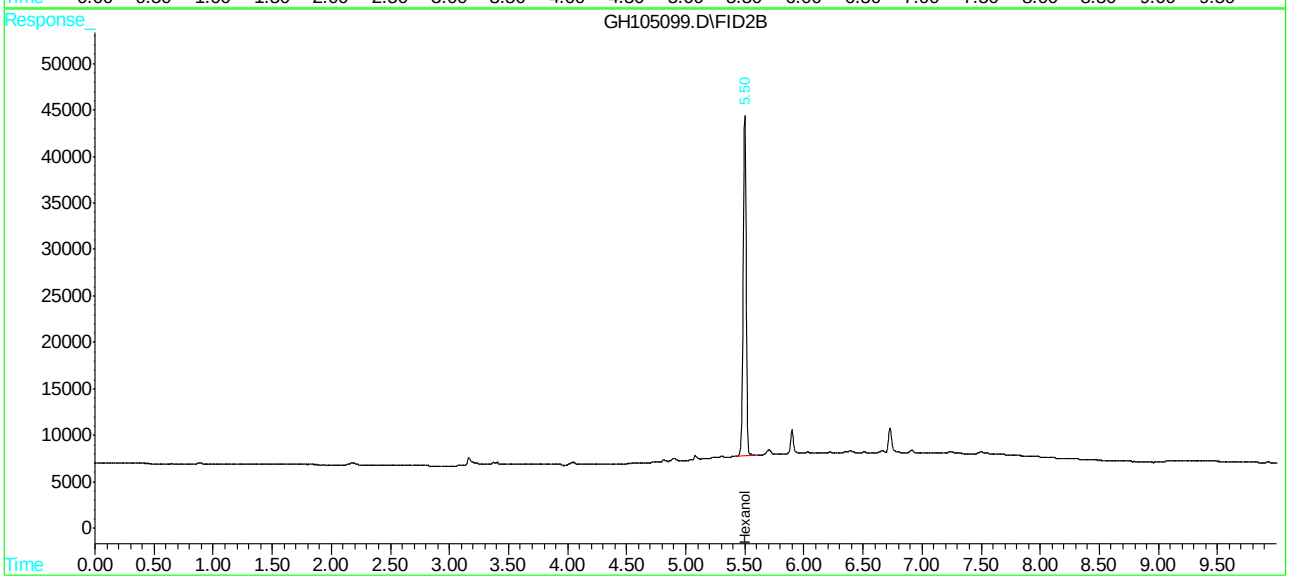
```
Data File : C:\HPCHEM\1\DATA\GH105099.D\FID1A.CH          Vial: 91
Acq On    : 19 May 2016   4:46 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105099.D\FID2B.CH          Vial: 91
Acq On    : 19 May 2016   5:08 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105110.D\FID1A.CH          Vial: 91
Acq On    : 19 May 2016   7:46 pm                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105110.D\FID2B.CH          Vial: 91
Acq On    : 19 May 2016   8:08 pm                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:10 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol          5.55   5.50    271170   606701 4011.589  3905.446
 Spiked Amount   5000.000                 Recovery     =   80.23%    78.11%

Target Compounds
```

9.2.3

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH105110.D  MGH5288.M      Fri May 20 09:30:07 2016      GCGH
```


SGS ACCUTEST JC20314

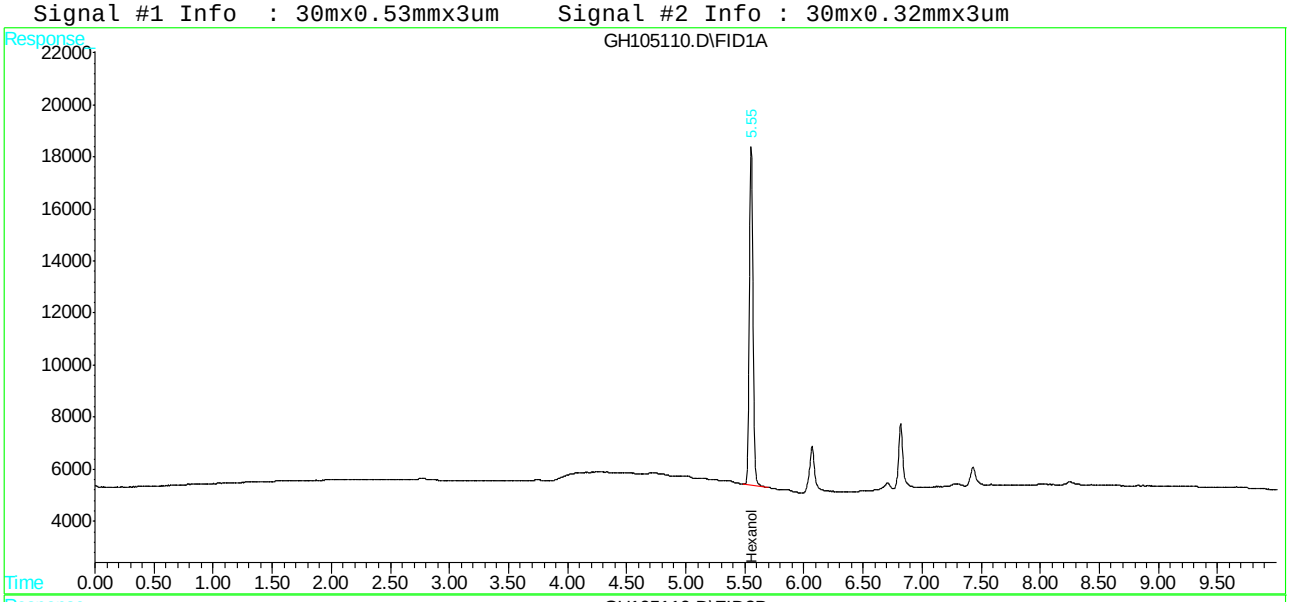
Quantitation Report (QT Reviewed)

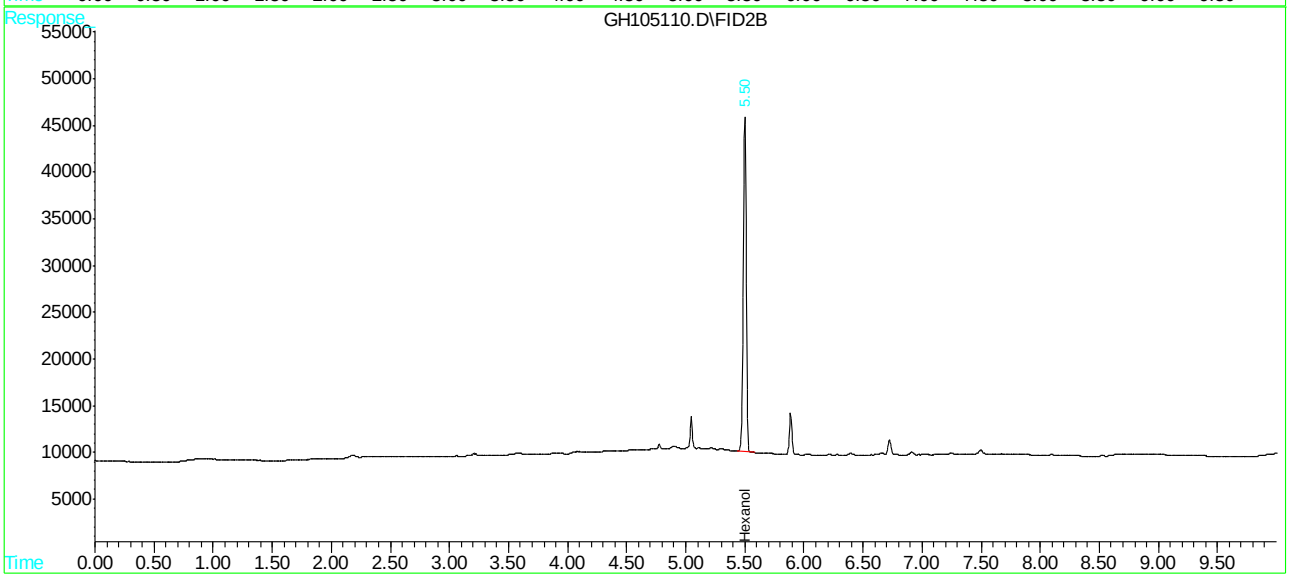
```
Data File : C:\HPCHEM\1\DATA\GH105110.D\FID1A.CH          Vial: 91
Acq On    : 19 May 2016   7:46 pm                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105110.D\FID2B.CH          Vial: 91
Acq On    : 19 May 2016   8:08 pm                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:10 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104961.D\FID1A.CH          Vial: 91
Acq On    : 16 May 2016   4:06 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104961.D\FID2B.CH          Vial: 91
Acq On    : 16 May 2016   4:28 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:39 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
9) S Hexanol	5.60	5.48	398117	284089	5203.193	1726.210 #
Spiked Amount 5000.000			Recovery	=	104.06%	34.52%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

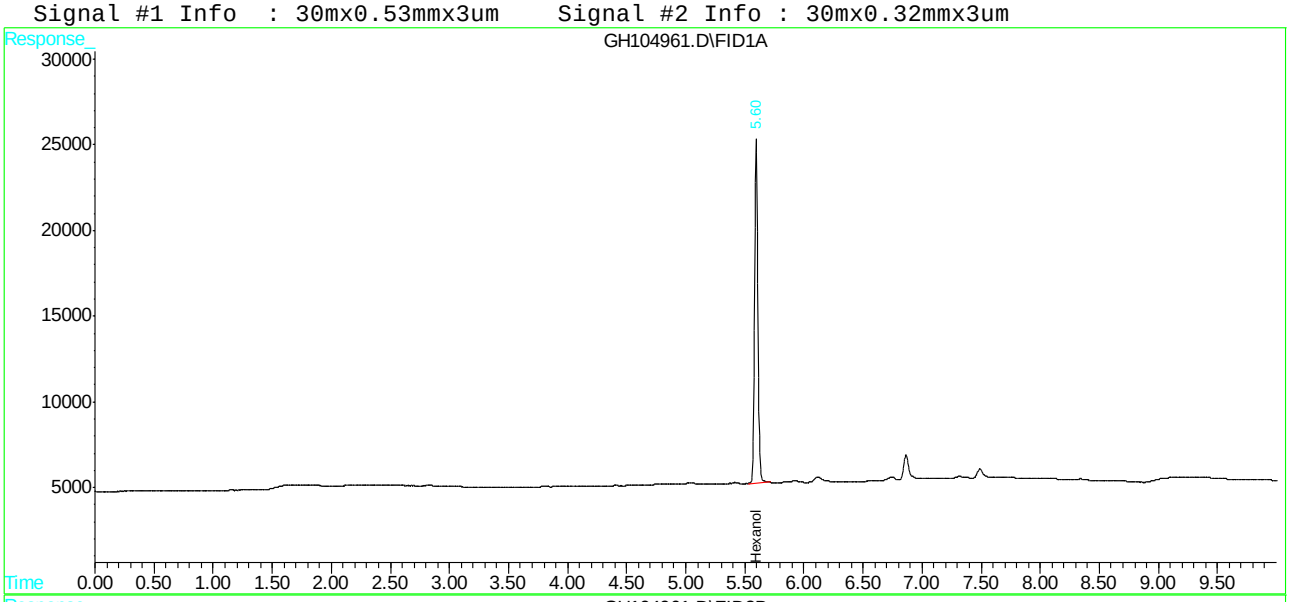
Quantitation Report (QT Reviewed)

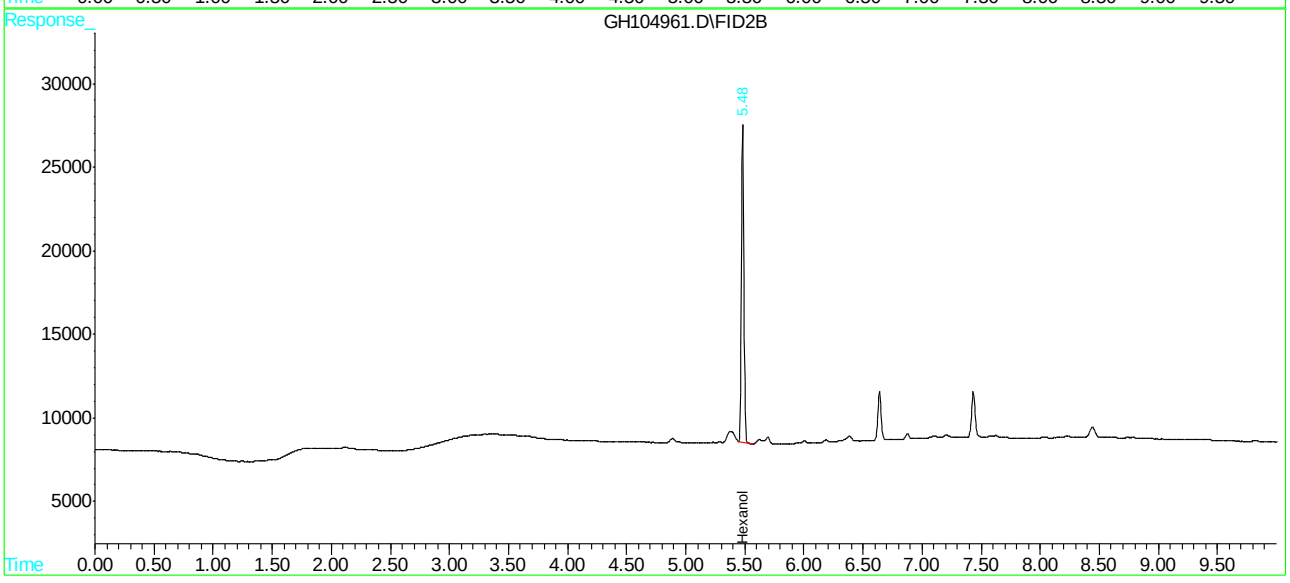
```
Data File : C:\HPCHEM\1\DATA\GH104961.D\FID1A.CH          Vial: 91
Acq On    : 16 May 2016   4:06 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104961.D\FID2B.CH          Vial: 91
Acq On    : 16 May 2016   4:28 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:39 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104962.D\FID1A.CH          Vial: 92
Acq On    : 16 May 2016   4:28 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104962.D\FID2B.CH          Vial: 92
Acq On    : 16 May 2016   4:45 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:38 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.60	5.48	439726	309830	5746.997	1882.618	#
Spiked Amount	5000.000			Recovery	=	114.94%	37.65%	
	Target Compounds							
1)	Methanol	1.15	0.86	71026	57960	4809.159	2851.105	#
2)	Ethanol	1.49	1.11	103628	73446	5537.932	2311.507	#
3)	Tert-Butyl Alcoh	2.07	1.60	194353	120481	7118.284	1845.234	#
4)	1-Propanol	2.56	1.94	135960	120368	6100.301	2443.009	#
5)	2-Propanol	1.80	1.37f	180447	81610	8696.137	1952.102	#
6)	Isobutanol	3.36	2.89	167811	108711	6105.202	1752.384	#
7)	1-Butanol	3.80	3.38	154708	127417	6318.080	2461.364	#
8)	2-Butanol	2.99	2.51f	138399	101020	5492.386	2044.341	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

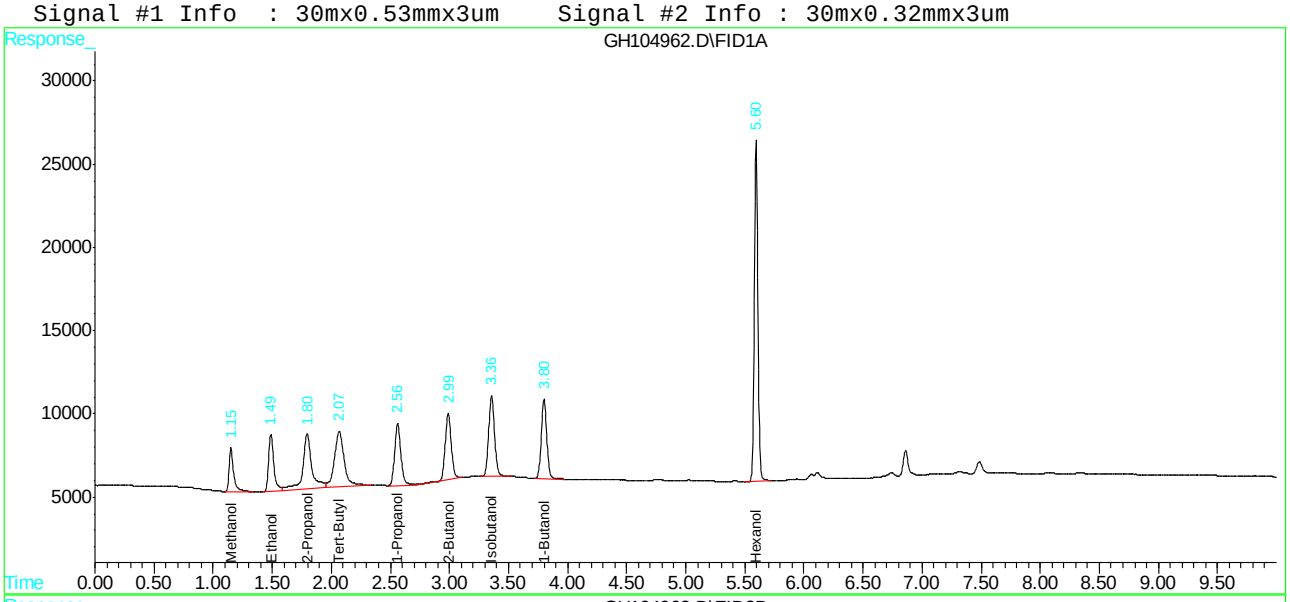
Quantitation Report (QT Reviewed)

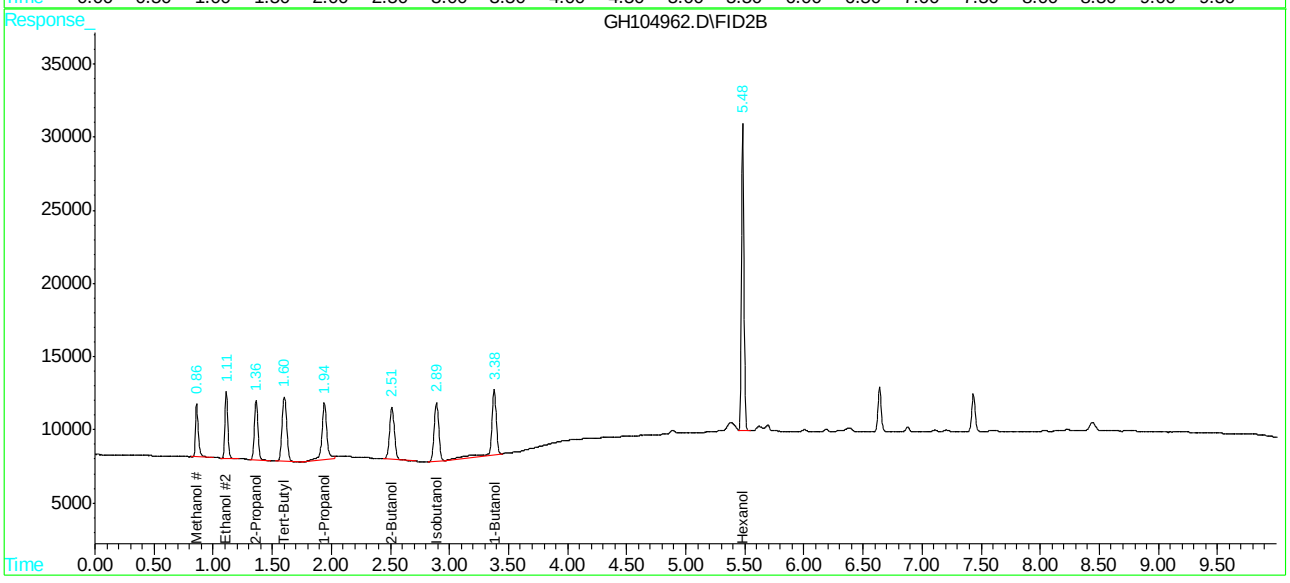
Data File : C:\HPCHEM\1\DATA\GH104962.D\FID1A.CH Vial: 92
Acq On : 16 May 2016 4:28 pm Operator: XULIU
Sample : BS Inst : GCGH
Misc : GC48420,GGH5285,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104962.D\FID2B.CH Vial: 92
Acq On : 16 May 2016 4:45 pm Operator: XULIU
Sample : BS Inst : GCGH
Misc : GC48420,GGH5285,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 17 7:38 2016 Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Tue May 17 07:24:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj. : 2ul
Signal #1 Phase : ZB-624 Signal #2 Phase: RTX-1
Signal #1 Info : 30mx0.53mmx3um Signal #2 Info : 30mx0.32mmx3um





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105100.D\FID1A.CH          Vial: 92
Acq On    : 19 May 2016   5:08 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105100.D\FID2B.CH          Vial: 92
Acq On    : 19 May 2016   5:22 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:46 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:14:57 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.56	5.49	319241	705201	4722.736	4539.504
Spiked Amount	5000.000			Recovery	=	94.45%	90.79%
	Target Compounds						
1)	Methanol	1.11	0.89	71908	177919	4651.591	5516.148
2)	Ethanol	1.44	1.15	93264	207313	4921.548	5200.904
3)	Tert-Butyl Alcoh	2.00	1.65	140903	327504	4972.773	5150.821
4)	1-Propanol	2.50	2.00	129946	262646	5341.826	5165.872
5)	2-Propanol	1.74	1.41	99306	233756	4982.461	5162.545
6)	Isobutanol	3.30	2.94	155012	298428	5387.796	4874.582
7)	1-Butanol	3.75	3.42	145478	310284	5093.636	4689.189
8)	2-Butanol	2.93	2.57	131640	284146	5135.270	5234.388

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

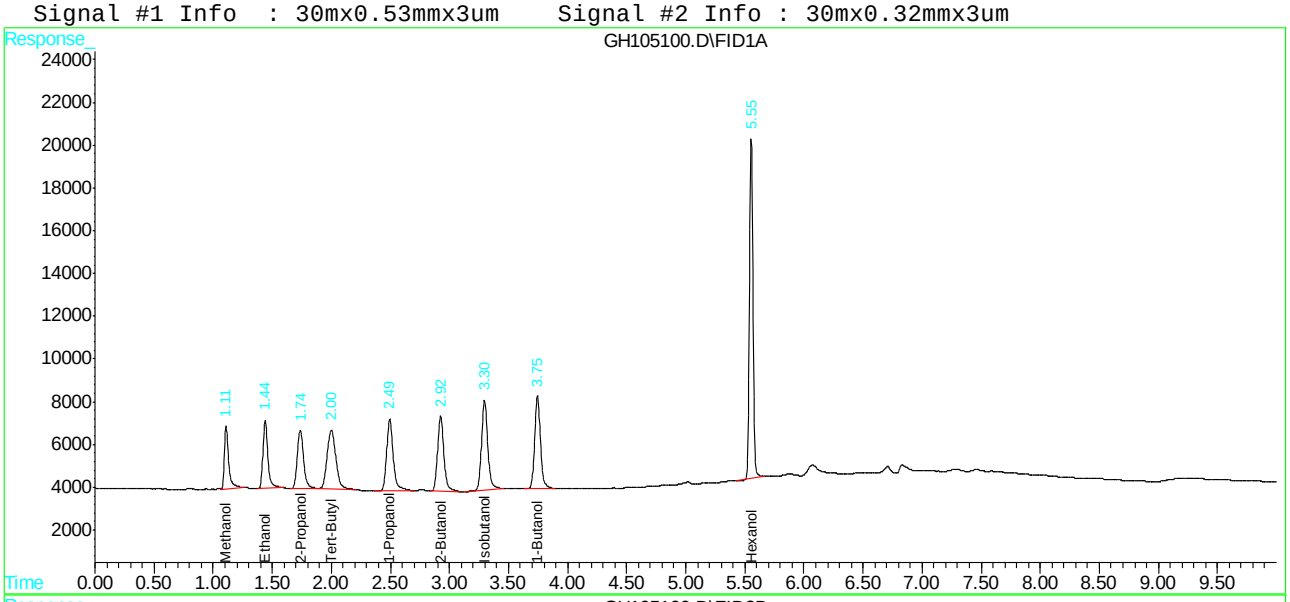
Quantitation Report (QT Reviewed)

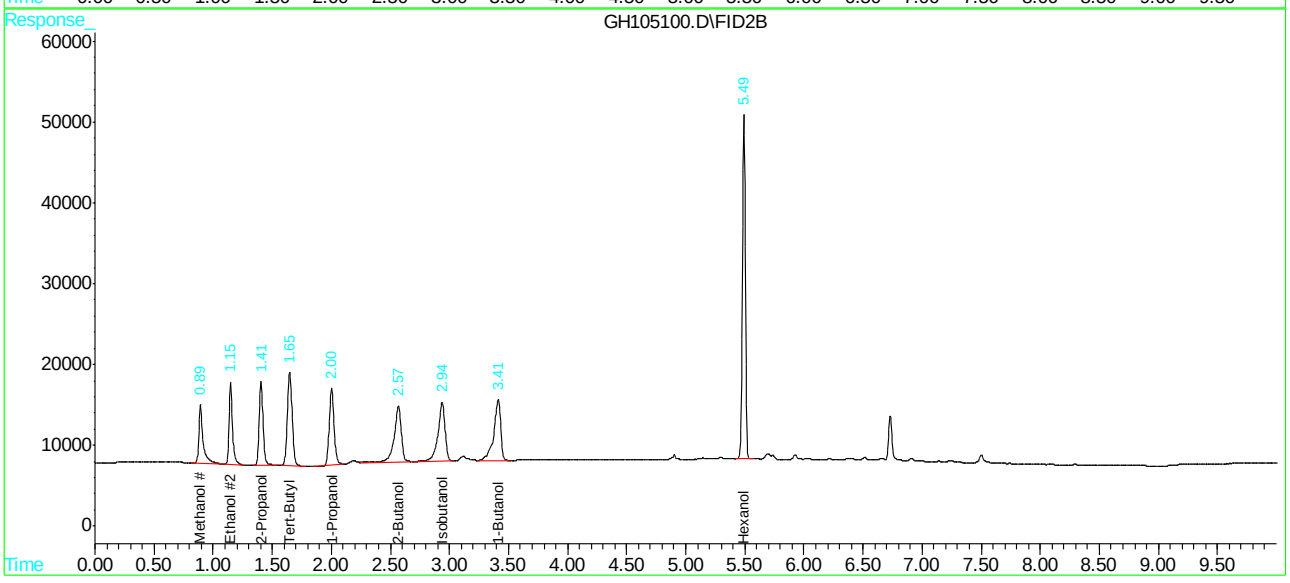
```
Data File : C:\HPCHEM\1\DATA\GH105100.D\FID1A.CH          Vial: 92
Acq On    : 19 May 2016   5:08 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105100.D\FID2B.CH          Vial: 92
Acq On    : 19 May 2016   5:22 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:46 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:14:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104964.D\FID1A.CH          Vial: 2
Acq On    : 16 May 2016   4:57 pm                     Operator: XULIU
Sample    : JC19644-1MS                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104964.D\FID2B.CH          Vial: 2
Acq On    : 16 May 2016   5:12 pm                     Operator: XULIU
Sample    : JC19644-1MS                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:46 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.60	5.48	423617	291848	5536.460	1773.354	#
Spiked Amount	5000.000			Recovery	=	110.73%	35.47%	
	Target Compounds							
1)	Methanol	1.15	0.86	72720	61380	4923.823	3019.335	
2)	Ethanol	1.49	1.12	107138	75953	5725.512	2390.398	#
3)	Tert-Butyl Alcoh	2.07	1.61	171758	124596	6290.720	1908.250	#
4)	1-Propanol	2.56	1.95	138985	118086	6236.037	2396.694	#
5)	2-Propanol	1.79	1.37f	107581	84259	5184.591	2015.454	#
6)	Isobutanol	3.35	2.89	174938	115275	6364.513	1858.191	#
7)	1-Butanol	3.80	3.38	164381	109032	6713.099	2106.225	#
8)	2-Butanol	2.99	2.52	145573	101789	5777.092	2059.904	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

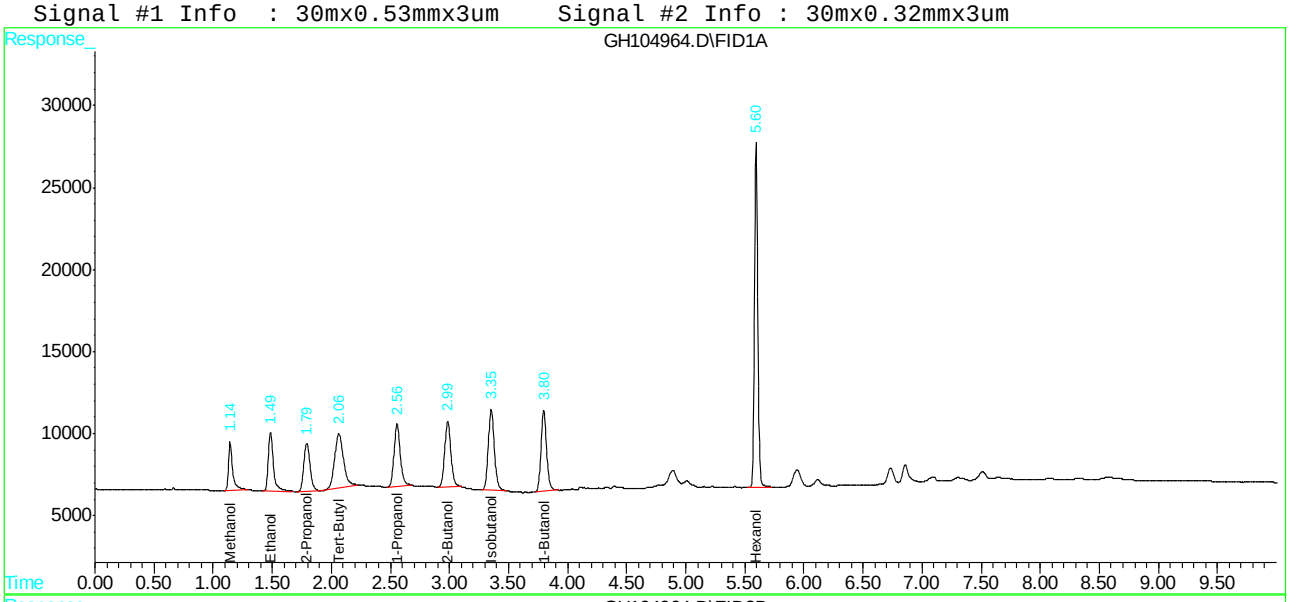
Quantitation Report (QT Reviewed)

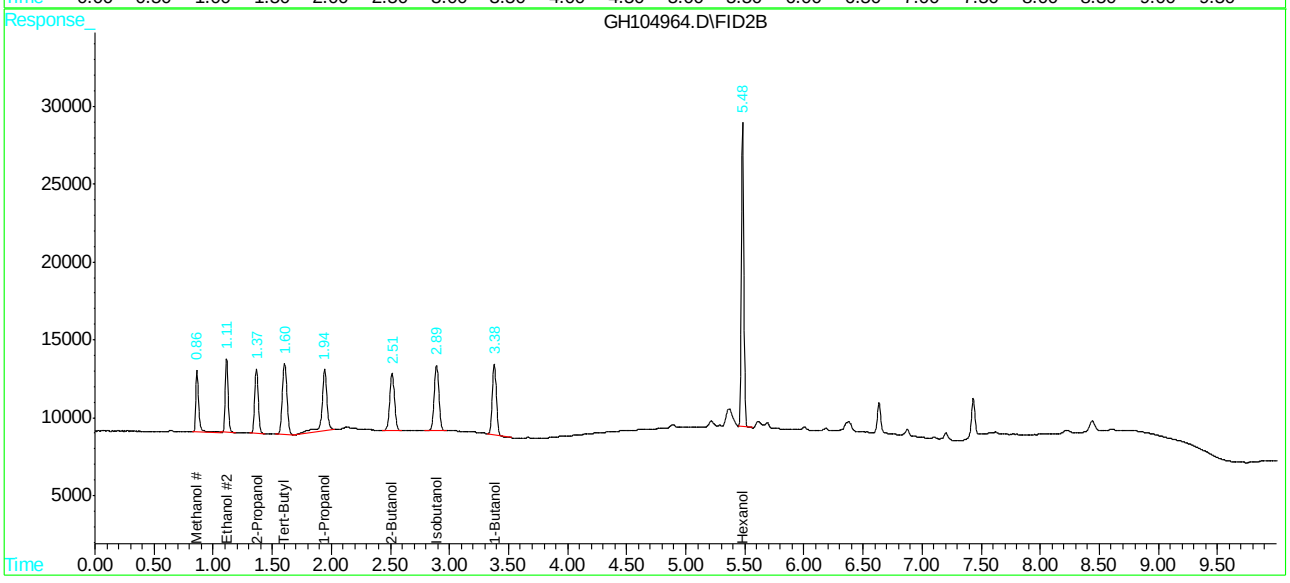
```
Data File : C:\HPCHEM\1\DATA\GH104964.D\FID1A.CH          Vial: 2
Acq On    : 16 May 2016   4:57 pm                     Operator: XULIU
Sample    : JC19644-1MS                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104964.D\FID2B.CH          Vial: 2
Acq On    : 16 May 2016   5:12 pm                     Operator: XULIU
Sample    : JC19644-1MS                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:46 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104965.D\FID1A.CH          Vial: 3
Acq On    : 16 May 2016   5:12 pm                     Operator: XULIU
Sample    : JC19644-1MSD                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104965.D\FID2B.CH          Vial: 3
Acq On    : 16 May 2016   5:30 pm                     Operator: XULIU
Sample    : JC19644-1MSD                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:47 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.60	5.48	431149	292567	5634.903	1777.727	#
Spiked Amount	5000.000			Recovery	=	112.70%	35.55%	
	Target Compounds							
1)	Methanol	1.15	0.86	73375	62227	4968.163	3061.026	
2)	Ethanol	1.49	1.11	109011	75678	5825.598	2381.731	#
3)	Tert-Butyl Alcoh	2.07	1.60	169876	125262	6221.802	1918.451	#
4)	1-Propanol	2.56	1.94f	150011	99591	6730.745	2021.302	#
5)	2-Propanol	1.79	1.36f	122453	84591	5901.293	2023.395	#
6)	Isobutanol	3.35	2.89	182004	115401	6621.580	1860.232	#
7)	1-Butanol	3.80	3.38	168796	109734	6893.405	2119.783	#
8)	2-Butanol	2.99	2.51f	153419	102611	6088.456	2076.538	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

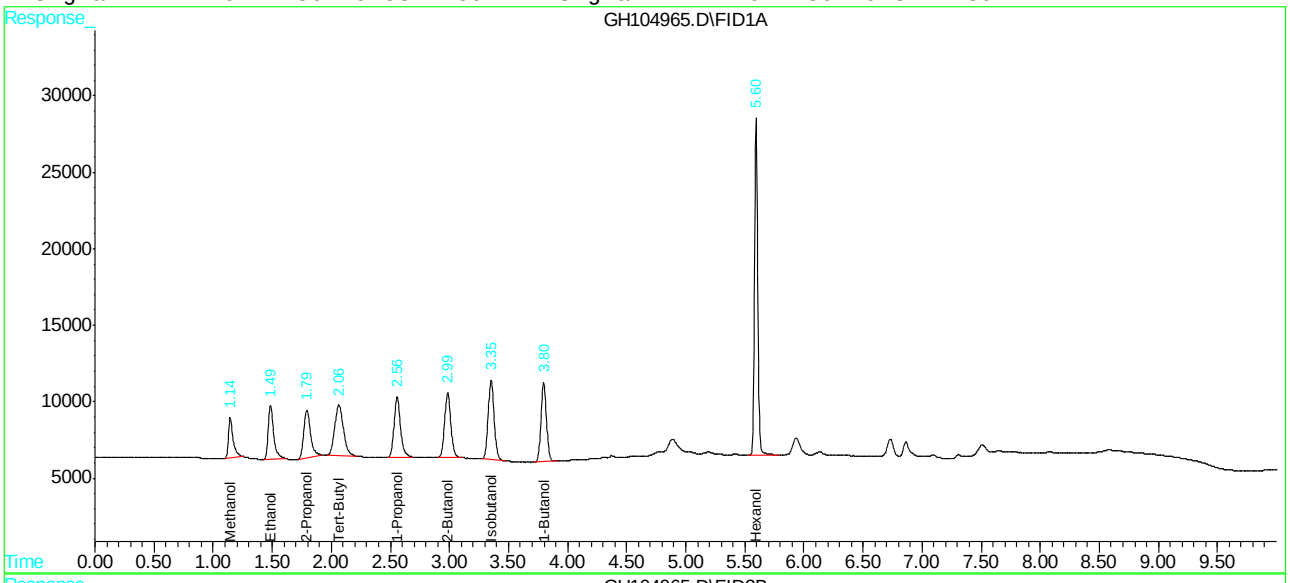
Quantitation Report (QT Reviewed)

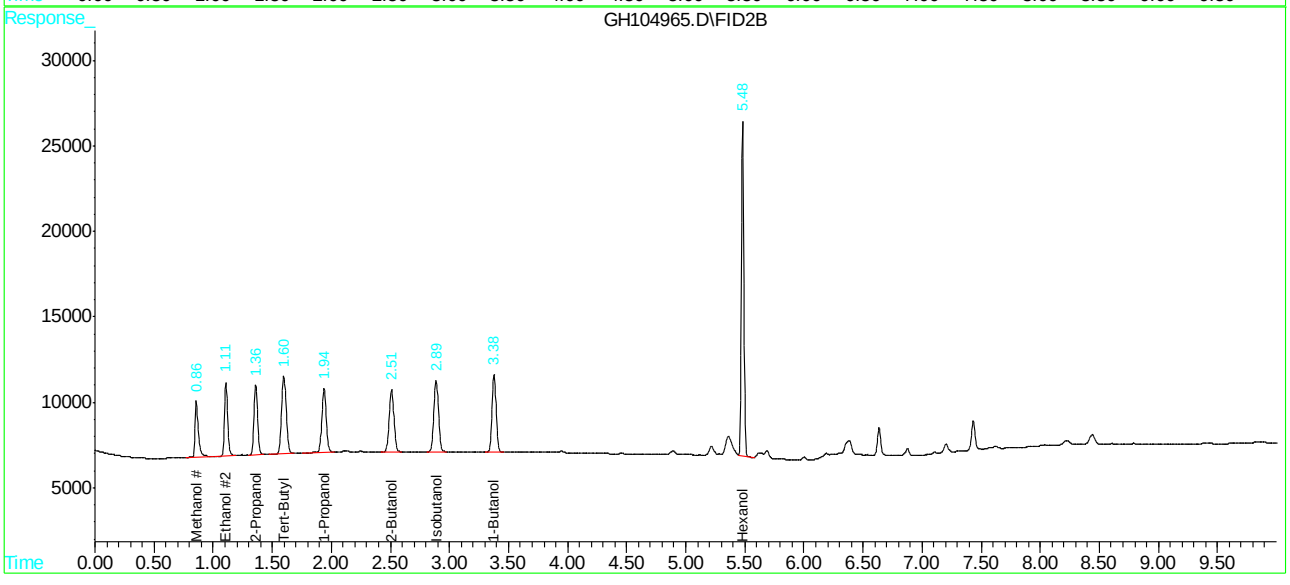
```
Data File : C:\HPCHEM\1\DATA\GH104965.D\FID1A.CH          Vial: 3
Acq On    : 16 May 2016   5:12 pm                     Operator: XULIU
Sample    : JC19644-1MSD                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104965.D\FID2B.CH          Vial: 3
Acq On    : 16 May 2016   5:30 pm                     Operator: XULIU
Sample    : JC19644-1MSD                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:47 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105102.D\FID1A.CH          Vial: 6
Acq On    : 19 May 2016   5:37 pm                     Operator: XULIU
Sample    : JC20464-1MS                               Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105102.D\FID2B.CH          Vial: 6
Acq On    : 19 May 2016   5:51 pm                     Operator: XULIU
Sample    : JC20464-1MS                               Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:53 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:53:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.55	5.50	317891	704897	4702.764	4537.551
Spiked Amount	5000.000			Recovery	=	94.06%	90.75%
	Target Compounds						
1)	Methanol	1.11	0.90	63948	153278	4136.668	4752.184
2)	Ethanol	1.44	1.15	90928	204536	4798.264	5131.251
3)	Tert-Butyl Alcoh	2.00	1.65	144388	325390	5095.795	5117.570
4)	1-Propanol	2.49	2.00	132970	260653	5466.136	5126.675
5)	2-Propanol	1.74	1.41	100015	226639	5018.076	5005.373
6)	Isobutanol	3.30	2.94	154930	309491	5384.944	5055.294
7)	1-Butanol	3.74	3.42	143340	248740	5018.809	3759.111
8)	2-Butanol	2.93	2.57	131346	268402	5123.826	4944.371

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

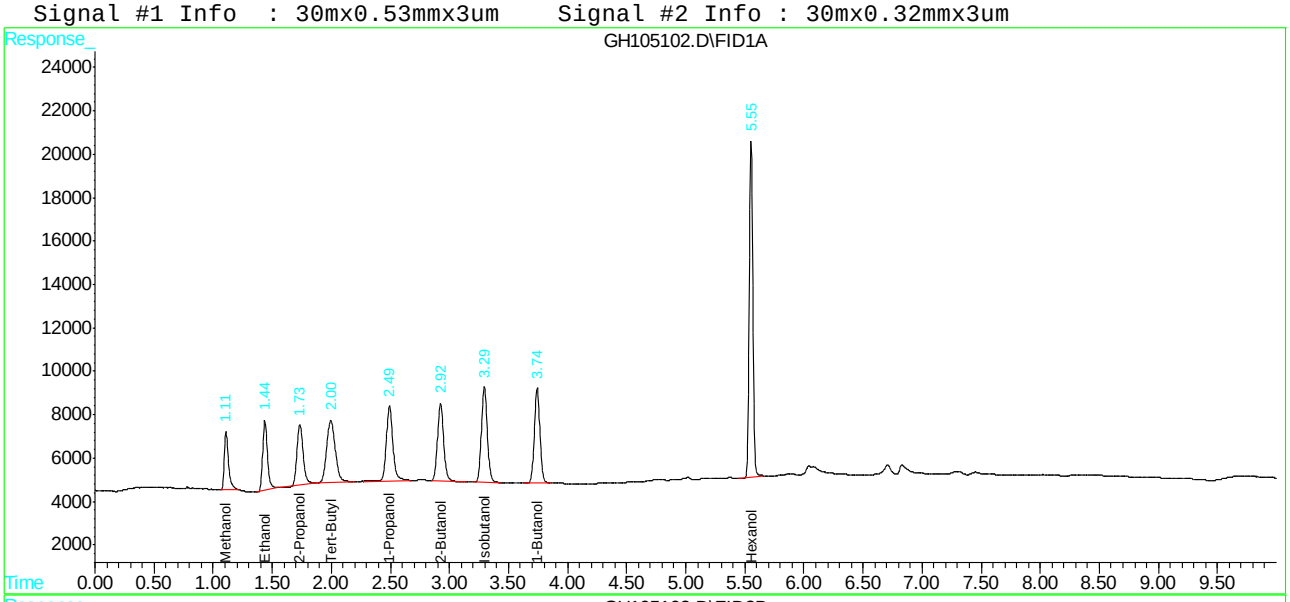
Quantitation Report (QT Reviewed)

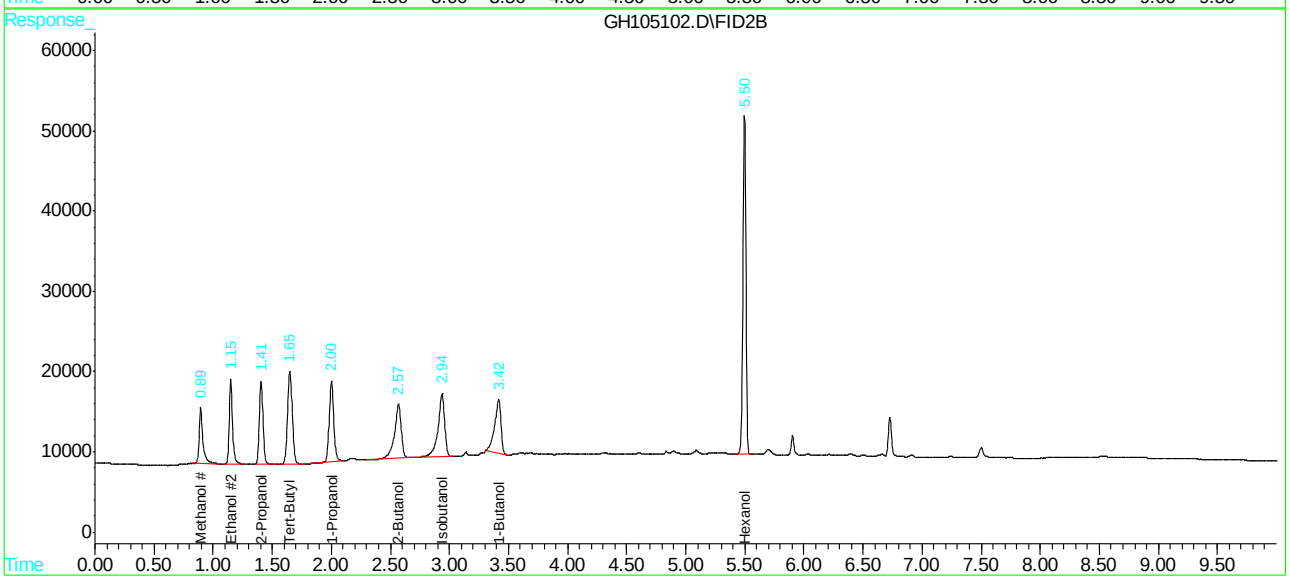
```
Data File : C:\HPCHEM\1\DATA\GH105102.D\FID1A.CH          Vial: 6
Acq On    : 19 May 2016   5:37 pm                     Operator: XULIU
Sample    : JC20464-1MS                               Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105102.D\FID2B.CH          Vial: 6
Acq On    : 19 May 2016   5:51 pm                     Operator: XULIU
Sample    : JC20464-1MS                               Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:53 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:53:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105103.D\FID1A.CH          Vial: 7
Acq On    : 19 May 2016   5:51 pm                     Operator: XULIU
Sample    : JC20464-1MSD                              Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105103.D\FID2B.CH          Vial: 7
Acq On    : 19 May 2016   6:13 pm                     Operator: XULIU
Sample    : JC20464-1MSD                              Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:54 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:53:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.55	5.50	317956	706865	4703.718	4550.218
	Spiked Amount 5000.000			Recovery	=	94.07%	91.00%
	Target Compounds						
1)	Methanol	1.11	0.90	67687	130778	4378.579	4054.599
2)	Ethanol	1.44	1.15	96850	216348	5110.763	5427.575
3)	Tert-Butyl Alcoh	2.00	1.65	145749	327715	5143.800	5154.135
4)	1-Propanol	2.50	2.00	122458	263739	5033.996	5187.380
5)	2-Propanol	1.74	1.41	96953	225656	4864.404	4983.670
6)	Isobutanol	3.30	2.94	151881	297607	5278.961	4861.178
7)	1-Butanol	3.74	3.42	140577	302114	4922.052	4565.723
8)	2-Butanol	2.93	2.57	129589	255164	5055.278	4700.497

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

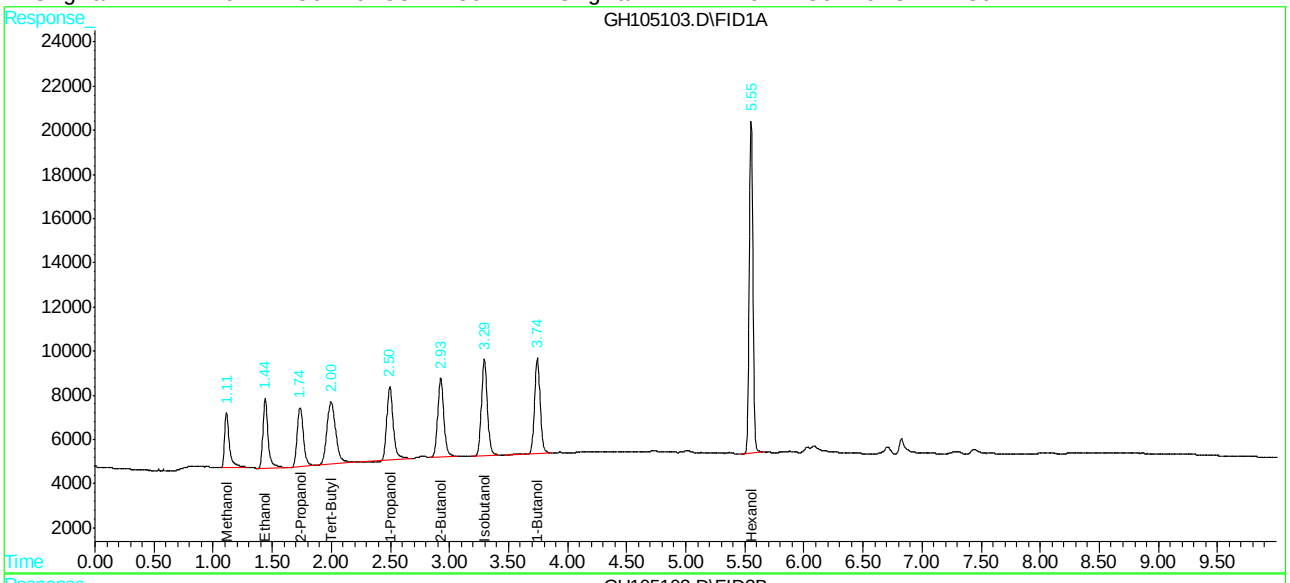
Quantitation Report (QT Reviewed)

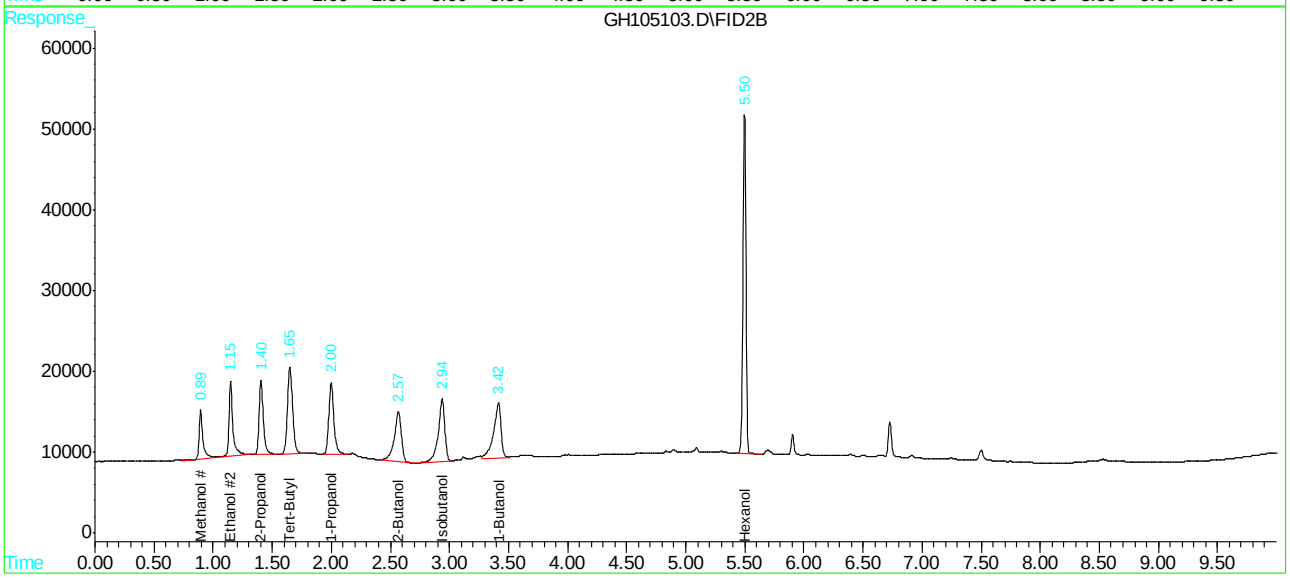
```
Data File : C:\HPCHEM\1\DATA\GH105103.D\FID1A.CH          Vial: 7
Acq On    : 19 May 2016   5:51 pm                     Operator: XULIU
Sample    : JC20464-1MSD                              Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105103.D\FID2B.CH          Vial: 7
Acq On    : 19 May 2016   6:13 pm                     Operator: XULIU
Sample    : JC20464-1MSD                              Inst    : GCGH
Misc      : GC48446,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:54 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:53:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna
05/10/16 12:49

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:29 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:30:14 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.61	5.44	49985	112111	653.275	663.209
	Spiked Amount 5000.000			Recovery	=	13.07%	13.26%
	Target Compounds						
1)	Methanol	1.15	0.88	1614	2383	109.284	94.588
2)	Ethanol	1.50	1.13	1891	2911	101.049	88.894
3)	Tert-Butyl Alcoh	2.08	1.62	2661	6282	97.471	106.692
4)	1-Propanol	2.58f	1.96	1437	4687	56.648m	117.370 #
5)	2-Propanol	1.81	1.38	2379	4175	114.673	105.617
6)	Isobutanol	3.38	2.91	2339	6882	85.109	109.048
7)	1-Butanol	3.84	3.38	2288	5438	87.938m	102.310
8)	2-Butanol	3.00	2.53	2251	4806	89.595	104.191

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

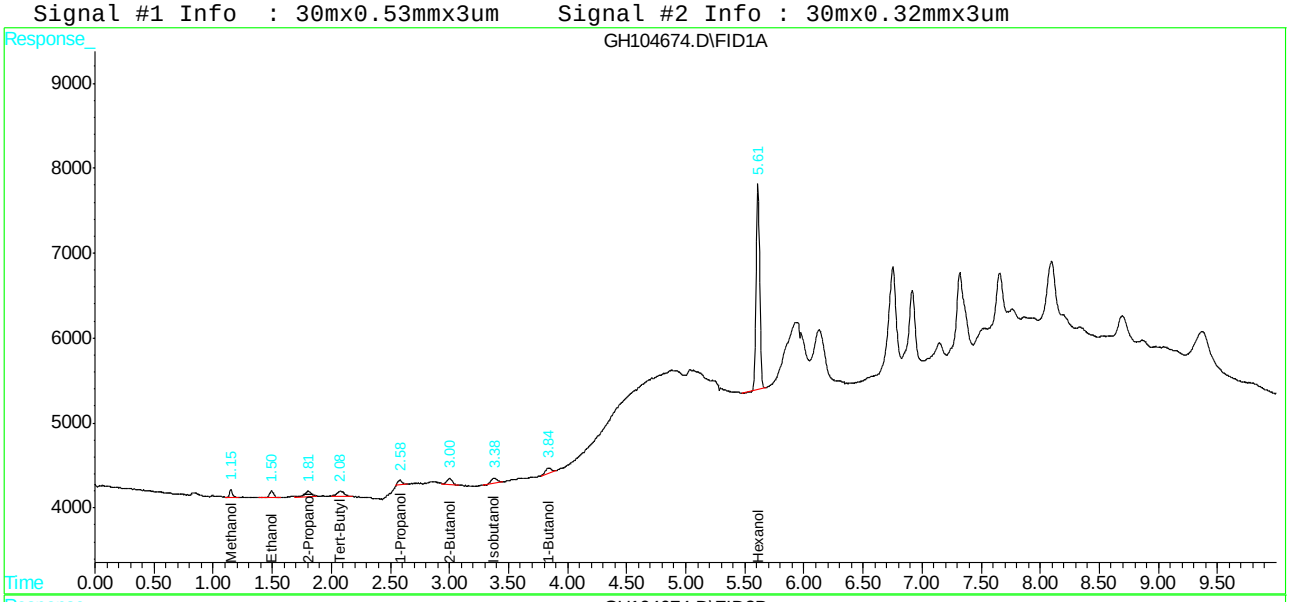
Quantitation Report (QT Reviewed)

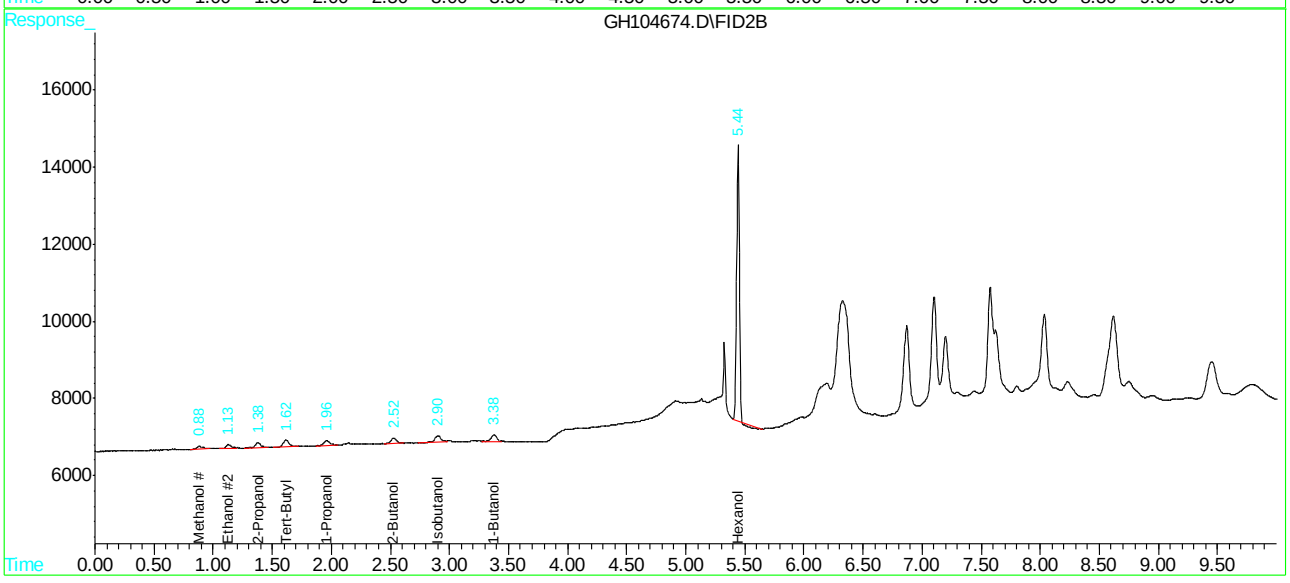
```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:29 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:30:14 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Manual Integration Approval Summary

Sample Number:	GGH5269-IC5269	**Method:**	SW846-8015C (DAI)
Lab FileID:	GH104674.D	**Analyst approved:**	05/10/16 10:51 Xu Liu
Injection Time:	05/09/16 13:28	**Supervisor approved:**	05/10/16 12:49 Owen McKenna

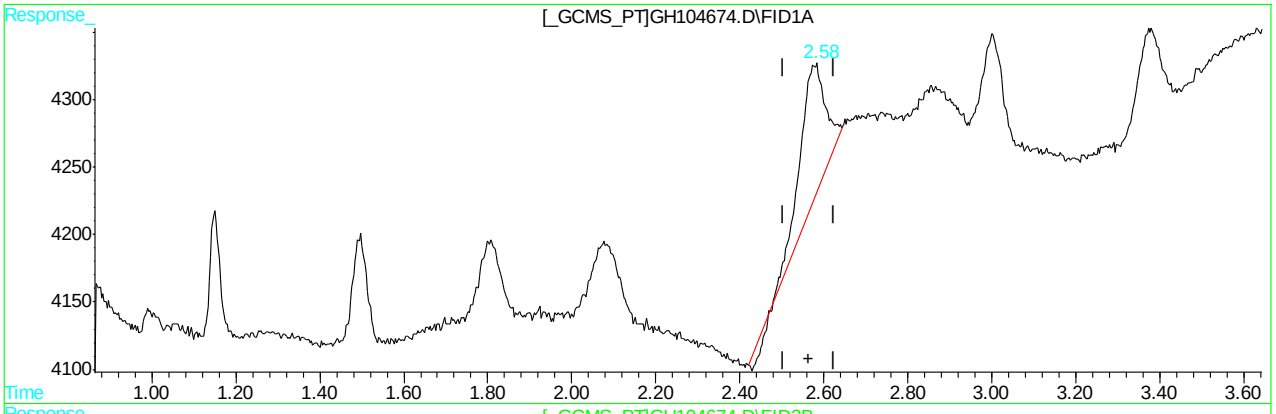
Parameter	CAS	Sig#	R.T. (min.)	Reason
n-Propyl Alcohol	71-23-8	1	2.58	Poor instrument integration
n-Butyl Alcohol	71-36-3	1	3.84	Poor instrument integration

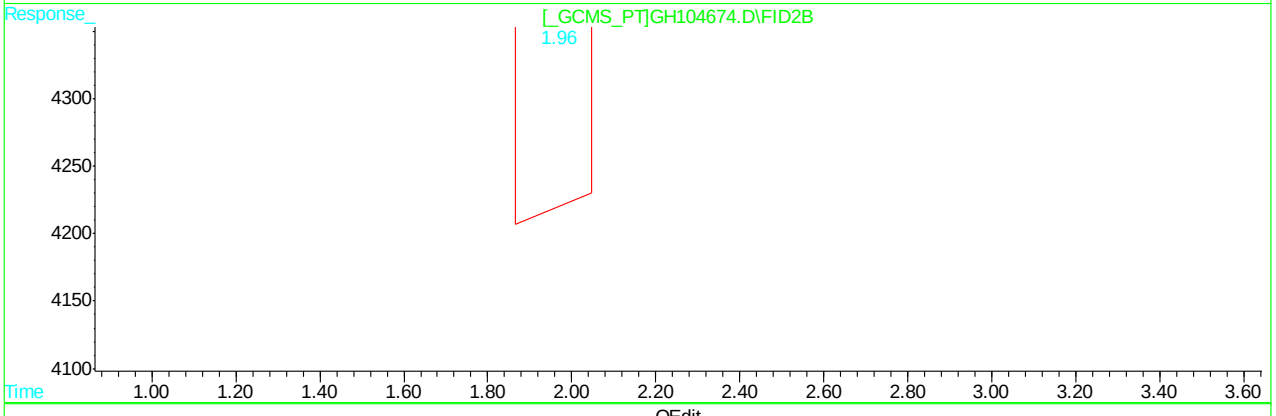
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:41 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:22:20 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

2.58min 150.557PPB

response 3820

(4) 1-Propanol #2

1.96min 117.370PPB

response 4687

(+) = Expected Retention Time

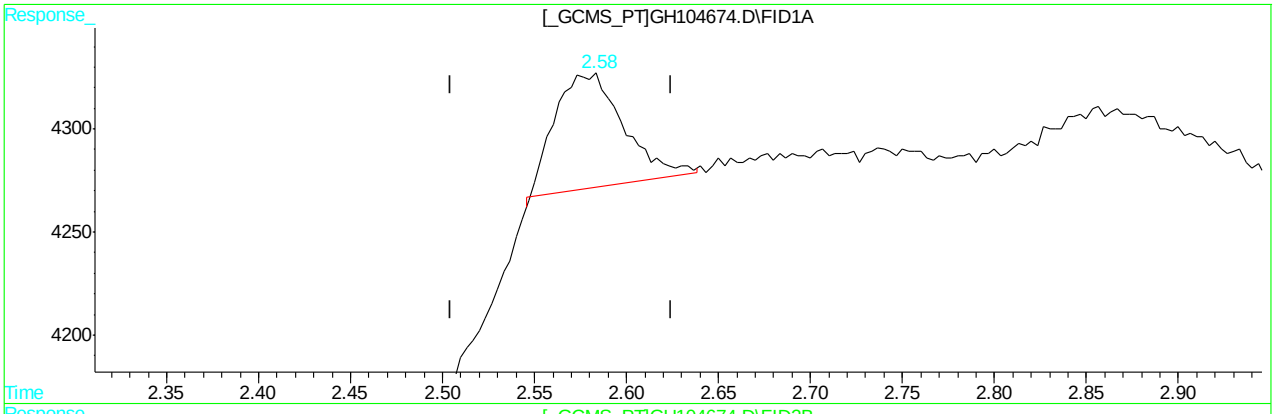
GH104674.D MGH5269.M Tue May 10 10:24:42 2016 GCGH

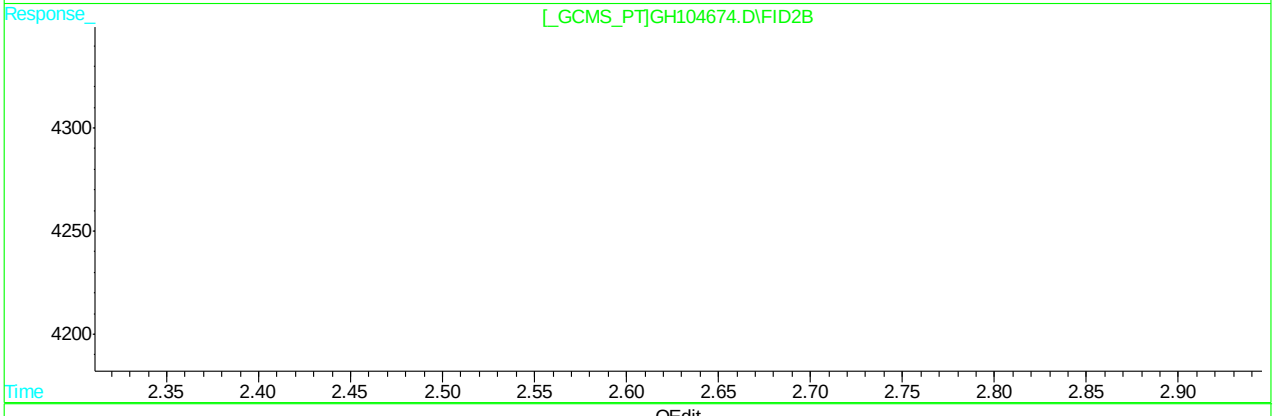
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:41 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:22:20 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

2.58min 56.648PPB m

response 1437

(4) 1-Propanol #2

1.96min 117.370PPB

response 4687

(+) = Expected Retention Time

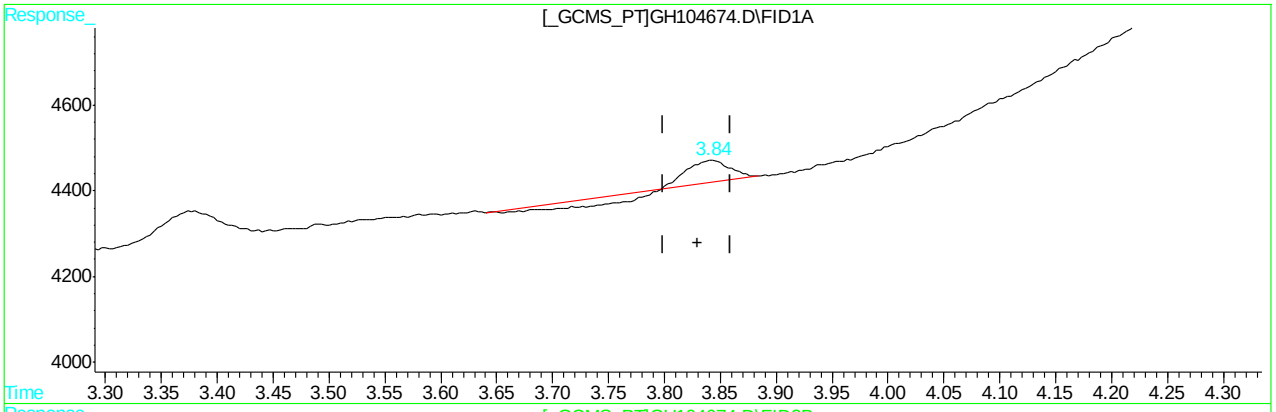
GH104674.D MGH5269.M Tue May 10 10:26:13 2016 GCGH

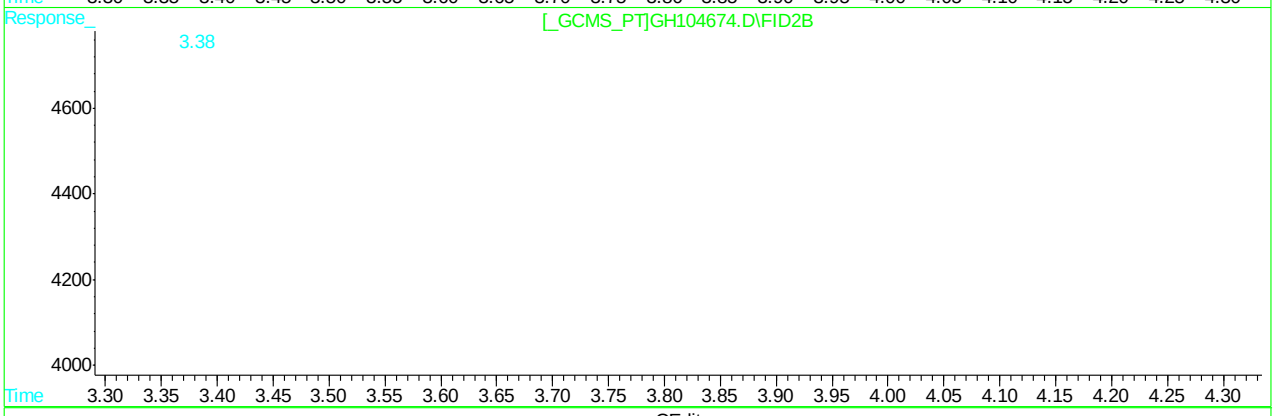
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:25 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:27:58 2016
Response via : Multiple Level Calibration
```





QEdit

(7) 1-Butanol

3.84min 11.608PPB

response 302

(7) 1-Butanol #2

3.38min 102.310PPB

response 5438

(+) = Expected Retention Time

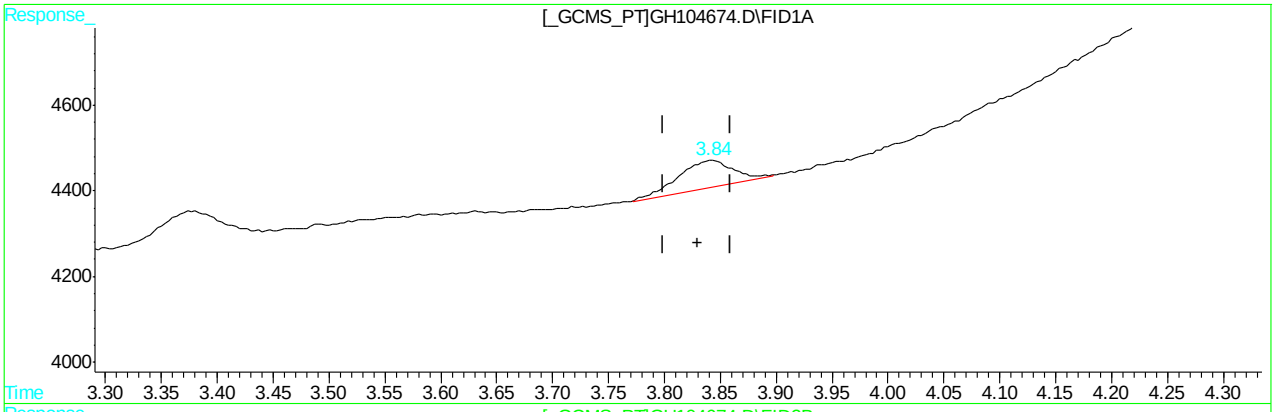
GH104674.D MGH5269.M Tue May 10 10:28:49 2016 GCGH

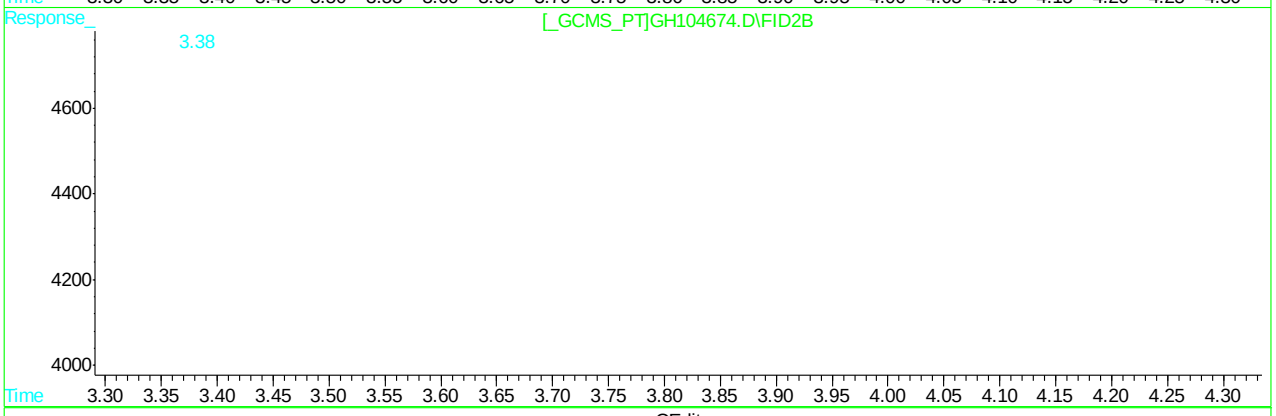
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:25 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:27:58 2016
Response via : Multiple Level Calibration
```





QEdit

(7) 1-Butanol

3.84min 87.938PPB m

response 2288

(7) 1-Butanol #2

3.38min 102.310PPB

response 5438

(+) = Expected Retention Time

GH104674.D MGH5269.M Tue May 10 10:29:46 2016 GCGH

Manual Integrations APPROVED (compounds with "m" flag)
Owen McKenna
05/10/16 12:49

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104675.D\FID2B.CH          Vial: 3
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 11:06 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:54:33 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.61	5.45	155641	338544	2034.146	2002.705
Spiked Amount	5000.000			Recovery	=	40.68%	40.05%
	Target Compounds						
1)	Methanol	1.14	0.95f	7966	6439	539.359	255.524m#
2)	Ethanol	1.49	1.15	9431	14087	503.977	430.233
3)	Tert-Butyl Alcoh	2.08	1.62f	14207	34168	520.325	580.335
4)	1-Propanol	2.57	1.98	12300	20457	484.805	512.230
5)	2-Propanol	1.80	1.39	10136	22758	488.484	575.762
6)	Isobutanol	3.37	2.91	15489	46800	563.522	741.552
7)	1-Butanol	3.83	3.39	8724	27492	335.300	517.205 #
8)	2-Butanol	3.00	2.53	12319	22672	490.327	491.547

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

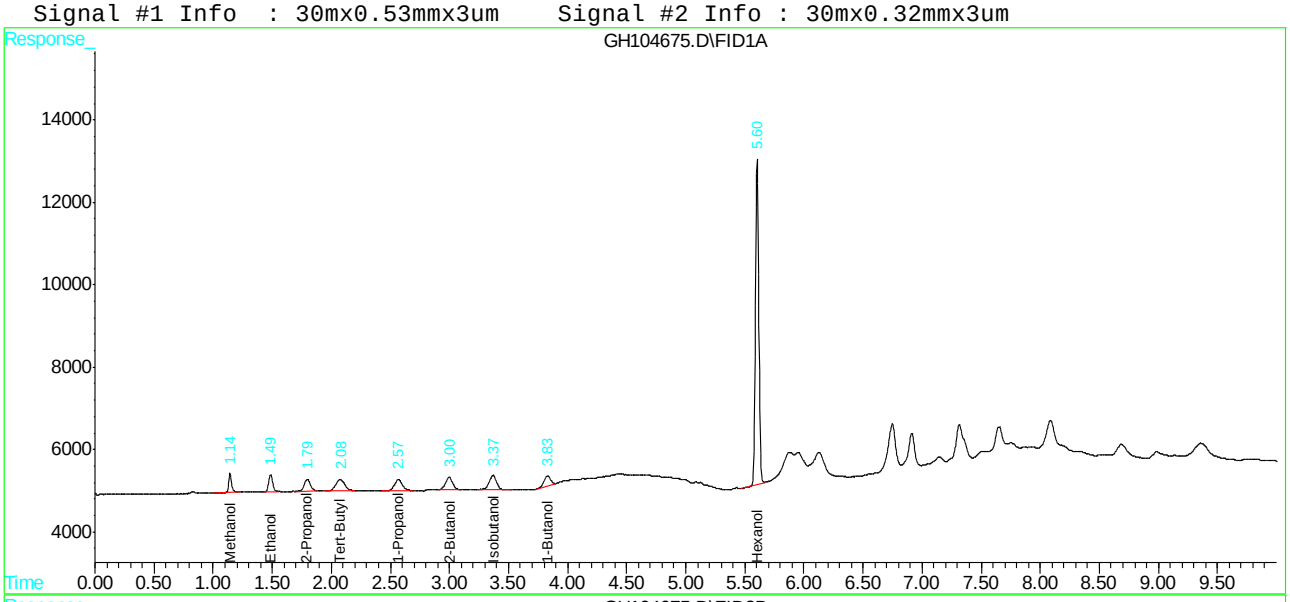
Quantitation Report (QT Reviewed)

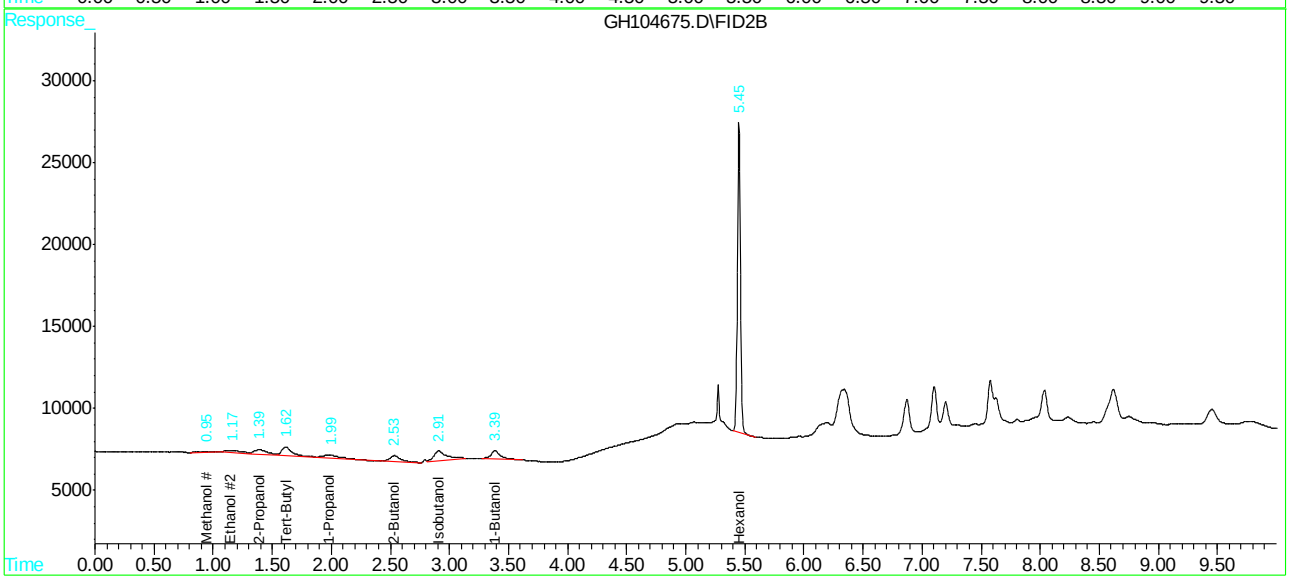
```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104675.D\FID2B.CH          Vial: 3
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 11:06 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:54:33 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC20314

Manual Integration Approval Summary

Sample Number:	GGH5269-IC5269	**Method:**	SW846-8015C (DAI)
Lab FileID:	GH104675.D	**Analyst approved:**	05/10/16 11:09 Xu Liu
Injection Time:	05/09/16 13:49	**Supervisor approved:**	05/10/16 12:49 Owen McKenna

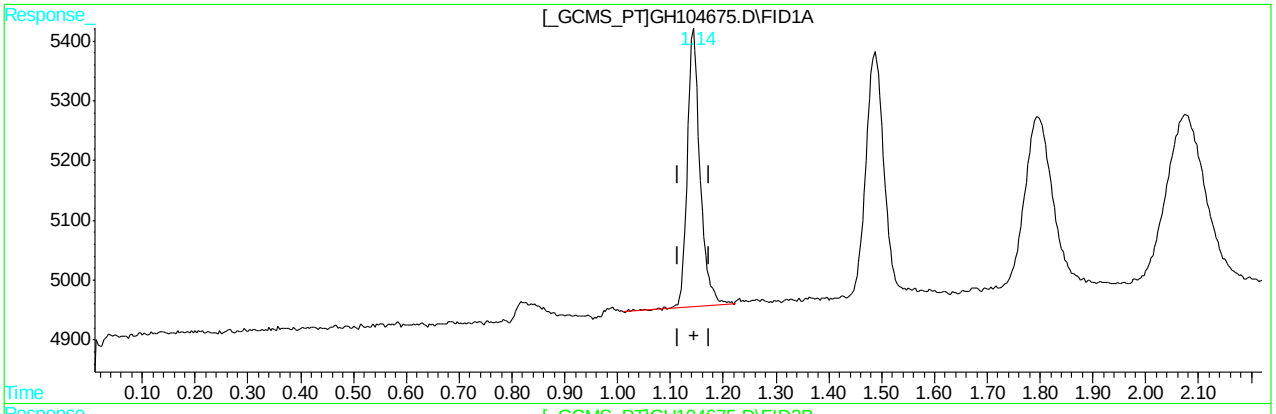
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methanol	67-56-1	2	0.95	Missed peak

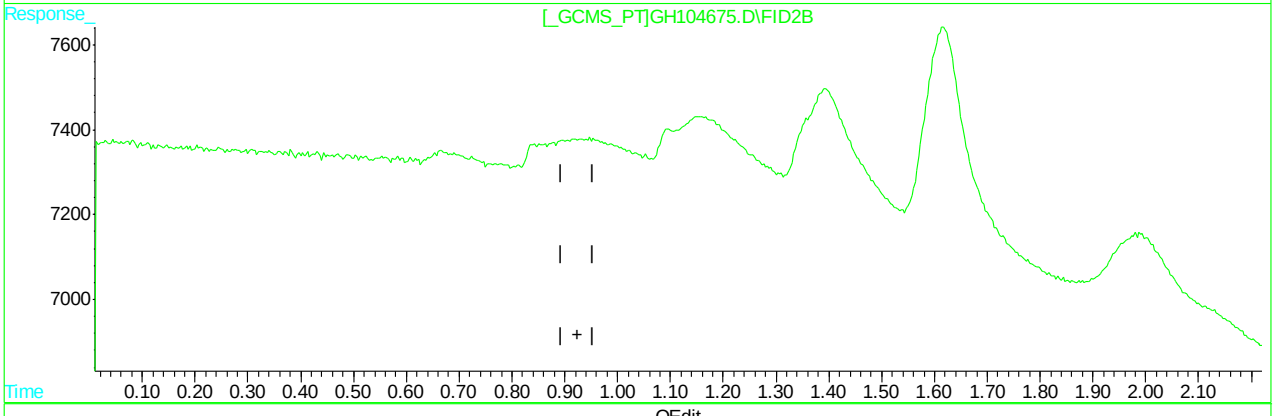
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104675.D\FID2B.CH          Vial: 3
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:57 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:29:55 2016
Response via : Multiple Level Calibration
```





QEdit

(1) Methanol

1.14min 539.359PPB

response 7966

(1) Methanol #2

0.00min 0.000PPB

response 0

(+) = Expected Retention Time

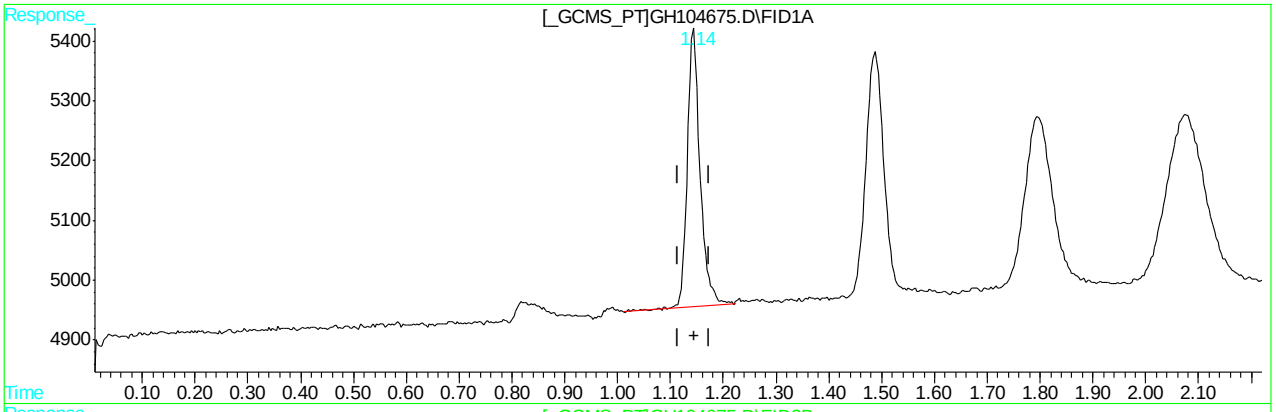
GH104675.D MGH5269.M Tue May 10 11:06:18 2016 GCGH

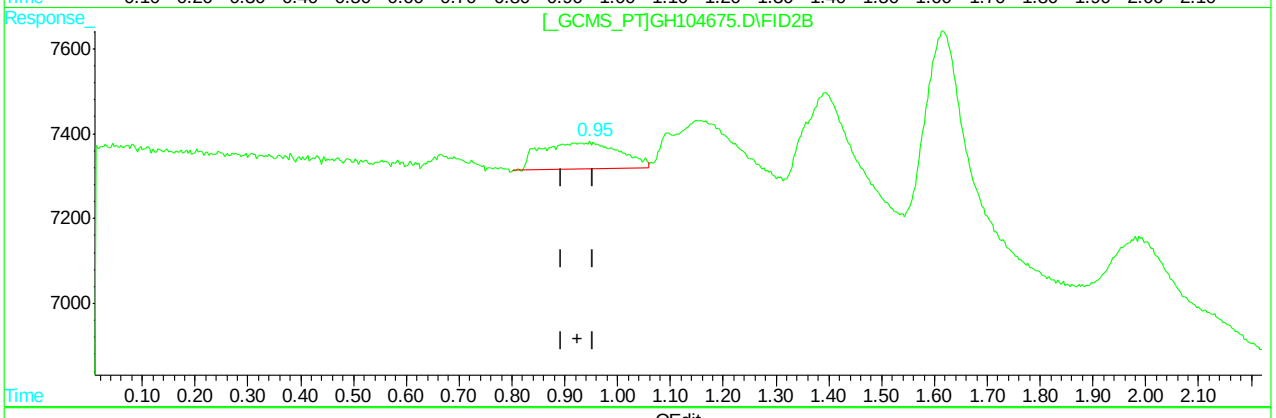
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104675.D\FID2B.CH          Vial: 3
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:57 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:29:55 2016
Response via : Multiple Level Calibration
```





QEdit

(1) Methanol

1.14min 539.359PPB

response 7966

(1) Methanol #2

0.95min 255.524PPB m

response 6439

(+) = Expected Retention Time

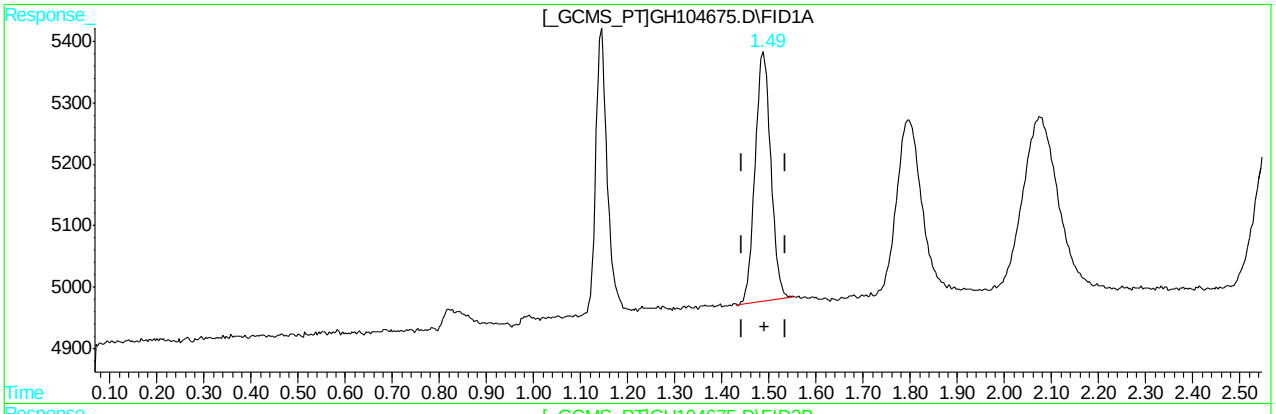
GH104675.D MGH5269.M Tue May 10 11:06:25 2016 GCGH

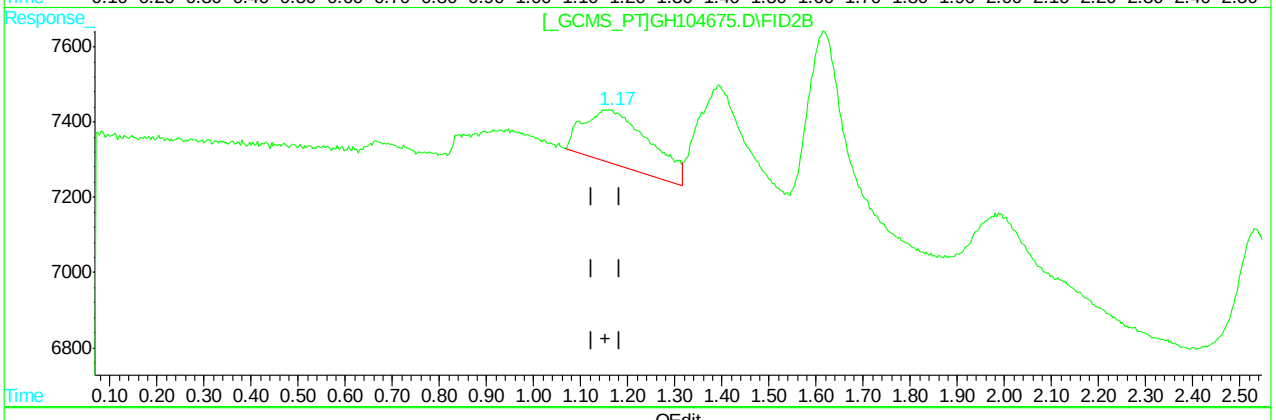
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104675.D\FID2B.CH          Vial: 3
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 11:06 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 11:06:41 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Ethanol

1.49min 503.977PPB

response 9431

(2) Ethanol #2

1.15min 430.233PPB

response 14087

(+) = Expected Retention Time

GH104675.D MGH5269.M Tue May 10 11:24:42 2016 GCGH

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104676.D\FID1A.CH          Vial: 4
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-1000                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104676.D\FID2B.CH          Vial: 4
Acq On    :  9 May 2016   2:18 pm                     Operator: XULIU
Sample    : IC5269-1000                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:58 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:57:36 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.60	5.44	303591	672843	3967.781	3980.295
	Spiked Amount 5000.000			Recovery	=	79.36%	79.61%
	Target Compounds						
1)	Methanol	1.15	0.90	15388	31657	1041.927	1256.339
2)	Ethanol	1.49	1.14	19273	41463	1029.941	1266.307
3)	Tert-Butyl Alcoh	2.07	1.62f	27422	61351	1004.338	1042.011
4)	1-Propanol	2.56	1.97	23966	39583	944.641	991.147
5)	2-Propanol	1.80	1.39	20074	44557	967.396	1127.272
6)	Isobutanol	3.37	2.91	28308	55331	1029.904	876.740
7)	1-Butanol	3.83	3.39	25885	57940	994.891	1090.021
8)	2-Butanol	3.00	2.53	31386	52105	1249.275	1129.682

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

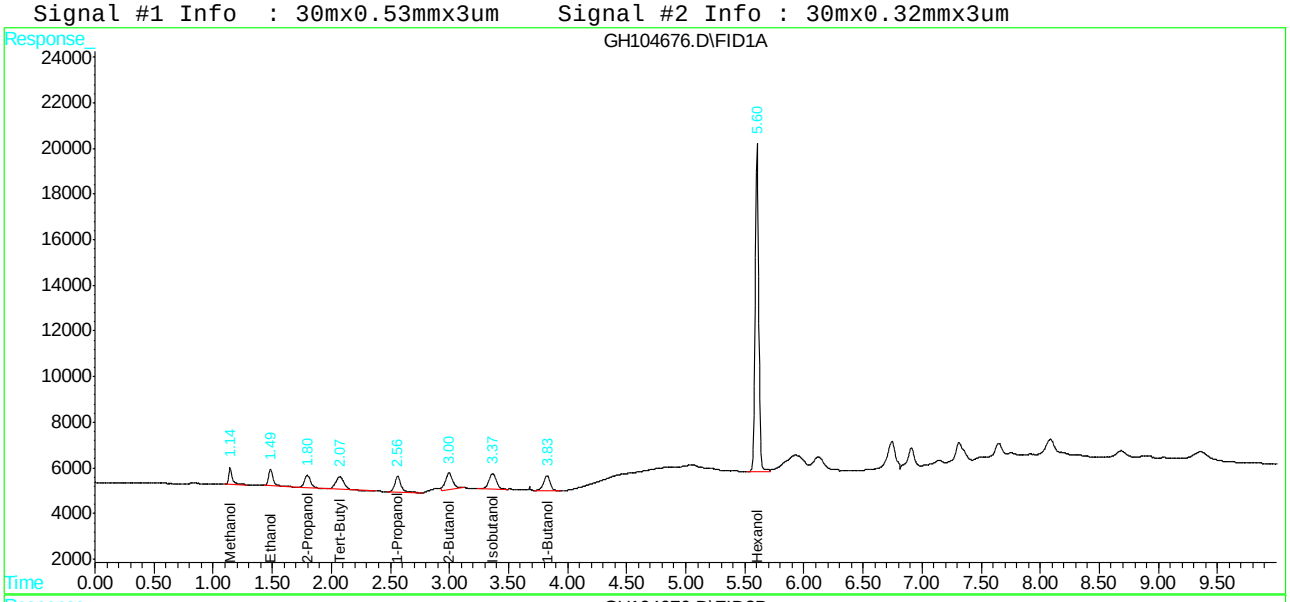
Quantitation Report (QT Reviewed)

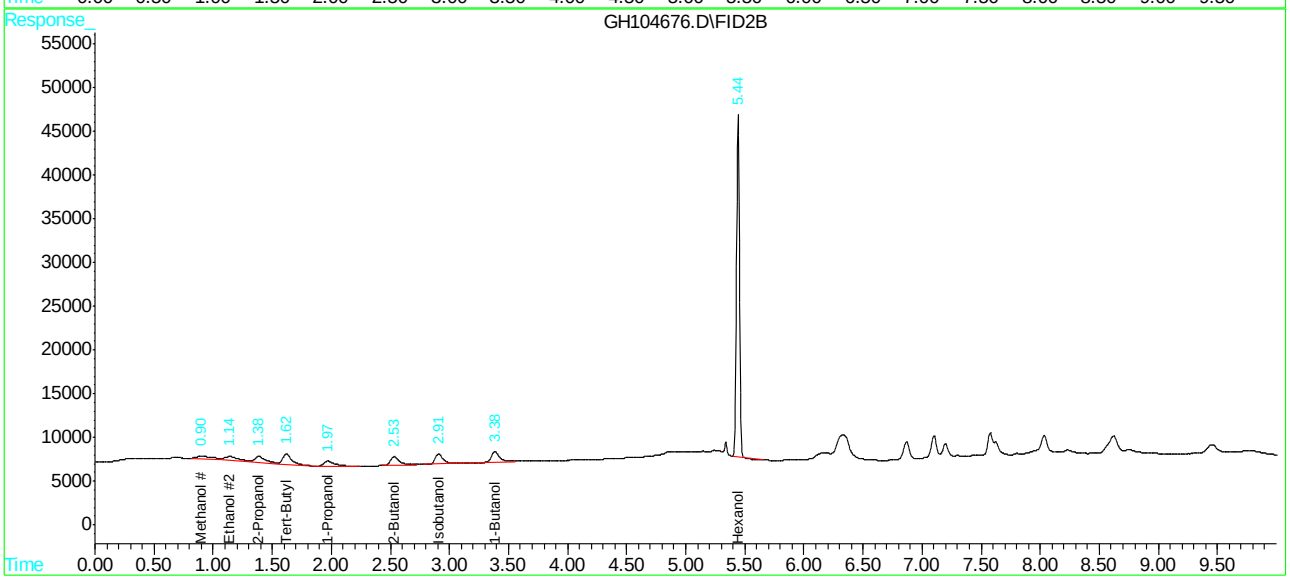
```
Data File : C:\HPCHEM\1\DATA\GH104676.D\FID1A.CH          Vial: 4
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-1000                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104676.D\FID2B.CH          Vial: 4
Acq On    :  9 May 2016   2:18 pm                     Operator: XULIU
Sample    : IC5269-1000                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:58 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:57:36 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104677.D\FID1A.CH          Vial: 5
Acq On    :  9 May 2016   2:18 pm                     Operator: XULIU
Sample    : ICC5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104677.D\FID2B.CH          Vial: 5
Acq On    :  9 May 2016   2:33 pm                     Operator: XULIU
Sample    : ICC5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:53 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:53:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.61	5.45	399452	852765	5220.642	5044.646	
	Spiked Amount 5000.000			Recovery	=	104.41%	100.89%	
	Target Compounds							
1)	Methanol	1.14	0.93	69718	69126	4720.585	2743.319	#
2)	Ethanol	1.49	1.16	92298	170511	4932.446	5207.532	
3)	Tert-Butyl Alcoh	2.07	1.62	134234	405477	4916.384	6886.825	#
4)	1-Propanol	2.57	1.98	120620	384047	4754.340	9616.362	#
5)	2-Propanol	1.80	1.39	98162	234600	4730.664	5935.275	
6)	Isobutanol	3.37	2.90	142882	274685	5198.247	4352.446	
7)	1-Butanol	3.83	3.38	142943	256728	5494.115	4829.771	
8)	2-Butanol	3.00	2.53	125245	298157	4985.133	6464.358	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

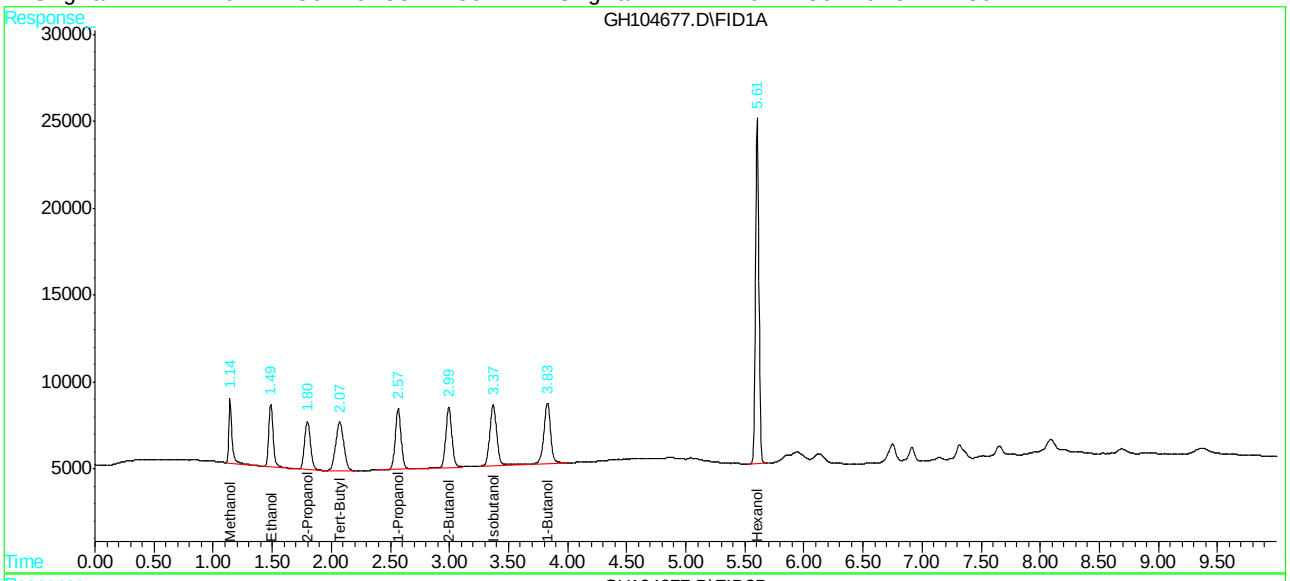
Quantitation Report (QT Reviewed)

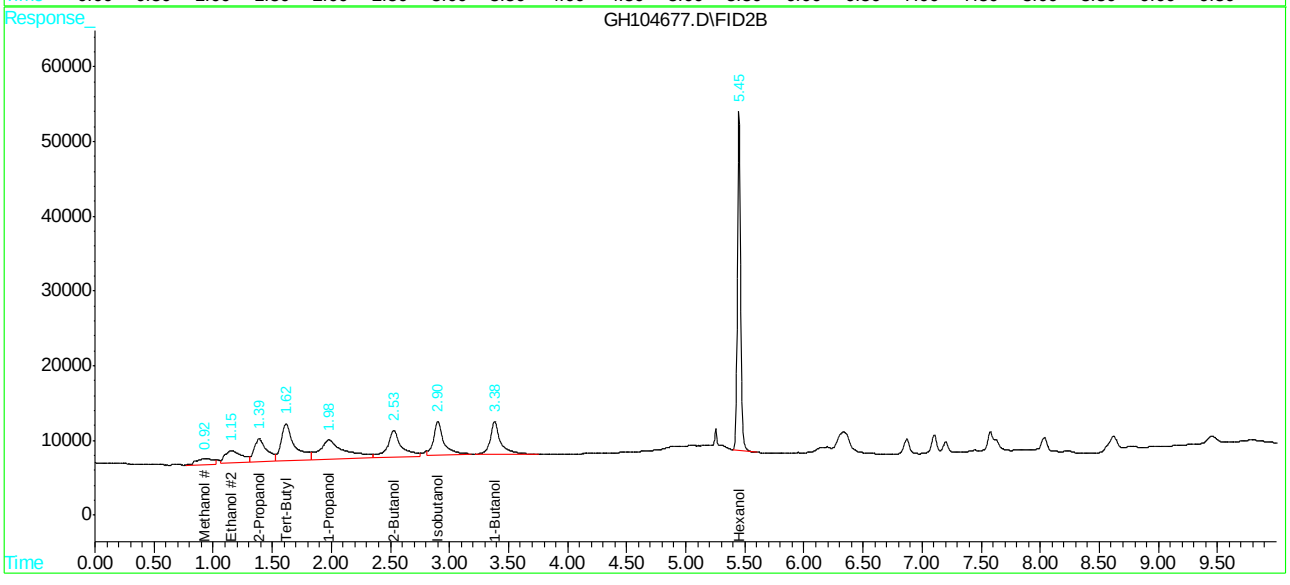
```
Data File : C:\HPCHEM\1\DATA\GH104677.D\FID1A.CH          Vial: 5
Acq On    :  9 May 2016   2:18 pm                     Operator: XULIU
Sample    : ICC5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104677.D\FID2B.CH          Vial: 5
Acq On    :  9 May 2016   2:33 pm                     Operator: XULIU
Sample    : ICC5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:53 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:53:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104678.D\FID1A.CH          Vial: 6
Acq On    :  9 May 2016   2:33 pm                     Operator: XULIU
Sample    : IC5269-10000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104678.D\FID2B.CH          Vial: 6
Acq On    :  9 May 2016   2:54 pm                     Operator: XULIU
Sample    : IC5269-10000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:07 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:07:17 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.61	5.39	400565	787400	5235.190	4657.969
Spiked Amount	5000.000			Recovery	=	104.70%	93.16%
	Target Compounds						
1)	Methanol	1.15	0.91	139678	103161	9457.541	4094.038 #
2)	Ethanol	1.49	1.17f	193822	212310	10357.983	6484.084
3)	Tert-Butyl Alcoh	2.07	1.67f	287026	596945	10512.470	10138.817
4)	1-Propanol	2.57	2.01f	241983	445497	9537.952	11155.026
5)	2-Propanol	1.80	1.43f	222300	316022	10713.155	7995.202
6)	Isobutanol	3.37	2.95f	279069	478633	10152.927	7584.056
7)	1-Butanol	3.83	3.43f	272252	416396	10464.176	7833.566
8)	2-Butanol	3.00	2.58f	246940	434114	9828.962	9412.052

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

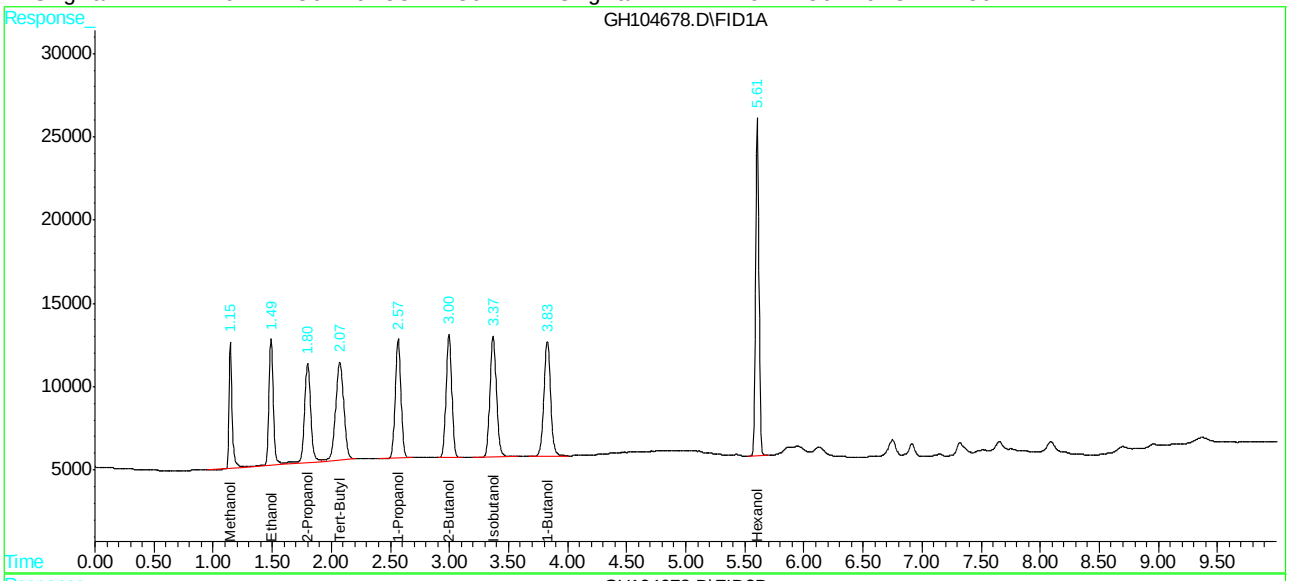
Quantitation Report (QT Reviewed)

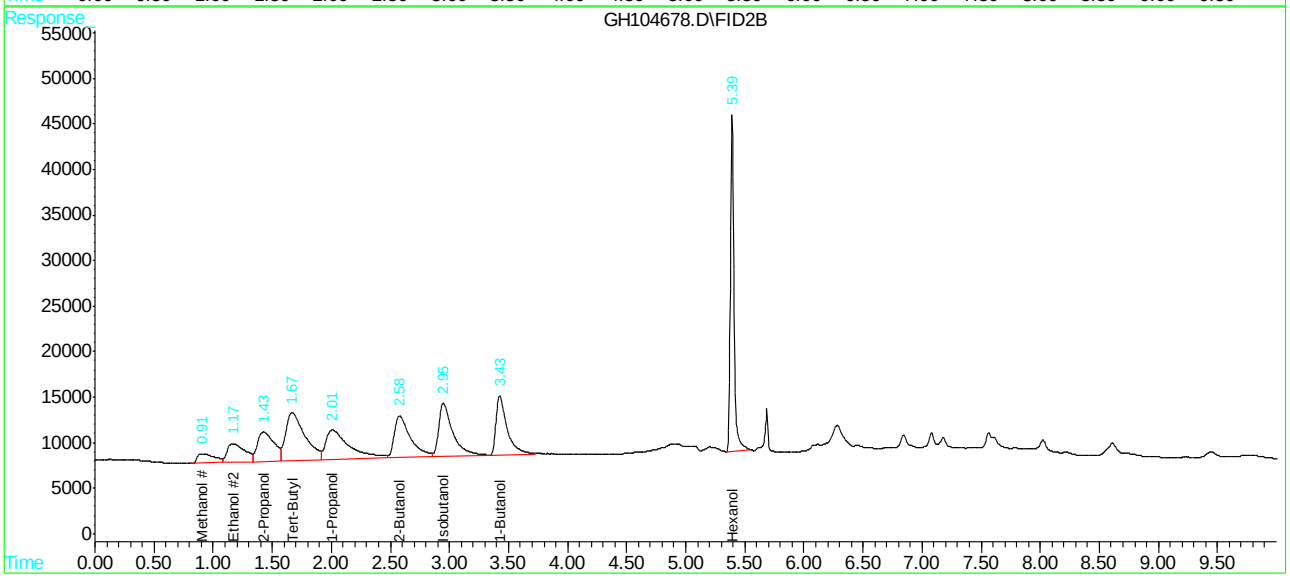
```
Data File : C:\HPCHEM\1\DATA\GH104678.D\FID1A.CH          Vial: 6
Acq On    :  9 May 2016   2:33 pm                     Operator: XULIU
Sample    : IC5269-10000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104678.D\FID2B.CH          Vial: 6
Acq On    :  9 May 2016   2:54 pm                     Operator: XULIU
Sample    : IC5269-10000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:07 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:07:17 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH104679.D\FID1A.CH Vial: 7
Acq On : 9 May 2016 2:54 pm Operator: XULIU
Sample : IC5269-50000 Inst : GCGH
Misc : GC48342,GGH5269,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104679.D\FID2B.CH Vial: 7
Acq On : 9 May 2016 3:09 pm Operator: XULIU
Sample : IC5269-50000 Inst : GCGH
Misc : GC48342,GGH5269,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 10 10:09 2016 Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Tue May 10 10:09:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj. : 2ul
Signal #1 Phase : ZB-624 Signal #2 Phase: RTX-1
Signal #1 Info : 30mx0.53mmx3um Signal #2 Info : 30mx0.32mmx3um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.61	5.45f	497290	1090728	6499.330	6452.345
Spiked Amount	5000.000			Recovery	=	129.99%	129.05%
	Target Compounds						
1)	Methanol	1.14	0.87f	662127	1473199	44832.252	58465.418
2)	Ethanol	1.49	1.12f	869497	1828416	46466.502	55841.082
3)	Tert-Butyl Alcoh	2.07	1.62	1291147	2923252	47288.930	49649.987
4)	1-Propanol	2.56	1.96	1123233	2344658	44273.121	58709.139
5)	2-Propanol	1.80	1.38	924902	2024797	44573.192	51226.377
6)	Isobutanol	3.37	2.90	1287768	2583184	46850.874	40931.194
7)	1-Butanol	3.83	3.38	1244720	2515352	47841.645	47320.746
8)	2-Butanol	2.99	2.53	1145678	2396916	45601.457	51967.691

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GH104679.D MGH5269.M Tue May 10 10:18:25 2016 GCGH

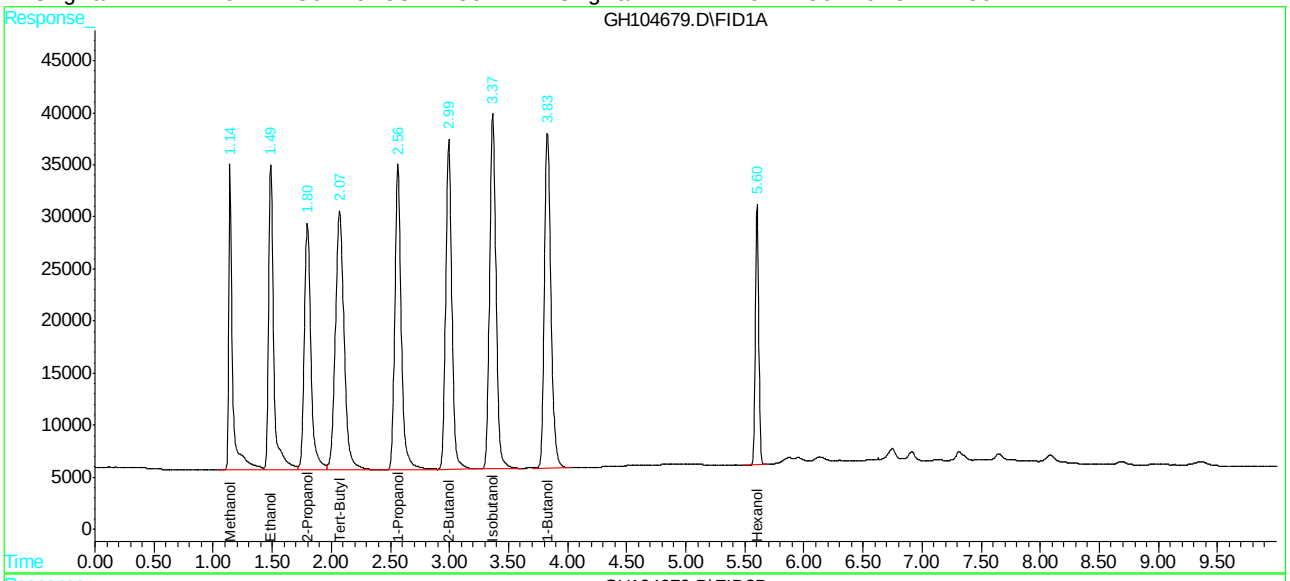
Quantitation Report (QT Reviewed)

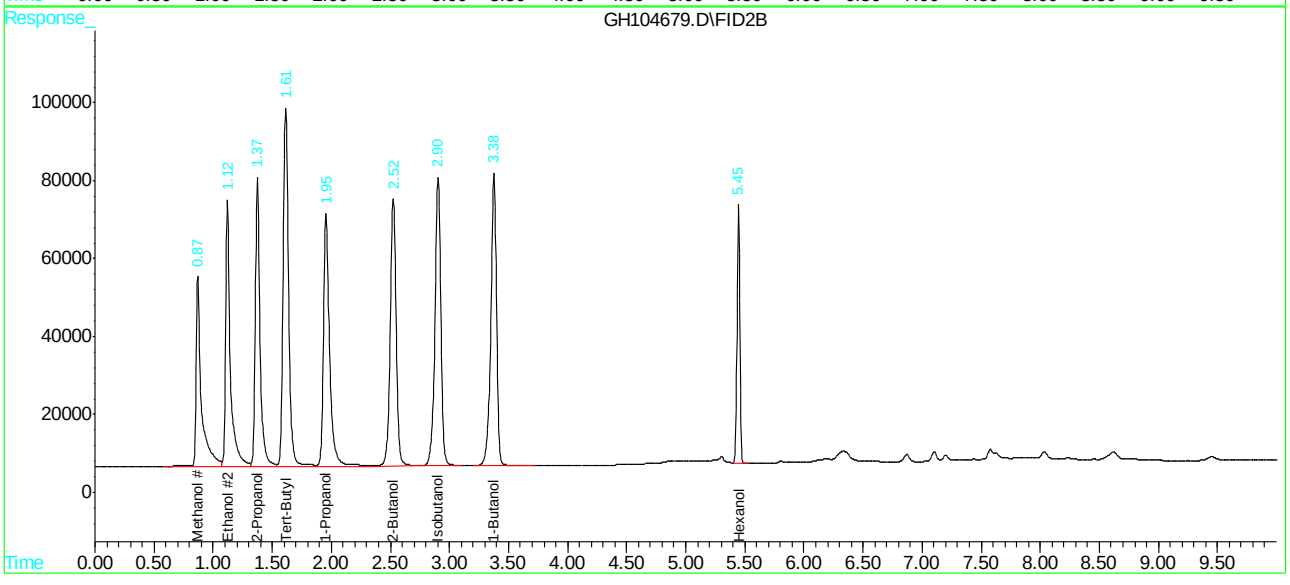
Data File : C:\HPCHEM\1\DATA\GH104679.D\FID1A.CH Vial: 7
Acq On : 9 May 2016 2:54 pm Operator: XULIU
Sample : IC5269-50000 Inst : GCGH
Misc : GC48342,GGH5269,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104679.D\FID2B.CH Vial: 7
Acq On : 9 May 2016 3:09 pm Operator: XULIU
Sample : IC5269-50000 Inst : GCGH
Misc : GC48342,GGH5269,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 10 10:09 2016 Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Tue May 10 10:09:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj. : 2ul
Signal #1 Phase : ZB-624 Signal #2 Phase: RTX-1
Signal #1 Info : 30mx0.53mmx3um Signal #2 Info : 30mx0.32mmx3um





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104683.D\FID1A.CH          Vial: 10
Acq On    :  9 May 2016   5:42 pm                     Operator: XULIU
Sample    : ICV5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104683.D\FID2B.CH          Vial: 10
Acq On    :  9 May 2016   6:04 pm                     Operator: XULIU
Sample    : ICV5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:32 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:29:55 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.60	5.44	346499	764323	4528.568	4644.253
Spiked Amount	5000.000			Recovery	=	90.57%	92.89%
	Target Compounds						
1)	Methanol	1.14	0.88	69747	149424	4722.538	6848.279 #
2)	Ethanol	1.49	1.13	98274	199013	5251.857	6263.326
3)	Tert-Butyl Alcoh	2.07	1.62	141470	315650	5181.430	4834.343
4)	1-Propanol	2.56	1.96	117258	263447	5261.158	5346.941
5)	2-Propanol	1.79	1.38	99427	217420	4791.629	5200.646
6)	Isobutanol	3.36	2.90	146264	290191	5321.284	4677.799
7)	1-Butanol	3.83	3.38	138769	322004	5667.134	6220.286
8)	2-Butanol	2.99	2.53	123337	262596	4894.660	5314.179

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

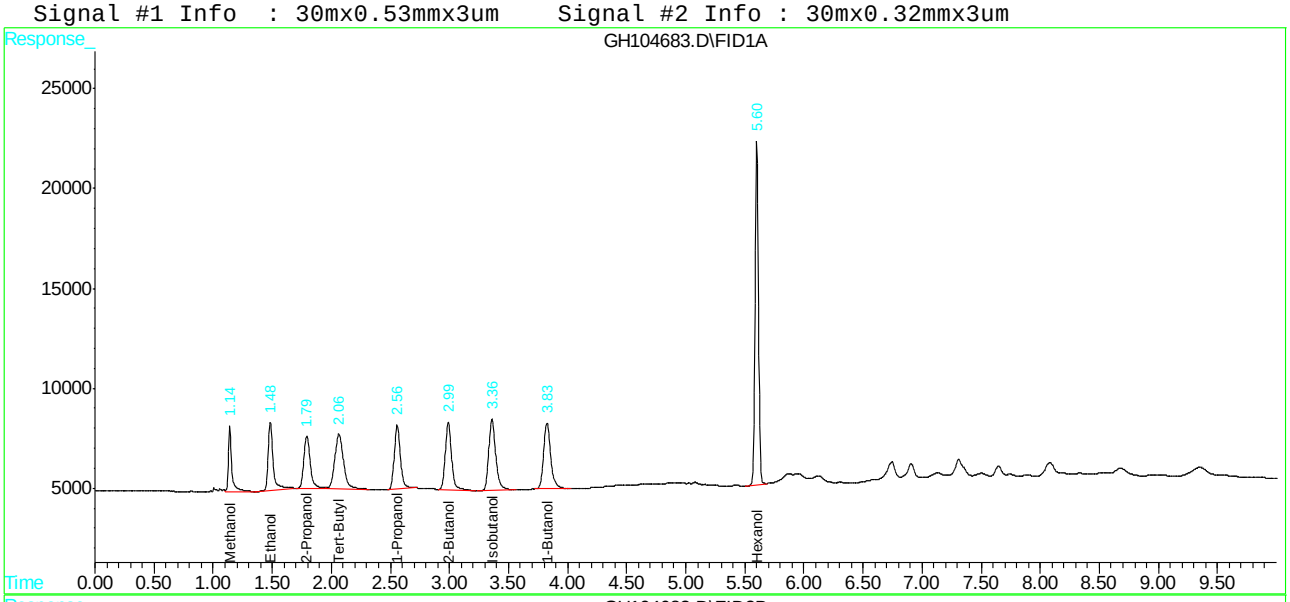
Quantitation Report (QT Reviewed)

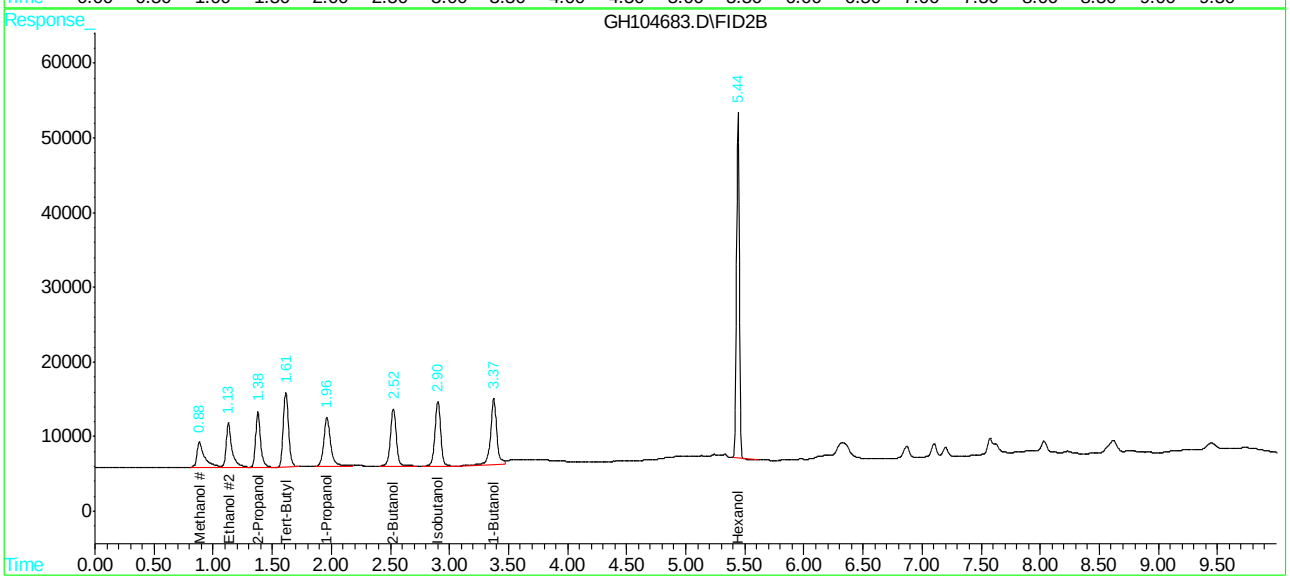
```
Data File : C:\HPCHEM\1\DATA\GH104683.D\FID1A.CH          Vial: 10
Acq On    :  9 May 2016   5:42 pm                     Operator: XULIU
Sample    : ICV5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104683.D\FID2B.CH          Vial: 10
Acq On    :  9 May 2016   6:04 pm                     Operator: XULIU
Sample    : ICV5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:32 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:29:55 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104960.D\FID1A.CH          Vial: 90
Acq On    : 16 May 2016   3:50 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104960.D\FID2B.CH          Vial: 90
Acq On    : 16 May 2016   4:06 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:37 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.60	5.48	395939	278237	5174.719	1690.654 #
Spiked Amount	5000.000			Recovery	=	103.49%	33.81%
	Target Compounds						
1)	Methanol	1.15	0.86	77696	60614	5260.772	2981.680 #
2)	Ethanol	1.49	1.11	100907	70117	5392.537	2206.715 #
3)	Tert-Butyl Alcoh	2.07	1.60	139661	122888	5115.166	1882.097 #
4)	1-Propanol	2.56	1.94	133202	89091	5976.549	1808.195 #
5)	2-Propanol	1.80	1.37f	106323	79137	5123.975	1892.937 #
6)	Isobutanol	3.36	2.89	148451	102247	5400.863	1648.192 #
7)	1-Butanol	3.80	3.38	152899	100826	6244.216	1947.702 #
8)	2-Butanol	2.99	2.51f	134178	94233	5324.862	1906.994 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

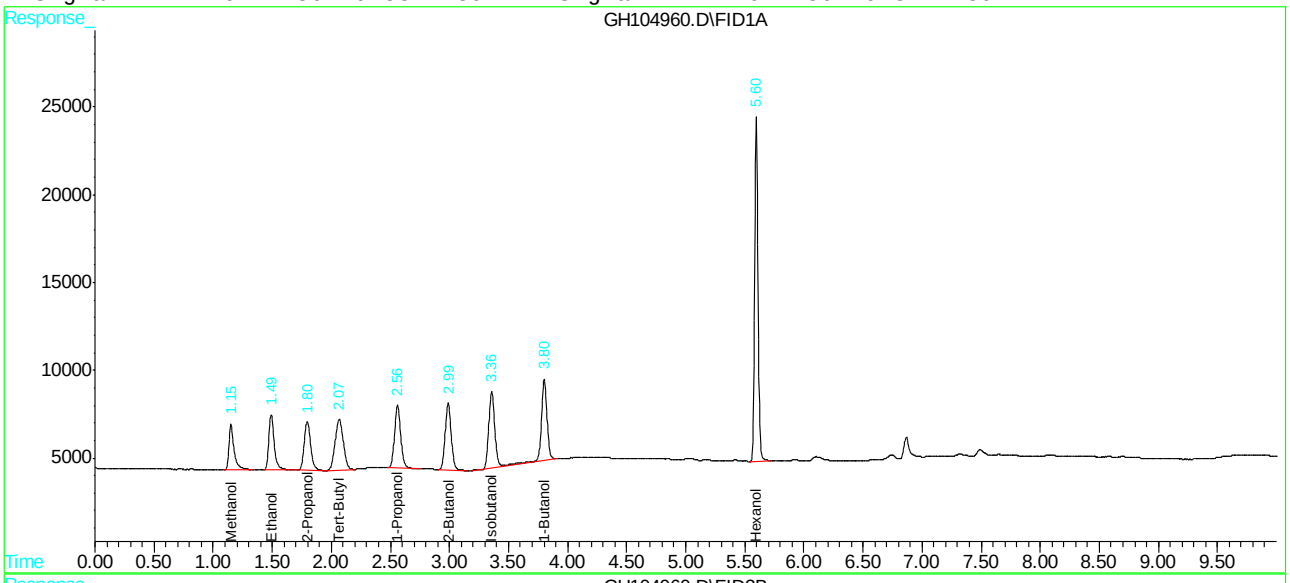
Quantitation Report (QT Reviewed)

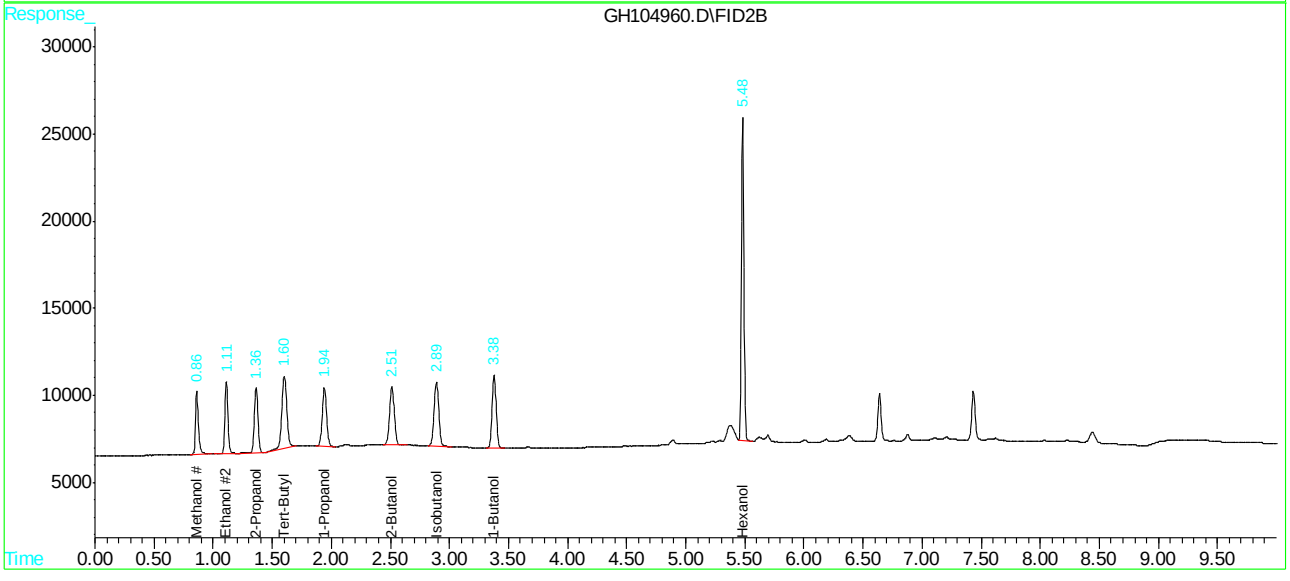
```
Data File : C:\HPCHEM\1\DATA\GH104960.D\FID1A.CH          Vial: 90
Acq On    : 16 May 2016   3:50 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104960.D\FID2B.CH          Vial: 90
Acq On    : 16 May 2016   4:06 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:37 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104970.D\FID1A.CH          Vial: 95
Acq On    : 16 May 2016   6:35 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104970.D\FID2B.CH          Vial: 95
Acq On    : 16 May 2016   6:50 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:48 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.60	5.48	340971	197569	4456.325	1200.491	#
Spiked Amount	5000.000			Recovery	=	89.13%	24.01%	
	Target Compounds							
1)	Methanol	1.14	0.87	156388	81158	10588.936	3992.234	#
2)	Ethanol	1.49	1.11	199897	88628	10682.620	2789.292	#
3)	Tert-Butyl Alcoh	2.07	1.60	295973	155882	10840.182	2387.419	#
4)	1-Propanol	2.56	1.94f	265940	107810	11932.315	2188.114	#
5)	2-Propanol	1.79	1.36f	211475	89229	10191.453	2134.344	#
6)	Isobutanol	3.35	2.90	307202	160621	11176.453	2589.156	#
7)	1-Butanol	3.80	3.39f	293749	153724	11996.353	2969.557	#
8)	2-Butanol	2.99	2.51f	270702	143634	10742.841	2906.731	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

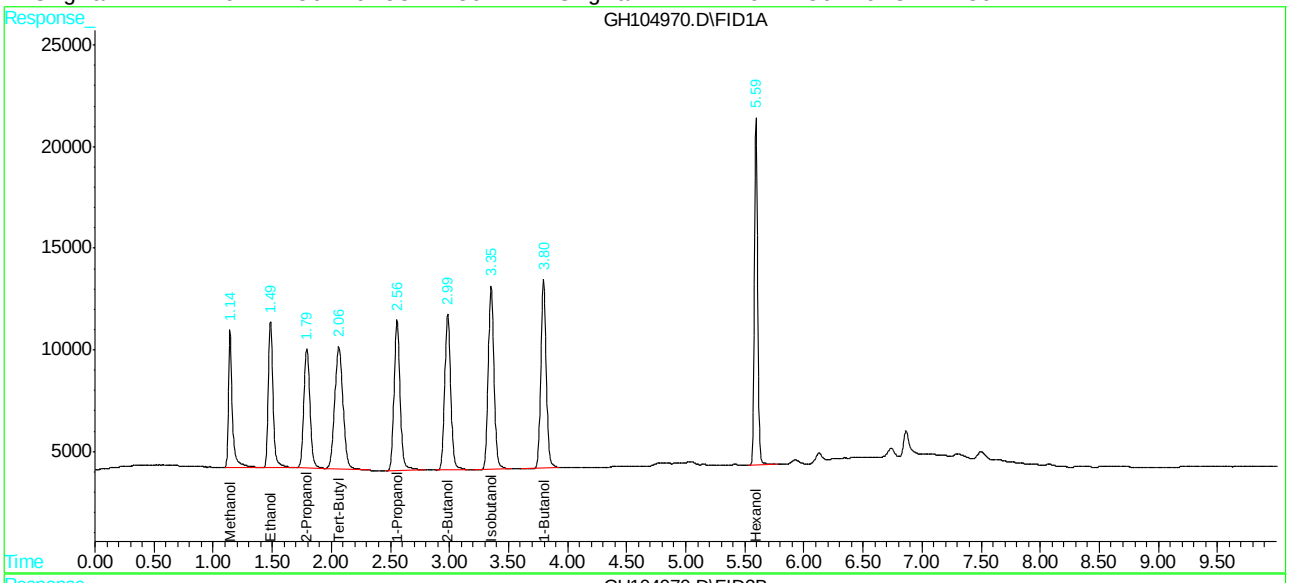
Quantitation Report (QT Reviewed)

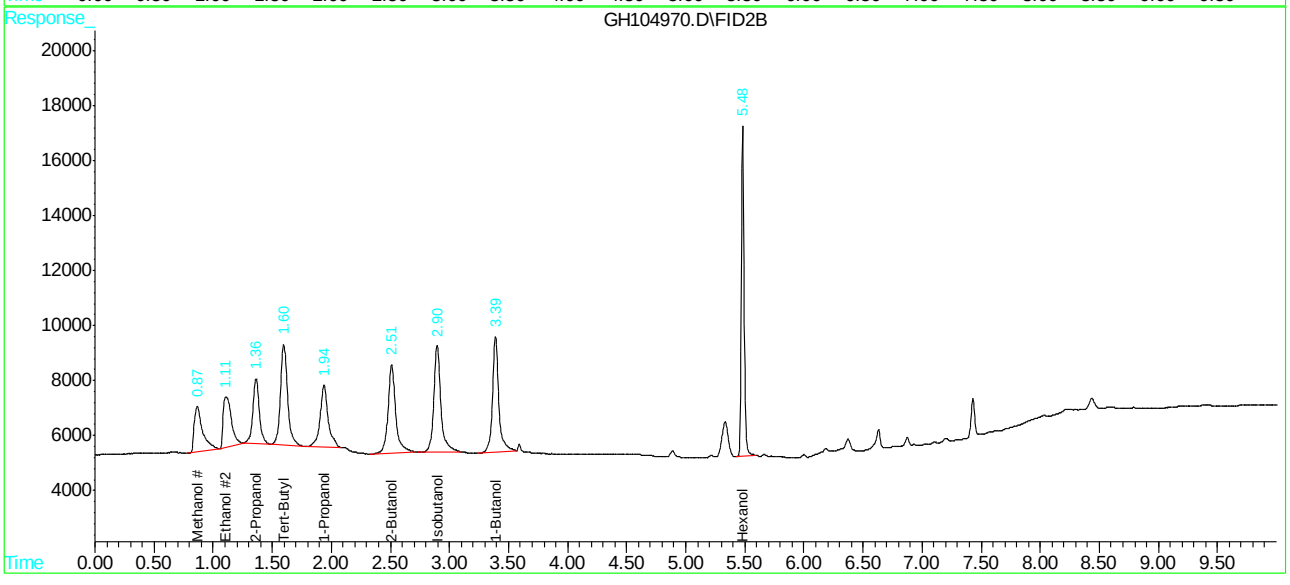
```
Data File : C:\HPCHEM\1\DATA\GH104970.D\FID1A.CH          Vial: 95
Acq On    : 16 May 2016   6:35 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104970.D\FID2B.CH          Vial: 95
Acq On    : 16 May 2016   6:50 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:48 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104980.D\FID1A.CH          Vial: 90
Acq On    : 16 May 2016   9:21 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104980.D\FID2B.CH          Vial: 90
Acq On    : 16 May 2016   9:36 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:05 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.60	5.48	383526	268777	5012.497	1633.169	#
Spiked Amount	5000.000			Recovery	=	100.25%	32.66%	
	Target Compounds							
1)	Methanol	1.15	0.86	72636	61331	4918.160	3016.948	
2)	Ethanol	1.49	1.11	95816	66937	5120.455	2106.651	#
3)	Tert-Butyl Alcoh	2.07	1.60	143687	109743	5262.618	1680.774	#
4)	1-Propanol	2.56	1.94f	130028	87098	5834.128	1767.750	#
5)	2-Propanol	1.80	1.36f	101286	75996	4881.219	1817.820	#
6)	Isobutanol	3.36	2.89	154201	99160	5610.062	1598.435	#
7)	1-Butanol	3.80	3.38	146566	98125	5985.585	1895.530	#
8)	2-Butanol	2.99	2.51f	134482	91690	5336.932	1855.530	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

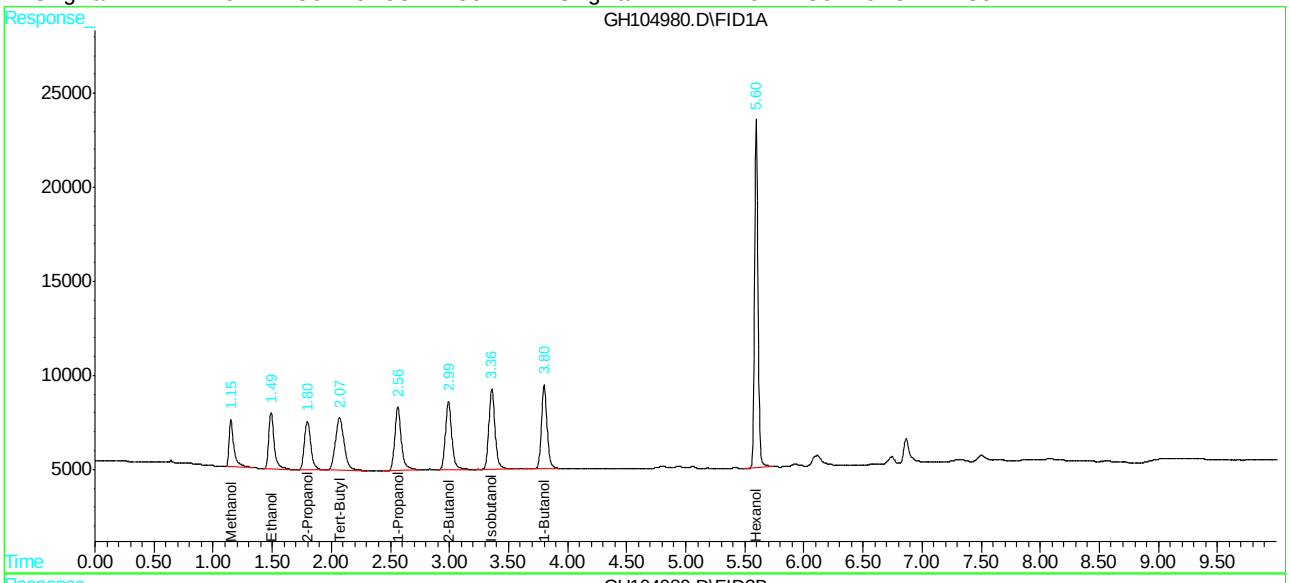
Quantitation Report (QT Reviewed)

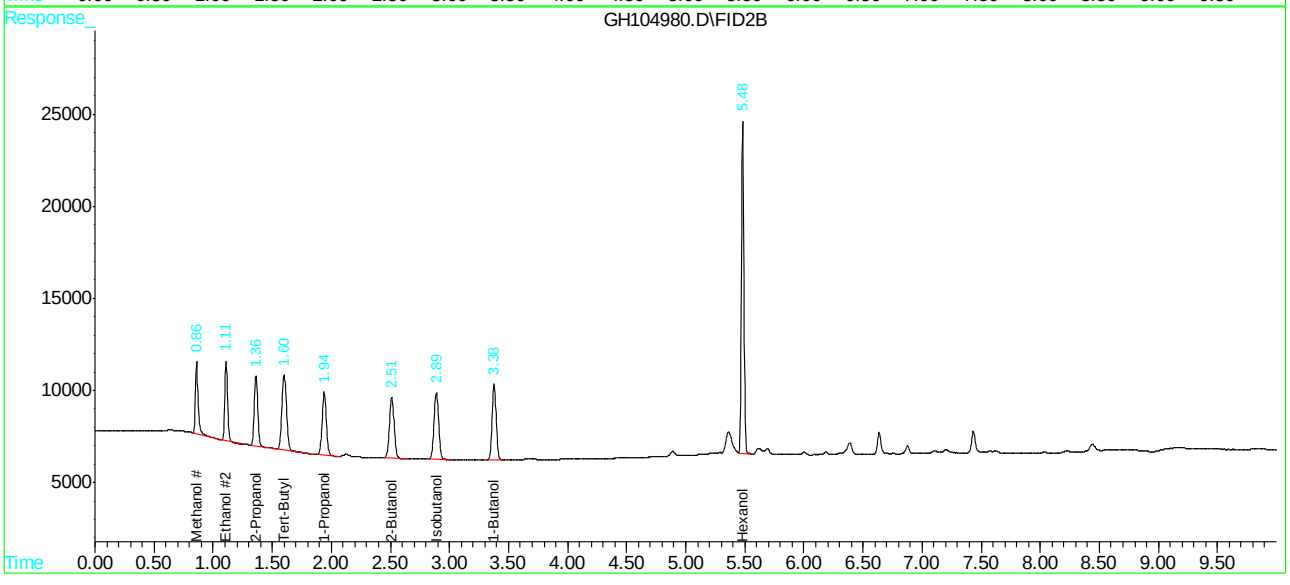
```
Data File : C:\HPCHEM\1\DATA\GH104980.D\FID1A.CH          Vial: 90
Acq On    : 16 May 2016   9:21 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104980.D\FID2B.CH          Vial: 90
Acq On    : 16 May 2016   9:36 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:05 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104987.D\FID1A.CH          Vial: 95
Acq On    : 16 May 2016  11:17 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104987.D\FID2B.CH          Vial: 95
Acq On    : 16 May 2016  11:31 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:25 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.60	5.48	322562	226870	4215.726	1378.532	#
Spiked Amount	5000.000			Recovery	=	84.31%	27.57%	
	Target Compounds							
1)	Methanol	1.15	0.86	159266	116138	10783.835	5712.929	#
2)	Ethanol	1.49	1.11	195256	133332	10434.606	4196.215	#
3)	Tert-Butyl Alcoh	2.07	1.60	286883	214282	10507.232	3281.842	#
4)	1-Propanol	2.56	1.94f	265353	172058	11905.946	3492.111	#
5)	2-Propanol	1.80	1.36f	207401	150196	9995.159	3592.663	#
6)	Isobutanol	3.36	2.89	299158	269838	10883.820	4349.707	#
7)	1-Butanol	3.80	3.38	288496	190698	11781.823	3683.795	#
8)	2-Butanol	2.99	2.51f	264998	183195	10516.460	3707.332	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

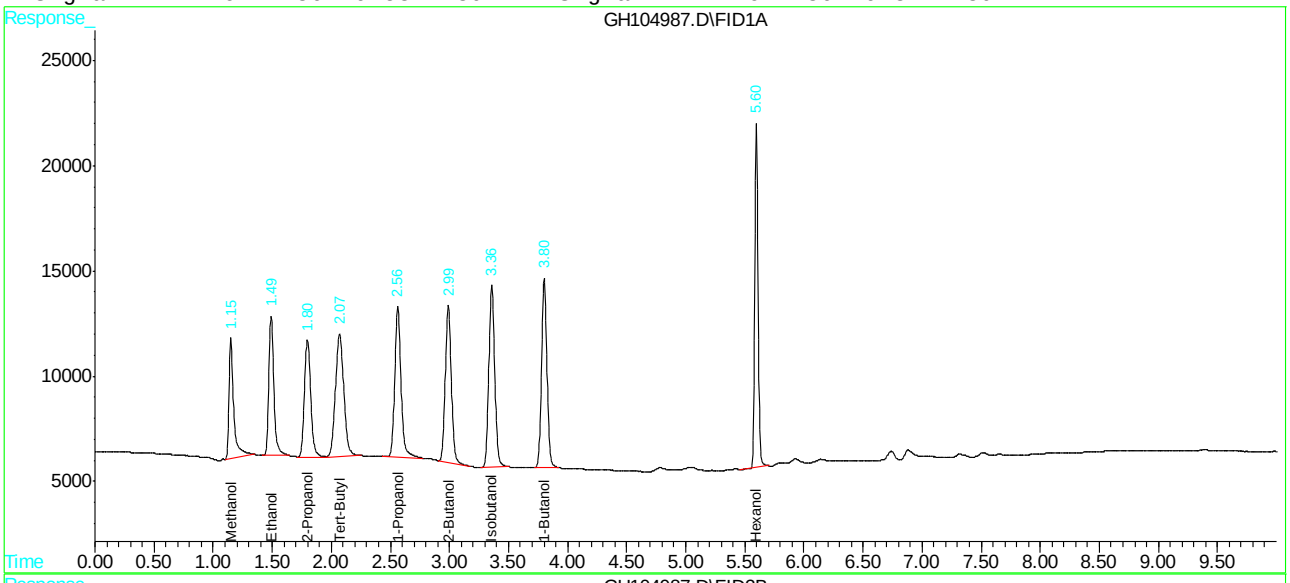
Quantitation Report (QT Reviewed)

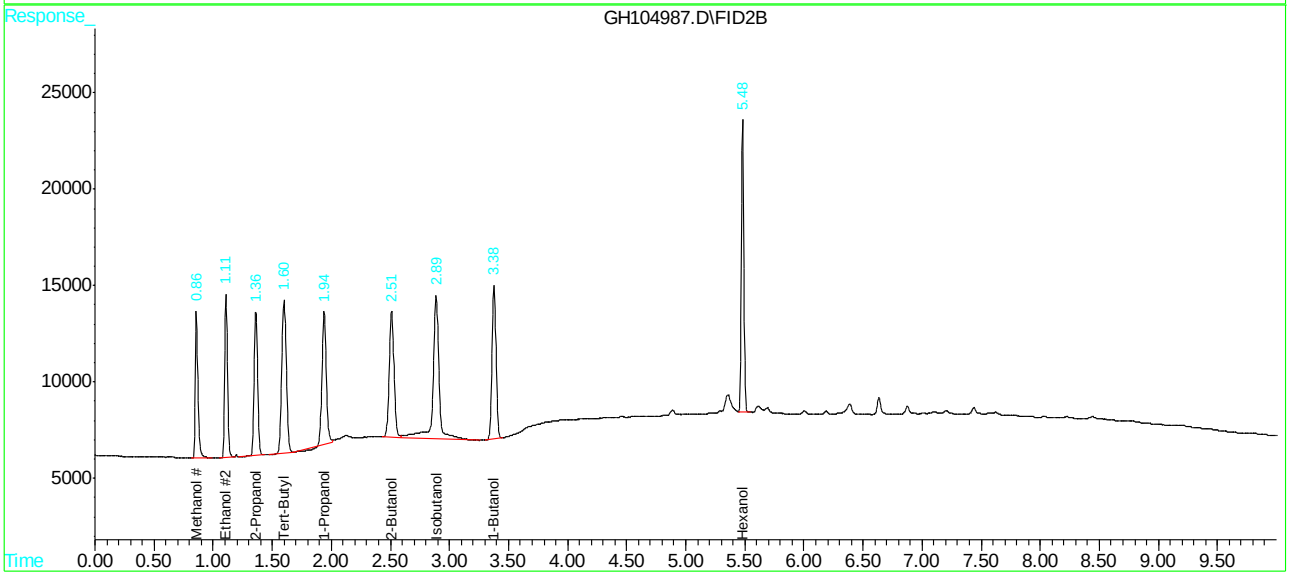
```
Data File : C:\HPCHEM\1\DATA\GH104987.D\FID1A.CH          Vial: 95
Acq On    : 16 May 2016  11:17 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104987.D\FID2B.CH          Vial: 95
Acq On    : 16 May 2016  11:31 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:25 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.      : 2ul
Signal #1 Phase  : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info   : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Manual Integrations
APPROVED
(compounds with "m" flag)
Owen McKenna
05/18/16 09:16

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  8:50 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	49213	113892	786.392	792.225
	Spiked Amount 5000.000			Recovery	=	15.73%	15.84%
	Target Compounds						
1)	Methanol	1.12	0.89f	1784	2982	115.427	93.713m
2)	Ethanol	1.45	1.15	2099	3361	110.763	84.901m
3)	Tert-Butyl Alcoh	2.01	1.66	2806	5629	99.020	88.524
4)	1-Propanol	2.52	2.03	2187	3458	89.885	69.117m
5)	2-Propanol	1.75	1.41	1888	4004	94.702	88.437
6)	Isobutanol	3.32	2.95f	2784	6044	96.777	98.728
7)	1-Butanol	3.76	3.42	3014	7445	105.546	113.606m
8)	2-Butanol	2.95	2.57	2840	4510	121.739m	83.638m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

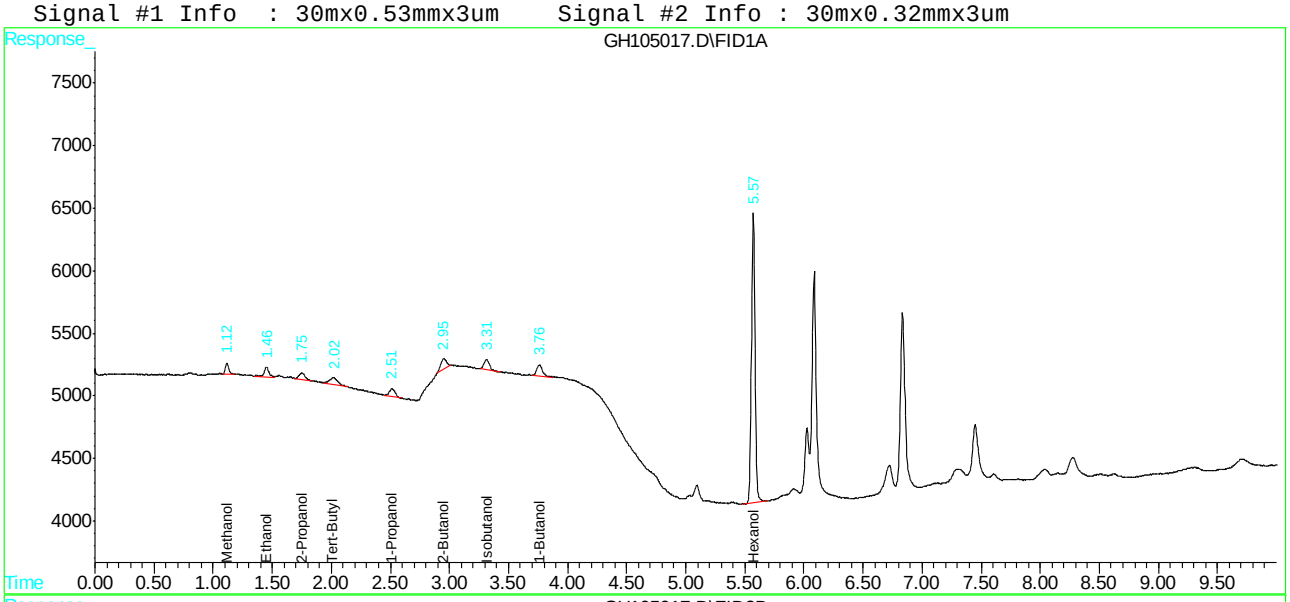
Quantitation Report (QT Reviewed)

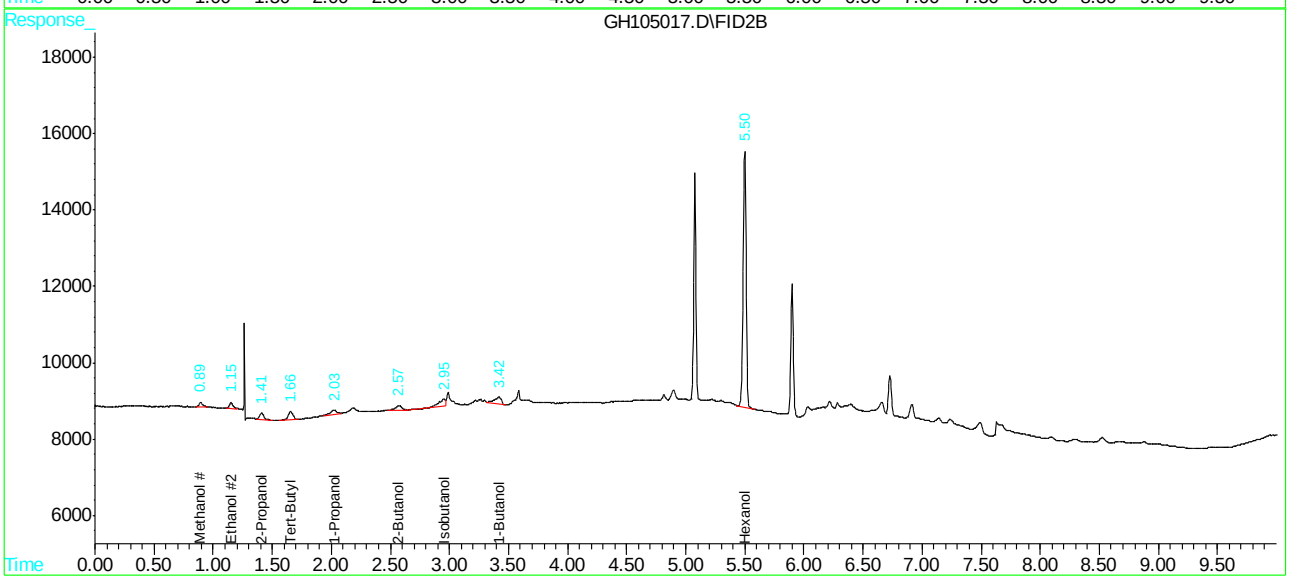
```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  8:50 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Manual Integration Approval Summary

Sample Number:	GGH5288-IC5288	**Method:**	SW846-8015C (DAI)
Lab FileID:	GH105017.D	**Analyst approved:**	05/18/16 09:10 Xu Liu
Injection Time:	05/17/16 16:14	**Supervisor approved:**	05/18/16 09:16 Owen McKenna

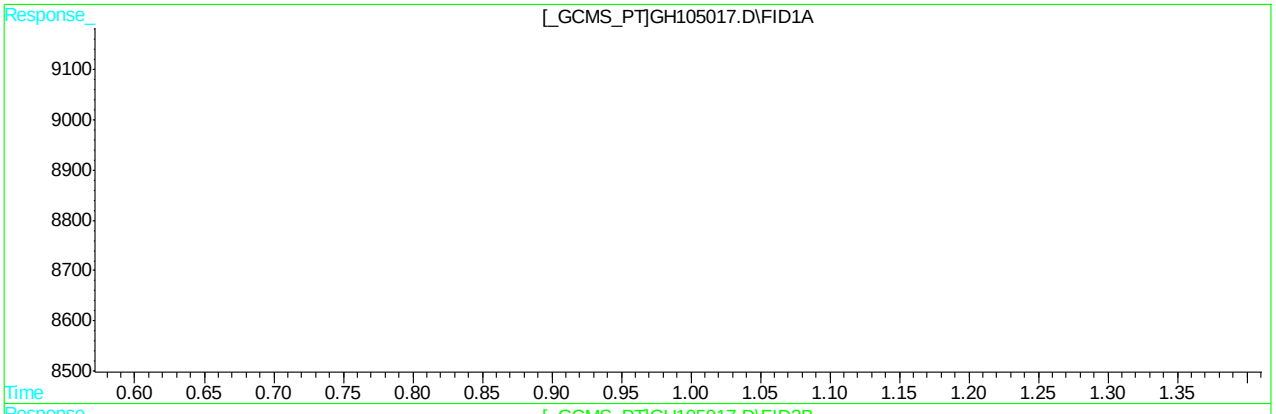
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methanol	67-56-1	2	0.89	Poor instrument integration
Ethanol	64-17-5	2	1.15	Poor instrument integration
n-Propyl Alcohol	71-23-8	2	2.03	Poor instrument integration
sec-Butyl Alcohol	78-92-2	2	2.57	Poor instrument integration
sec-Butyl Alcohol	78-92-2	1	2.95	Poor instrument integration
n-Butyl Alcohol	71-36-3	2	3.42	Poor instrument integration

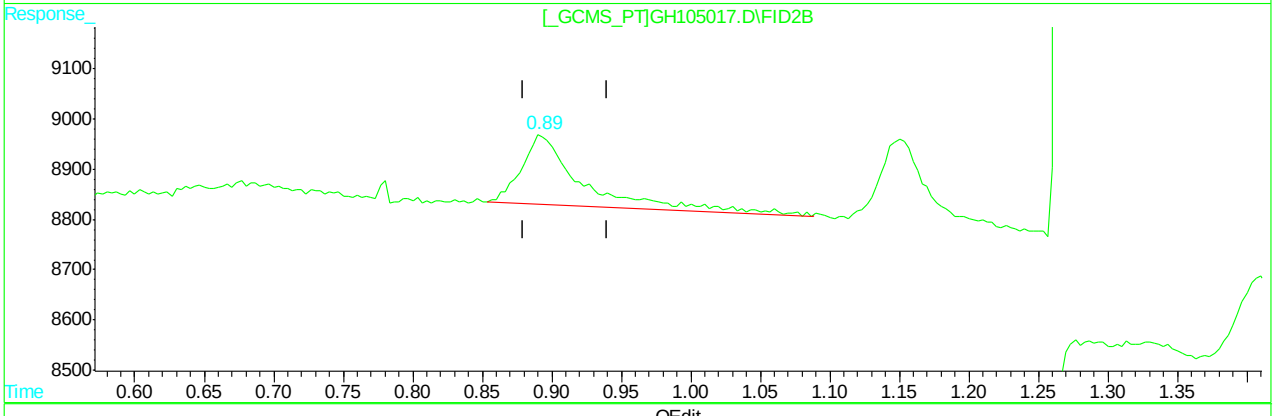
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(1) Methanol

1.12min 115.427PPB

response 1784

(1) Methanol #2

0.89min 132.645PPB

response 4221

(+) = Expected Retention Time

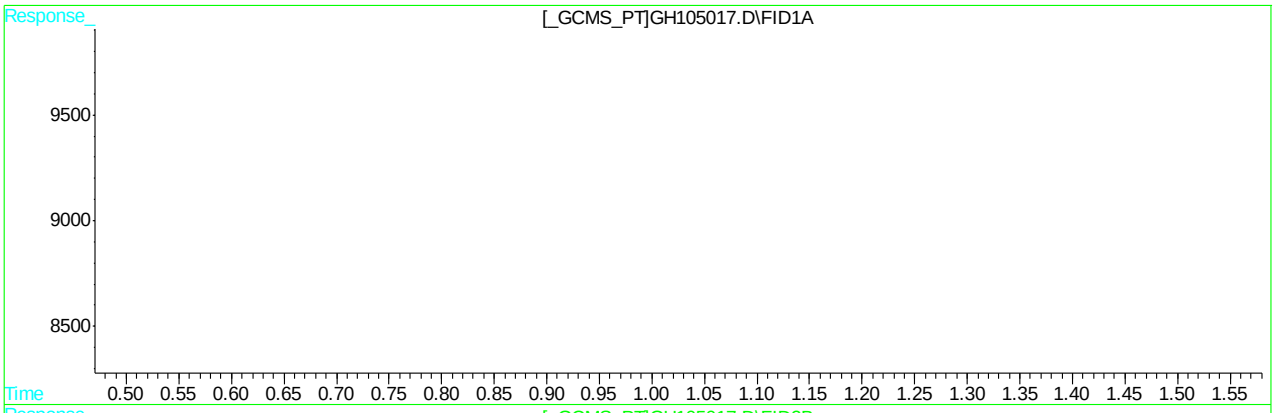
GH105017.D MGH5288.M Wed May 18 08:43:56 2016 GCGH

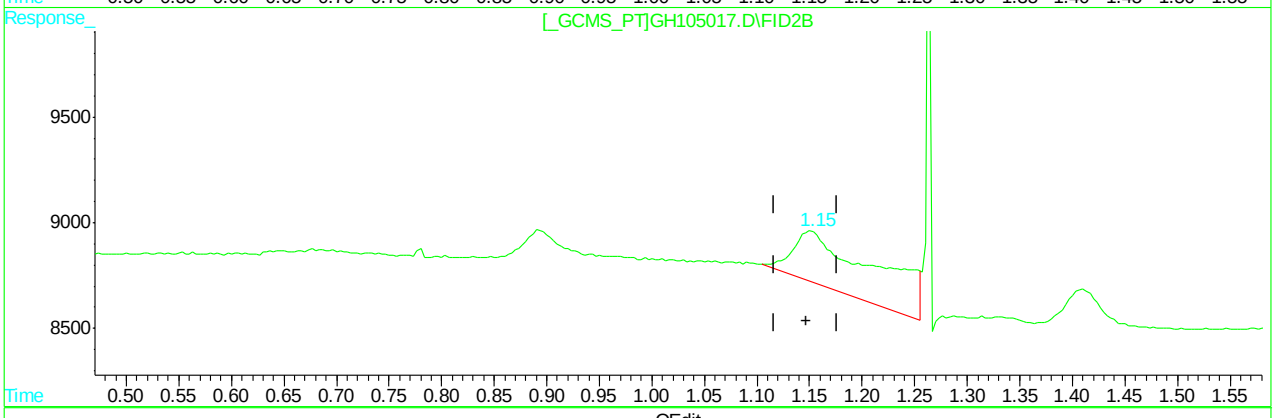
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Ethanol

1.45min 110.763PPB

response 2099

(2) Ethanol #2

1.15min 367.751PPB

response 14557

(+) = Expected Retention Time

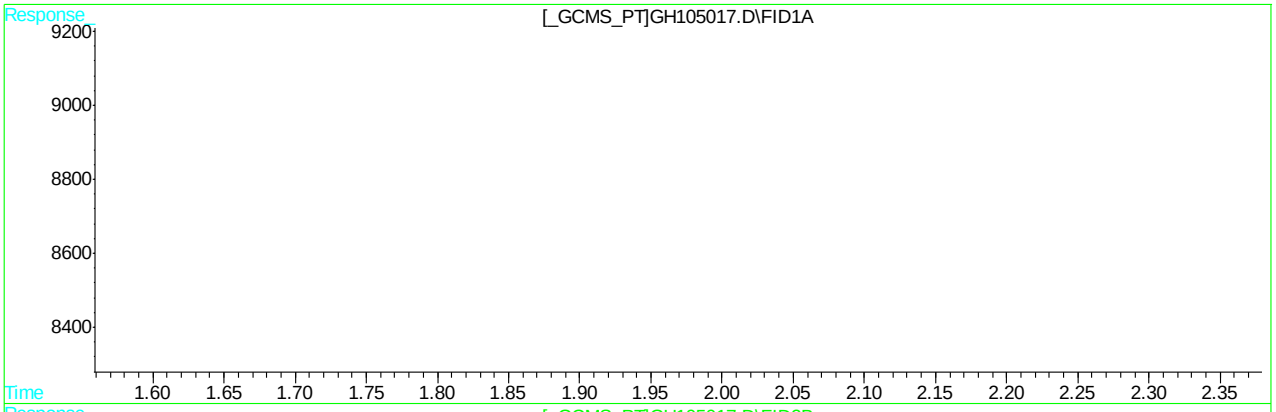
GH105017.D MGH5288.M Wed May 18 08:44:26 2016 GCGH

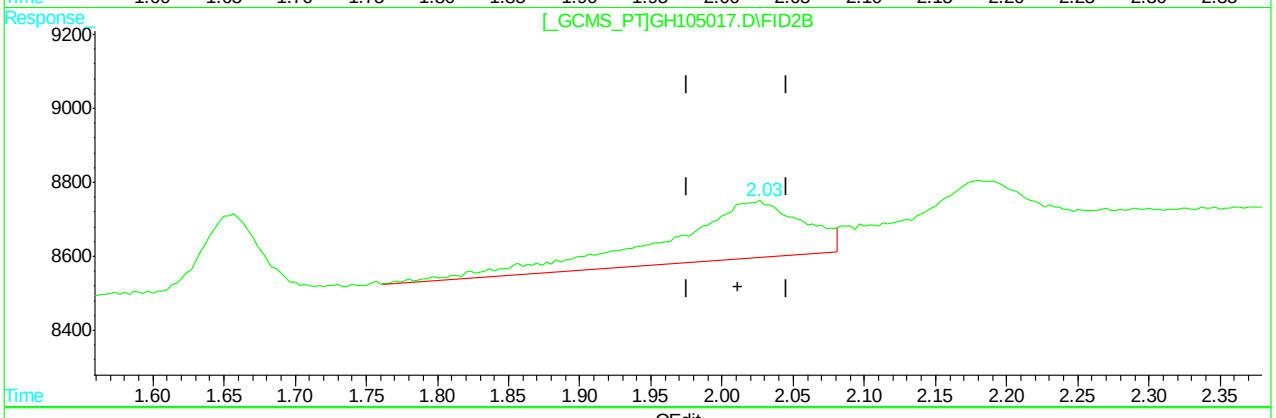
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

2.52min 89.885PPB

response 2187

(4) 1-Propanol #2

2.03min 209.050PPB

response 10460

(+) = Expected Retention Time

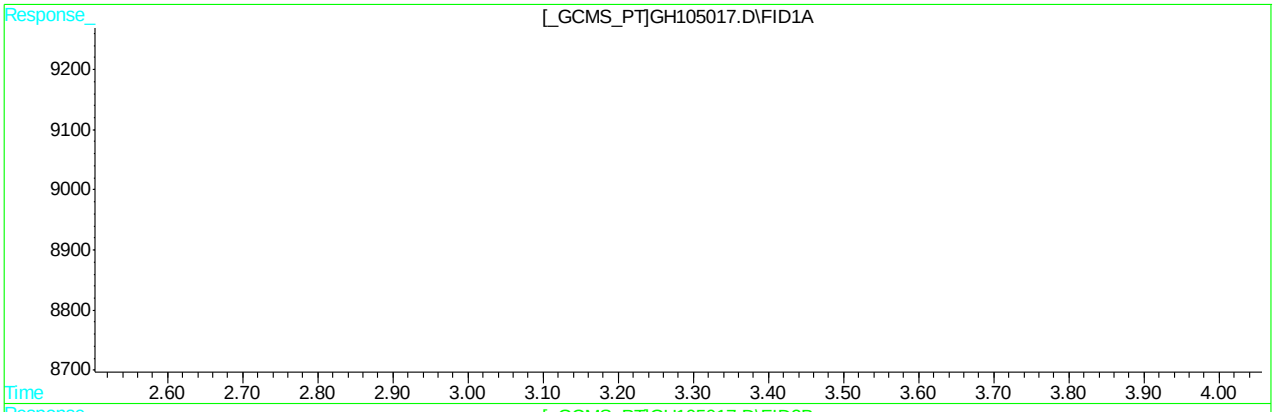
GH105017.D MGH5288.M Wed May 18 08:44:42 2016 GCGH

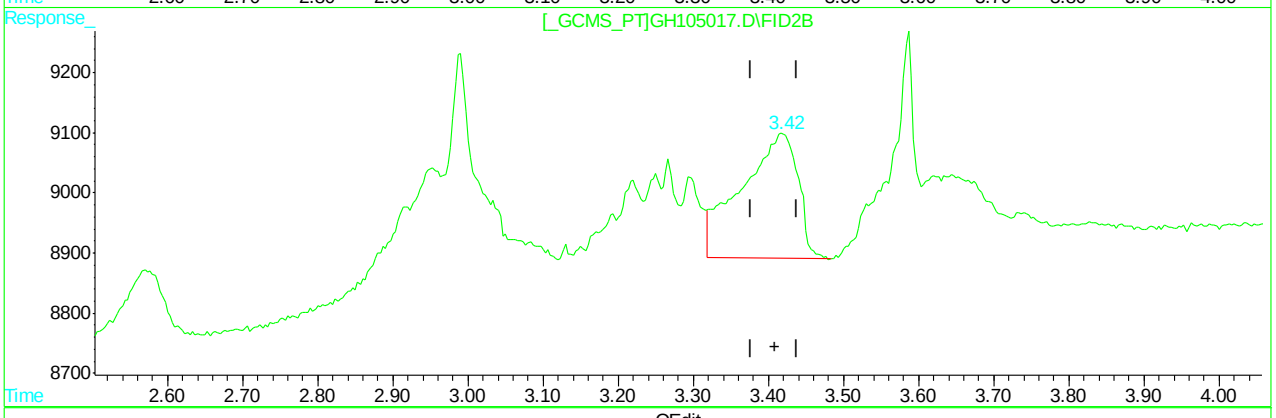
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(7) 1-Butanol

3.76min 105.546PPB

response 3014

(7) 1-Butanol #2

3.42min 167.388PPB

response 10970

(+) = Expected Retention Time

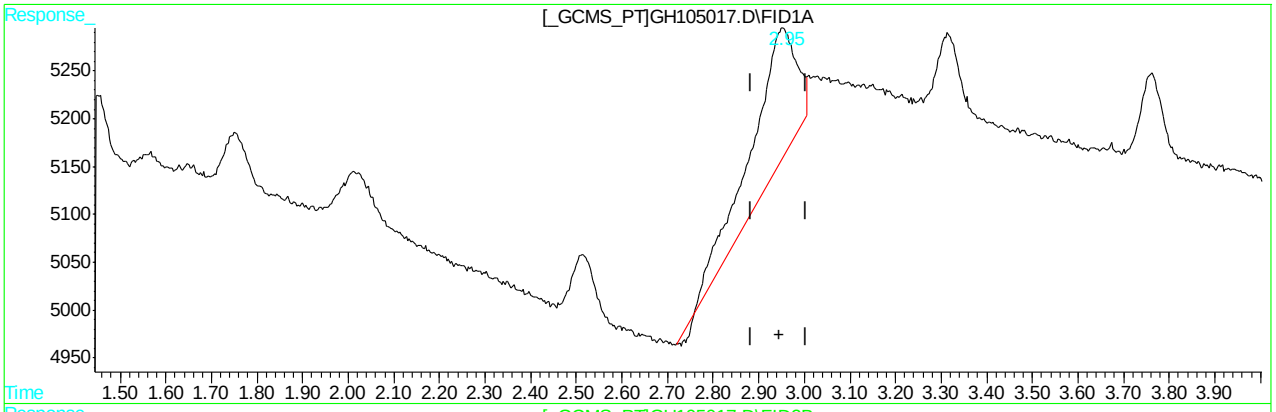
GH105017.D MGH5288.M Wed May 18 08:45:02 2016 GCGH

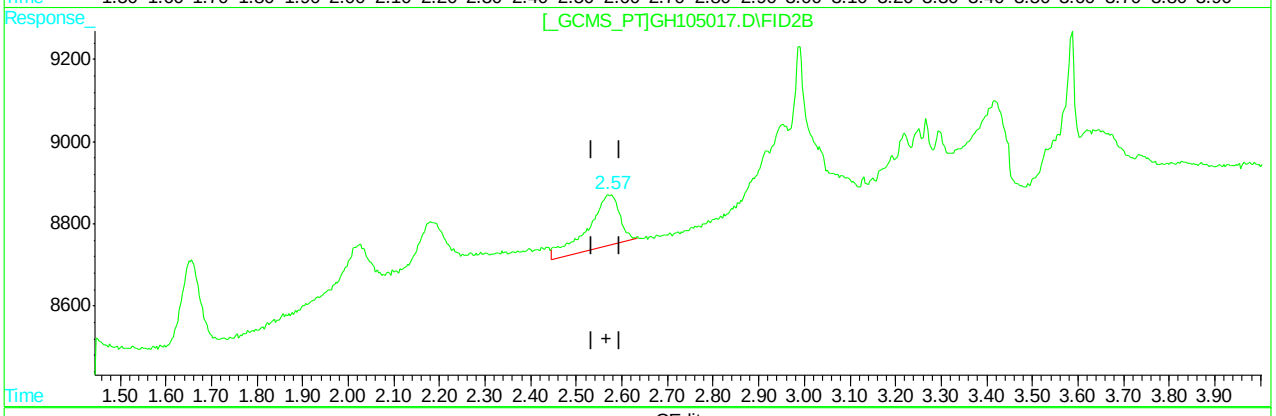
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(8) 2-Butanol

2.95min 395.696PPB

response 9232

(8) 2-Butanol #2

2.57min 109.800PPB

response 5921

(+) = Expected Retention Time

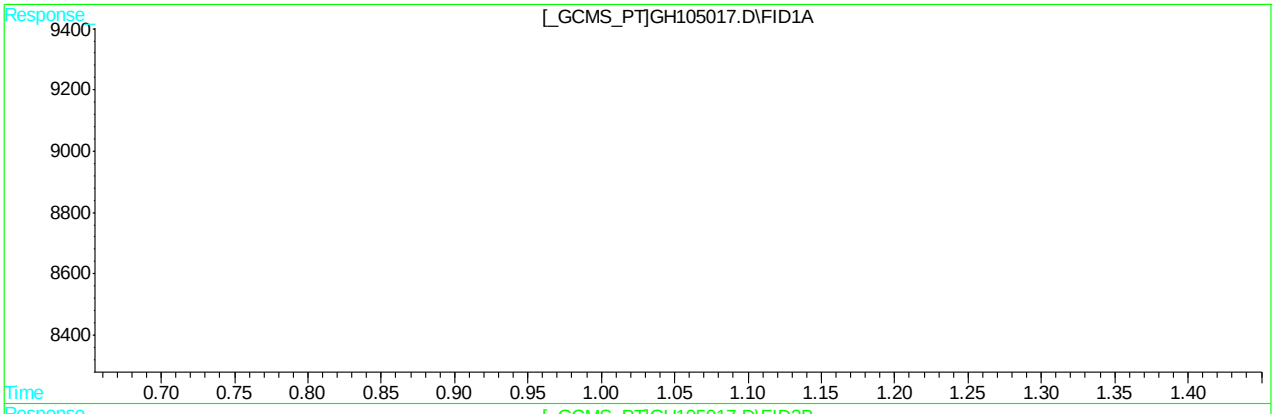
GH105017.D MGH5288.M Wed May 18 08:45:09 2016 GCGH

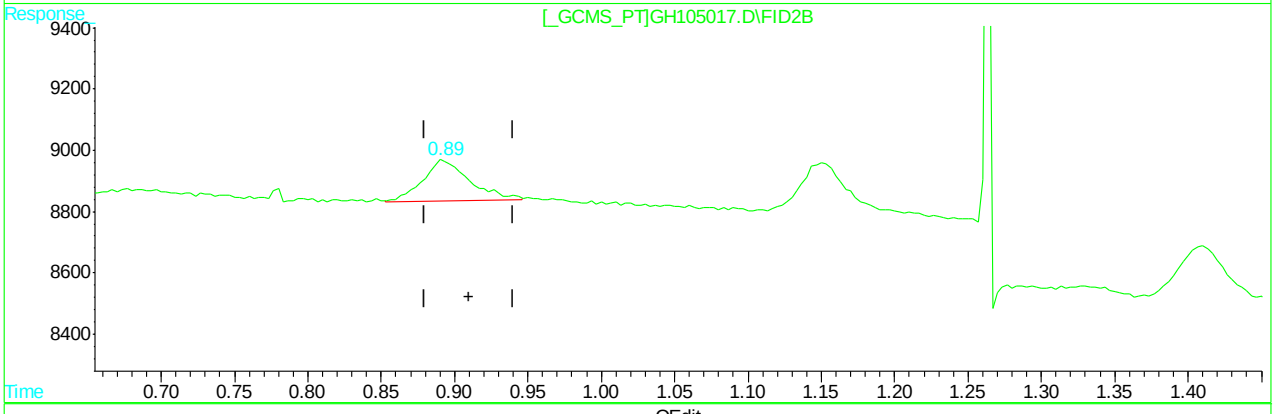
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(1) Methanol

1.12min 115.427PPB

response 1784

(1) Methanol #2

0.89min 93.713PPB m

response 2982

(+) = Expected Retention Time

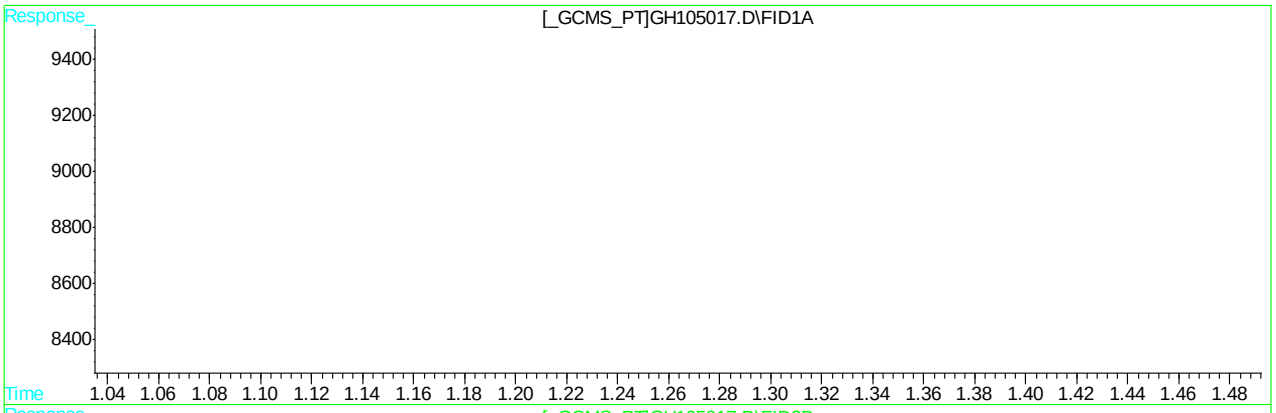
GH105017.D MGH5288.M Wed May 18 08:46:19 2016 GCGH

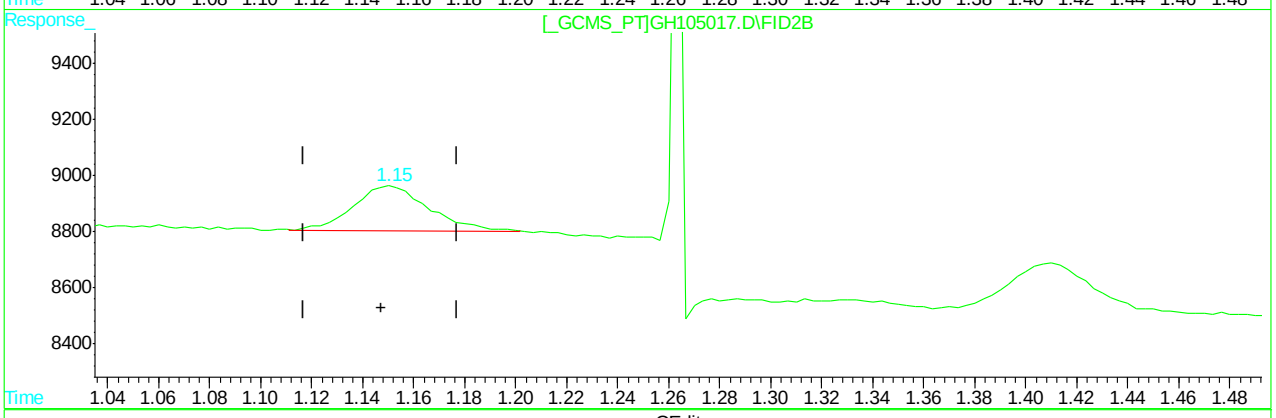
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Ethanol

1.45min 110.763PPB

response 2099

(2) Ethanol #2

1.15min 84.901PPB m

response 3361

(+) = Expected Retention Time

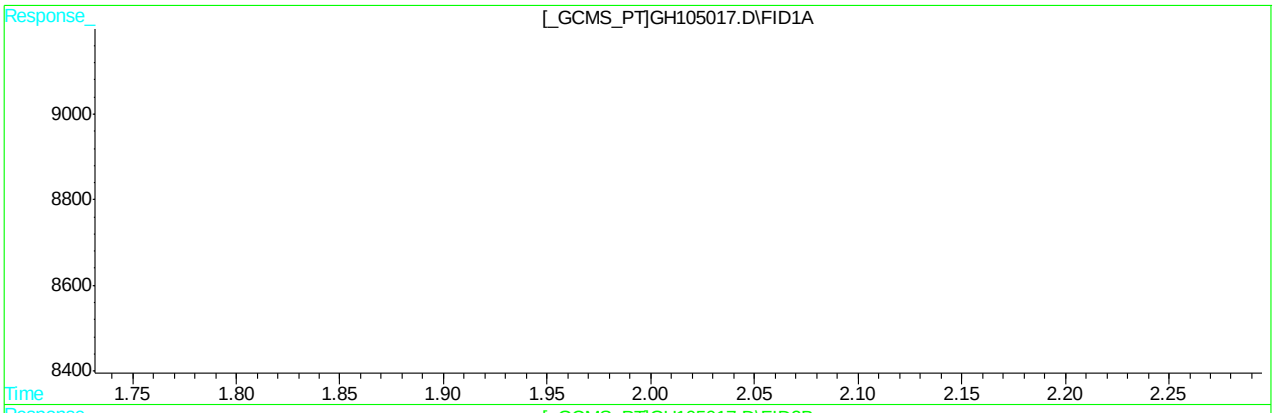
GH105017.D MGH5288.M Wed May 18 08:46:55 2016 GCGH

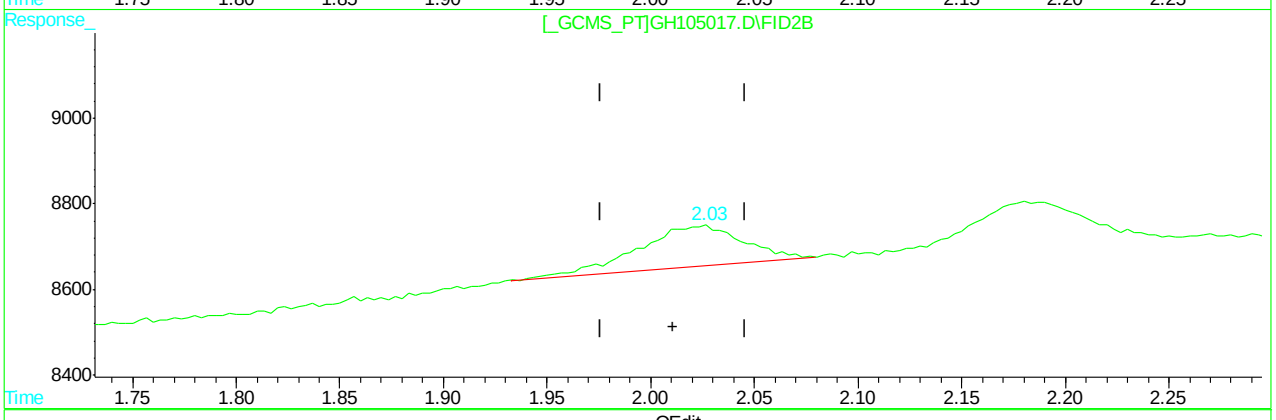
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

2.52min 89.885PPB

response 2187

(4) 1-Propanol #2

2.03min 69.117PPB m

response 3458

(+) = Expected Retention Time

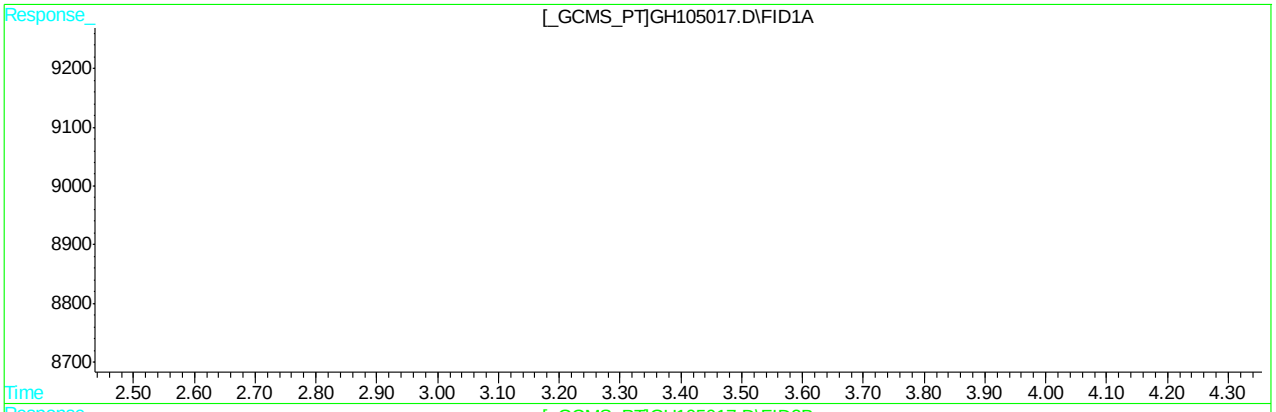
GH105017.D MGH5288.M Wed May 18 08:48:45 2016 GCGH

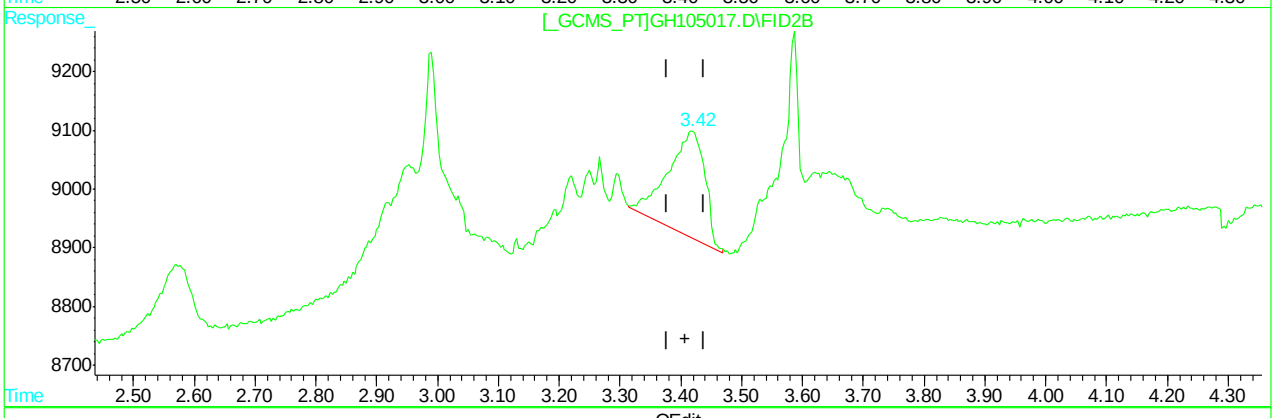
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(7) 1-Butanol

3.76min 105.546PPB

response 3014

(7) 1-Butanol #2

3.42min 113.606PPB m

response 7445

(+) = Expected Retention Time

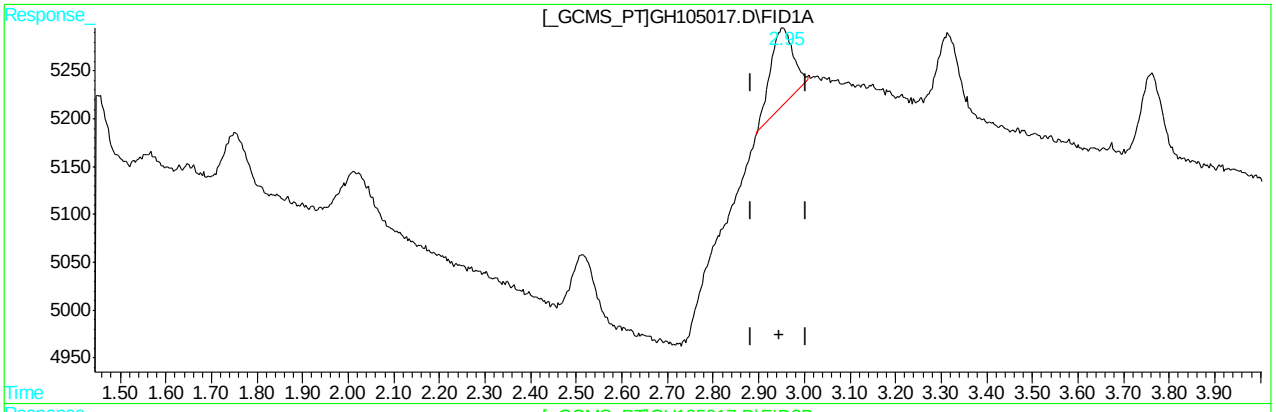
GH105017.D MGH5288.M Wed May 18 08:49:10 2016 GCGH

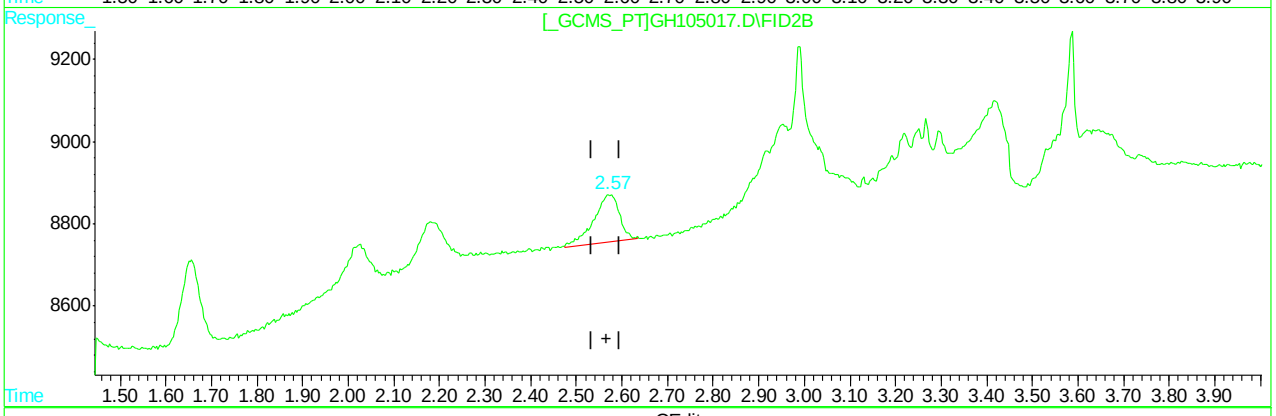
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(8) 2-Butanol

2.95min 121.739PPB m

response 2840

(8) 2-Butanol #2

2.57min 83.638PPB m

response 4510

(+) = Expected Retention Time

GH105017.D MGH5288.M Wed May 18 08:50:46 2016 GCGH

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105018.D\FID1A.CH          Vial: 3
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-500                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105018.D\FID2B.CH          Vial: 3
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-500                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:23 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:22:56 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	133226	309222	2149.239	2179.587
	Spiked Amount 5000.000			Recovery	=	42.98%	43.59%
	Target Compounds						
1)	Methanol	1.12	0.90	7371	16974	487.375	523.867
2)	Ethanol	1.45	1.15	7403	20315	382.175	495.986
3)	Tert-Butyl Alcoh	2.02	1.65	13219	32642	459.462	504.499
4)	1-Propanol	2.52	2.01	11323	26078	450.160	484.442
5)	2-Propanol	1.75	1.41	8826	24643	428.510	541.309
6)	Isobutanol	3.32	2.95f	14018	31821	481.673	522.579
7)	1-Butanol	3.76	3.41	14489	37291	514.513	593.512
8)	2-Butanol	2.95	2.57	11839	27554	464.803	492.431

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

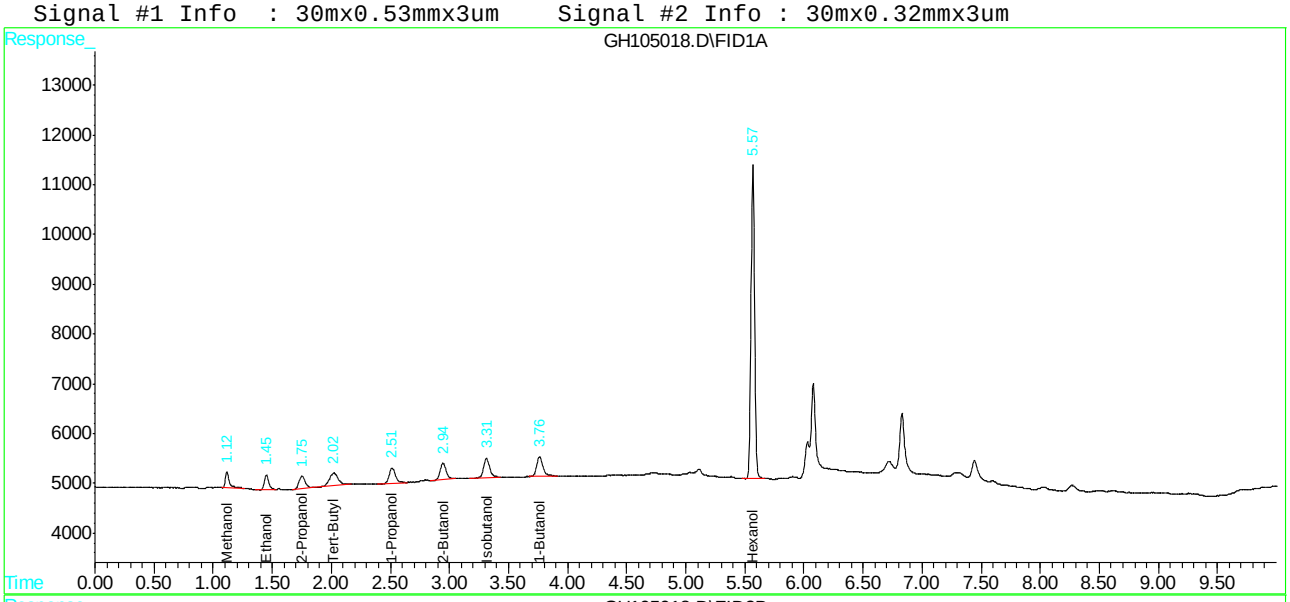
Quantitation Report (QT Reviewed)

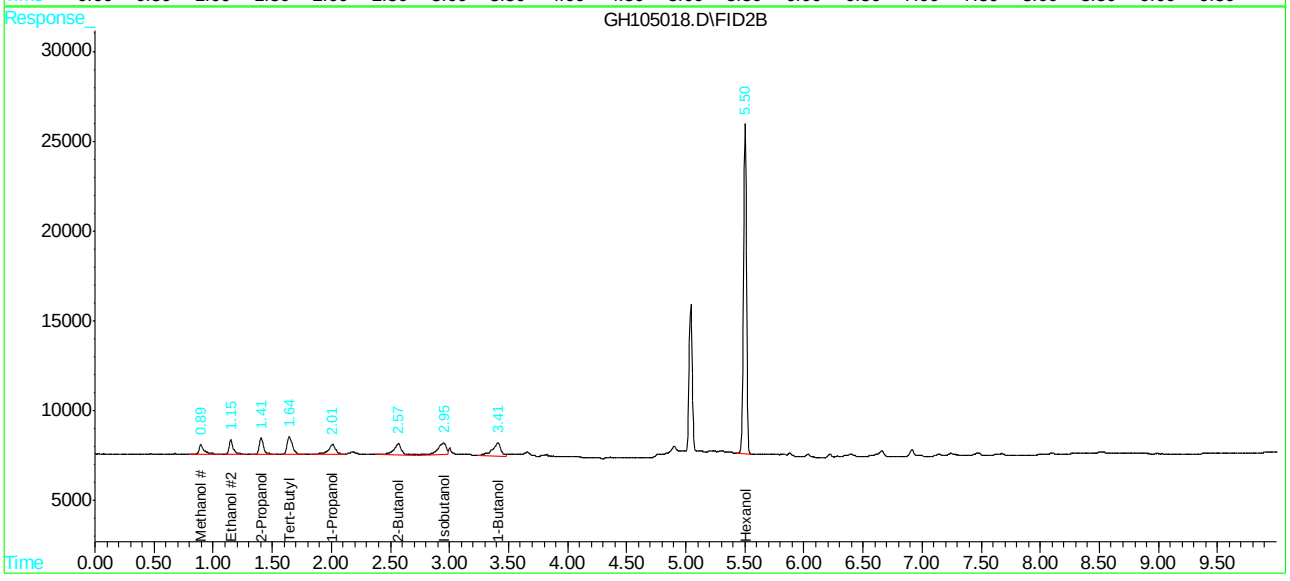
```
Data File : C:\HPCHEM\1\DATA\GH105018.D\FID1A.CH          Vial: 3
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-500                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105018.D\FID2B.CH          Vial: 3
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-500                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:23 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:22:56 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105019.D\FID1A.CH          Vial: 4
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105019.D\FID2B.CH          Vial: 4
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:22 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:22:21 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.51	274171	622051	4543.104	4492.586
	Spiked Amount 5000.000			Recovery	=	90.86%	89.85%
	Target Compounds						
1)	Methanol	1.12	0.92	16166	29685	1087.516	897.349
2)	Ethanol	1.45	1.17f	18855	36354	966.928	863.337
3)	Tert-Butyl Alcoh	2.01	1.66	28949	63750	1007.774	981.673
4)	1-Propanol	2.51	2.02	25248	52807	1004.669	976.309
5)	2-Propanol	1.75	1.42	20497	43421	993.892	942.889
6)	Isobutanol	3.31	2.94	29498	59602	1017.007	973.641
7)	1-Butanol	3.76	3.42	29408	73648	1055.991	1224.889
8)	2-Butanol	2.94	2.57	25576	58599	1005.126	1059.749

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

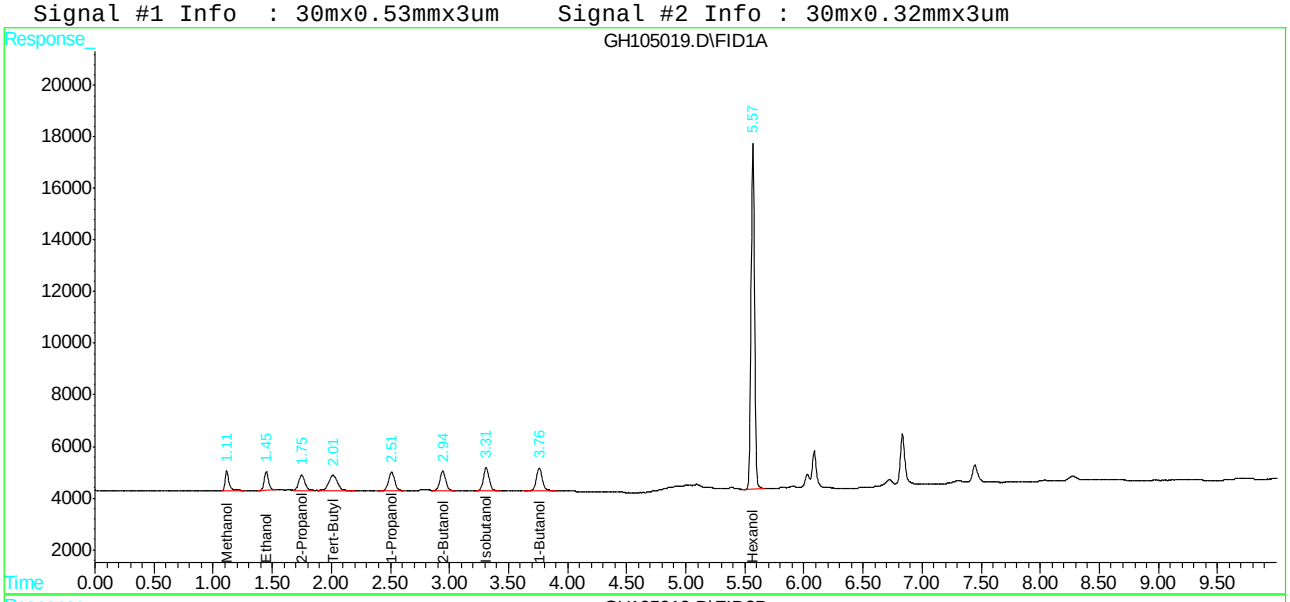
Quantitation Report (QT Reviewed)

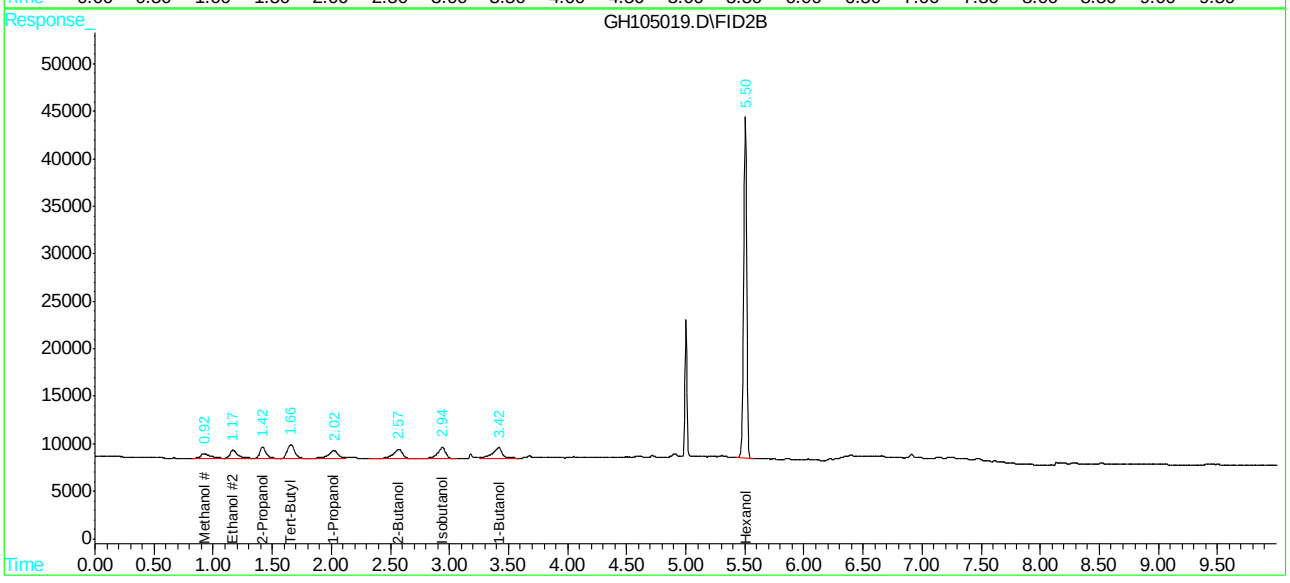
```
Data File : C:\HPCHEM\1\DATA\GH105019.D\FID1A.CH          Vial: 4
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105019.D\FID2B.CH          Vial: 4
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:22 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:22:21 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105020.D\FID1A.CH          Vial: 5
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105020.D\FID2B.CH          Vial: 5
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	345209	794669	4511.712	4828.644
Spiked Amount	5000.000			Recovery	=	90.23%	96.57%
	Target Compounds						
1)	Methanol	1.12	0.89	77443	173699	5243.603	8544.414 #
2)	Ethanol	1.45	1.15	99445	217347	5314.412	6840.346
3)	Tert-Butyl Alcoh	2.01	1.65	142996	332018	5237.321	5085.028
4)	1-Propanol	2.51	2.01	128385	274702	5760.408	5575.380
5)	2-Propanol	1.75	1.41	105046	236654	5062.425	5660.735
6)	Isobutanol	3.31	2.94	147383	311633	5362.003	5023.429
7)	1-Butanol	3.76	3.42	143097	319465	5843.923	6171.241
8)	2-Butanol	2.94	2.57	129413	280976	5135.753	5686.138

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

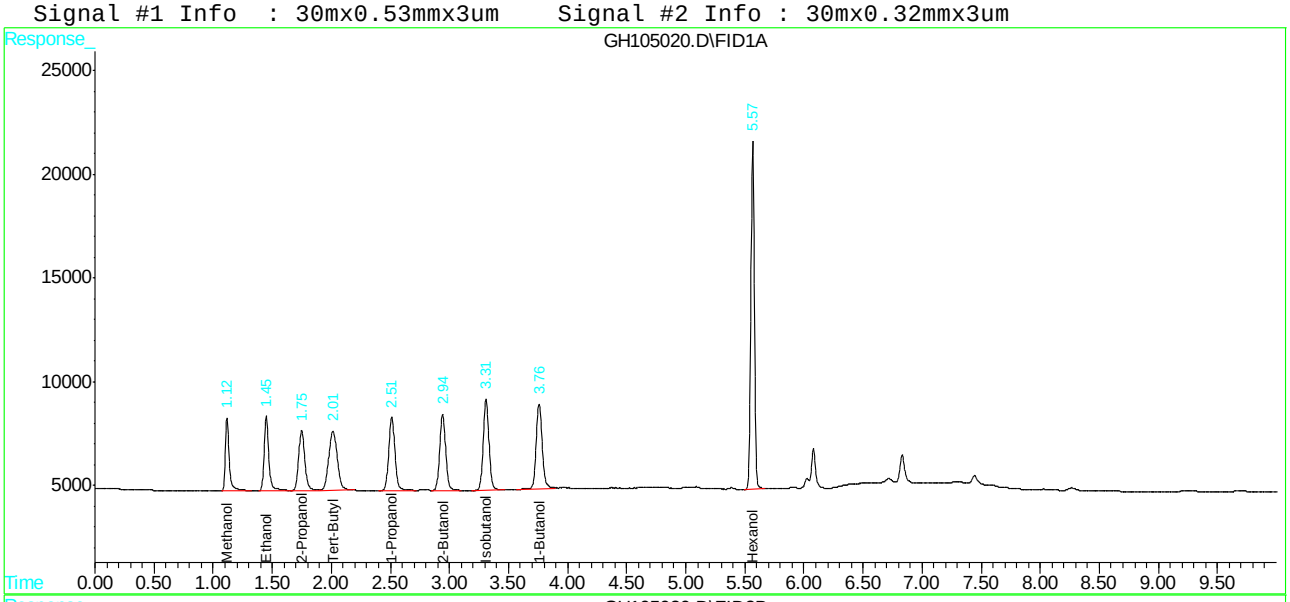
Quantitation Report (QT Reviewed)

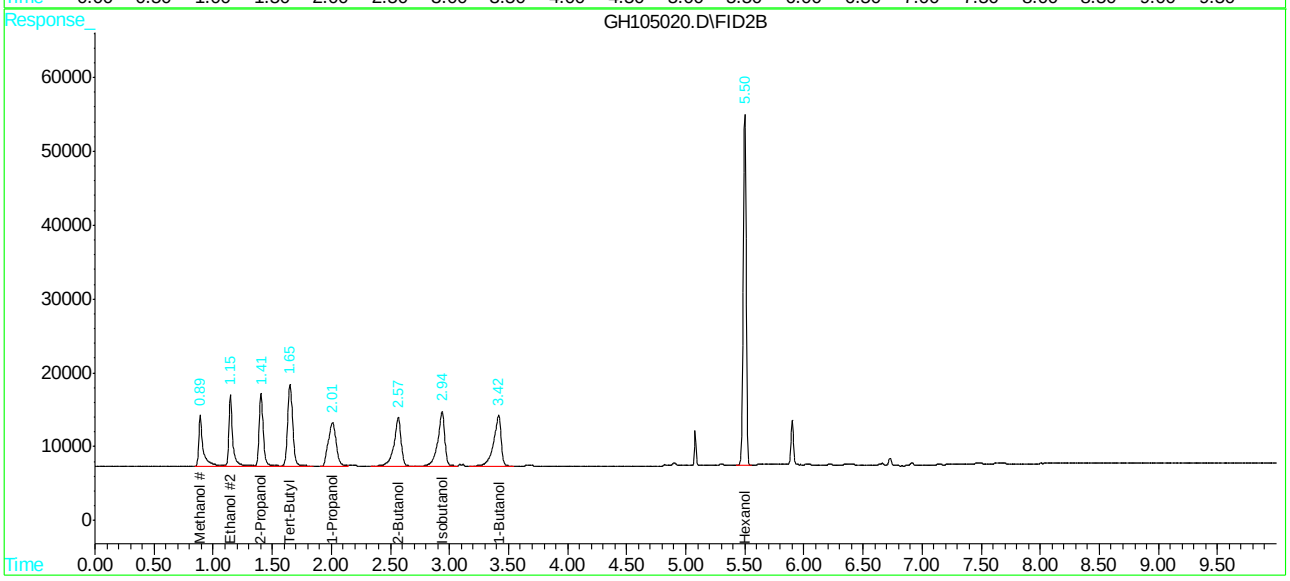
```
Data File : C:\HPCHEM\1\DATA\GH105020.D\FID1A.CH          Vial: 5
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105020.D\FID2B.CH          Vial: 5
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105021.D\FID1A.CH          Vial: 6
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105021.D\FID2B.CH          Vial: 6
Acq On    : 17 May 2016   5:33 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	355196	814101	4642.238	4946.724
Spiked Amount	5000.000			Recovery	=	92.84%	98.93%
	Target Compounds						
1)	Methanol	1.12	0.89	157448	346407	10660.697	17040.107 #
2)	Ethanol	1.45	1.15	202728	432745	10833.939	13619.358
3)	Tert-Butyl Alcoh	2.02	1.65	294805	663970	10797.389	10169.042
4)	1-Propanol	2.51	2.02	257894	549862	11571.266	11160.064
5)	2-Propanol	1.75	1.41	213932	472748	10309.866	11308.075
6)	Isobutanol	3.31	2.95	298782	632695	10870.134	10198.859
7)	1-Butanol	3.76	3.41	289038	604299	11803.967	11673.499
8)	2-Butanol	2.94	2.57	262599	566046	10421.277	11455.123

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

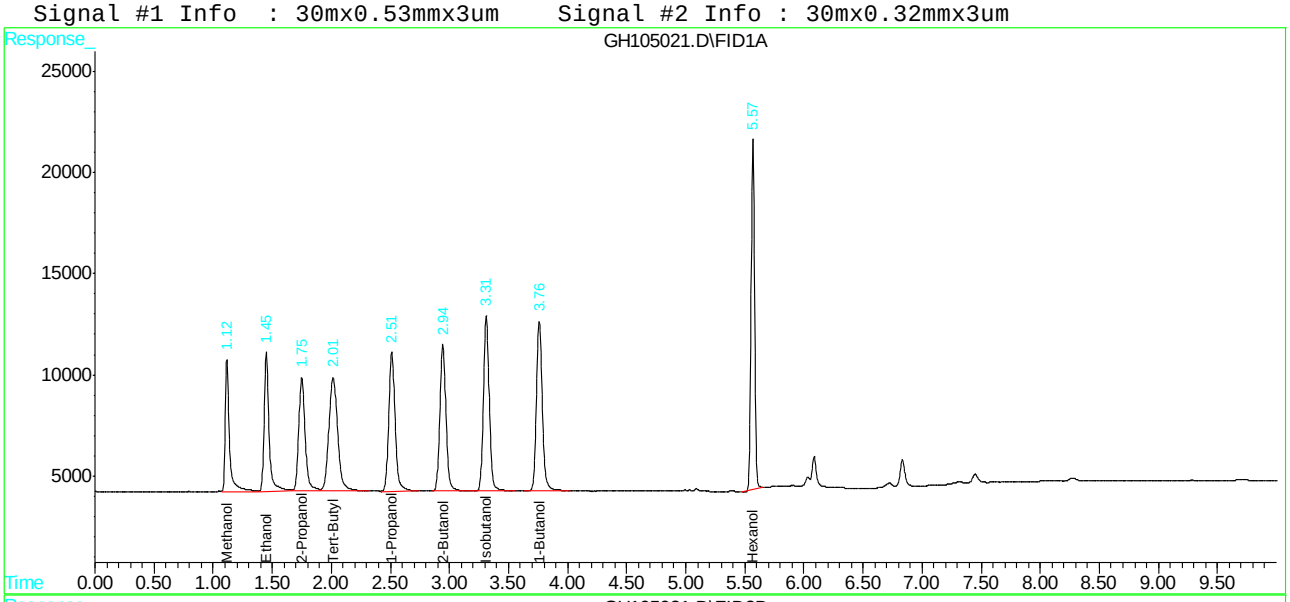
Quantitation Report (QT Reviewed)

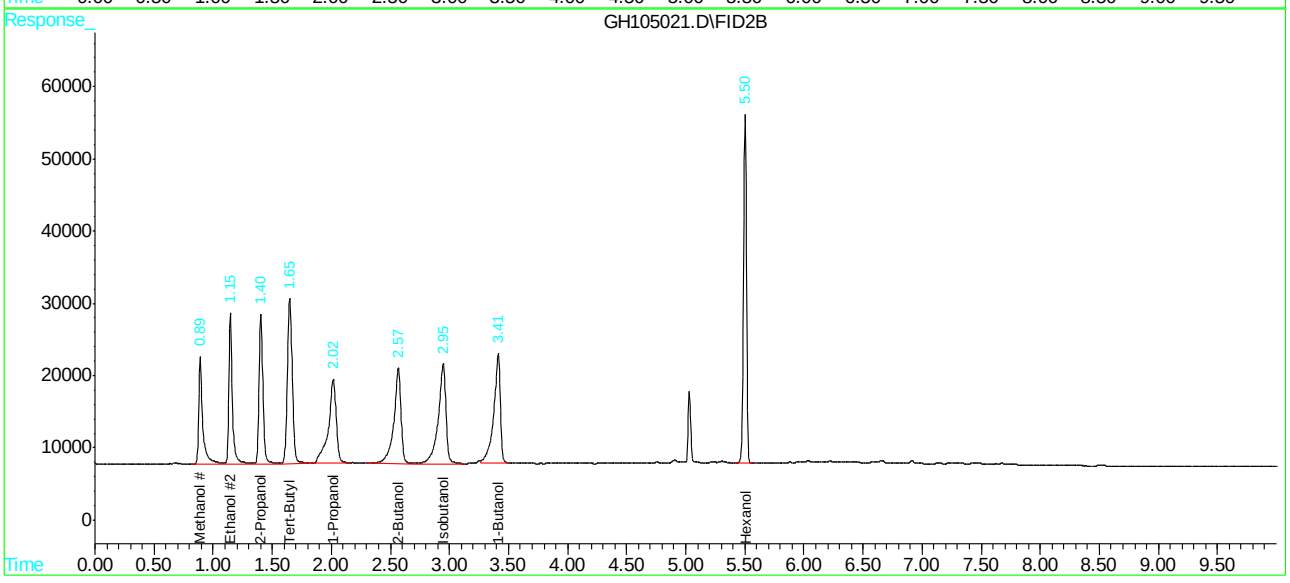
```
Data File : C:\HPCHEM\1\DATA\GH105021.D\FID1A.CH          Vial: 6
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105021.D\FID2B.CH          Vial: 6
Acq On    : 17 May 2016   5:33 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105022.D\FID1A.CH          Vial: 7
Acq On    : 17 May 2016   5:33 pm                     Operator: XULIU
Sample    : IC5288-50000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105022.D\FID2B.CH          Vial: 7
Acq On    : 17 May 2016   5:48 pm                     Operator: XULIU
Sample    : IC5288-50000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:10 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	412961	947054	5397.192	5754.582
	Spiked Amount 5000.000			Recovery	=	107.94%	115.09%
	Target Compounds						
1)	Methanol	1.12	0.89	720543	1576706	48787.500	77559.774 #
2)	Ethanol	1.45	1.15	934936	1996365	49963.655	62829.557
3)	Tert-Butyl Alcoh	2.02	1.65	1362114	3066977	49888.133	46972.339
4)	1-Propanol	2.51	2.02	1197382	2577415	53724.608	52311.489
5)	2-Propanol	1.75	1.41	990575	2181490	47738.100	52180.934
6)	Isobutanol	3.31	2.94	1369639	2883211	49829.464	46476.511
7)	1-Butanol	3.76	3.42	1316221	2839006	53752.804	54842.255
8)	2-Butanol	2.94	2.57	1212229	2632402	48107.436	53272.148

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

GH105022.D MGH5288.M Wed May 18 08:53:10 2016 GCGH

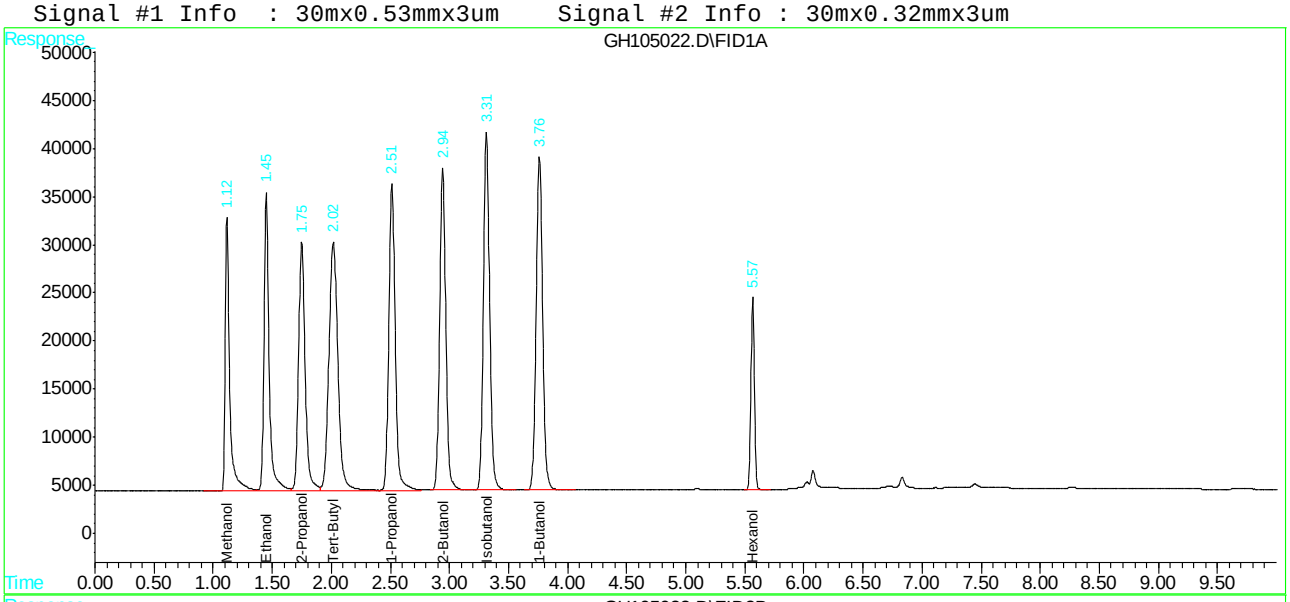
Quantitation Report (QT Reviewed)

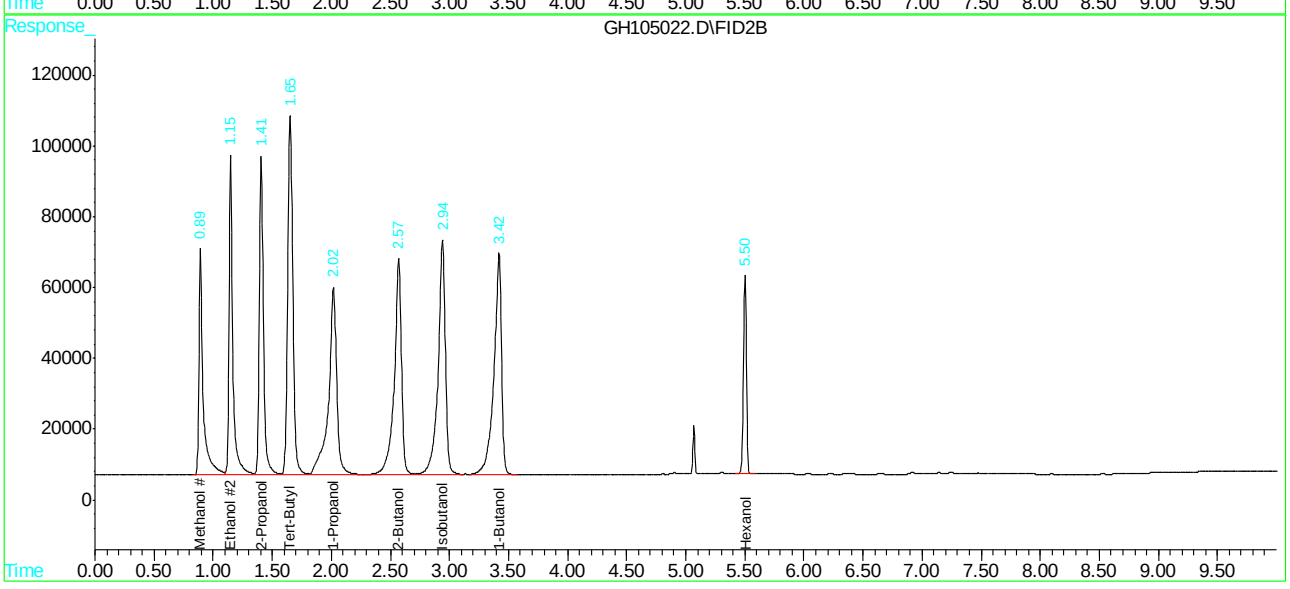
```
Data File : C:\HPCHEM\1\DATA\GH105022.D\FID1A.CH          Vial: 7
Acq On    : 17 May 2016   5:33 pm                     Operator: XULIU
Sample    : IC5288-50000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105022.D\FID2B.CH          Vial: 7
Acq On    : 17 May 2016   5:48 pm                     Operator: XULIU
Sample    : IC5288-50000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:10 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105023.D\FID1A.CH          Vial: 8
Acq On    : 17 May 2016   5:48 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105023.D\FID2B.CH          Vial: 8
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:10 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	259897	594005	3396.729	3609.352
	Spiked Amount 5000.000			Recovery	=	67.93%	72.19%
	Target Compounds						
1)	Methanol	1.12	0.89	1381464	3140971	93538.113	154507.580 #
2)	Ethanol	1.45	1.15	1913963	4176473	102283.537	131441.900
3)	Tert-Butyl Alcoh	2.02	1.66	2957875	6562015	108333.721	100500.651
4)	1-Propanol	2.51	2.03	2510870	5487726	112658.677	111379.470
5)	2-Propanol	1.76	1.41	2027830	4596795	97725.857	109954.692
6)	Isobutanol	3.32	2.96f	2927116	6160124	106492.774	99299.394
7)	1-Butanol	3.76	3.42	2754661	5940276	112496.937	114750.761
8)	2-Butanol	2.95	2.57	2539551	5573181	100782.352	112784.937

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

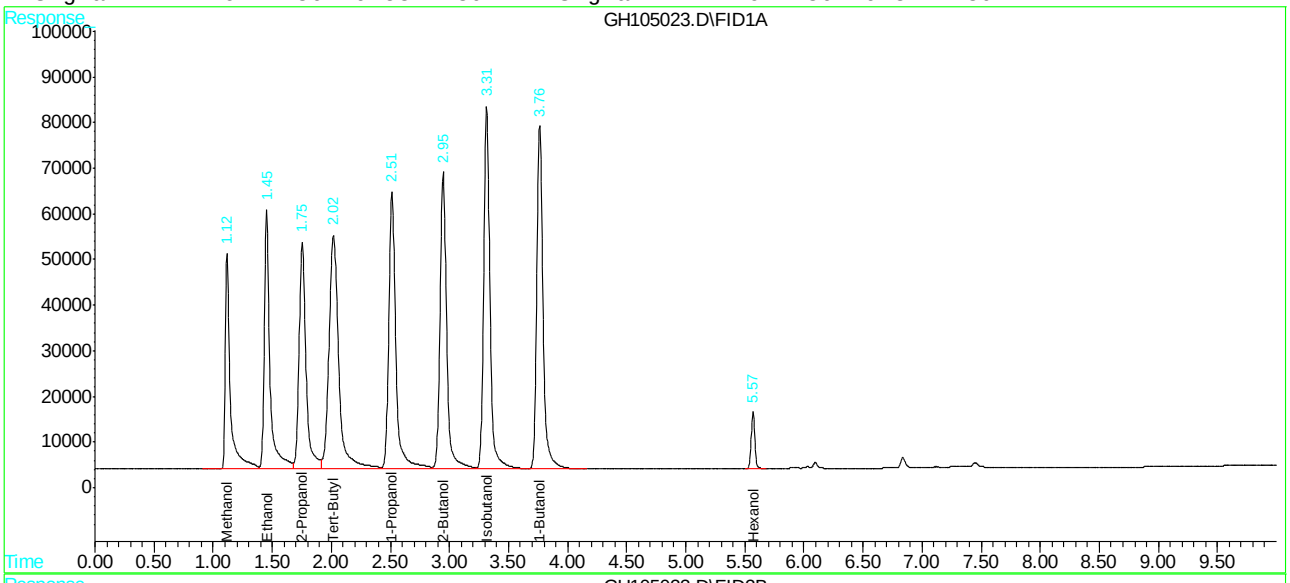
Quantitation Report (QT Reviewed)

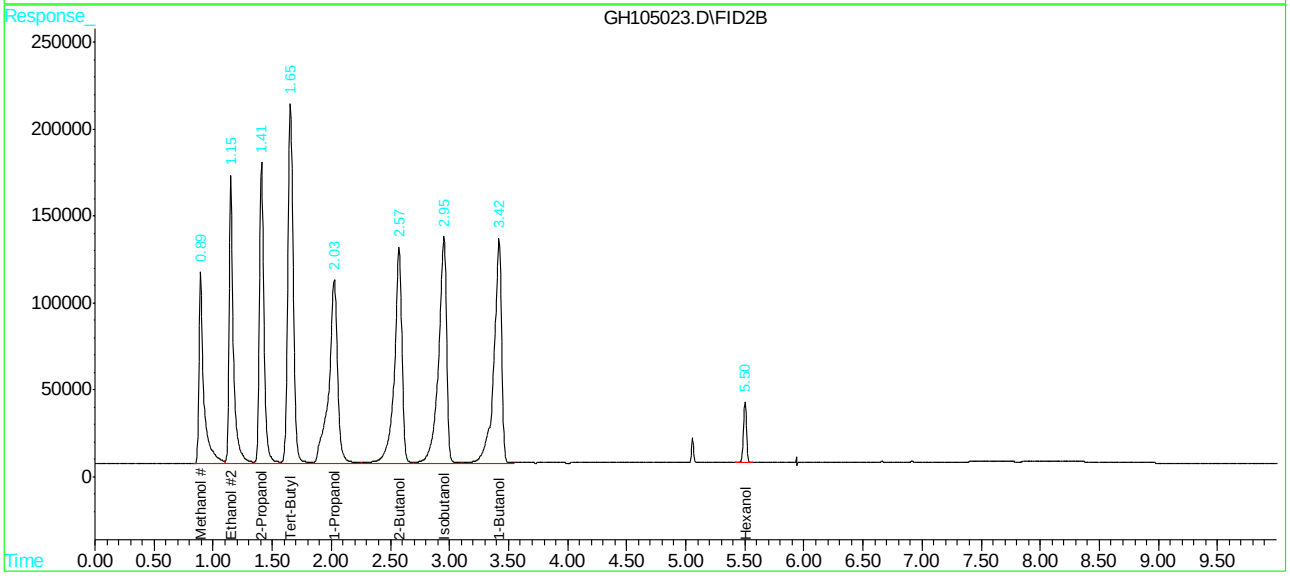
```
Data File : C:\HPCHEM\1\DATA\GH105023.D\FID1A.CH          Vial: 8
Acq On    : 17 May 2016   5:48 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105023.D\FID2B.CH          Vial: 8
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:10 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105024.D\FID1A.CH          Vial: 9
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : ICV5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105024.D\FID2B.CH          Vial: 9
Acq On    : 17 May 2016   6:24 pm                     Operator: XULIU
Sample    : ICV5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  9:07 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	349710	790800	5173.481	5090.525
Spiked Amount	5000.000			Recovery	=	103.47%	101.81%
	Target Compounds						
1)	Methanol	1.12	0.90	65127	172731	4212.940	5355.287
2)	Ethanol	1.45	1.16	100143	226641	5284.554	5685.787
3)	Tert-Butyl Alcoh	2.02	1.66	149854	332921	5288.674	5236.015
4)	1-Propanol	2.52	2.02	127682	285106	5248.735	5607.628
5)	2-Propanol	1.75	1.41	105368	238229	5286.625	5261.345
6)	Isobutanol	3.31	2.94	151110	333033	5252.180	5439.828
7)	1-Butanol	3.76	3.42	145592	326188	5097.649	4929.542
8)	2-Butanol	2.95	2.57	133016	304299	5188.956	5605.638

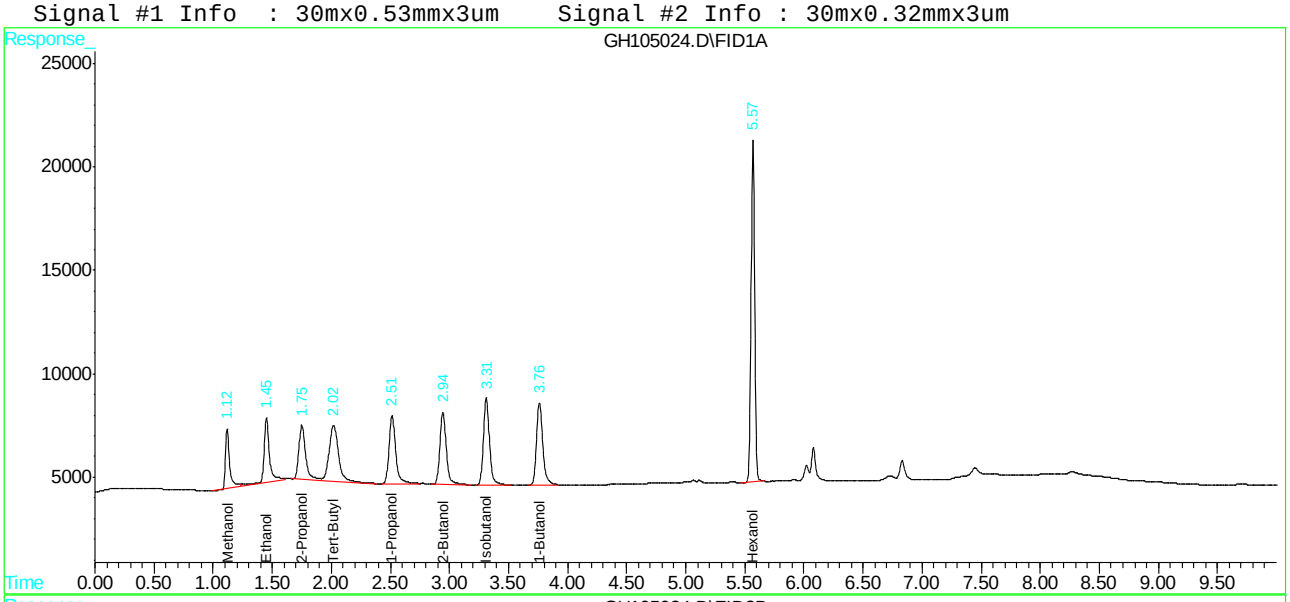
Quantitation Report (QT Reviewed)

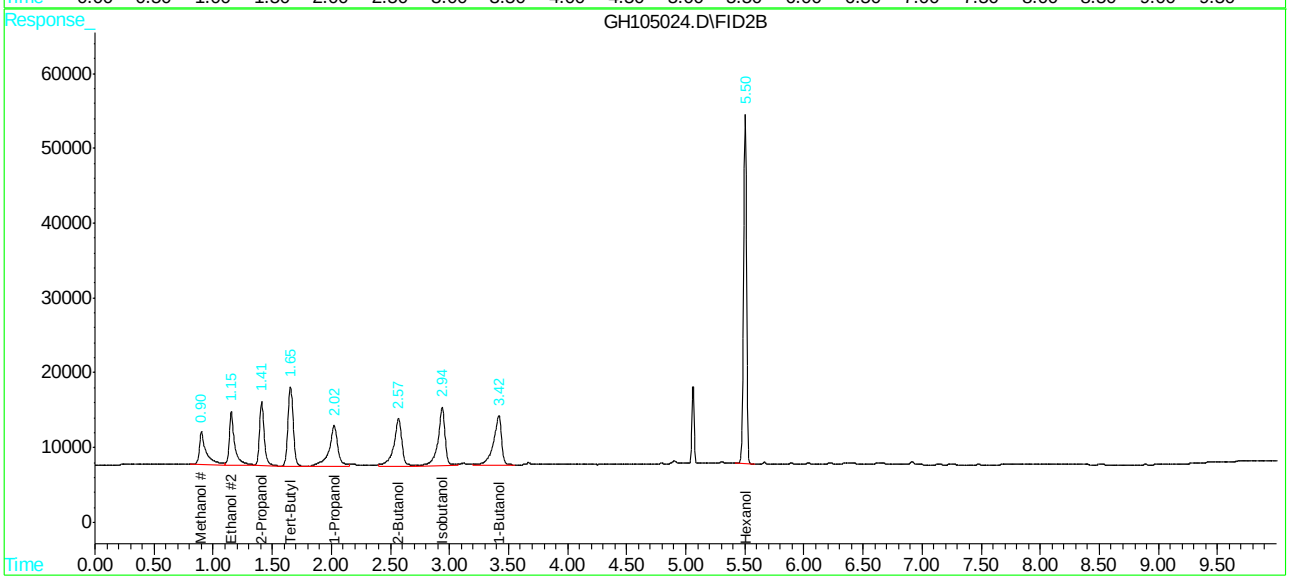
```
Data File : C:\HPCHEM\1\DATA\GH105024.D\FID1A.CH          Vial: 9
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : ICV5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105024.D\FID2B.CH          Vial: 9
Acq On    : 17 May 2016   6:24 pm                     Operator: XULIU
Sample    : ICV5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  9:07 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105098.D\FID1A.CH Vial: 95
Acq On : 19 May 2016 4:32 pm Operator: XULIU
Sample : CC5288-10000 Inst : GCGH
Misc : GC48427,GGH5291,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105098.D\FID2B.CH Vial: 95
Acq On : 19 May 2016 4:46 pm Operator: XULIU
Sample : CC5288-10000 Inst : GCGH
Misc : GC48427,GGH5291,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 20 8:14 2016 Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Fri May 20 08:13:59 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj. : 2ul
Signal #1 Phase : ZB-624 Signal #2 Phase: RTX-1
Signal #1 Info : 30mx0.53mmx3um Signal #2 Info : 30mx0.32mmx3um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.55	5.50	305087	672487	4513.346	4328.918
Spiked Amount	5000.000			Recovery	=	90.27%	86.58%
	Target Compounds						
1)	Methanol	1.11	0.90	149502	340212	9671.024	10547.818
2)	Ethanol	1.44	1.15	187929	417060	9916.999	10462.870
3)	Tert-Butyl Alcoh	2.00	1.65	288187	649535	10170.781	10215.564
4)	1-Propanol	2.50	2.00	253221	534452	10409.417	10511.922
5)	2-Propanol	1.74	1.41	194621	461533	9764.702	10193.062
6)	Isobutanol	3.30	2.94	292289	588335	10159.160	9609.996
7)	1-Butanol	3.75	3.42	280209	566028	9811.003	8554.146
8)	2-Butanol	2.93	2.57	256176	539088	9993.441	9930.814

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GH105098.D MGH5288.M Fri May 20 08:24:28 2016 GCGH

SGS ACCUTEST JC20314

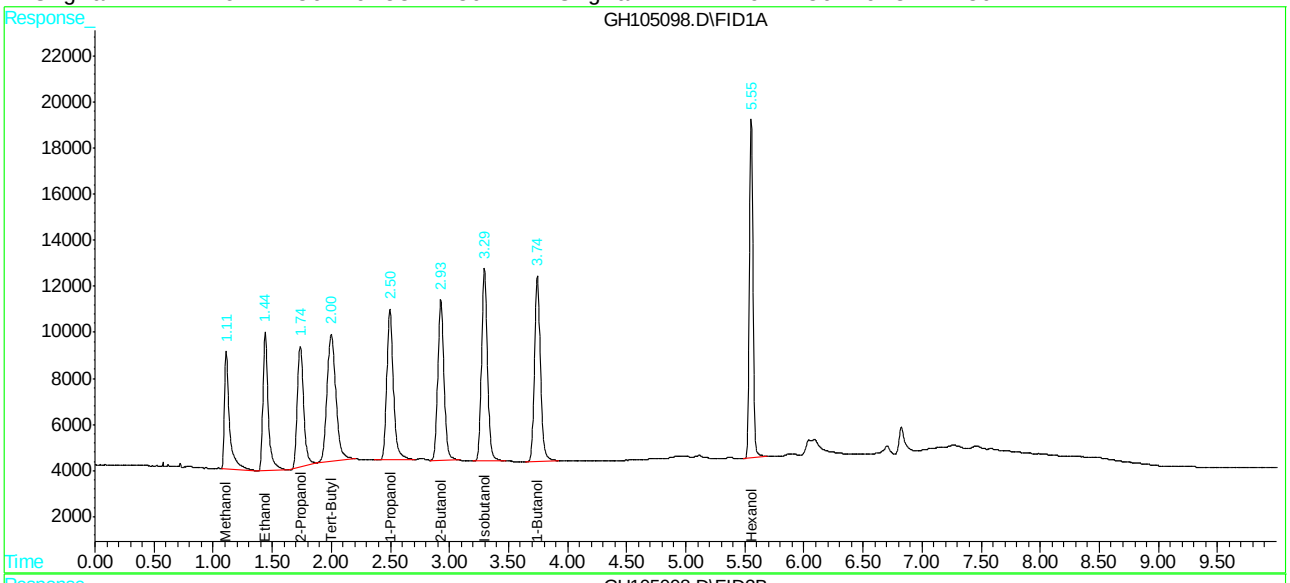
Quantitation Report (QT Reviewed)

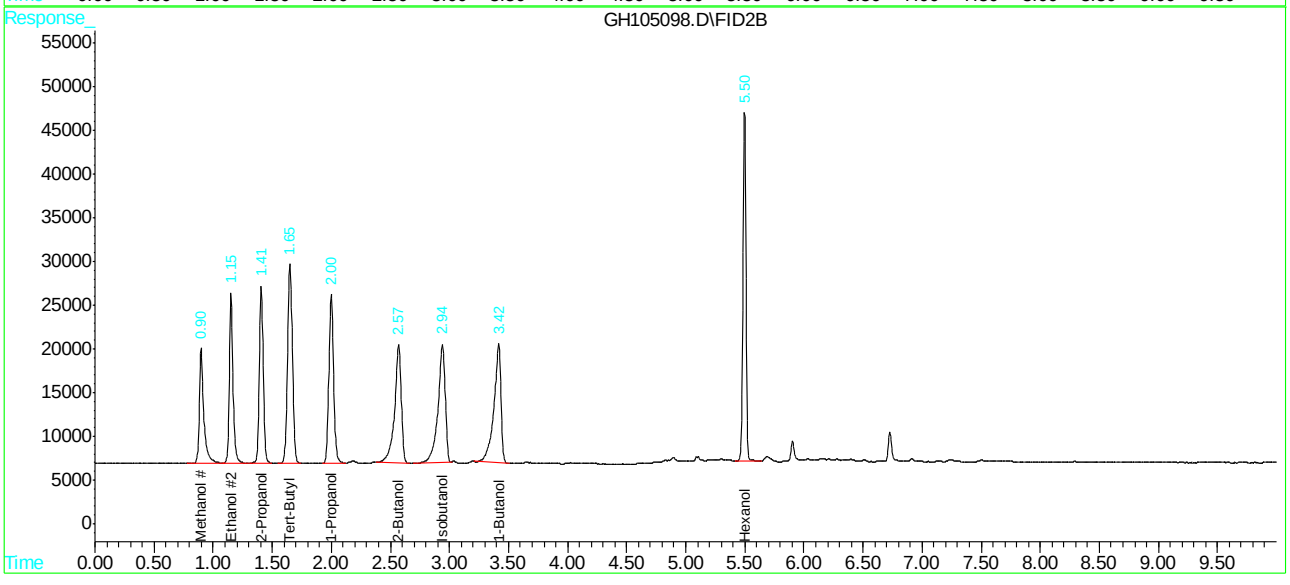
```
Data File : C:\HPCHEM\1\DATA\GH105098.D\FID1A.CH          Vial: 95
Acq On    : 19 May 2016   4:32 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48427,GGH5291,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105098.D\FID2B.CH          Vial: 95
Acq On    : 19 May 2016   4:46 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48427,GGH5291,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  8:14 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 08:13:59 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105109.D\FID1A.CH          Vial: 90
Acq On    : 19 May 2016   7:32 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105109.D\FID2B.CH          Vial: 90
Acq On    : 19 May 2016   7:46 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  9:00 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 09:00:10 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
9) S Hexanol	5.55	5.50	289828	660879	4287.602	4254.199
Spiked Amount 5000.000			Recovery	=	85.75%	85.08%
Target Compounds						
1) Methanol	1.11	0.90	75632	156464	4892.523	4850.972
2) Ethanol	1.44	1.15	97328	201462	5136.011	5054.120
3) Tert-Butyl Alcoh	2.00	1.65	142014	321407	5011.990	5054.929
4) 1-Propanol	2.49	2.00	127644	263515	5247.177	5182.958
5) 2-Propanol	1.74	1.41	102682	229269	5151.846	5063.466
6) Isobutanol	3.30	2.94	146327	291041	5085.926	4753.936
7) 1-Butanol	3.74	3.42	137444	286397	4812.347	4328.202
8) 2-Butanol	2.92	2.57	129407	269052	5048.190	4956.344

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

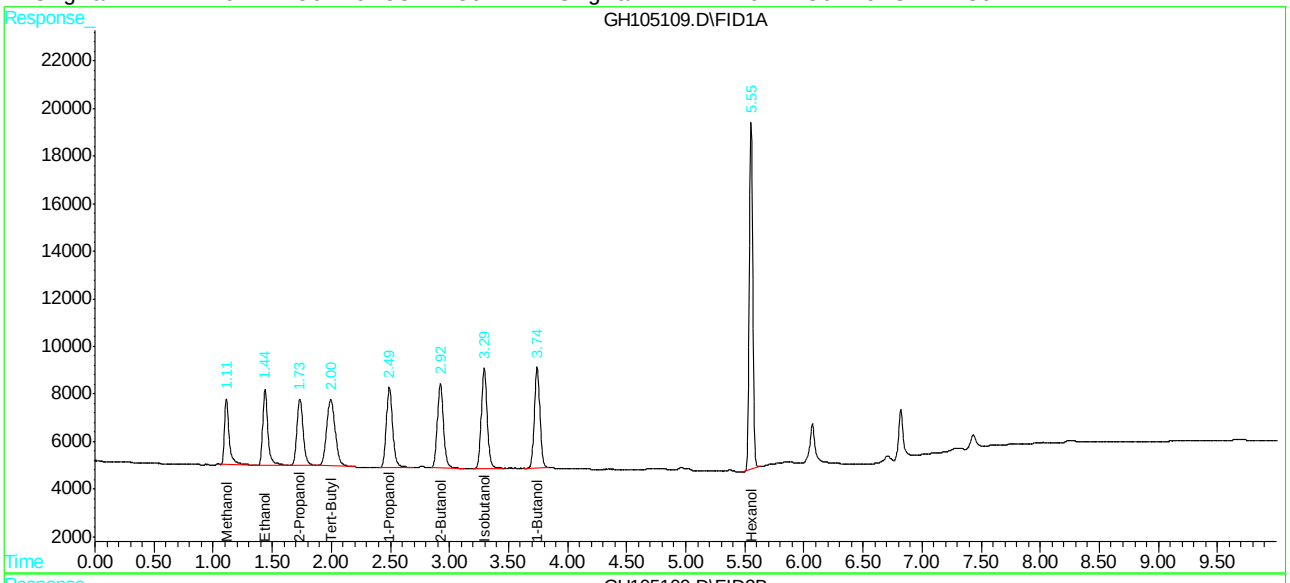
Quantitation Report (QT Reviewed)

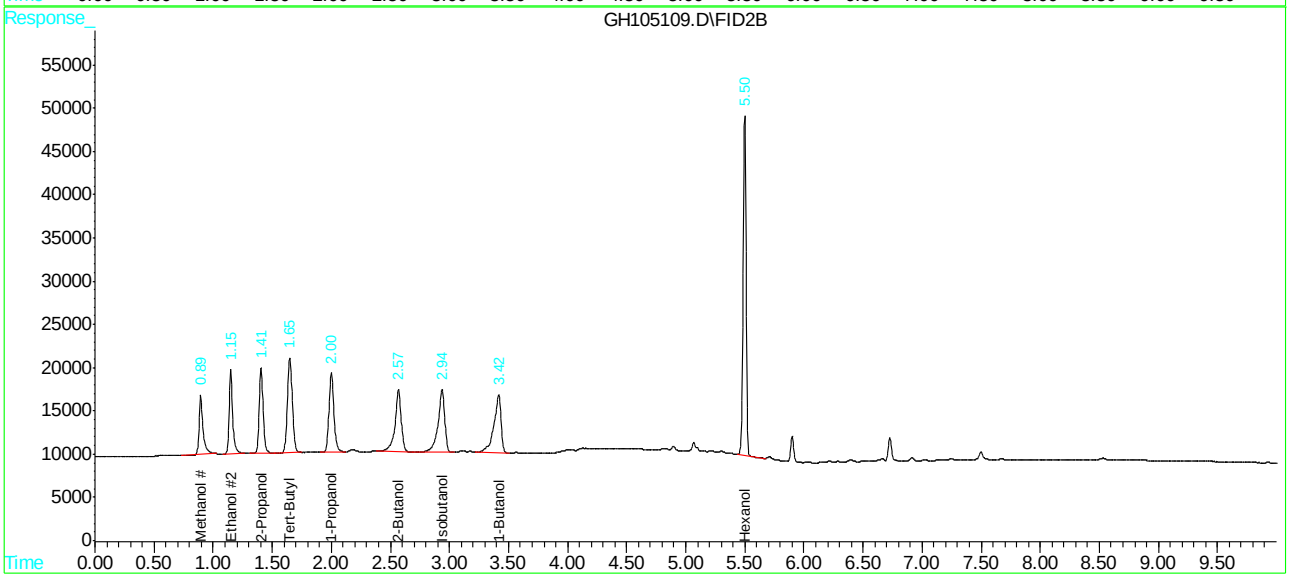
```
Data File : C:\HPCHEM\1\DATA\GH105109.D\FID1A.CH          Vial: 90
Acq On    : 19 May 2016   7:32 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105109.D\FID2B.CH          Vial: 90
Acq On    : 19 May 2016   7:46 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48426,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  9:00 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 09:00:10 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105119.D\FID1A.CH          Vial: 95
Acq On    : 19 May 2016  10:18 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48440,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105119.D\FID2B.CH          Vial: 95
Acq On    : 19 May 2016  10:33 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48440,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  9:27 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 09:00:10 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.56	5.50	288754	647073	4271.716	4165.325
	Spiked Amount 5000.000			Recovery	=	85.43%	83.31%
	Target Compounds						
1)	Methanol	1.12	0.89	145944	329444	9440.883	10213.986
2)	Ethanol	1.44	1.15	192849	408548	10176.626	10249.331
3)	Tert-Butyl Alcoh	2.00	1.65	277790	643195	9803.825	10115.840
4)	1-Propanol	2.50	2.00	245855	528187	10106.606	10388.685
5)	2-Propanol	1.74	1.40	201896	455768	10129.746	10065.745
6)	Isobutanol	3.30	2.94	287343	585803	9987.246	9568.641
7)	1-Butanol	3.75	3.41	270086	583190	9456.572	8813.508
8)	2-Butanol	2.93	2.57	274928	537387	10724.941	9899.479

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC20314

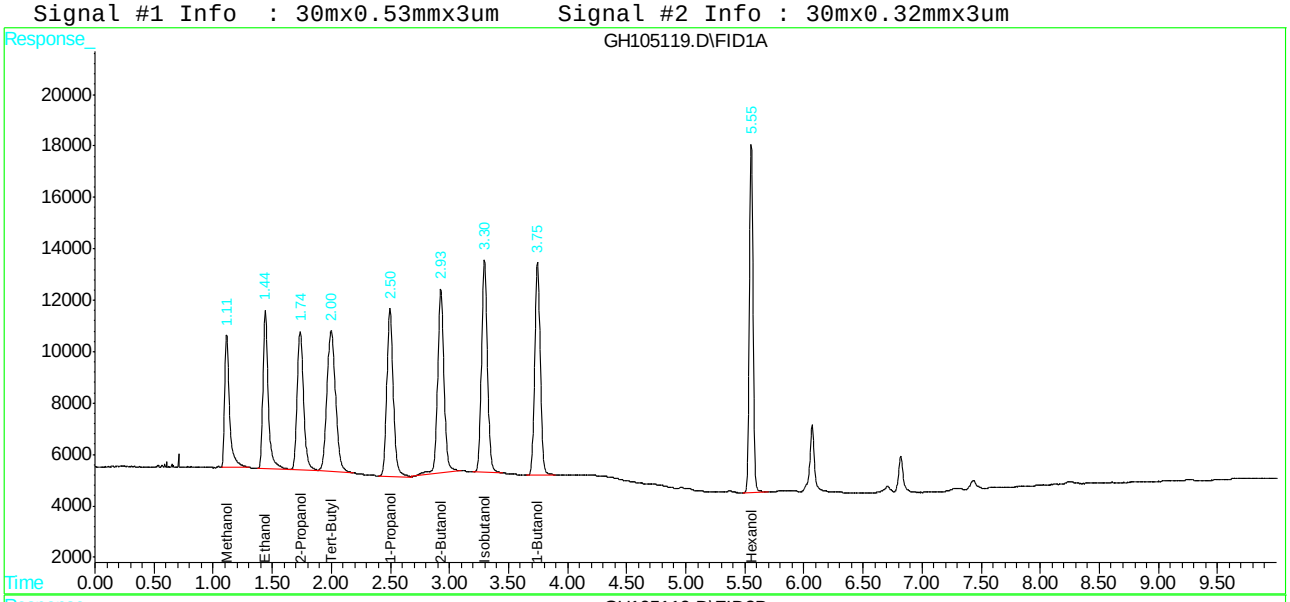
Quantitation Report (QT Reviewed)

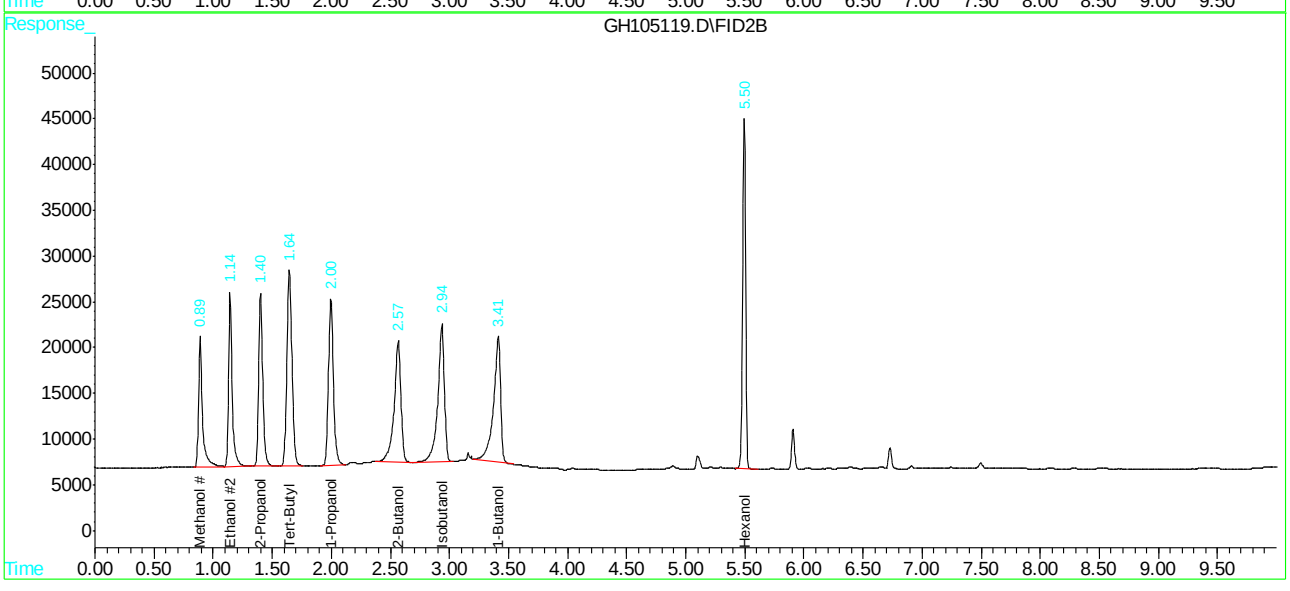
```
Data File : C:\HPCHEM\1\DATA\GH105119.D\FID1A.CH          Vial: 95
Acq On    : 19 May 2016  10:18 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48440,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105119.D\FID2B.CH          Vial: 95
Acq On    : 19 May 2016  10:33 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48440,GGH5292,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 20  9:27 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Fri May 20 09:00:10 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5269

Print Analyst Name: Xielin

Date: 5/9/16

Analyst Signature:

Columns: ZB624 / RTX-1 (30m x 0.25mm x 3um) (30m x 0.32mm x

Method 8015C ALC

Initial Cal. Method MGH5269

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015MX-18	ALL SUR	2000 ppm
015MX-19	ALL STD	100 ppm
015MX-30	ALL STD(2)	100 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: **Date:** 5/12/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	GH104669	2B					1						not ul		
	104670	2B					1						not ul		
	104671	2B					1						not ul		
	104672	2B					1						not ul		
	104673	2B					1					✓	ok		
	104674	2G5269-100					1					✓	ok	10ul STD, 4ul sur/10ml 1/20	
	104675	2G5269-500					1					✓	ok	5ul STD, 1ul sur/1ml 1/20	
	104676	2G5269-1000					1					✓	ok	10ul STD, 2ul sur/1ml 1/20	
	104677	2G5269-5000					1					✓	ok	50ul STD, 2.5ul sur/1ml 1/20	
	104678	2G5269-10,000					1					✓	ok	100ul STD, 2.5ul sur/1ml 1/20	
	104679	2G5269-50,000					1					✓	ok	500ul STD, 2.5ul sur/1ml 1/20	
	104680	2G5269-100,000					1					✓	not need		
	104681	2G5269-100,000					1						N/G	1000ul STD, 4ul sur/ml	
	104682	2GH5269-5000					1						N/G		
	104683	2GH5269-5000					1					✓	ok	50ul STD(2), 2.5ul sur/1ml 1/20	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC20314

9.6.1

9

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5285

Print Analyst Name: [illegible]

Analyst Signature: [illegible]

Date: 5/16/16

Columns: 2B624 / RTX-1 (30m x 0.32mm x 3um) (30m x 0.32mm x 3um)

Method 8015C ALL

Initial Cal. Method MGH5269

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015MUX418	ALL SUR (5/05)	2000 ppm
015MUX419	ALL SUR (5/05)	100 ppm
015MUX430	ALL SURG (5/05)	100 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible] **Date:** 5/17/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	GH10459	2B					1					✓	ok		
	10460	CC5269-5000					1					✓	ok	50µl STD/mlw	
	10461	MB1					1					✓	ok		
	10462	BS					1					✓	ok	50µl STD/mlw	
	10463	JC19644-1	48420 CMTS	W	6		1					✓	ok		✓
	10464	JC19644-1MS	✓	W	6		1					✓	ok		✓
	10465	JC19644-1MSD	✓	W	6		1					✓	ok		✓
	10466	JC19644-2	✓	W	5		1					✓	ok		✓
	10467	JC19644-3	✓	W	6		1					✓	ok		✓
	10468	JC19759-1	✓	W	6		1					✓	ok		✓
	10469	JC19759-2	✓	W	6		1					✓	ok		✓
	10470	CC5269-10,000					1					✓	ok		
	10471	MB2					1					✓	ok		
	10472	JC19759-3	✓	W	6		1					✓	ok		✓
	10473	JC19759-4	✓	W	5		1					✓	ok		✓
	10474	JC19759-5	✓	W	6		1					✓	ok		✓
	10475	JC19759-6	✓	W	6		1					✓	ok		✓

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5285

Print Analyst Name: Xi Liu

Analyst Signature:

Date: 5/16/16

Columns: ZB624 / RTX-1 (30m x 0.53mm x 3um) (30m x 0.25mm x 1u)

Method 8015CAK

Initial Cal. Method MGH5269

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Pg 153	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 5/17/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	GH104976	JC19914-1	48420 CMB	G W	5		1					✓	ok		✓
	104977	JC19114-2	✓	G W	5		1					✓	ok		✓
	104978	JC19114-4	✓	G W	5		1					✓	ok		✓
	104979	JC19114-5	✓	G W	5		1					✓	ok		✓
	104980	CC5269-5000					1					✓	ok	50ul std/mL	
	104981	MBX3					1					✓	ok		
	104982	JC20098-1	48422 CMB	G W	5		1					✓	ok	JC20098-1	✓
	104983	JC20098-4	✓	G W	5		1					✓	ok	JC20098-4	✓
	104984	JC20098-5	✓	G W	5		1					✓	ok	JC20098-5	✓
	104985	JC20314-2	48423 CMB	G W	4		1					✓	ok		✓
	104986	JC20314-4	✓	G W	2		1					✓	ok		✓
	104987	CC5269-10,000					1					✓	ok	100ul std/mL	
	104988						1								
	104989						1								
													5/16		

MTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH 5288

Print Analyst Name: Xu Gu

Analyst Signature:

Date: 5/17/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015M4408	All Sur (5/15)	2000 ppm
015M4510	All STD (5/15)	100 ppm
015M4530	All SD012 (5/15)	100 ppm

Columns: ZB624 / RTX-1 (30m x0.53mm x3μm / 30m x0.32mm x2μm)

Method 8015C All

Initial Cal. Method Mcal 5288

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: _____ **Date:** 5/19/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	Cal 105015	ZB					1					✓	not well		
	105016	ZB					1					✓	ok		
	105017	ZC5288-100					1					✓	ok	10μl STD, 4μl SW / 10ml	
	105018	ZC5288-500					1					✓	ok	5μl STD, 1μl SW / 10ml	
	105019	ZC5288-1000					1					✓	ok	10μl STD, 2.5μl SW / 10ml	
	105020	ZC5288-5000					1					✓	ok	50μl STD, 2.5μl SW / 10ml	
	105021	ZC5288-10,000					1					✓	ok	100μl STD, 2.5μl SW / 10ml	
	105022	ZC5288-50,000					1					✓	ok	500μl STD, 3μl SW / 10ml	
	105023	ZC5288-100,000					1					✓	ok	1000μl STD, 4μl SW / 10ml	
	105024	ZC5288-5000					1					✓	ok	2.5μl SW / 50μl STD (1:10) / 10ml	

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MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5291

Print Analyst Name: Xulin

Analyst Signature:

Date: 5/19/16

Columns: 2B6W / RTX-1 (30mx0.53mmx3μm) (30mx0.32mmx3)

Method 8015LAIC

Initial Cal. Method MGH5288

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015W4108	ALK STD (5/15)	2000 ppm
015W4109	ALL STD (5/15)	100 ppm
015W4130	ALL STD(2) (5/15)	100 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: **Date:** 5/20/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* <2
	GH105066	2B					1					✓	ok		
	105067	CC5288-5000					1					✓	ok	50μl(10)/ml/2W	
	105068	MB1					1					✓	ok		
	105069	BS					1					✓	ok	50μl(10)(2)/ml/2W	✓
	105070	JC20466-1	48445 CMA	GW	3		1					✓	ok		✓
	105071	JC20466-2	✓	GW	3		1					✓	ok		✓
	105072	JC20466-3	✓	GW	3		1					✓	ok		✓
	105073	JC20147-13	48429 CMA	GW	13		1					✓	ok		✓
	105074	JC20147-13MS	✓	GW	13		1					✓	ok	50μl(10)(2)/ml sample	✓
	105075	JC20147-13MSD	✓	GW	13		1					✓	ok	50μl(10)(2)/ml sample	✓
	105076	JC20147-14	✓	GW	8		1					✓	ok		✓
	105077	CC5288-10000					1					✓	ok	100μl(10)/ml/2W	
	105078	MB2					1					✓	ok		
	105079	JC20147-16	✓	AQ	7		1					✓	ok		✓
	105080	JC19961-1	48394 CMA	GW	8		1					✓	ok		✓
	105081	JC19961-2	✓	GW	6		1					✓	ok		✓
	105082	JC19961-3	✓	GW	7		1					✓	ok		✓

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Form: OR001-10
Rev. Date: 1/19/16

9.6.4

9

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5291

Print Analyst Name: Xulin

Analyst Signature: [signature]

Date: 5/19/16

Columns: ZB624 / RTX-1 (30m x 0.53mm x 3µm) (30m x 0.32mm x 2µm)

Method 8015C ALL

Initial Cal. Method MGH5288

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Pg 171	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5/20/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	GH105083	JC19961-6	48394 EMA	G W	8		1					✓	OK		✓
	105084	JC19961-7	✓	G W	5		1					✓	OK		✓
	105085	JC19961-8	✓	G W	9		1					✓	OK		✓
	105086	JC20048-2	48427 EMA	G W	6		1					✓	OK		
	105087	CC5288-5000					1					✓	OK	50µl STD/1ml DW	
	105088	MB3					1					✓	OK		
	105089	JC20048-4	✓	G W	7		1					✓	OK		✓
	105090	JC20057-1	48427 EMA	G W	5		1					✓	OK		✓
	105091	JC20057-3	✓	G W	5		1					✓	OK		✓
	105092	JC20057-4	✓	G W	6		1					✓	OK		✓
	105093	JC20057-5	✓	G W	6		1					✓	OK		✓
	105094	JC20057-6	✓	G W	6		1					✓	OK	2PA	✓
	105095	JC20057-8	✓	G W	8		1					✓	OK		✓
	105096	JC20057-9	✓	W B	7		1					✓	OK		✓
	105097	JC20204-1	48427 EMA SL	2 N	12		1					✓	OK		✓
	105098	CC5288-10,000					1					✓	OK	100µl STD/1ml DW	
	99													5/19	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Form: OR001-10
Rev. Date: 1/19/16

9.6.4

9

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5292

Print Analyst Name: Xulin

Analyst Signature: [signature]

Date: 5/19/16

Columns: ZB624 / RTX-1 (30mx0.53mmx3μm) (30mx0.32mmx3)

Method 8015ACC

Initial Cal. Method MGH5288

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015214128	ACL SUR (T/15)	2000ppm
015214129	ACL STD (S/15)	100 ppm
015214130	ACL STD(2) (T/15)	100 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5/23/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	GH105099	MB1										✓	OK		
	105100	BS										✓	OK	50µl STD12/ml H2O	
	105101	JC20464-1	48446 meth	S	3		5.0/5					✓	OK		
	105102	JC20464-1MS	✓	S	3		5.0/5					✓	OK	50µl STD12/ml sample	
	105103	JC20464-1MSD	✓	S	3		5.0/5					✓	OK	50µl STD12/ml sample	
	105104	JC19412-29	48362 meth	S	3		5.0/5					✓	OK		
	105105	JC20468-1	48448 meth	S	6		5.1/5					✓	OK		
	105106	JC19914-6	48426 CMA	S	1		5.0/5					✓	OK	mem	
	105107	JC19914-7	✓	S	1		5.0/5					✓	OK	mem	
	105108	JC20314-1	✓	S	2		5.0/5					✓	OK		
	105109	CC5288-5000										✓	OK	50µl STD/ml H2O	
	105110	MB2										✓	OK		
	105111	JC20314-3	✓	S	2		5.0/5		~~X2~~ 5/19			✓	OK	mem	
	105112	JC20399-1A 5/19	48440 meth	S	3		5.0/5		X2000			✓	OK	Turbidity + resin	
	105113	JC20399-2A	✓	S	3		5.0/5		X2000			✓	OK	✓	
	105114	JC20399-3A	✓	S	3		5.0/5		X2000			✓	OK	✓	
	105115	JC20399-4A	✓	S	3		5.0/5		X2000			✓	OK	✓	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Form: OR001-10
Rev. Date: 1/19/16

9.6.5

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SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5292

Print Analyst Name: Xulin

Analyst Signature:

Date: 5/19/16

Columns: ZB624 / RTX-1 (30m x 0.53mm x 3µm) (30m x 0.32mm x 3

Method 8015ACC

Initial Cal. Method MGH5288

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015ZUX218	ALL SUR (5/25)	2000 ppm
015MMP18	ALL STD (5/25)	100 ppm
015MX130	ALL STD (5/25)	100 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Dayn Date: 5/23/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	GGH1051 16	JC20399-5A	8260B Meth	S	3		5.0/5		X2000			✓	ok	Turbidity + resin	
	1051 17	JC20399-6A	✓	S	3		5.0/5		X2000			✓	ok	✓	
	1051 18	JC20399-7A	✓	S	3		5.0/5		X2000			✓	ok	✓	
	1051 19	CLS288-10,000										✓	ok	coupled 510/mt/20	

5/19

MMTX = Matrix Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt.= volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

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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: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93925-MB1	1G123137.D	1	05/17/16	RK	05/15/16	OP93925	G1G3990

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC20314-2

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.010	0.0060	ug/l	
319-84-6	alpha-BHC	ND	0.010	0.0060	ug/l	
319-85-7	beta-BHC	ND	0.010	0.0057	ug/l	
319-86-8	delta-BHC	ND	0.010	0.0046	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.010	0.0028	ug/l	
5103-71-9	alpha-Chlordane	ND	0.010	0.0046	ug/l	
5103-74-2	gamma-Chlordane	ND	0.010	0.0046	ug/l	
60-57-1	Dieldrin	ND	0.010	0.0036	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0038	ug/l	
72-55-9	4,4'-DDE	ND	0.010	0.0062	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0050	ug/l	
72-20-8	Endrin	ND	0.010	0.0050	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.010	0.0053	ug/l	
7421-93-4	Endrin aldehyde	ND	0.010	0.0051	ug/l	
53494-70-5	Endrin ketone	ND	0.010	0.0051	ug/l	
959-98-8	Endosulfan-I	ND	0.010	0.0050	ug/l	
33213-65-9	Endosulfan-II	ND	0.010	0.0043	ug/l	
76-44-8	Heptachlor	ND	0.010	0.0038	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.010	0.0065	ug/l	
72-43-5	Methoxychlor	ND	0.020	0.0057	ug/l	
8001-35-2	Toxaphene	ND	0.25	0.18	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	85%	26-132%
877-09-8	Tetrachloro-m-xylene	76%	26-132%
2051-24-3	Decachlorobiphenyl	83%	10-118%
2051-24-3	Decachlorobiphenyl	83%	10-118%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93925-BS1	1G123138.D	1	05/17/16	RK	05/15/16	OP93925	G1G3990
OP93925-BSD	1G123139.D	1	05/17/16	RK	05/15/16	OP93925	G1G3990

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC20314-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.25	0.22	88	0.23	92	4	38-138/30
319-84-6	alpha-BHC	0.25	0.26	104	0.25	100	4	51-144/30
319-85-7	beta-BHC	0.25	0.26	104	0.26	104	4	55-137/30
319-86-8	delta-BHC	0.25	0.25	100	0.25	100	0	33-148/30
58-89-9	gamma-BHC (Lindane)	0.25	0.26	104	0.26	104	0	53-142/30
5103-71-9	alpha-Chlordane	0.25	0.26	104	0.26	104	0	52-137/30
5103-74-2	gamma-Chlordane	0.25	0.25	100	0.26	104	0	52-140/30
60-57-1	Dieldrin	0.25	0.27	108	0.27	108	0	54-144/30
72-54-8	4,4'-DDD	0.25	0.27	108	0.27	108	0	46-151/30
72-55-9	4,4'-DDE	0.25	0.25	100	0.26	104	4	51-142/30
50-29-3	4,4'-DDT	0.25	0.26	104	0.26	104	0	53-158/30
72-20-8	Endrin	0.25	0.28	112	0.27	108	4	53-149/30
1031-07-8	Endosulfan sulfate	0.25	0.24	96	0.24	96	0	49-148/30
7421-93-4	Endrin aldehyde	0.25	0.26	104	0.27	108	4	45-137/30
53494-70-5	Endrin ketone	0.25	0.24	96	0.25	100	4	48-142/30
959-98-8	Endosulfan-I	0.25	0.26	104	0.26	104	0	54-139/30
33213-65-9	Endosulfan-II	0.25	0.26	104	0.27	108	4	54-142/30
76-44-8	Heptachlor	0.25	0.23	92	0.23	92	0	45-137/30
1024-57-3	Heptachlor epoxide	0.25	0.27	108	0.28	112	4	54-140/30
72-43-5	Methoxychlor	0.25	0.26	104	0.26	104	0	51-157/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	82%	84%	26-132%
877-09-8	Tetrachloro-m-xylene	78%	79%	26-132%
2051-24-3	Decachlorobiphenyl	84%	89%	10-118%
2051-24-3	Decachlorobiphenyl	88%	93%	10-118%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3990-CC3988	**Injection Date:**	05/17/16
Lab File ID:	1G123133.D	**Injection Time:**	08:45
Instrument ID:	GC1G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	842090134	1.50	125878292	1.33
Upper Limit [a]	1684180268	2.00	251756584	1.83
Lower Limit [b]	421045067	1.00	62939146	0.83

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP93854-MB1	958491329	1.50	140897441	1.33
OP93854-BS1	1020843963	1.49	152876860	1.33
OP93925-MB1	840706382	1.49	117024580	1.33
OP93925-BS1	828493079	1.49	121477666	1.33
OP93925-BSD	852365962	1.49	122332534	1.33
JC20314-2	770012262	1.49	111050548	1.33
ZZZZZZ	875179343	1.49	127001168	1.33
ZZZZZZ	878169146	1.49	127360000	1.33
ZZZZZZ	902399285	1.49	130237285	1.33
OP93907-MS	928822987	1.49	120639956	1.33
OP93907-MSD	937567509	1.50	118573028	1.33
ZZZZZZ	1047666354	1.49	158610964	1.33
ZZZZZZ	1017961480	1.49	153746205	1.33
ZZZZZZ	1047064316	1.49	152516308	1.33
ZZZZZZ	867752697	1.49	143222984	1.33
JC20016-4	1077418991	1.49	158605192	1.33
OP93854-MS	1085120230	1.49	157447304	1.33
OP93854-MSD	1124615822	1.49	163398996	1.33

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: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G1G3988-DDT
Lab File ID: 1G123059.D
Instrument ID: GC1G
Injection Date: 05/16/16
Injection Time: 09:09

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	1011043	7386221
4,4'-DDE	837634	4492810
4,4'-DDT	267769932	1336844219
DDT Breakdown [a]	0.7 %	0.9 %
Endrin aldehyde	1371237	7932699
Endrin ketone	6408544	33500252
Endrin	129236444	661131236
Endrin Breakdown [b]	5.7 %	5.9 %

(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
G1G3988-IC3988	1G123061.D	05/16/16	10:11	01:02	Initial cal 1
G1G3988-IC3988	1G123062.D	05/16/16	10:28	01:19	Initial cal 2
G1G3988-IC3988	1G123063.D	05/16/16	10:46	01:37	Initial cal 5
G1G3988-IC3988	1G123064.D	05/16/16	11:03	01:54	Initial cal 10
G1G3988-ICC3988	1G123065.D	05/16/16	11:21	02:12	Initial cal 25
G1G3988-IC3988	1G123066.D	05/16/16	11:38	02:29	Initial cal 50
G1G3988-IC3988	1G123067.D	05/16/16	11:56	02:47	Initial cal 75
G1G3988-IC3988	1G123068.D	05/16/16	12:13	03:04	Initial cal 100
G1G3988-IC3988	1G123069.D	05/16/16	12:31	03:22	Initial cal 500
G1G3988-IC3988	1G123070.D	05/16/16	12:48	03:39	Initial cal 500
G1G3988-ICV3988	1G123071.D	05/16/16	13:06	03:57	Initial cal verification 25
G1G3988-ICV3988	1G123072.D	05/16/16	13:23	04:15	Initial cal verification 25
G1G3988-ICV3988	1G123073.D	05/16/16	13:41	04:32	Initial cal verification 500
G1G3988-ICV3988	1G123074.D	05/16/16	13:58	04:50	Initial cal verification 500
G1G3989-CC3988	1G123075.D	05/16/16	14:16	05:07	Continuing cal 25
OP93907-MB1	1G123077.D	05/16/16	14:51	05:43	Method Blank
OP93907-BS1	1G123078.D	05/16/16	15:09	06:00	Blank Spike
OP93838-MB1	1G123079.D	05/16/16	15:26	06:18	Method Blank
ZZZZZZ	1G123080.D	05/16/16	15:44	06:35	(unrelated sample)
ZZZZZZ	1G123081.D	05/16/16	16:01	06:53	(unrelated sample)
ZZZZZZ	1G123082.D	05/16/16	16:19	07:10	(unrelated sample)
ZZZZZZ	1G123084.D	05/16/16	16:54	07:45	(unrelated sample)
JC20184-3	1G123111.D	05/16/16	17:11	08:03	(used for QC only; not part of job JC20314)
ZZZZZZ	1G123085.D	05/16/16	17:29	08:20	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	G1G3988-DDT	**Injection Date:**	05/16/16
Lab File ID:	1G123059.D	**Injection Time:**	09:09
Instrument ID:	GC1G		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	1G123086.D	05/16/16	17:46	08:38	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G1G3990-DDT
Lab File ID: 1G123132.D
Instrument ID: GC1G
Injection Date: 05/17/16
Injection Time: 08:27

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	1544545	8770357
4,4'-DDE	1763605	10355652
4,4'-DDT	266658590	1288797995
DDT Breakdown [a]	1.2 %	1.5 %
Endrin aldehyde	1784385	9698560
Endrin ketone	5653645	34723962
Endrin	129958740	681991830
Endrin Breakdown [b]	5.4 %	6.1 %

(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
G1G3990-CC3988	1G123133.D	05/17/16	08:45	00:17	Continuing cal 50
OP93854-MB1	1G123135.D	05/17/16	09:20	00:52	Method Blank
OP93854-BS1	1G123136.D	05/17/16	09:37	01:10	Blank Spike
OP93925-MB1	1G123137.D	05/17/16	09:55	01:27	Method Blank
OP93925-BS1	1G123138.D	05/17/16	10:12	01:44	Blank Spike
OP93925-BSD	1G123139.D	05/17/16	10:30	02:02	Blank Spike Duplicate
JC20314-2	1G123140.D	05/17/16	10:47	02:19	EB051316
ZZZZZZ	1G123141.D	05/17/16	11:05	02:37	(unrelated sample)
ZZZZZZ	1G123143.D	05/17/16	11:40	03:12	(unrelated sample)
ZZZZZZ	1G123144.D	05/17/16	11:57	03:29	(unrelated sample)
OP93907-MS	1G123145.D	05/17/16	12:15	03:47	Matrix Spike
OP93907-MSD	1G123146.D	05/17/16	12:32	04:04	Matrix Spike Duplicate
ZZZZZZ	1G123147.D	05/17/16	12:50	04:22	(unrelated sample)
ZZZZZZ	1G123148.D	05/17/16	13:07	04:40	(unrelated sample)
ZZZZZZ	1G123149.D	05/17/16	13:25	04:58	(unrelated sample)
ZZZZZZ	1G123150.D	05/17/16	13:42	05:15	(unrelated sample)
JC20016-4	1G123151.D	05/17/16	14:00	05:33	(used for QC only; not part of job JC20314)
OP93854-MS	1G123152.D	05/17/16	14:17	05:50	Matrix Spike
OP93854-MSD	1G123153.D	05/17/16	14:35	06:08	Matrix Spike Duplicate

GC Identification Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3990-CC3988	**Injection Date:**	05/17/16
Lab File ID:	1G123133.D	**Injection Time:**	08:45
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP93925-BS1	**Injection Date:**	05/17/16
Lab File ID:	1G123138.D	**Injection Time:**	10:12
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.52	3.53	0.22		ug/l	8.7
Aldrin	2	4.34	4.34	0.24		ug/l	
alpha-BHC	1	2.41	2.41	0.26		ug/l	0.0
alpha-BHC	2 [a]	2.94	2.94	0.26		ug/l	
beta-BHC	1 [a]	2.78	2.78	0.26		ug/l	3.8
beta-BHC	2	3.43	3.43	0.27		ug/l	
delta-BHC	1	2.97	2.97	0.25		ug/l	0.0
delta-BHC	2 [a]	3.81	3.81	0.25		ug/l	
gamma-BHC (Lindane)	1	2.71	2.71	0.26		ug/l	0.0
gamma-BHC (Lindane)	2 [a]	3.35	3.35	0.26		ug/l	
alpha-Chlordane	1 [a]	4.56	4.56	0.26		ug/l	3.8
alpha-Chlordane	2	5.64	5.64	0.27		ug/l	
gamma-Chlordane	1	4.39	4.40	0.26		ug/l	3.9
gamma-Chlordane	2 [a]	5.41	5.42	0.25		ug/l	
Dieldrin	1 [a]	5.06	5.07	0.27		ug/l	3.6
Dieldrin	2	6.15	6.15	0.28		ug/l	
4,4'-DDD	1 [a]	5.50	5.50	0.27		ug/l	3.6
4,4'-DDD	2	6.83	6.83	0.28		ug/l	
4,4'-DDE	1 [a]	4.67	4.67	0.25		ug/l	7.7
4,4'-DDE	2	5.90	5.90	0.27		ug/l	
4,4'-DDT	1 [a]	5.92	5.92	0.26		ug/l	10.9
4,4'-DDT	2	7.36	7.36	0.29		ug/l	
Endrin	1 [a]	5.39	5.39	0.28		ug/l	3.5
Endrin	2	6.64	6.65	0.29		ug/l	
Endosulfan sulfate	1 [a]	7.03	7.03	0.24		ug/l	11.8
Endosulfan sulfate	2	8.02	8.02	0.27		ug/l	
Endrin aldehyde	1 [a]	6.34	6.34	0.26		ug/l	7.4
Endrin aldehyde	2	7.55	7.56	0.28		ug/l	
Endrin ketone	1 [a]	7.46	7.45	0.24		ug/l	11.8
Endrin ketone	2	8.97	8.97	0.27		ug/l	
Endosulfan-I	1 [a]	4.75	4.75	0.26		ug/l	7.4
Endosulfan-I	2	5.73	5.73	0.28		ug/l	
Endosulfan-II	1 [a]	5.71	5.71	0.26		ug/l	3.8
Endosulfan-II	2	6.99	6.99	0.27		ug/l	
Heptachlor	1	3.19	3.20	0.24		ug/l	4.3
Heptachlor	2 [a]	3.90	3.90	0.23		ug/l	
Heptachlor epoxide	1 [a]	4.24	4.24	0.27		ug/l	7.1
Heptachlor epoxide	2	5.14	5.14	0.29		ug/l	
Methoxychlor	1 [a]	6.69	6.69	0.26		ug/l	7.4
Methoxychlor	2	8.60	8.60	0.28		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3990-CC3988	**Injection Date:**	05/17/16
Lab File ID:	1G123133.D	**Injection Time:**	08:45
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP93925-BSD	**Injection Date:**	05/17/16
Lab File ID:	1G123139.D	**Injection Time:**	10:30
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.52	3.53	0.23		ug/l	4.3
Aldrin	2	4.34	4.34	0.24		ug/l	
alpha-BHC	1	2.41	2.41	0.26		ug/l	3.9
alpha-BHC	2 [a]	2.94	2.94	0.25		ug/l	
beta-BHC	1	2.78	2.78	0.26		ug/l	0.0
beta-BHC	2 [a]	3.43	3.43	0.26		ug/l	
delta-BHC	1	2.97	2.97	0.26		ug/l	3.9
delta-BHC	2 [a]	3.81	3.81	0.25		ug/l	
gamma-BHC (Lindane)	1	2.71	2.71	0.26		ug/l	0.0
gamma-BHC (Lindane)	2 [a]	3.35	3.35	0.26		ug/l	
alpha-Chlordane	1 [a]	4.56	4.56	0.26		ug/l	3.8
alpha-Chlordane	2	5.64	5.64	0.27		ug/l	
gamma-Chlordane	1 [a]	4.39	4.40	0.26		ug/l	3.8
gamma-Chlordane	2	5.41	5.42	0.27		ug/l	
Dieldrin	1 [a]	5.07	5.07	0.27		ug/l	3.6
Dieldrin	2	6.15	6.15	0.28		ug/l	
4,4'-DDD	1 [a]	5.50	5.50	0.27		ug/l	3.6
4,4'-DDD	2	6.83	6.83	0.28		ug/l	
4,4'-DDE	1 [a]	4.67	4.67	0.26		ug/l	3.8
4,4'-DDE	2	5.90	5.90	0.27		ug/l	
4,4'-DDT	1 [a]	5.92	5.92	0.26		ug/l	7.4
4,4'-DDT	2	7.36	7.36	0.28		ug/l	
Endrin	1 [a]	5.39	5.39	0.27		ug/l	3.6
Endrin	2	6.65	6.65	0.28		ug/l	
Endosulfan sulfate	1 [a]	7.03	7.03	0.24		ug/l	11.8
Endosulfan sulfate	2	8.02	8.02	0.27		ug/l	
Endrin aldehyde	1 [a]	6.34	6.34	0.27		ug/l	3.6
Endrin aldehyde	2	7.56	7.56	0.28		ug/l	
Endrin ketone	1 [a]	7.45	7.45	0.25		ug/l	7.7
Endrin ketone	2	8.97	8.97	0.27		ug/l	
Endosulfan-I	1 [a]	4.75	4.75	0.26		ug/l	7.4
Endosulfan-I	2	5.73	5.73	0.28		ug/l	
Endosulfan-II	1 [a]	5.71	5.71	0.27		ug/l	0.0
Endosulfan-II	2	6.99	6.99	0.27		ug/l	
Heptachlor	1	3.19	3.20	0.24		ug/l	4.3
Heptachlor	2 [a]	3.90	3.90	0.23		ug/l	
Heptachlor epoxide	1 [a]	4.24	4.24	0.28		ug/l	3.5
Heptachlor epoxide	2	5.14	5.14	0.29		ug/l	
Methoxychlor	1 [a]	6.69	6.69	0.26		ug/l	3.8
Methoxychlor	2	8.60	8.60	0.27		ug/l	

(a) QC results reported from this column.

Semivolatile Surrogate Recovery Summary

Job Number: JC20314
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]
JC20314-2	1G123140.D	91	88	57	61
OP93925-BS1	1G123138.D	82	78	84	88
OP93925-BSD	1G123139.D	84	79	89	93
OP93925-MB1	1G123137.D	85	76	83	83

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

GC Surrogate Retention Time Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3990-CC3988	**Injection Date:**	05/17/16
Lab File ID:	1G123133.D	**Injection Time:**	08:45
Instrument ID:	GC1G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.92	2.30	9.23	10.68

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP93854-MB1	1G123135.D	05/17/16	09:20	1.93	2.30	9.23	10.68
OP93854-BS1	1G123136.D	05/17/16	09:37	1.92	2.30	9.23	10.68
OP93925-MB1	1G123137.D	05/17/16	09:55	1.92	2.29	9.23	10.68
OP93925-BS1	1G123138.D	05/17/16	10:12	1.92	2.29	9.23	10.68
OP93925-BSD	1G123139.D	05/17/16	10:30	1.92	2.29	9.23	10.68
JC20314-2	1G123140.D	05/17/16	10:47	1.92	2.29	9.23	10.68
ZZZZZZ	1G123141.D	05/17/16	11:05	1.92	2.29	9.23	10.67
ZZZZZZ	1G123143.D	05/17/16	11:40	1.92	2.29	9.23	10.68
ZZZZZZ	1G123144.D	05/17/16	11:57	1.92	2.29	9.23	10.68
OP93907-MS	1G123145.D	05/17/16	12:15	1.92	2.29	9.23	10.68
OP93907-MSD	1G123146.D	05/17/16	12:32	1.93	2.29	9.23	10.68
ZZZZZZ	1G123147.D	05/17/16	12:50	1.92	2.29	9.23	10.67
ZZZZZZ	1G123148.D	05/17/16	13:07	1.92	2.29	9.23	10.67
ZZZZZZ	1G123149.D	05/17/16	13:25	1.92	2.29	9.23	10.68
ZZZZZZ	1G123150.D	05/17/16	13:42	1.92	2.29	9.23	10.67
JC20016-4	1G123151.D	05/17/16	14:00	1.92	2.29	9.23	10.67
OP93854-MS	1G123152.D	05/17/16	14:17	1.92	2.29	9.23	10.67
OP93854-MSD	1G123153.D	05/17/16	14:35	1.92	2.29	9.23	10.67

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: JC20314 **Sample:** G1G3988-ICC3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123065.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report GC1G

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 13:30:31 2016
Response via : Initial Calibration

Calibration Files
2 =1G123062.D 5 =1G123063.D 10 =1G123064.D 25 =1G123065.D
50 =1G123066.D 100 =1G123068.D 1 =1G123061.D 75 =1G123067.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.805	0.896	0.893	0.933	0.958	0.974	0.813	0.957	0.904	7.21
3) alpha-BHC	1.137	1.209	1.191	1.290	1.407	1.521	1.131	1.455	1.292	11.66
4) gamma-BHC	1.072	1.155	1.138	1.217	1.308	1.399	1.033	1.340	1.208	10.87
5) Heptachlor	1.163	1.203	1.149	1.202	1.264	1.326	1.246	1.281	1.229	4.94
6) beta-BHC	0.592	0.584	0.560	0.566	0.580	0.587	0.579	0.576	0.578	1.85
7) delta-BHC	1.027	1.091	1.093	1.166	1.279	1.388	1.108	1.321	1.184	10.92
8) Aldrin	1.013	1.087	1.054	1.117	1.186	1.263	1.030	1.213	1.120	8.15
9) Heptachlor E	1.001	1.103	1.065	1.096	1.140	1.182	1.105	1.142	1.104	4.95
10) gamma-Chlord	1.076	1.117	1.045	1.093	1.146	1.204	1.258	1.152	1.137	6.13
11) alpha-Chlord	1.074	1.112	1.057	1.097	1.137	1.184	1.214	1.143	1.127	4.74
12) Endosulfan I	1.026	1.064	1.023	1.061	1.098	1.139	1.162	1.102	1.084	4.62
13) 4,4'-DDE	1.078	1.106	1.059	1.110	1.157	1.211	1.206	1.165	1.136	5.01
14) Dieldrin	1.041	1.085	1.047	1.112	1.172	1.240	1.143	1.193	1.129	6.28
15) Endrin	0.982	0.997	0.952	0.986	1.028	1.069	1.139	1.036	1.024	5.77
16) 4,4'-DDD	0.826	0.859	0.829	0.881	0.931	0.987	0.879	0.948	0.893	6.46
17) Endosulfan I	1.022	1.062	1.012	1.052	1.089	1.120	1.135	1.090	1.073	4.09
18) 4,4'-DDT	0.863	0.927	0.909	0.955	1.010	1.068	1.019	1.027	0.972	7.17
19) Endrin Aldeh	0.821	0.829	0.801	0.816	0.848	0.897	0.880	0.887	0.847	4.29
20) Endosulfan S	0.930	0.984	0.958	0.988	1.008	1.027	1.334	1.010	1.030	12.29
21) Methoxychlor	0.571	0.514	0.563	0.570	0.572	0.571	0.680	0.567	0.576	8.06
22) Mirex	1.007	1.028	0.964	0.959	0.936	0.922	1.099	0.923	0.980	6.28
23) Endrin Keton	1.043	1.134	1.099	1.150	1.182	1.214	1.303	1.197	1.165	6.73
24) Decachlorobi	1.297	1.273	1.230	1.201	1.180	1.152	1.325	1.170	1.229	5.18
25) I 1-bromo-2-nitrobenzen	ISTD									
26) Toxaphene{A}					0.016				0.016	0.00
27) Toxaphene{B}					0.047				0.047	0.00
28) Toxaphene{C}					0.025				0.025	0.00
29) Toxaphene{D}					0.029				0.029	0.00
30) Toxaphene{E}					0.033				0.033	0.00
31) I 1-bromo-2-nitrobenzen	ISTD									
32) Chlordane {A					0.037				0.037	0.00
33) Chlordane {B					0.048				0.048	0.00
34) Chlordane {C					0.162				0.162	0.00
35) Chlordane {D					0.253				0.253	0.00
36) Chlordane {E					0.038				0.038	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.940	0.955	0.933	0.903	0.873	0.825	0.850	0.836	0.889	5.66
3) alpha-BHC	1.408	1.400	1.368	1.329	1.326	1.310	1.204	1.310	1.332	4.85
4) gamma-BHC	1.293	1.307	1.234	1.212	1.195	1.169	1.061	1.172	1.205	6.46

Initial Calibration Summary

Job Number: JC20314 **Sample:** G1G3988-ICC3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123065.D
Project: BMSMC, Building 5 Area, PR

5)	Heptachlor	1.273	1.228	1.160	1.101	1.094	1.061	1.021	1.063	1.125	7.83
6)	beta-BHC	0.621	0.639	0.576	0.556	0.525	0.493	0.508	0.503	0.553	9.98
7)	delta-BHC	1.343	1.290	1.214	1.203	1.200	1.181	1.030	1.179	1.205	7.59
8)	Aldrin	1.082	1.079	1.038	1.041	1.030	1.011	0.948	1.007	1.030	4.16
9)	Heptachlor E	0.966	0.993	0.923	0.918	0.897	0.871	0.930	0.870	0.921	4.67
10)	gamma-Chlord	0.967	0.993	0.929	0.941	0.916	0.898	0.991	0.892	0.941	4.20
11)	alpha-Chlord	0.992	0.981	0.925	0.920	0.893	0.868	1.011	0.864	0.932	6.10
12)	Endosulfan I	0.886	0.911	0.881	0.887	0.854	0.822	0.809	0.823	0.859	4.37
13)	4,4'-DDE	0.951	0.956	0.919	0.925	0.900	0.884	0.983	0.875	0.924	4.05
14)	Dieldrin	0.998	1.007	0.947	0.962	0.940	0.916	1.034	0.913	0.965	4.59
15)	Endrin	0.888	0.924	0.851	0.828	0.810	0.776	0.951	0.765	0.849	7.93
16)	4,4'-DDD	0.776	0.823	0.758	0.771	0.749	0.733	0.755	0.724	0.761	4.03
17)	Endosulfan I	0.923	0.922	0.859	0.853	0.822	0.802	0.978	0.794	0.869	7.57
18)	4,4'-DDT	0.762	0.802	0.738	0.765	0.745	0.731	0.701	0.731	0.747	4.01
19)	Endrin Aldeh	0.681	0.706	0.667	0.661	0.643	0.625	0.718	0.634	0.667	5.00
20)	Endosulfan S	0.805	0.813	0.765	0.762	0.738	0.709	0.775	0.715	0.760	5.03
21)	Methoxychlor	0.410	0.429	0.394	0.383	0.373	0.352	0.502	0.366	0.401	11.88
22)	Mirex	0.674	0.685	0.651	0.611	0.586	0.553	0.759	0.565	0.635	11.00
23)	Endrin Keton	0.896	0.915	0.860	0.846	0.817	0.782	0.912	0.792	0.853	6.18
24)	Decachlorobi	0.665	0.678	0.638	0.607	0.581	0.543	0.726	0.561	0.625	10.09

25) I 1-bromo-2-nitrobenzen ----------ISTD----------

26)	Toxaphene{A}	0.013	0.013	0.00
27)	Toxaphene{B}	0.029	0.029	0.00
28)	Toxaphene{C}	0.051	0.051	0.00
29)	Toxaphene{D}	0.032	0.032	0.00
30)	Toxaphene{E}	0.030	0.030	0.00

31) I 1-bromo-2-nitrobenzen ----------ISTD----------

32)	Chlordane {A	0.037	0.037	0.00
33)	Chlordane {B	0.037	0.037	0.00
34)	Chlordane {C	0.122	0.122	0.00
35)	Chlordane {D	0.201	0.201	0.00
36)	Chlordane {E	0.036	0.036	0.00

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

1PST3988.M Mon May 16 15:10:27 2016 RPT1

Initial Calibration Verification

Job Number: JC20314 **Sample:** G1G3988-ICV3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123071.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123071.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123071.D\ECD2B.CH
Acq On    : 5-16-16 01:06:17 PM                      Operator: thomasl
Sample    : icv3988-25                               Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.30- 1.36
2	SAB	Tetrachloro-m-xylene	0.903	0.853	5.5	95	0.00	1.89- 1.95
3	A	alpha-BHC	1.292	1.118	13.5	90	0.00	2.38- 2.44
4	MA	gamma-BHC	1.208	1.067	11.7	91	0.00	2.68- 2.74
5	MA	Heptachlor	1.229	1.045	15.0	91	0.00	3.16- 3.22
6	B	beta-BHC	0.578	0.497	14.0	91	0.00	2.75- 2.81
7	B	delta-BHC	1.184	1.097	7.3	98	0.00	2.94- 3.00
8	MB	Aldrin	1.121	0.976	12.9	91	0.00	3.50- 3.56
9	B	Heptachlor Epoxide	1.100	0.968	12.0	92	0.00	4.21- 4.27
10	B	gamma-Chlordane	1.134	0.980	13.6	93	0.00	4.37- 4.43
11	B	alpha-Chlordane	1.127	0.970	13.9	92	0.00	4.53- 4.59
12	A	Endosulfan I	1.085	0.910	16.1	89	0.00	4.72- 4.78
13	B	4,4'-DDE	1.137	0.977	14.1	92	0.00	4.65- 4.71
14	MA	Dieldrin	1.129	0.981	13.1	92	0.00	5.04- 5.10
15	MA	Endrin	1.023	0.875	14.5	92	0.00	5.36- 5.42
16	A	4,4'-DDD	0.892	0.781	12.4	92	0.00	5.47- 5.54
17	B	Endosulfan II	1.073	0.918	14.4	91	0.00	5.68- 5.74
18	MA	4,4'-DDT	0.972	0.806	17.1	88	0.00	5.89- 5.95
19	B	Endrin Aldehyde	0.848	0.757	10.7	97	0.00	6.31- 6.37
20	B	Endosulfan Sulfate	1.030	0.868	15.7	92	0.00	7.00- 7.06
21	A	Methoxychlor	0.586	0.478	18.4	88	0.00	6.67- 6.73
22		Mirex		----------NA----------				
23	B	Endrin Ketone	1.166	1.016	12.9	92	0.00	7.43- 7.49
24	SA	Decachlorobiphenyl	1.229	1.137	7.5	99	0.00	9.20- 9.26
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.23- 1.43
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.23- 1.43
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

10.8.2 10

Initial Calibration Verification

Job Number: JC20314 **Sample:** G1G3988-ICV3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123071.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.46- 1.52
2	SAB	Tetrachloro-m-xylene	0.889	0.853	4.0	98	0.00	2.26- 2.32
3	A	alpha-BHC	1.331	1.193	10.4	93	0.00	2.91- 2.97
4	MA	gamma-BHC	1.205	1.086	9.9	93	0.00	3.32- 3.38
5	MA	Heptachlor	1.125	1.000	11.1	94	0.00	3.87- 3.93
6	B	beta-BHC	0.552	0.492	10.9	92	0.00	3.40- 3.46
7	B	delta-BHC	1.205	1.134	5.9	98	0.00	3.78- 3.84
8	MB	Aldrin	1.031	0.960	6.9	96	0.00	4.31- 4.37
9	B	Heptachlor Epoxide	0.920	0.853	7.3	97	0.00	5.11- 5.17
10	B	gamma-Chlordane	0.939	0.884	5.9	98	0.00	5.39- 5.45
11	B	alpha-Chlordane	0.933	0.845	9.4	95	0.00	5.61- 5.67
12	A	Endosulfan I	0.860	0.796	7.4	93	0.00	5.70- 5.76
13	B	4,4'-DDE	0.925	0.847	8.4	95	0.00	5.87- 5.93
14	MA	Dieldrin	0.963	0.890	7.6	96	0.00	6.12- 6.18
15	MA	Endrin	0.852	0.751	11.9	94	0.00	6.62- 6.68
16	A	4,4'-DDD	0.763	0.706	7.5	95	0.00	6.80- 6.86
17	B	Endosulfan II	0.868	0.780	10.1	95	0.00	6.96- 7.02
18	MA	4,4'-DDT	0.744	0.671	9.8	91	0.00	7.33- 7.39
19	B	Endrin Aldehyde	0.666	0.637	4.4	100	0.00	7.53- 7.59
20	B	Endosulfan Sulfate	0.760	0.703	7.5	96	0.00	7.99- 8.05
21	A	Methoxychlor	0.398	0.343	13.8	93	0.00	8.57- 8.63
22		Mirex		----------NA----------				
23	B	Endrin Ketone	0.851	0.786	7.6	97	0.00	8.94- 9.00
24	SA	Decachlorobiphenyl	0.624	0.586	6.1	100	0.00	10.65-10.71
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.39- 1.59
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.39- 1.59
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
1G123065.D 1PST3988.M Mon May 16 17:24:55 2016 RPT1

10.8.2 10

Initial Calibration Verification

Job Number: JC20314 **Sample:** G1G3988-ICV3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123072.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123072.D\ECD1A.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123072.D\ECD2B.CH
Acq On    : 5-16-16 01:23:45 PM                      Operator: thomasl
Sample    : icv3988-25                               Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.30- 1.36
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	0.980	0.896	8.6	97	0.00	6.80- 6.86
23	B	Endrin Ketone		----------NA----------				
24	SA	Decachlorobiphenyl		----------NA----------				
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.23- 1.43
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.23- 1.43
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: JC20314 **Sample:** G1G3988-ICV3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123072.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.47- 1.53
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	0.635	0.598	5.8	102	0.00	8.87- 8.93
23	B	Endrin Ketone		----------NA----------				
24	SA	Decachlorobiphenyl		----------NA----------				
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.40- 1.60
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.40- 1.60
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
1G123065.D 1PST3988.M Mon May 16 17:24:56 2016 RPT1

10.8.3 10

Initial Calibration Verification

Job Number: JC20314 **Sample:** G1G3988-ICV3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123073.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123073.D\ECD1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123073.D\ECD2B.CH
Acq On    : 5-16-16 01:41:21 PM                      Operator: thomasl
Sample    : icv3988-500                              Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 13:30:31 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	102	0.00	1.30- 1.36
2	SAB	Tetrachloro-m-xylene	0.904	0.857	5.2	91	0.00	1.89- 1.95
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex		----------NA----------				
23	B	Endrin Ketone		----------NA----------				
24	SA	Decachlorobiphenyl	1.229	1.129	8.1	98	0.00	9.20- 9.26
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.23- 1.43
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	106	0.00	1.23- 1.43
32		Chlordane {A}	0.037	0.039	-5.4	112	0.00	3.01- 3.21
33		Chlordane {B}	0.048	0.044	8.3	97	0.00	3.57- 3.77
34		Chlordane {C}	0.162	0.142	12.3	92	0.00	4.30- 4.50
35		Chlordane {D}	0.253	0.226	10.7	94	0.00	4.45- 4.65
36		Chlordane {E}	0.038	0.035	7.9	98	0.00	5.50- 5.70

***** Signal #2 *****

Initial Calibration Verification

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3988-ICV3988
Lab FileID: 1G123073.D

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.46- 1.52
2	SAB	Tetrachloro-m-xylene	0.889	0.816	8.2	94	0.00	2.26- 2.32
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex		----------NA----------				
23	B	Endrin Ketone		----------NA----------				
24	SA	Decachlorobiphenyl	0.625	0.584	6.6	101	0.00	10.65-10.71
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.39- 1.59
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.39- 1.59
32		Chlordane {A}	0.037	0.040	-8.1	113	0.00	3.61- 3.81
33		Chlordane {B}	0.037	0.036	2.7	101	0.00	4.43- 4.63
34		Chlordane {C}	0.122	0.111	9.0	94	0.00	5.32- 5.52
35		Chlordane {D}	0.201	0.185	8.0	95	0.00	5.54- 5.74
36		Chlordane {E}	0.036	0.033	8.3	94	0.00	6.97- 7.17

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G123066.D 1PST3988.M Mon May 16 15:08:04 2016 RPT1

10.8.4 10

Initial Calibration Verification

Job Number: JC20314 **Sample:** G1G3988-ICV3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123074.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD2B.CH
Acq On    : 5-16-16 01:58:48 PM                      Operator: thomasl
Sample    : icv3988-500                              Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 13:30:31 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.30- 1.36
2	SAB	Tetrachloro-m-xylene	0.904	0.843	6.7	91	0.00	1.89- 1.95
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex		----------NA----------				
23	B	Endrin Ketone		----------NA----------				
24	SA	Decachlorobiphenyl	1.229	1.090	11.3	95	0.00	9.20- 9.26
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.23- 1.43
26	L8	Toxaphene{A}	0.016	0.018	-12.5	114	0.00	4.97- 5.17
27	L8	Toxaphene{B}	0.047	0.047	0.0	102	0.00	5.60- 5.80
28	L8	Toxaphene{C}	0.025	0.026	-4.0	105	0.00	5.77- 5.97
29	L8	Toxaphene{D}	0.029	0.030	-3.4	105	0.00	6.10- 6.30
30	L8	Toxaphene{E}	0.033	0.032	3.0	99	0.00	6.75- 6.95
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.23- 1.43
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

10.8.5 10

Initial Calibration Verification

Job Number: JC20314 **Sample:** G1G3988-ICV3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123074.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.46- 1.52
2	SAB	Tetrachloro-m-xylene	0.889	0.812	8.7	93	0.00	2.27- 2.33
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex		----------NA----------				
23	B	Endrin Ketone		----------NA----------				
24	SA	Decachlorobiphenyl	0.625	0.575	8.0	99	0.00	10.65-10.71
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.39- 1.59
26	L8	Toxaphene{A}	0.013	0.014	-7.7	102	0.00	6.02- 6.22
27	L8	Toxaphene{B}	0.029	0.031	-6.9	107	0.00	6.86- 7.06
28	L8	Toxaphene{C}	0.051	0.052	-2.0	103	0.00	7.02- 7.22
29	L8	Toxaphene{D}	0.032	0.033	-3.1	103	0.00	7.46- 7.66
30	L8	Toxaphene{E}	0.030	0.031	-3.3	102	0.00	8.34- 8.54
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.39- 1.59
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
1G123066.D 1PST3988.M Mon May 16 15:08:05 2016 RPT1

10.8.5 10

Continuing Calibration Summary

Job Number: JC20314 **Sample:** G1G3990-CC3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123133.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123133.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123133.D\ECD2B.CH
Acq On    : 5-17-16 08:45:06 AM                      Operator: rebeccak
Sample    : cc3988-50                                Inst    : GC1G
Misc      : op93908,g1g3990,5.4,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.30- 1.36
2	SAB	Tetrachloro-m-xylene	0.903	0.880	2.5	96	0.00	1.89- 1.95
3	A	alpha-BHC	1.292	1.292	0.0	96	0.00	2.38- 2.44
4	MA	gamma-BHC	1.208	1.197	0.9	95	0.00	2.68- 2.74
5	MA	Heptachlor	1.229	1.202	2.2	99	0.00	3.17- 3.23
6	B	beta-BHC	0.578	0.527	8.8	95	0.00	2.75- 2.81
7	B	delta-BHC	1.184	1.160	2.0	95	0.00	2.94- 3.00
8	MB	Aldrin	1.121	1.112	0.8	98	0.00	3.50- 3.56
9	B	Heptachlor Epoxide	1.100	1.103	-0.3	101	0.00	4.21- 4.27
10	B	gamma-Chlordane	1.134	1.023	9.8	93	0.00	4.37- 4.43
11	B	alpha-Chlordane	1.127	1.028	8.8	94	0.00	4.53- 4.59
12	A	Endosulfan I	1.085	1.003	7.6	95	0.00	4.72- 4.78
13	B	4,4'-DDE	1.137	1.054	7.3	95	0.00	4.64- 4.70
14	MA	Dieldrin	1.129	1.081	4.3	96	0.00	5.04- 5.10
15	MA	Endrin	1.023	0.998	2.4	101	0.00	5.36- 5.42
16	A	4,4'-DDD	0.892	0.852	4.5	95	0.00	5.47- 5.54
17	B	Endosulfan II	1.073	0.987	8.0	94	0.00	5.68- 5.74
18	MA	4,4'-DDT	0.972	0.914	6.0	94	0.00	5.89- 5.95
19	B	Endrin Aldehyde	0.848	0.755	11.0	93	0.00	6.31- 6.37
20	B	Endosulfan Sulfate	1.030	0.893	13.3	92	0.00	7.00- 7.06
21	A	Methoxychlor	0.586	0.530	9.6	97	0.00	6.66- 6.72
22		Mirex	0.980	0.835	14.8	93	0.00	6.79- 6.85
23	B	Endrin Ketone	1.166	0.980	16.0	86	0.00	7.42- 7.48
24	SA	Decachlorobiphenyl	1.229	1.127	8.3	100	0.00	9.20- 9.26
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.23- 1.43
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	108	0.00	1.23- 1.43
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

10.8.6 10

Continuing Calibration Summary

Job Number: JC20314 **Sample:** G1G3990-CC3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123133.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	94	0.00	1.47- 1.53
2	SAB	Tetrachloro-m-xylene	0.889	0.817	8.1	88	0.00	2.27- 2.33
3	A	alpha-BHC	1.331	1.217	8.6	86	0.00	2.91- 2.97
4	MA	gamma-BHC	1.205	1.106	8.2	87	0.00	3.32- 3.38
5	MA	Heptachlor	1.125	1.036	7.9	89	0.00	3.87- 3.93
6	B	beta-BHC	0.552	0.474	14.1	84	0.00	3.40- 3.46
7	B	delta-BHC	1.205	1.085	10.0	85	0.00	3.78- 3.84
8	MB	Aldrin	1.031	0.960	6.9	87	0.00	4.31- 4.37
9	B	Heptachlor Epoxide	0.920	0.867	5.8	90	0.00	5.11- 5.17
10	B	gamma-Chlordane	0.939	0.872	7.1	89	0.00	5.39- 5.45
11	B	alpha-Chlordane	0.933	0.844	9.5	89	0.00	5.61- 5.67
12	A	Endosulfan I	0.860	0.816	5.1	89	0.00	5.70- 5.76
13	B	4,4'-DDE	0.925	0.861	6.9	90	0.00	5.87- 5.93
14	MA	Dieldrin	0.963	0.898	6.7	89	0.00	6.12- 6.18
15	MA	Endrin	0.852	0.809	5.0	94	0.00	6.62- 6.68
16	A	4,4'-DDD	0.763	0.717	6.0	90	0.00	6.80- 6.86
17	B	Endosulfan II	0.868	0.785	9.6	89	0.00	6.96- 7.02
18	MA	4,4'-DDT	0.744	0.717	3.6	90	0.00	7.33- 7.39
19	B	Endrin Aldehyde	0.666	0.602	9.6	88	0.00	7.53- 7.59
20	B	Endosulfan Sulfate	0.760	0.685	9.9	87	0.00	7.99- 8.05
21	A	Methoxychlor	0.398	0.381	4.3	96	0.00	8.57- 8.63
22		Mirex	0.635	0.554	12.8	89	0.00	8.87- 8.93
23	B	Endrin Ketone	0.851	0.741	12.9	85	0.00	8.94- 9.00
24	SA	Decachlorobiphenyl	0.624	0.589	5.6	95	0.00	10.65-10.71
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	93	0.00	1.40- 1.60
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.40- 1.60
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
1G123066.D 1PST3988.M Tue May 17 12:49:39 2016 RPT1

10.8.6 10

Continuing Calibration Summary

Job Number: JC20314 **Sample:** G1G3990-CC3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123155.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD2B.CH
Acq On    : 5-17-16 04:19:00 PM                      Operator: dharas
Sample    : cc3988-25                                Inst    : GC1G
Misc      : op93854,g1g3990,910,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.30- 1.36
2	SAB	Tetrachloro-m-xylene	0.903	0.900	0.3	103	0.00	1.89- 1.95
3	A	alpha-BHC	1.292	1.272	1.5	105	0.00	2.38- 2.44
4	MA	gamma-BHC	1.208	1.204	0.3	106	0.00	2.68- 2.74
5	MA	Heptachlor	1.229	1.229	0.0	109	0.00	3.16- 3.22
6	B	beta-BHC	0.578	0.570	1.4	107	0.00	2.75- 2.81
7	B	delta-BHC	1.184	1.152	2.7	105	0.00	2.94- 3.00
8	MB	Aldrin	1.121	1.128	-0.6	108	0.00	3.49- 3.55
9	B	Heptachlor Epoxide	1.100	1.090	0.9	106	0.00	4.21- 4.27
10	B	gamma-Chlordane	1.134	1.086	4.2	106	0.00	4.36- 4.42
11	B	alpha-Chlordane	1.127	1.096	2.8	107	0.00	4.53- 4.59
12	A	Endosulfan I	1.085	1.062	2.1	107	0.00	4.71- 4.77
13	B	4,4'-DDE	1.137	1.115	1.9	107	0.00	4.64- 4.70
14	MA	Dieldrin	1.129	1.120	0.8	108	0.00	5.03- 5.09
15	MA	Endrin	1.023	1.041	-1.8	113	0.00	5.35- 5.41
16	A	4,4'-DDD	0.892	0.890	0.2	108	0.00	5.47- 5.54
17	B	Endosulfan II	1.073	1.056	1.6	107	0.00	5.68- 5.74
18	MA	4,4'-DDT	0.972	0.981	-0.9	110	0.00	5.88- 5.94
19	B	Endrin Aldehyde	0.848	0.804	5.2	105	0.00	6.31- 6.37
20	B	Endosulfan Sulfate	1.030	0.983	4.6	106	0.00	6.99- 7.05
21	A	Methoxychlor	0.586	0.600	-2.4	112	0.00	6.66- 6.72
22		Mirex	0.980	0.962	1.8	107	0.00	6.79- 6.85
23	B	Endrin Ketone	1.166	1.119	4.0	104	0.00	7.42- 7.48
24	SA	Decachlorobiphenyl	1.229	1.241	-1.0	110	0.00	9.19- 9.25
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.23- 1.43
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.23- 1.43
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

10.8.7 10

Continuing Calibration Summary

Job Number: JC20314 **Sample:** G1G3990-CC3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123155.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.47- 1.53
2	SAB	Tetrachloro-m-xylene	0.889	0.865	2.7	97	0.00	2.27- 2.33
3	A	alpha-BHC	1.331	1.286	3.4	98	0.00	2.91- 2.97
4	MA	gamma-BHC	1.205	1.171	2.8	97	0.00	3.32- 3.38
5	MA	Heptachlor	1.125	1.117	0.7	102	0.00	3.87- 3.93
6	B	beta-BHC	0.552	0.528	4.3	96	0.00	3.40- 3.46
7	B	delta-BHC	1.205	1.156	4.1	97	0.00	3.78- 3.84
8	MB	Aldrin	1.031	1.022	0.9	99	0.00	4.31- 4.37
9	B	Heptachlor Epoxide	0.920	0.925	-0.5	102	0.00	5.11- 5.17
10	B	gamma-Chlordane	0.939	0.934	0.5	100	0.00	5.38- 5.44
11	B	alpha-Chlordane	0.933	0.917	1.7	101	0.00	5.61- 5.67
12	A	Endosulfan I	0.860	0.875	-1.7	99	0.00	5.70- 5.76
13	B	4,4'-DDE	0.925	0.923	0.2	101	0.00	5.87- 5.93
14	MA	Dieldrin	0.963	0.961	0.2	101	0.00	6.12- 6.18
15	MA	Endrin	0.852	0.873	-2.5	106	0.00	6.61- 6.67
16	A	4,4'-DDD	0.763	0.780	-2.2	102	0.00	6.80- 6.86
17	B	Endosulfan II	0.868	0.855	1.5	101	0.00	6.96- 7.02
18	MA	4,4'-DDT	0.744	0.788	-5.9	104	0.00	7.33- 7.39
19	B	Endrin Aldehyde	0.666	0.654	1.8	100	0.00	7.52- 7.58
20	B	Endosulfan Sulfate	0.760	0.754	0.8	100	0.00	7.99- 8.05
21	A	Methoxychlor	0.398	0.414	-4.0	109	0.00	8.57- 8.63
22		Mirex	0.635	0.613	3.5	101	0.00	8.86- 8.92
23	B	Endrin Ketone	0.851	0.834	2.0	99	0.00	8.94- 9.00
24	SA	Decachlorobiphenyl	0.624	0.648	-3.8	108	0.00	10.64-10.70
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.40- 1.60
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.40- 1.60
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
1G123065.D 1PST3988.M Wed May 18 12:38:21 2016 RPT1

Continuing Calibration Summary

Job Number: JC20314 **Sample:** G1G3990-CC3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123156.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123156.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123156.D\ECD2B.CH
Acq On    : 5-17-16 04:36:31 PM                      Operator: dharas
Sample    : cc3988-500                               Inst    : GC1G
Misc      : op93854,g1g3990,910,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.30- 1.36
2	SAB	Tetrachloro-m-xylene	0.903	0.994	-10.1	107	0.00	1.89- 1.95
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex		----------NA----------				
23	B	Endrin Ketone		----------NA----------				
24	SA	Decachlorobiphenyl	1.229	1.281	-4.2	112	0.00	9.20- 9.26
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.23- 1.43
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	106	0.00	1.23- 1.43
32		Chlordane {A}	0.037	0.035	5.4	101	0.00	3.01- 3.21
33		Chlordane {B}	0.048	0.043	10.4	97	0.00	3.57- 3.77
34		Chlordane {C}	0.162	0.156	3.7	103	0.00	4.29- 4.49
35		Chlordane {D}	0.253	0.245	3.2	103	0.00	4.45- 4.65
36		Chlordane {E}	0.038	0.037	2.6	103	0.00	5.50- 5.70

***** Signal #2 *****

Continuing Calibration Summary

Job Number: JC20314 **Sample:** G1G3990-CC3988
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G123156.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	96	0.00	1.46- 1.52
2	SAB	Tetrachloro-m-xylene	0.889	0.900	-1.2	99	0.00	2.26- 2.32
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex		----------NA----------				
23	B	Endrin Ketone		----------NA----------				
24	SA	Decachlorobiphenyl	0.624	0.637	-2.1	105	0.00	10.64-10.70
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.39- 1.59
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.39- 1.59
32		Chlordane {A}	0.037	0.034	8.1	93	0.00	3.61- 3.81
33		Chlordane {B}	0.037	0.035	5.4	94	0.00	4.43- 4.63
34		Chlordane {C}	0.122	0.118	3.3	97	0.00	5.31- 5.51
35		Chlordane {D}	0.201	0.195	3.0	96	0.00	5.54- 5.74
36		Chlordane {E}	0.036	0.033	8.3	90	0.00	6.97- 7.17

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G123066.D 1PST3988.M Wed May 18 12:38:57 2016 RPT1

10.8.8 10

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123140.D\ECD1A.CH Vial: 56
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123140.D\ECD2B.CH
Acq On : 17 May 2016 10:47 am Operator: rebeccak
Sample : jc20314-2 Inst : GC1G
Misc : op93925,g1g3990,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 12:45 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	111.1E6	770.0E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.33	1.49	111.1E6	770.0E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.33	1.49	111.1E6	770.0E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.92	2.29	73348132	481.0E6	36.565	35.128
Spiked Amount 40.000	Range 30 - 150		Recovery =		91.41%	87.82%
24) SA Decachlorobiphen	9.23	10.68	62282452	234.2E6	22.820	24.365
Spiked Amount 40.000			Recovery =		57.05%	60.91%
Target Compounds						

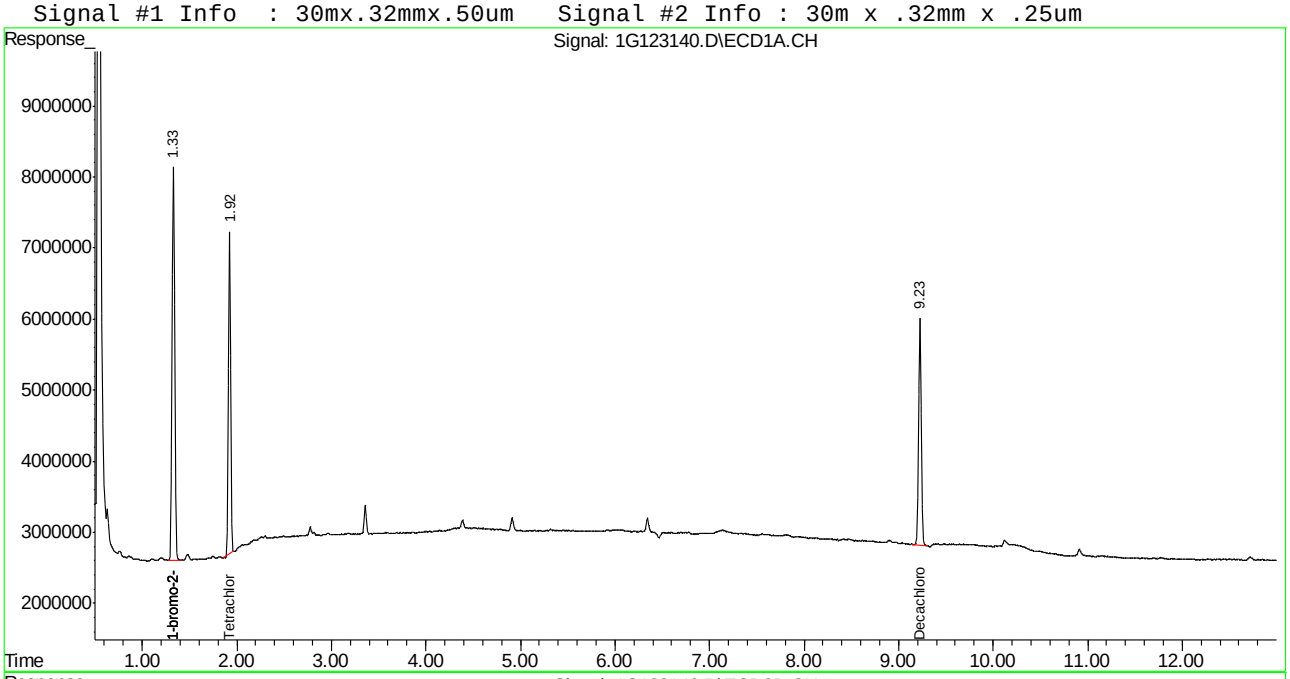
(f)=RT Delta > 1/2 Window (m)=manual int.
1G123140.D 1PST3988.M Tue May 17 12:45:12 2016 RPT1 Page 1

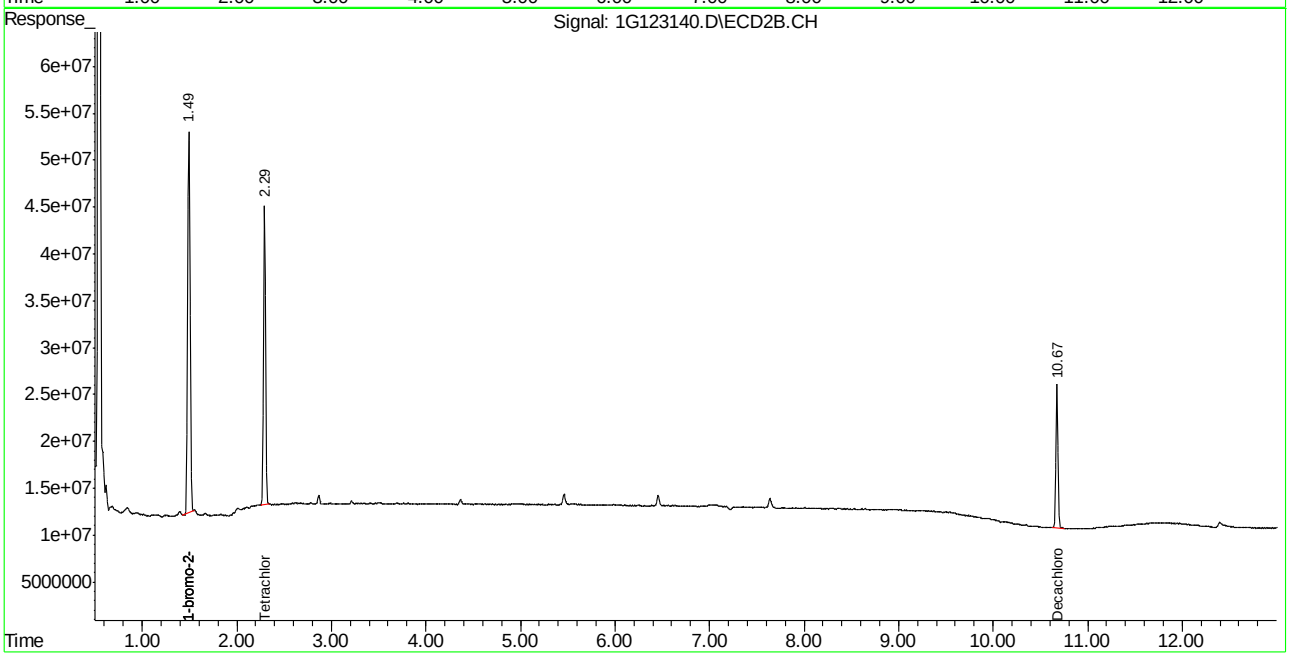
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123140.D\ECD1A.CH Vial: 56
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123140.D\ECD2B.CH
Acq On : 17 May 2016 10:47 am Operator: rebeccak
Sample : jc20314-2 Inst : GC1G
Misc : op93925,g1g3990,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 12:45 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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 05/17/16 13:21

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123137.D\ECD1A.CH Vial: 53
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123137.D\ECD2B.CH
Acq On    : 5-17-16 09:55:07 AM                      Operator: rebeccak
Sample    : op93925-mb1                              Inst    : GC1G
Misc      : op93925,g1g3990,1000,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 12:43 2016  Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	117.0E6	840.7E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.33	1.49	117.0E6	840.7E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.33	1.49	117.0E6	840.7E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.92	2.29	71887952	453.9E6	34.007m	30.366
Spiked Amount 40.000	Range 30 - 150		Recovery =		85.02%	75.91%
24) SA Decachlorobiphen	9.23	10.68	95364776	349.7E6	33.157	33.318
Spiked Amount 40.000			Recovery =		82.89%	83.30%
Target Compounds						

(f)=RT Delta > 1/2 Window (m)=manual int.

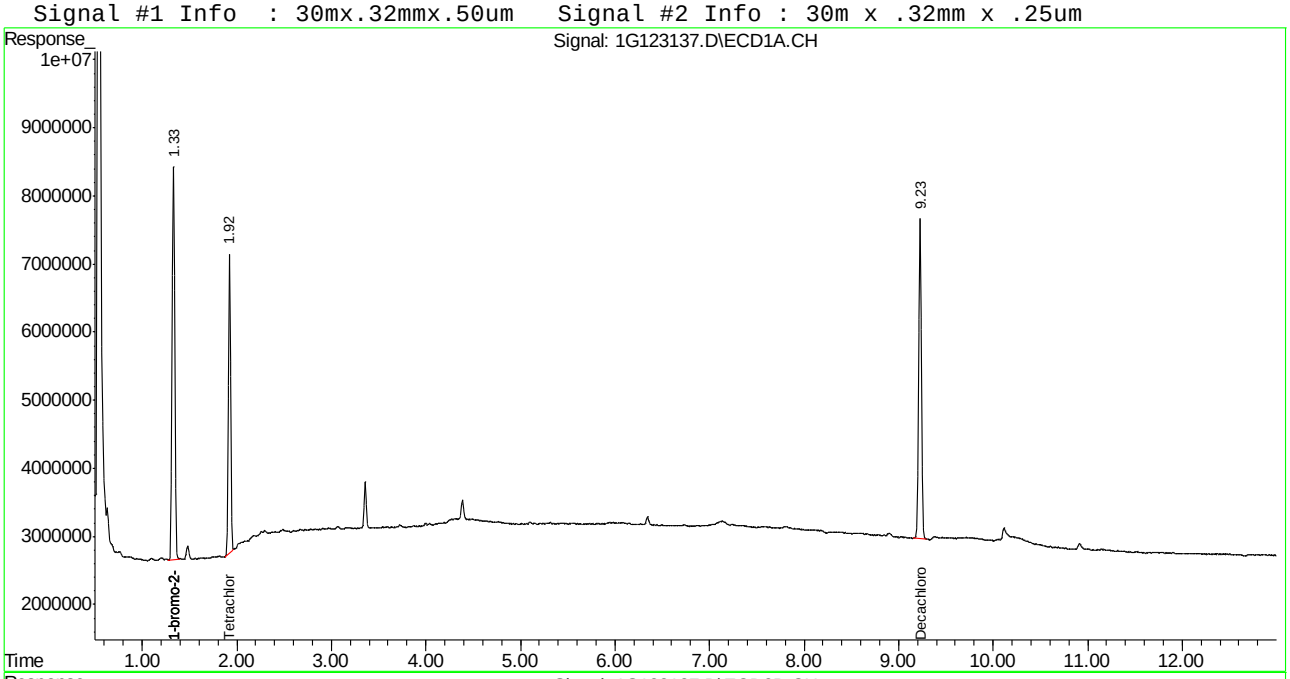
SGS ACCUTEST JC20314

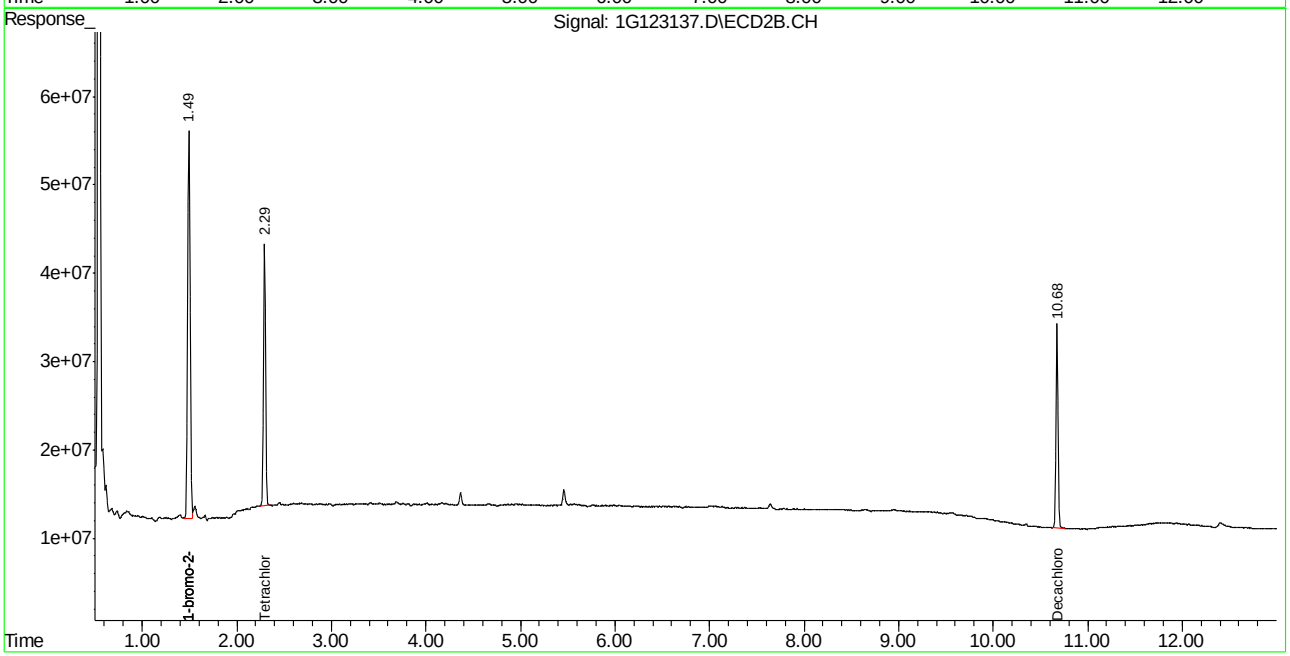
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123137.D\ECD1A.CH Vial: 53
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123137.D\ECD2B.CH
Acq On : 5-17-16 09:55:07 AM Operator: rebeccak
Sample : op93925-mb1 Inst : GC1G
Misc : op93925,g1g3990,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 12:43 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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

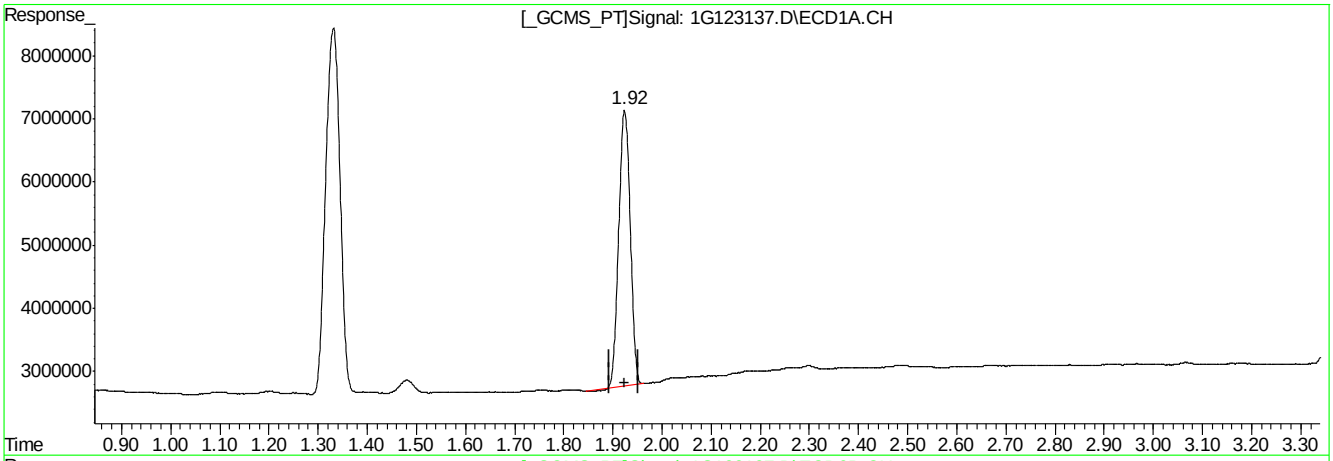
Sample Number:	OP93925-MB1	**Method:**	SW846 8081B
Lab FileID:	1G123137.D	**Analyst approved:**	05/17/16 12:55 Dhara Saparia
Injection Time:	05/17/16 09:55	**Supervisor approved:**	05/17/16 13:21 Gwendolyn Burns

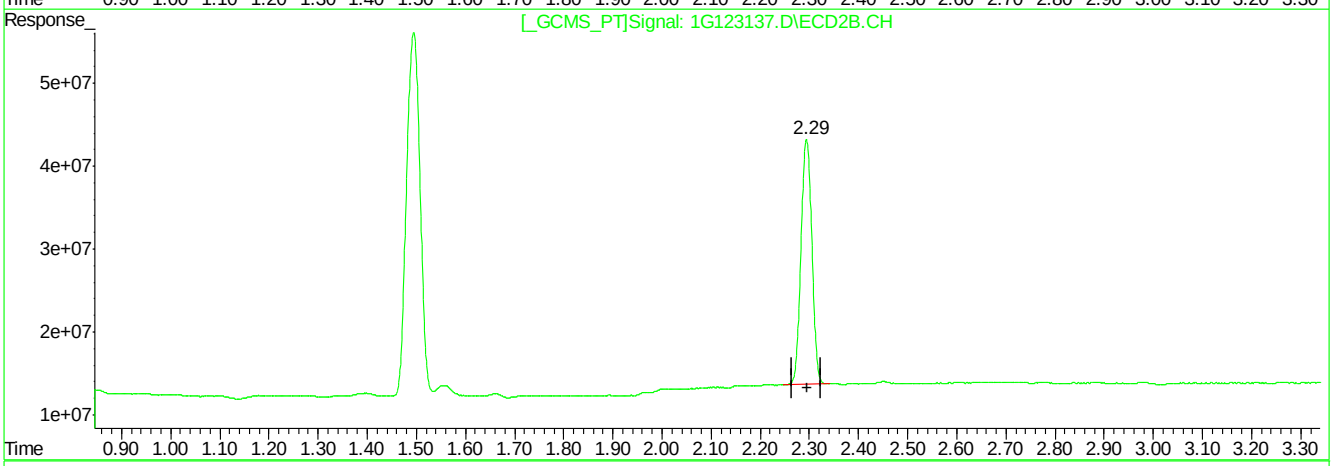
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.92	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123137.D\ECD1A.CH Vial: 53
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123137.D\ECD2B.CH
Acq On    : 5-17-16 09:55:07 AM                      Operator: rebeccak
Sample    : op93925-mb1                              Inst    : GC1G
Misc      : op93925,g1g3990,1000,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 12:42 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.92min 33.439PPB

response 70686621

(2) Tetrachloro-m-xylene #2 (SAB)

2.29min 30.366PPB

response 453929945

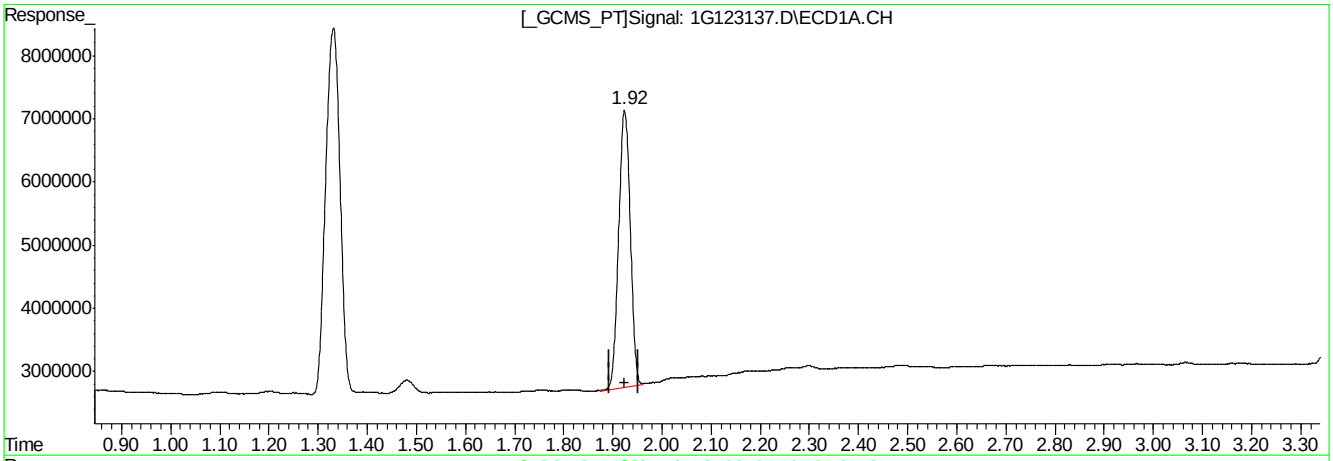
(+) = Expected Retention Time

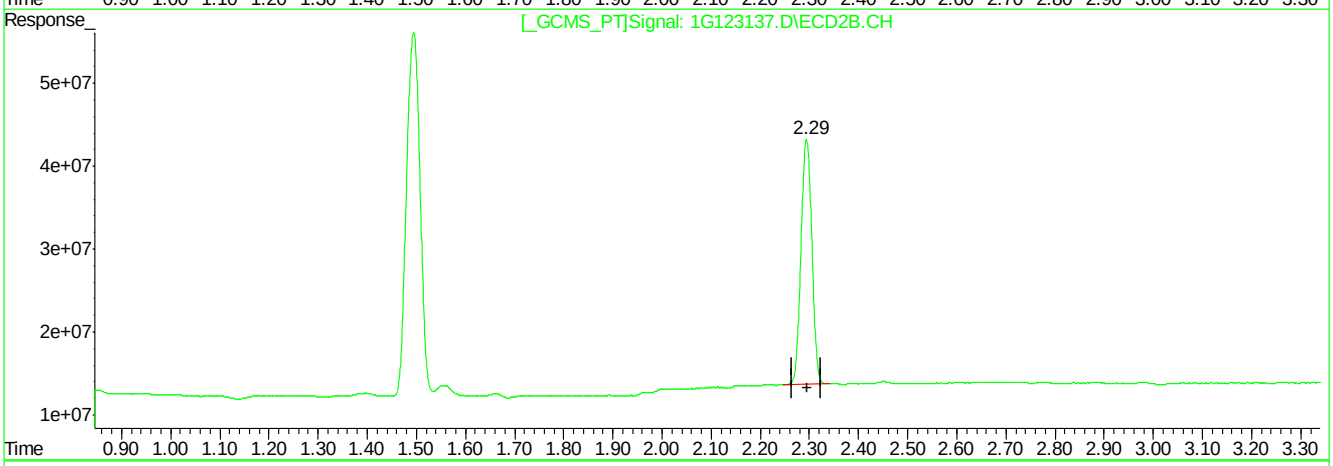
1G123137.D 1PST3988.M Tue May 17 12:42:41 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123137.D\ECD1A.CH Vial: 53
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123137.D\ECD2B.CH
Acq On    : 5-17-16 09:55:07 AM                      Operator: rebeccak
Sample    : op93925-mb1                              Inst    : GC1G
Misc      : op93925,g1g3990,1000,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 12:42 2016  Quant Results File: 1PST3988.RES
```

```
Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.92min 34.007PPB m

response 71887952

(2) Tetrachloro-m-xylene #2 (SAB)

2.29min 30.366PPB

response 453929945

(+) = Expected Retention Time

1G123137.D 1PST3988.M Tue May 17 12:42:48 2016 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123138.D\ECD1A.CH Vial: 54
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123138.D\ECD2B.CH
Acq On : 17 May 2016 10:12 am Operator: rebeccak
Sample : op93925-bs1 Inst : GC1G
Misc : op93925,g1g3990,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 12:43 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	121.5E6	828.5E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.33	1.49	121.5E6	828.5E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.33	1.49	121.5E6	828.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.92	2.29	72292420	459.7E6	32.945	31.206
Spiked Amount	40.000	Range	30 - 150	Recovery	=	82.36%	78.02%
24) SA	Decachlorobiphen	9.23	10.68	99761892	365.5E6	33.415	35.337
Spiked Amount	40.000			Recovery	=	83.54%	88.34%
	Target Compounds						
3) A	alpha-BHC	2.41	2.94	81575767	564.0E6	25.979	25.567
4) MA	gamma-BHC	2.71	3.35	77655439	518.6E6	26.459	25.971
5) MA	Heptachlor	3.19	3.90	71588464	432.7E6	23.967	23.204
6) B	beta-BHC	2.78	3.43	36794115	244.1E6	26.202	26.692
7) B	delta-BHC	2.97	3.81	73222531	490.1E6	25.450	24.556
8) MB	Aldrin	3.52	4.34	61063313	406.5E6	22.425	23.799
9) B	Heptachlor Epoxi	4.24	5.14	73214373	437.3E6	27.400	28.696
10) B	gamma-Chlordane	4.39	5.41	71299803	394.0E6	25.871	25.311
11) B	alpha-Chlordane	4.56	5.64	70004184	414.1E6	25.574	26.792
12) A	Endosulfan I	4.75	5.73	68661455	405.6E6	26.057	28.469
13) B	4,4'-DDE	4.67	5.90	70061289	410.5E6	25.362	26.773
14) MA	Dieldrin	5.06	6.15	73688666	449.1E6	26.859	28.135
15) MA	Endrin	5.39	6.64	68452826	403.5E6	27.537	28.577
16) A	4,4'-DDD	5.50	6.83	58029752	360.2E6	26.768	28.498
17) B	Endosulfan II	5.71	6.99	67770064	391.4E6	25.993	27.211
18) MA	4,4'-DDT	5.92	7.36	60741796	352.6E6	25.727	28.592
19) B	Endrin Aldehyde	6.34	7.55	53756048	304.2E6	26.087	27.554
20) B	Endosulfan Sulfa	7.03	8.02	59676181	336.8E6	23.848	26.740
21) A	Methoxychlor	6.69	8.60	36722581	181.6E6	25.805	27.504
23) B	Endrin Ketone	7.46	8.97	68663402	373.8E6	24.247	26.506

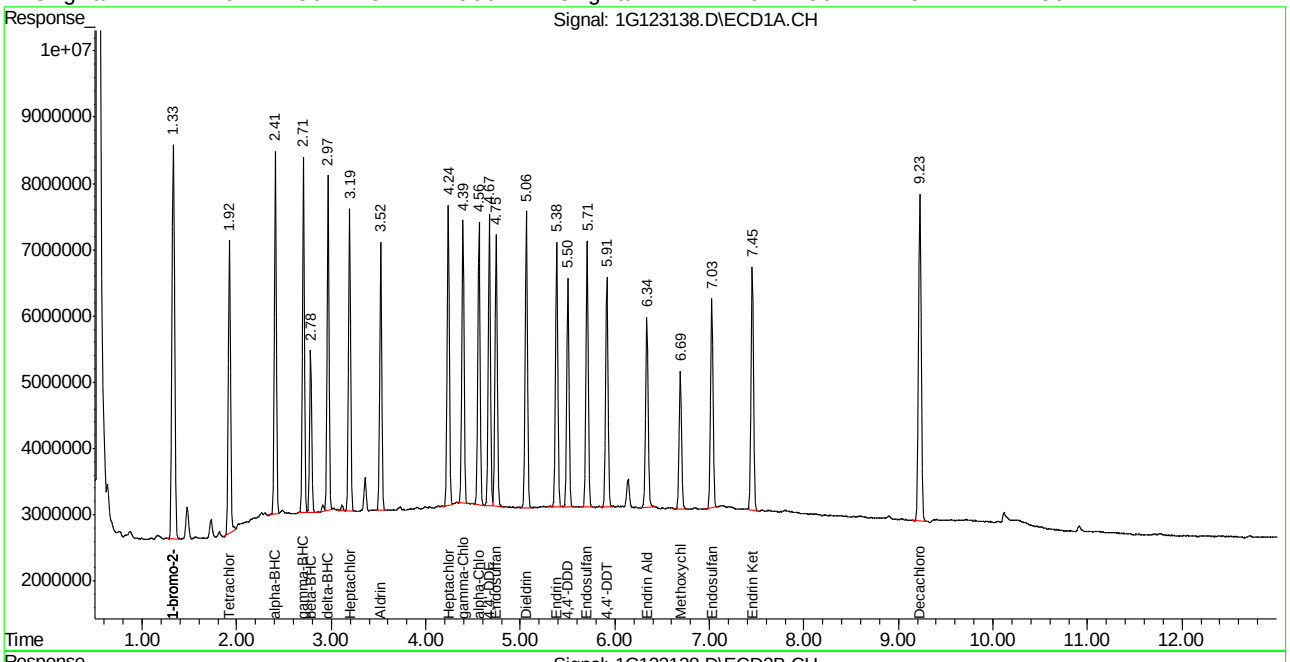
(f)=RT Delta > 1/2 Window (m)=manual int.

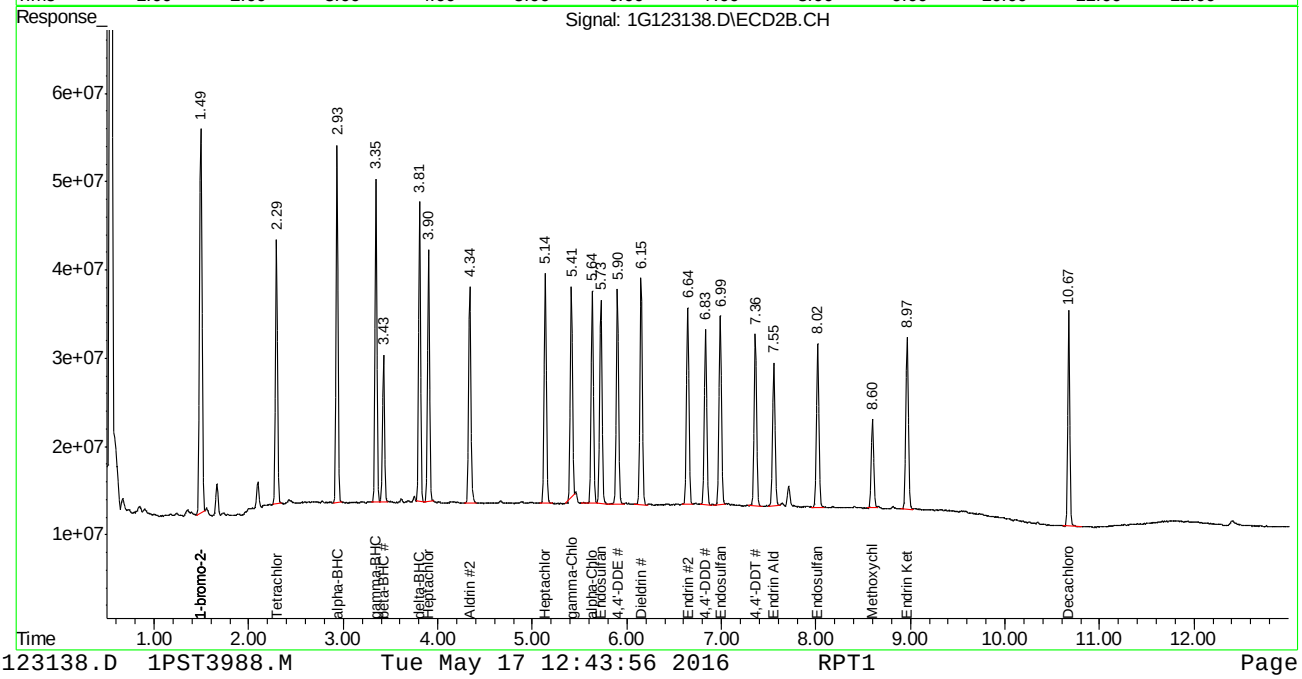
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123138.D\ECD1A.CH Vial: 54
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123138.D\ECD2B.CH
Acq On : 17 May 2016 10:12 am Operator: rebeccak
Sample : op93925-bs1 Inst : GC1G
Misc : op93925,g1g3990,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 12:43 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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 JC20314

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123139.D\ECD1A.CH Vial: 55
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123139.D\ECD2B.CH
Acq On : 17 May 2016 10:30 am Operator: rebeccak
Sample : op93925-bsd Inst : GC1G
Misc : op93925,g1g3990,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 12:44 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	122.3E6	852.4E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.33	1.49	122.3E6	852.4E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.33	1.49	122.3E6	852.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.92	2.29	73827552	476.3E6	33.409	31.425
Spiked Amount	40.000	Range	30 - 150	Recovery	=	83.52%	78.56%
24) SA	Decachlorobiphen	9.23	10.68	107.5E6	397.5E6	35.767	37.347
Spiked Amount	40.000			Recovery	=	89.42%	93.37%
	Target Compounds						
3) A	alpha-BHC	2.41	2.94	81554361	567.0E6	25.791	24.984
4) MA	gamma-BHC	2.71	3.35	77987905	524.4E6	26.386	25.524
5) MA	Heptachlor	3.19	3.90	71177758	441.3E6	23.663	23.002
6) B	beta-BHC	2.78	3.43	37377519	244.1E6	26.431	25.946
7) B	delta-BHC	2.97	3.81	74085773	505.6E6	25.570	24.620
8) MB	Aldrin	3.52	4.34	62485479	414.3E6	22.787	23.575
9) B	Heptachlor Epoxi	4.24	5.14	74117001	447.1E6	27.544	28.515
10) B	gamma-Chlordane	4.39	5.41	71970072	432.1E6	25.932	26.982
11) B	alpha-Chlordane	4.56	5.64	71144775	424.0E6	25.809	26.664
12) A	Endosulfan I	4.75	5.73	69694859	414.2E6	26.264	28.255
13) B	4,4'-DDE	4.67	5.90	71220413	418.9E6	25.602	26.553
14) MA	Dieldrin	5.07	6.15	74954922	459.5E6	27.129	27.978
15) MA	Endrin	5.39	6.65	68451464	407.8E6	27.345	28.075
16) A	4,4'-DDD	5.50	6.83	58908536	370.2E6	26.984	28.467
17) B	Endosulfan II	5.71	6.99	69624918	405.0E6	26.517	27.366
18) MA	4,4'-DDT	5.92	7.36	61537338	358.1E6	25.882	28.225
19) B	Endrin Aldehyde	6.34	7.56	55306728	315.5E6	26.652	27.776
20) B	Endosulfan Sulfa	7.03	8.02	61276499	349.1E6	24.316	26.940
21) A	Methoxychlor	6.69	8.60	37502784	186.0E6	26.169	27.388
23) B	Endrin Ketone	7.45	8.97	70557651	387.6E6	24.742	26.717

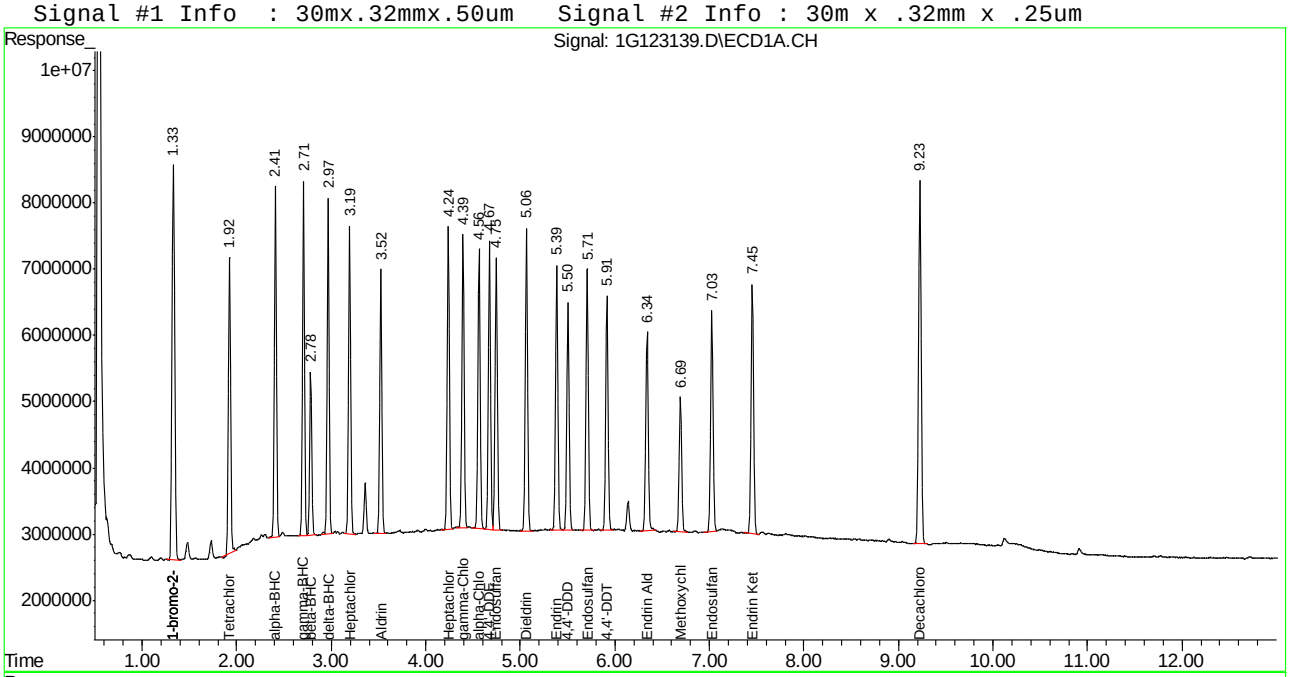
(f)=RT Delta > 1/2 Window (m)=manual int.

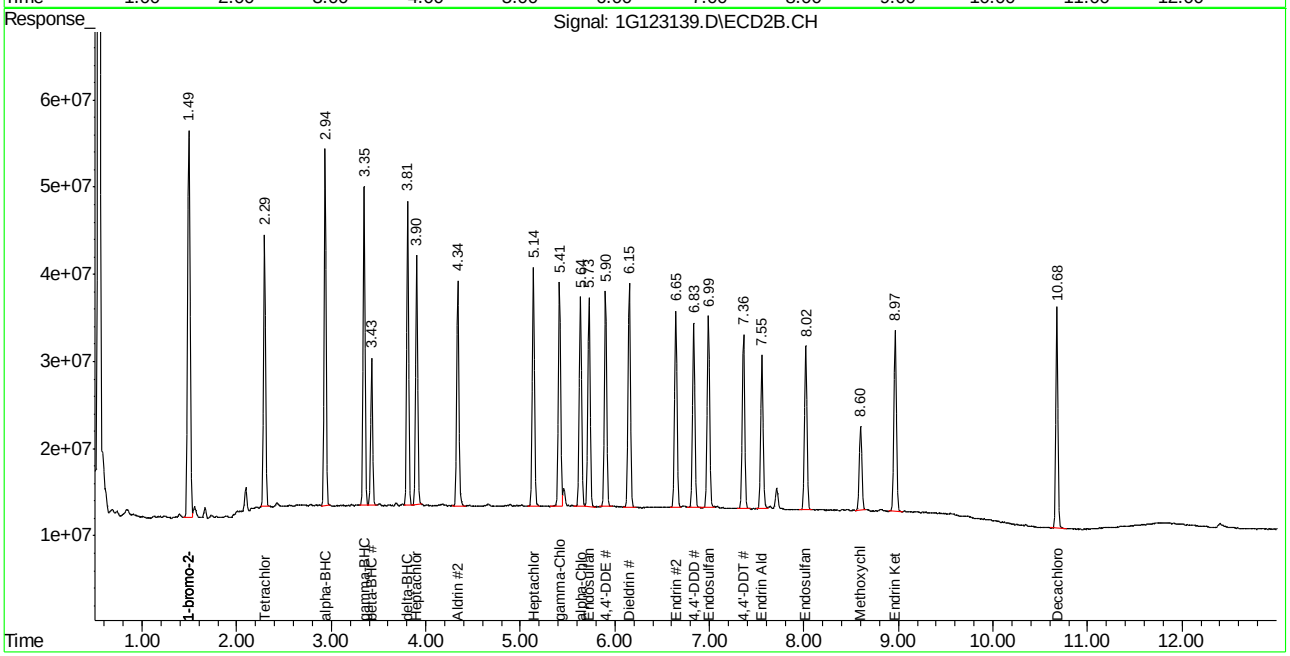
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123139.D\ECD1A.CH Vial: 55
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123139.D\ECD2B.CH
Acq On : 17 May 2016 10:30 am Operator: rebeccak
Sample : op93925-bsd Inst : GC1G
Misc : op93925,g1g3990,1000,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 12:44 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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 JC20314

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/16/16 17:43

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123059.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123059.D\ECD2B.CH
Acq On : 5-16-16 09:09:02 AM Operator: rebeccak
Sample : ddt Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:05 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3985.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	1.33	1.49	121.1E6	841.9E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.33	1.49	121.1E6	841.9E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.33	1.49	121.1E6	841.9E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.92	2.29	43640483	307.2E6	22.875	22.147
Spiked Amount	40.000	Range	30 - 150	Recovery	=	57.19%	55.37%
24) SA	Decachlorobiphen	9.23	10.68	60882083	222.9E6	22.606	22.898
Spiked Amount	40.000			Recovery	=	56.52%	57.25%
	Target Compounds						
13) B	4,4'-DDE	4.67	5.90	837634	4492810	0.315m	0.310m
15) MA	Endrin	5.39	6.64	129.2E6	661.1E6	52.441	57.352
16) A	4,4'-DDD	5.50	6.83	1011043	7386221	0.468m	0.586m
18) MA	4,4'-DDT	5.92	7.36	267.8E6	1336.8E6	113.949	118.863
19) B	Endrin Aldehyde	6.34	7.55	1371237	7932699	0.719m	0.779m
23) B	Endrin Ketone	7.45	8.97	6408544	33500252	2.819	2.736

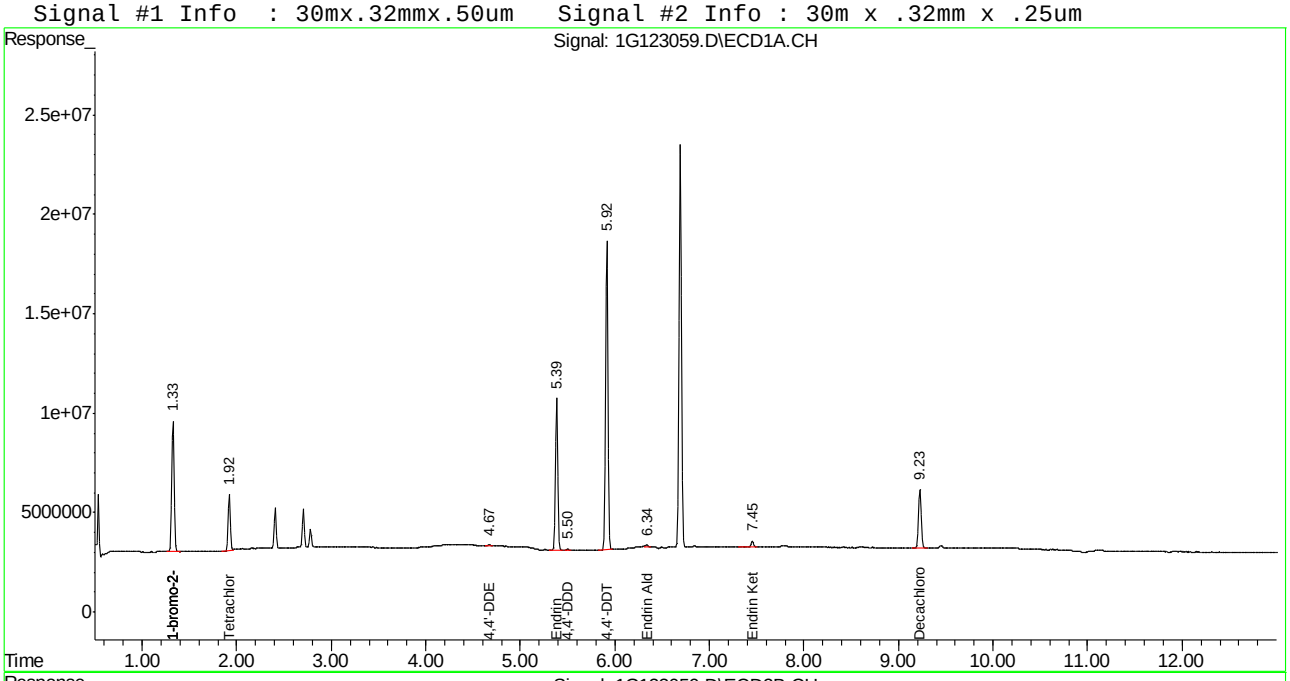
(f)=RT Delta > 1/2 Window (m)=manual int.

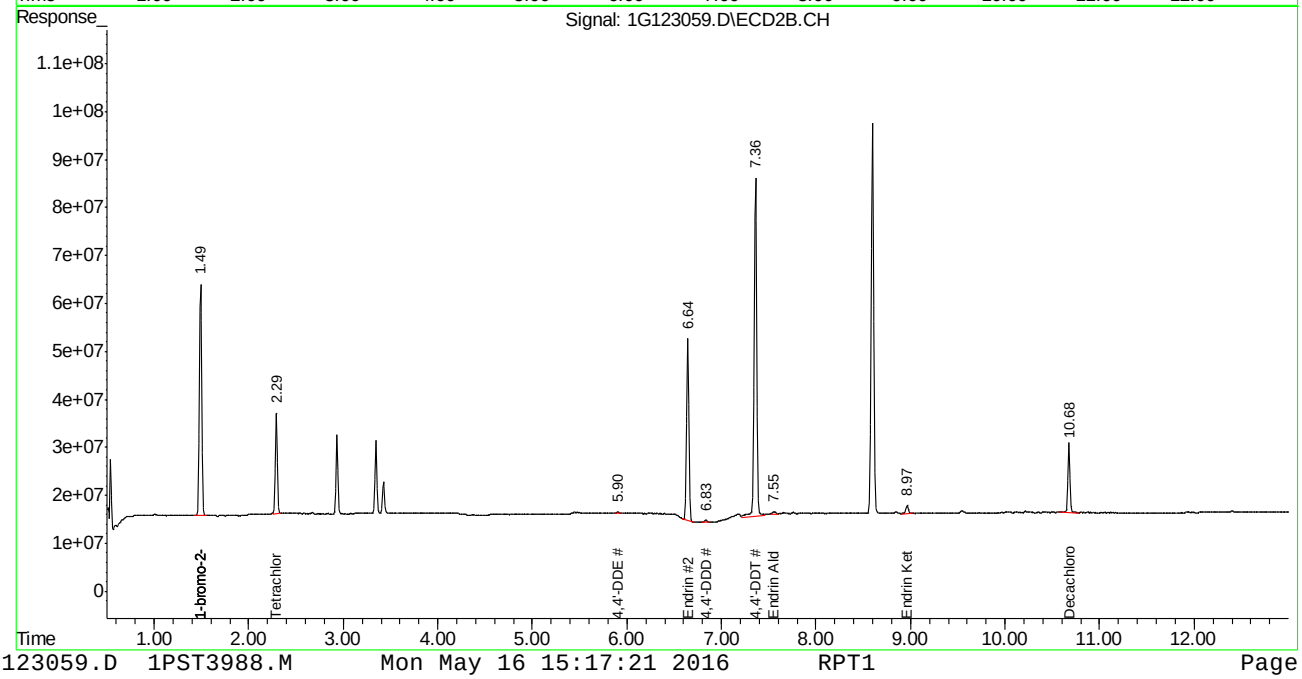
Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123059.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123059.D\ECD2B.CH
Acq On    : 5-16-16 09:09:02 AM                    Operator: rebeccak
Sample    : ddt                                    Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1             Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 13:05 2016  Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3985.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:	G1G3988-DDT	**Method:**	SW846 8081B
Lab FileID:	1G123059.D	**Analyst approved:**	05/16/16 15:18 Dhara Saparia
Injection Time:	05/16/16 09:09	**Supervisor approved:**	05/16/16 17:43 Gwendolyn Burns

Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.67	Poor instrument integration
4,4'-DDD	72-54-8	1	5.50	Poor instrument integration
4,4'-DDE	72-55-9	2	5.90	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.34	Poor instrument integration
4,4'-DDD	72-54-8	2	6.83	Poor instrument integration
Endrin aldehyde	7421-93-4	2	7.55	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/17/16 13:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD2B.CH
Acq On : 5-17-16 08:27:39 AM Operator: rebeccak
Sample : ddt Inst : GC1G
Misc : op93908,g1g3990,5.4,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 12:32 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	125.9E6	830.5E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.33	1.49	125.9E6	830.5E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.33	1.49	125.9E6	830.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.92	2.29	42621786	286.5E6	18.737	19.402
Spiked Amount	40.000	Range	30 - 150	Recovery	=	46.84%	48.51%
24) SA	Decachlorobiphen	9.22	10.67	64315473	227.0E6	20.780	21.894
Spiked Amount	40.000			Recovery	=	51.95%	54.73%
	Target Compounds						
13) B	4,4'-DDE	4.67	5.90	1763605	10355652	0.616m	0.674m
15) MA	Endrin	5.38	6.64	130.0E6	682.0E6	50.432	48.183
16) A	4,4'-DDD	5.50	6.83	1544545	8770357	0.687m	0.692m
18) MA	4,4'-DDT	5.91	7.36	266.7E6	1288.8E6	108.950	104.257
19) B	Endrin Aldehyde	6.33	7.55	1784385	9698560	0.835m	0.876m
23) B	Endrin Ketone	7.45	8.96	5653645	34723962	1.926	2.456m

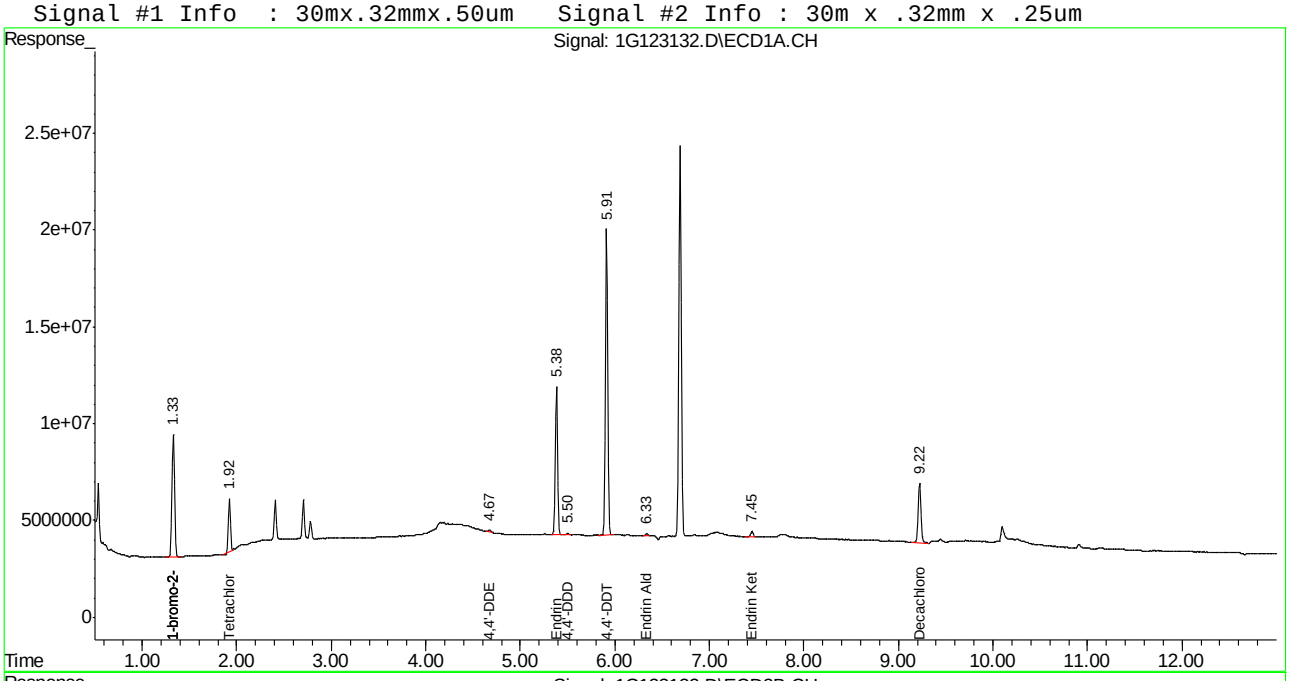
(f)=RT Delta > 1/2 Window (m)=manual int.
1G123132.D 1PST3988.M Tue May 17 12:33:01 2016 RPT1 Page 1

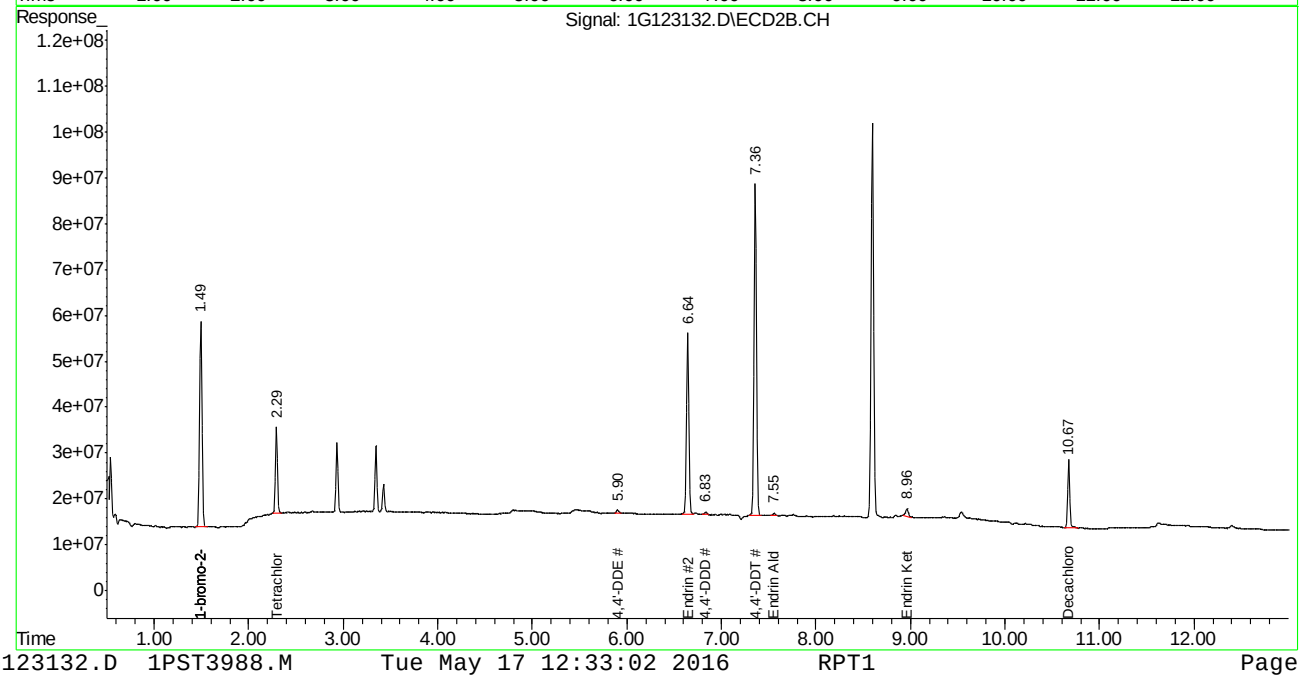
Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD2B.CH
Acq On    : 5-17-16 08:27:39 AM                    Operator: rebeccak
Sample    : ddt                                    Inst    : GC1G
Misc      : op93908,g1g3990,5.4,,,10,1             Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 12:32 2016  Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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

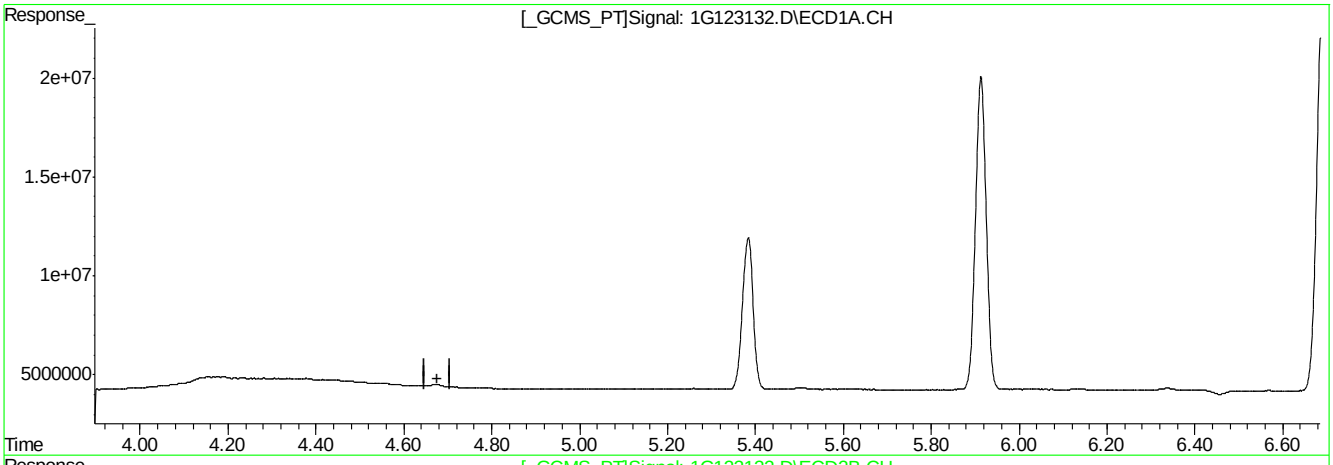
Sample Number:	G1G3990-DDT	**Method:**	SW846 8081B
Lab FileID:	1G123132.D	**Analyst approved:**	05/17/16 12:55 Dhara Saparia
Injection Time:	05/17/16 08:27	**Supervisor approved:**	05/17/16 13:17 Gwendolyn Burns

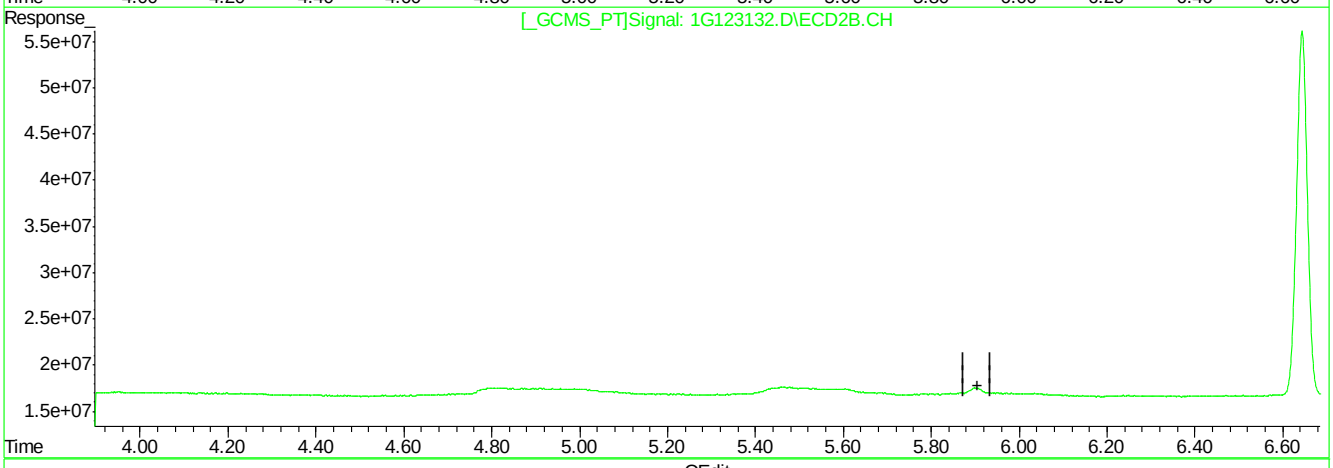
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.67	Poor instrument integration
4,4'-DDD	72-54-8	1	5.50	Poor instrument integration
4,4'-DDE	72-55-9	2	5.90	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.33	Poor instrument integration
4,4'-DDD	72-54-8	2	6.83	Poor instrument integration
Endrin aldehyde	7421-93-4	2	7.55	Poor instrument integration
Endrin ketone	53494-70-5	2	8.96	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD2B.CH
Acq On    : 5-17-16 08:27:39 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op93908,g1g3990,5.4,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 12:30 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 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

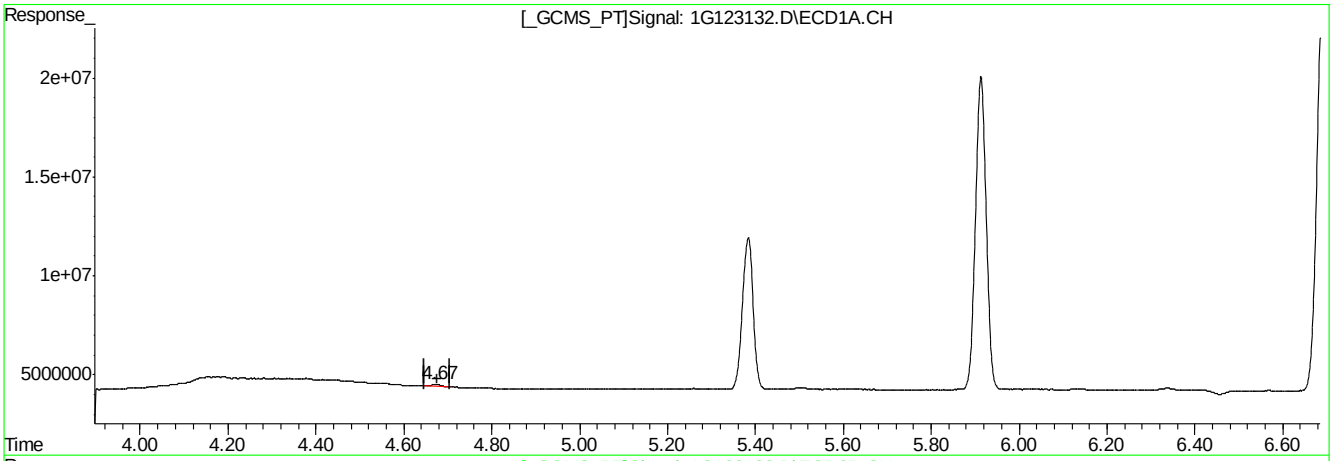
1G123132.D 1PST3988.M Tue May 17 12:31:25 2016 RPT1

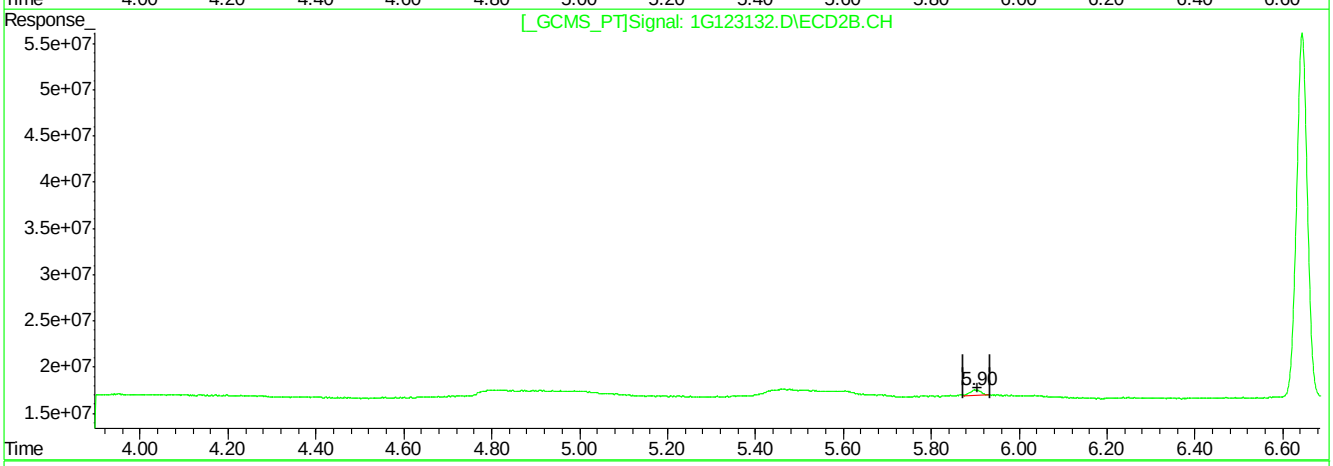
11.4.2.2 11

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD2B.CH
Acq On    : 5-17-16 08:27:39 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op93908,g1g3990,5.4,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 12:30 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(13) 4,4'-DDE (B)

4.67min 0.616PPB m

response 1763605

(13) 4,4'-DDE #2 (B)

5.90min 0.674PPB m

response 10355652

(+) = Expected Retention Time

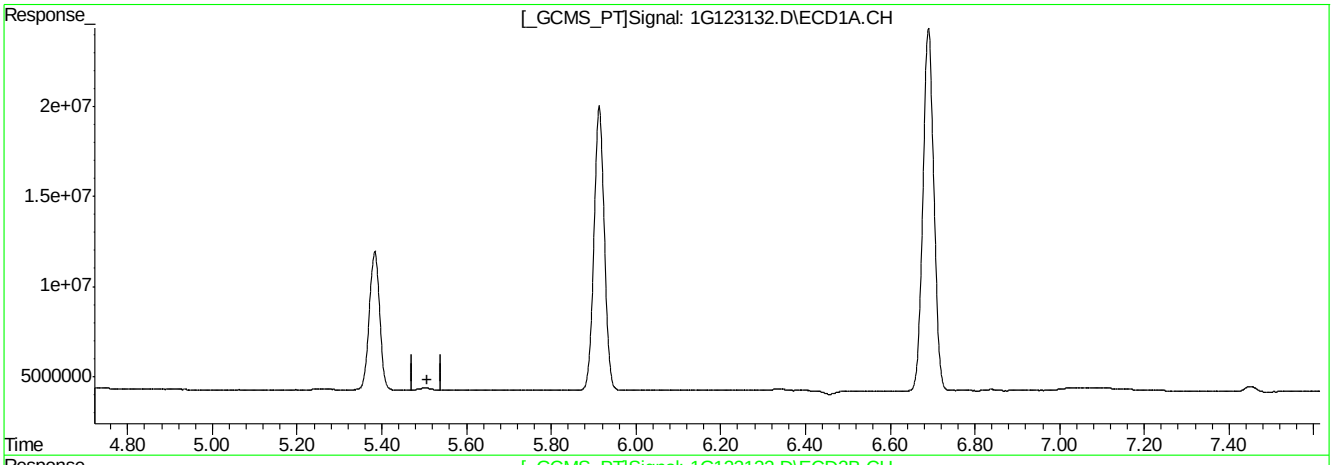
1G123132.D 1PST3988.M Tue May 17 12:31:41 2016 RPT1

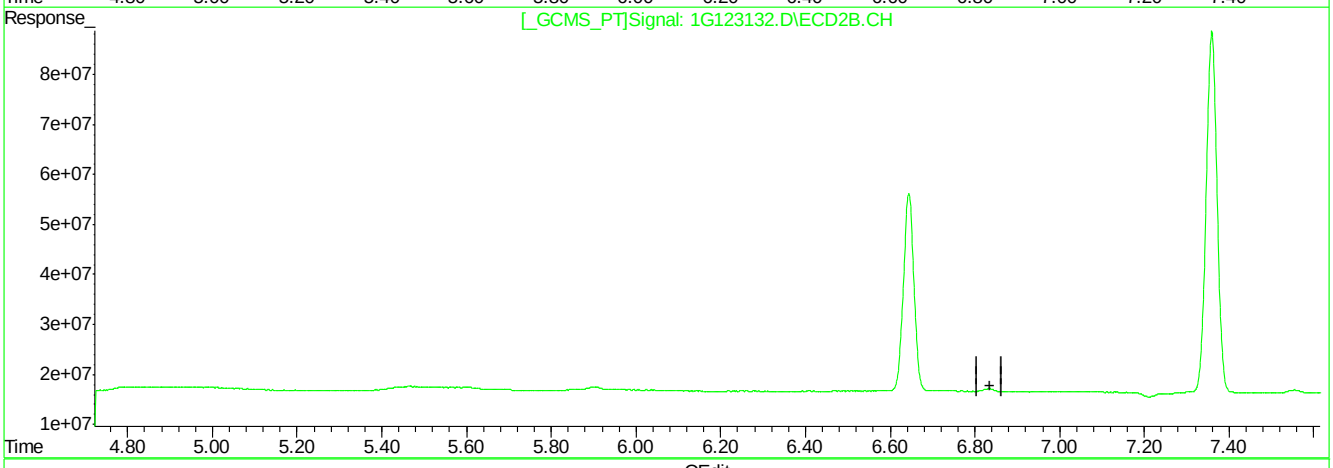
11.4.2.3 11

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD2B.CH
Acq On    : 5-17-16 08:27:39 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op93908,g1g3990,5.4,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 12:30 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

0.00min 0.000PPB

response 0

(16) 4,4'-DDD #2 (A)

0.00min 0.000PPB

response 0

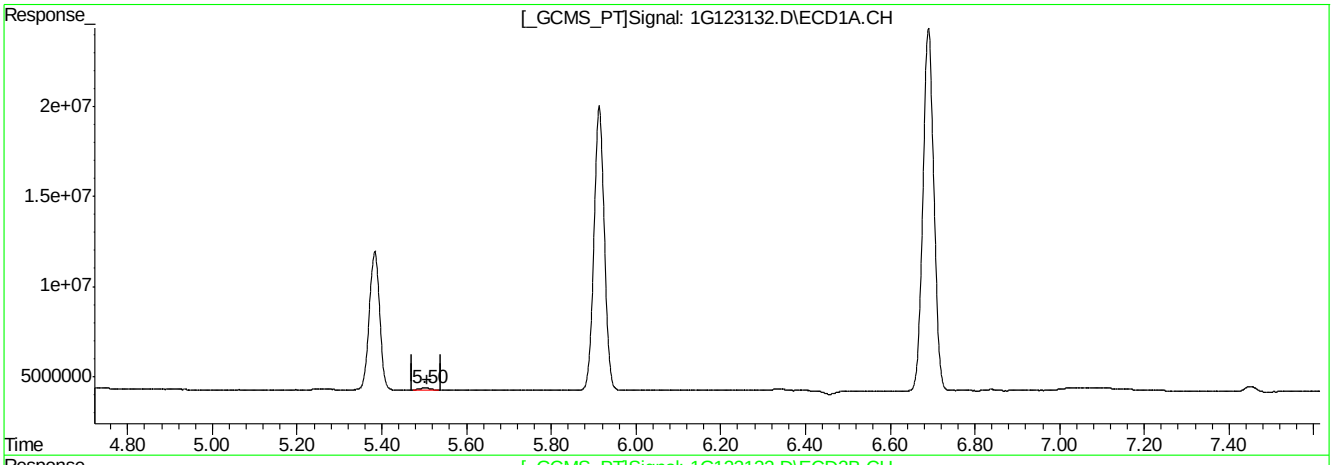
(+) = Expected Retention Time

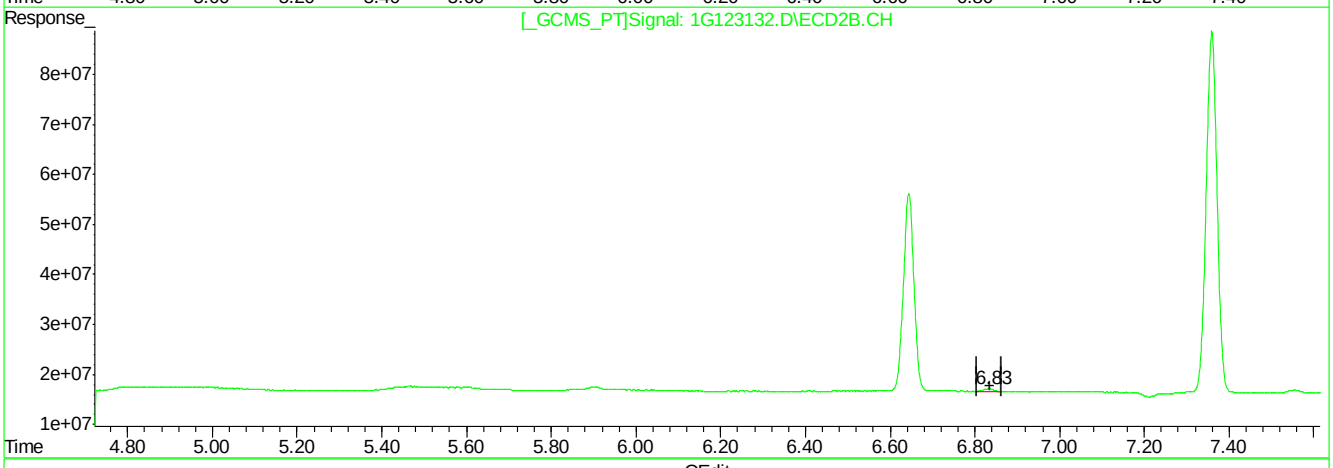
1G123132.D 1PST3988.M Tue May 17 12:31:52 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD2B.CH
Acq On    : 5-17-16 08:27:39 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op93908,g1g3990,5.4,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 12:30 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

5.50min 0.687PPB m

response 1544545

(16) 4,4'-DDD #2 (A)

6.83min 0.692PPB m

response 8770357

(+) = Expected Retention Time

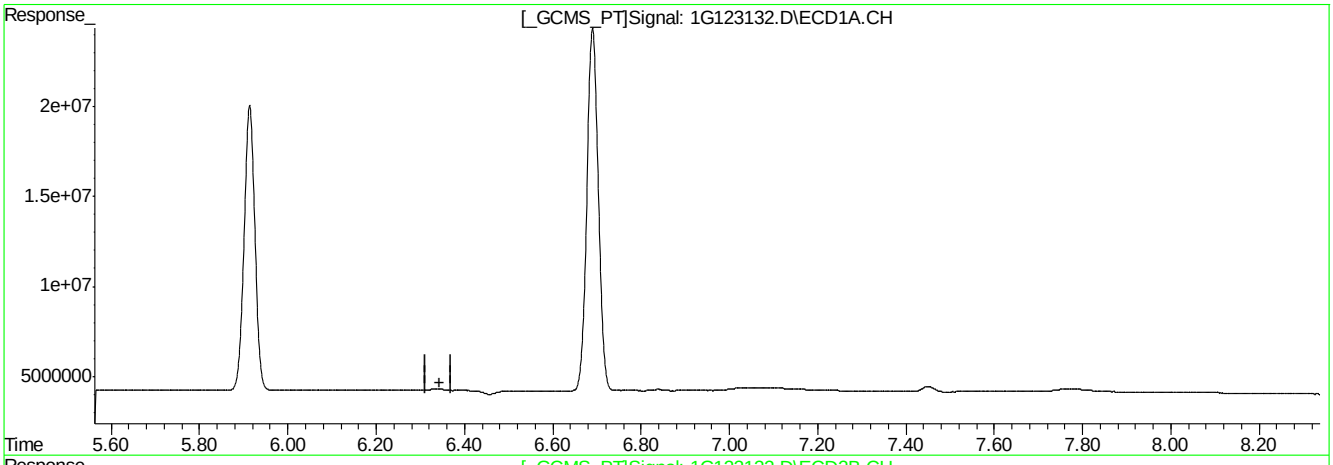
1G123132.D 1PST3988.M Tue May 17 12:32:06 2016 RPT1

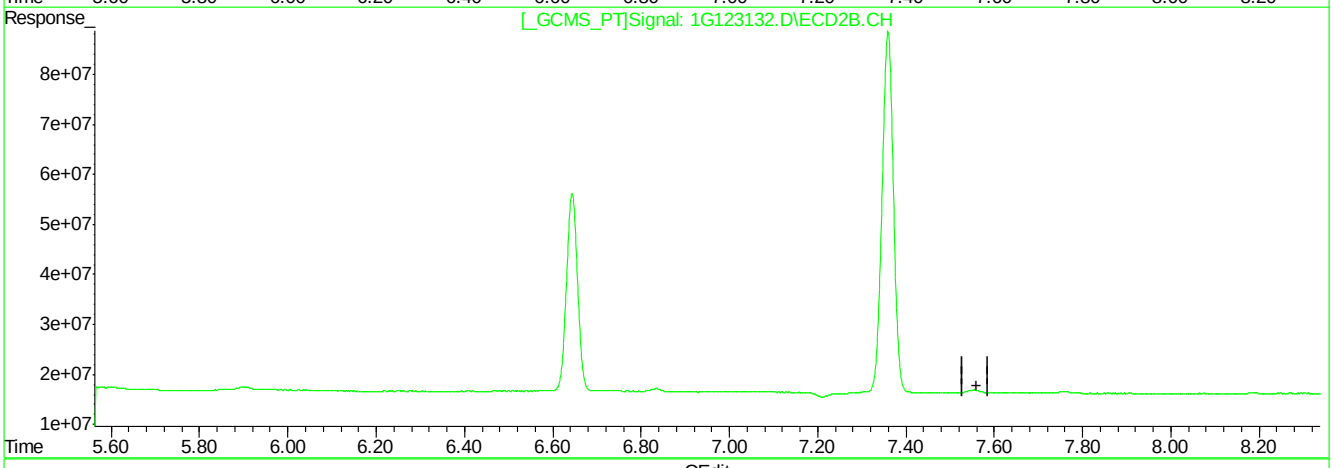
11.4.2.5 11

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD2B.CH
Acq On    : 5-17-16 08:27:39 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op93908,g1g3990,5.4,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 12:30 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 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

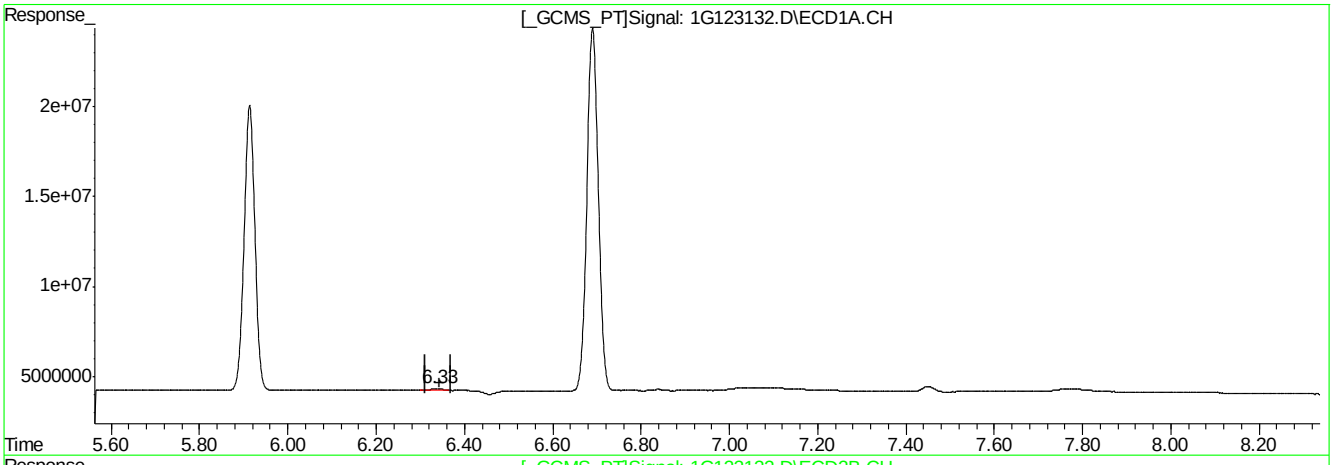
(+) = Expected Retention Time

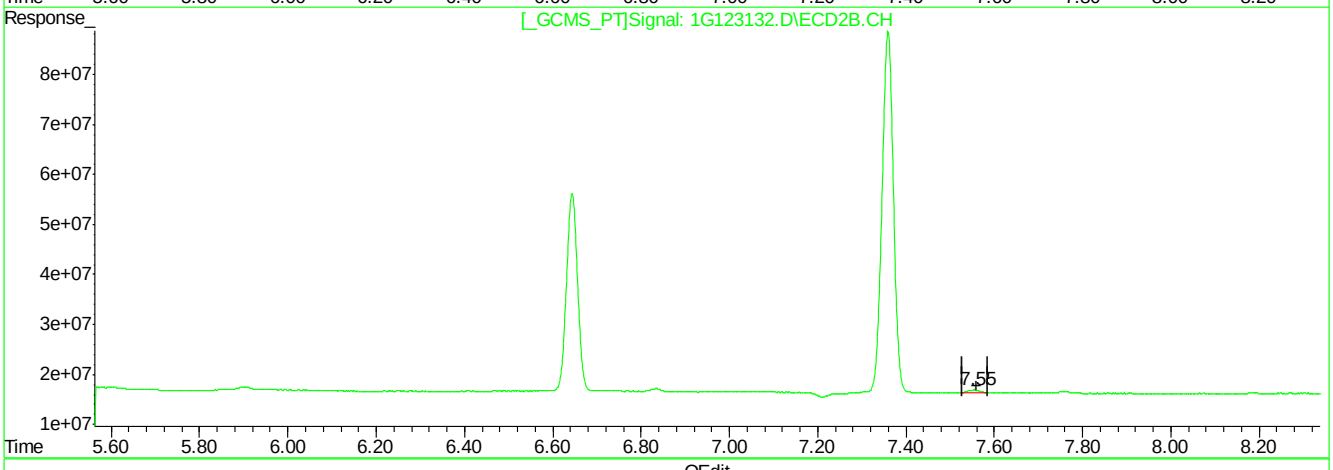
1G123132.D 1PST3988.M Tue May 17 12:32:12 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD2B.CH
Acq On    : 5-17-16 08:27:39 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op93908,g1g3990,5.4,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 12:30 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.33min 0.835PPB m

response 1784385

(19) Endrin Aldehyde #2 (B)

7.55min 0.876PPB m

response 9698560

(+) = Expected Retention Time

1G123132.D 1PST3988.M Tue May 17 12:32:27 2016 RPT1

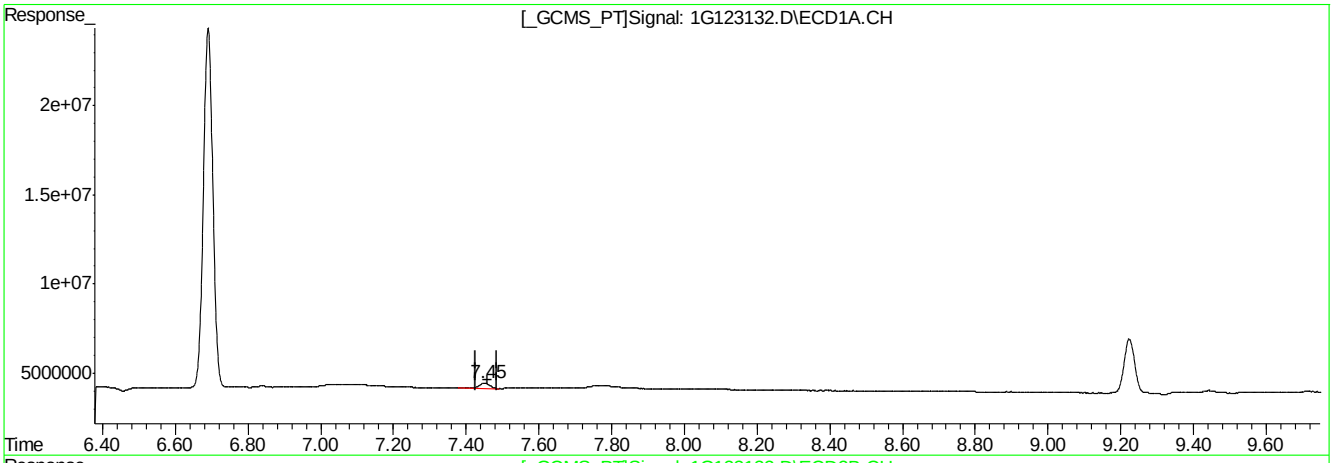
11.4.2.7

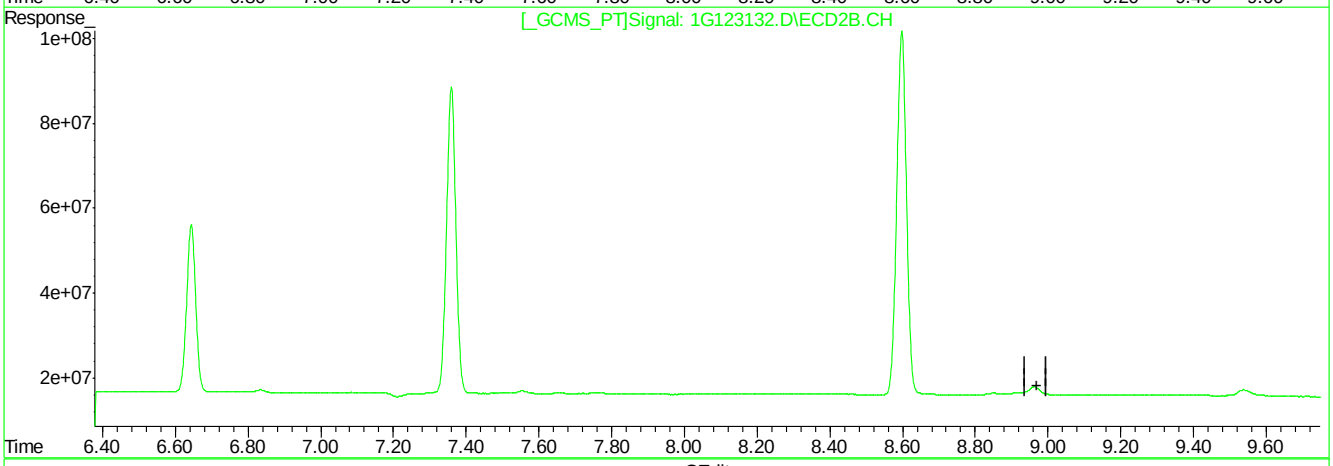
11

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD2B.CH
Acq On    : 5-17-16 08:27:39 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op93908,g1g3990,5.4,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 12:30 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.45min 1.926PPB

response 5653645

(23) Endrin Ketone #2 (B)

0.00min 0.000PPB

response 0

(+) = Expected Retention Time

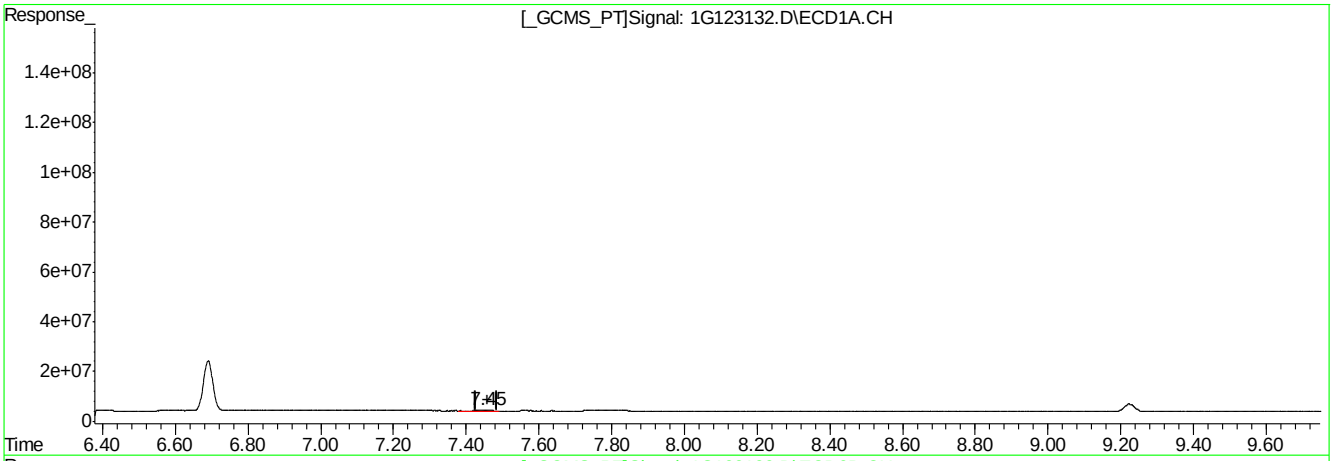
1G123132.D 1PST3988.M Tue May 17 12:32:31 2016 RPT1

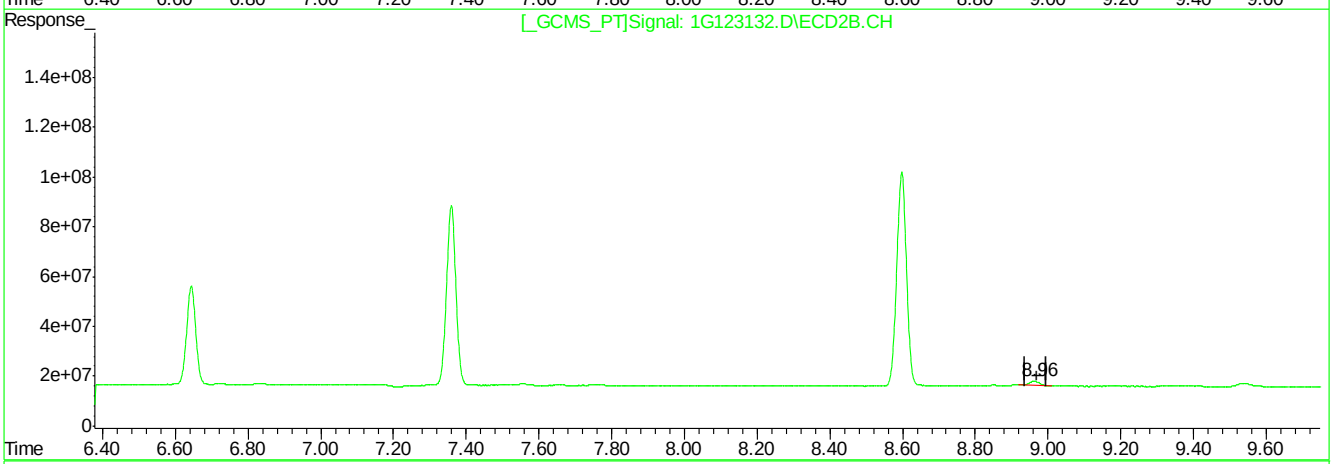
11.4.2.8 11

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123132.D\ECD2B.CH
Acq On    : 5-17-16 08:27:39 AM                      Operator: rebeccak
Sample    : ddt                                      Inst    : GC1G
Misc      : op93908,g1g3990,5.4,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 12:30 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.45min 1.926PPB

response 5653645

(23) Endrin Ketone #2 (B)

8.96min 2.456PPB m

response 34723962

(+) = Expected Retention Time

1G123132.D 1PST3988.M Tue May 17 12:32:42 2016 RPT1

11.4.2.9 11

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/16/16 17:43

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD2B.CH
Acq On : 16 May 2016 10:11 am Operator: thomasl
Sample : ic3988-1 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:24 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	97981670	767.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.93	2.29	1593097	13048604	1.032m	1.032
Spiked Amount	40.000	Range	30 - 150	Recovery	=	2.58%#	2.58%#
24) SA	Decachlorobiphen	9.24	10.68	2597406	11137800	1.192	1.256
Spiked Amount	40.000			Recovery	=	2.98%	3.14%
	Target Compounds						
3) A	alpha-BHC	2.41	2.94	2216924	18467738	0.930	0.983
4) MA	gamma-BHC	2.71	3.35	2024492	16275184	0.909	0.958
5) MA	Heptachlor	3.20	3.90	2441832	15659516	1.072	0.982
6) B	beta-BHC	2.79	3.43	1135172	7800568	1.050m	1.022
7) B	delta-BHC	2.97	3.81	2171307	15797517	1.005	0.950
8) MB	Aldrin	3.53	4.34	2019036	14551482	0.935	0.968
9) B	Heptachlor Epoxi	4.25	5.14	2165480	14276101	1.028	1.062
10) B	gamma-Chlordane	4.40	5.42	2465581	15200309	1.169	1.136
11) B	alpha-Chlordane	4.57	5.64	2379533	15515114	1.148	1.178
12) A	Endosulfan I	4.75	5.73	2276516	12414982	1.106	0.999
13) B	4,4'-DDE	4.68	5.90	2363972	15081593	1.100	1.143
14) MA	Dieldrin	5.07	6.16	2240390	15873467	1.007	1.164
15) MA	Endrin	5.40	6.65	2231189	14587124	1.119	1.389
16) A	4,4'-DDD	5.51	6.84	1723248	11581992	0.985m	1.008
17) B	Endosulfan II	5.72	6.99	2223675	15003113	1.077	1.126
18) MA	4,4'-DDT	5.92	7.36	1997680	10752582	1.050m	1.049m
19) B	Endrin Aldehyde	6.35	7.56	1723536	11015067	1.117m	1.188
20) B	Endosulfan Sulfa	7.04	8.03	2613752	11897470	1.590	1.188
21) A	Methoxychlor	6.70	8.60	1332584	7701428	1.342m	1.543
22)	Mirex	6.83	8.90	2154376	11644852	1.252	1.324
23) B	Endrin Ketone	7.47	8.97	2552572	13997924	1.387	1.254

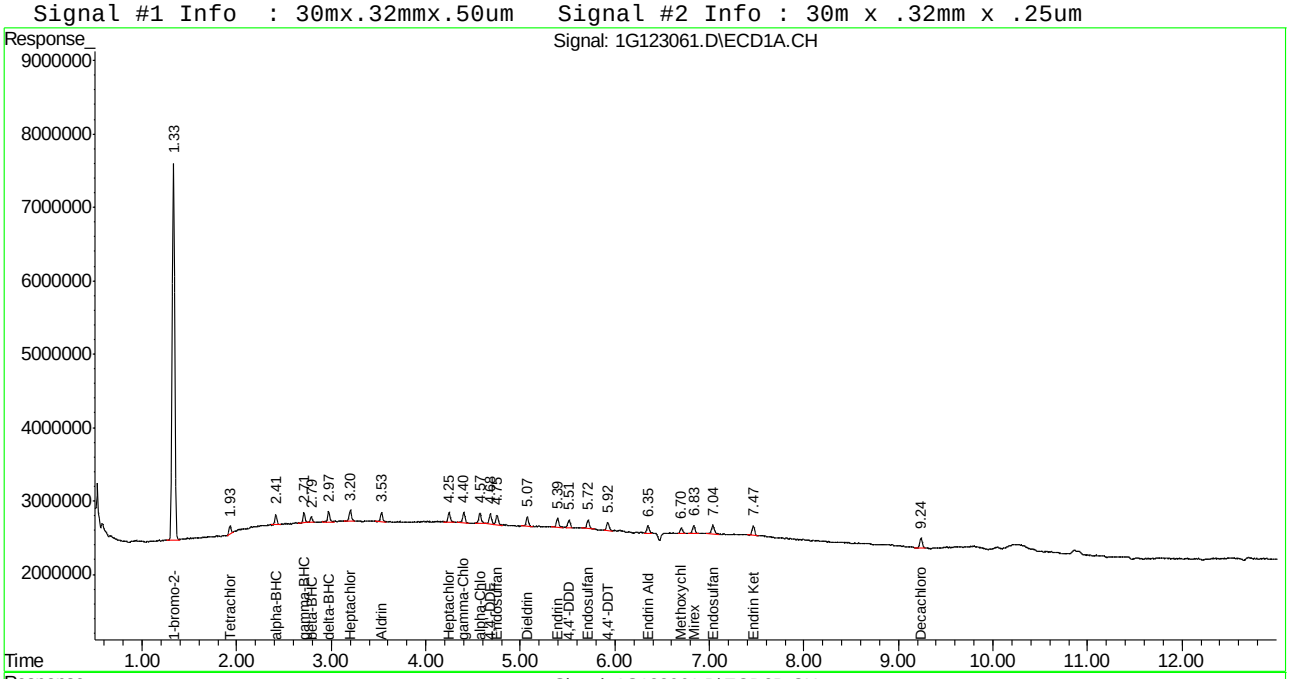
(f)=RT Delta > 1/2 Window (m)=manual int.
1G123061.D 1PST3988.M Mon May 16 13:24:09 2016 RPT1

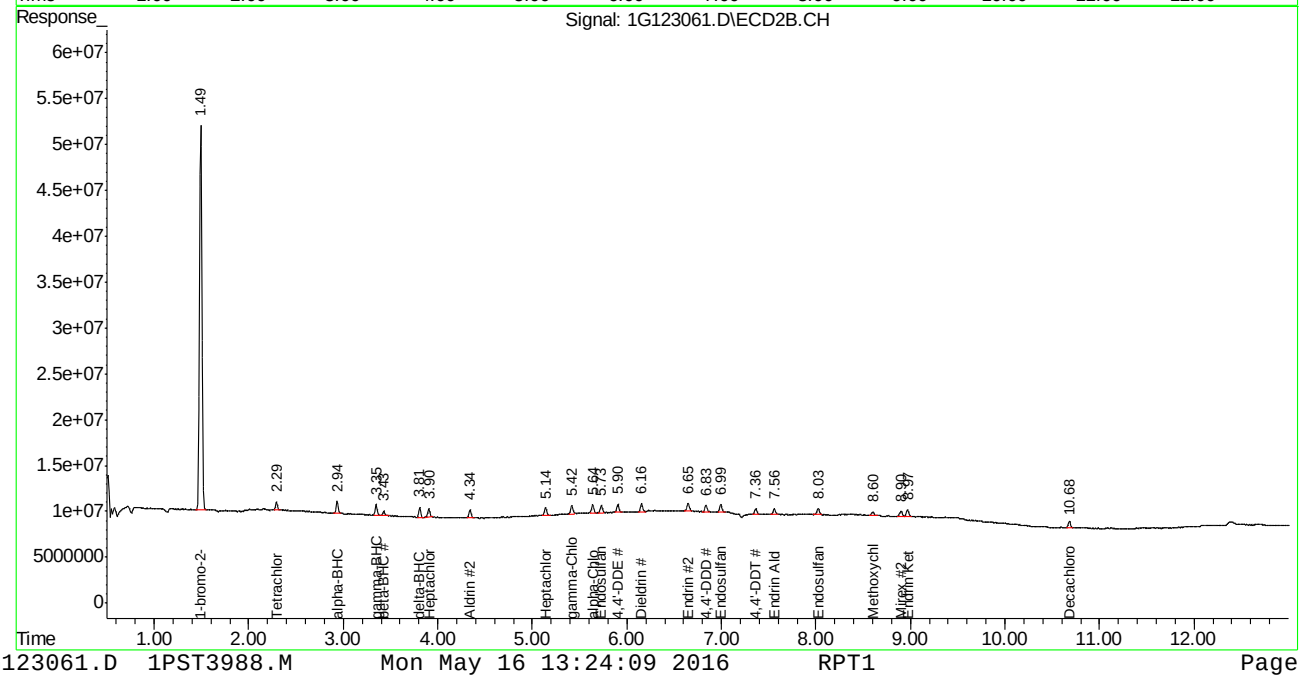
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD2B.CH
Acq On : 16 May 2016 10:11 am Operator: thomasl
Sample : ic3988-1 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:24 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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 JC20314

Manual Integration Approval Summary

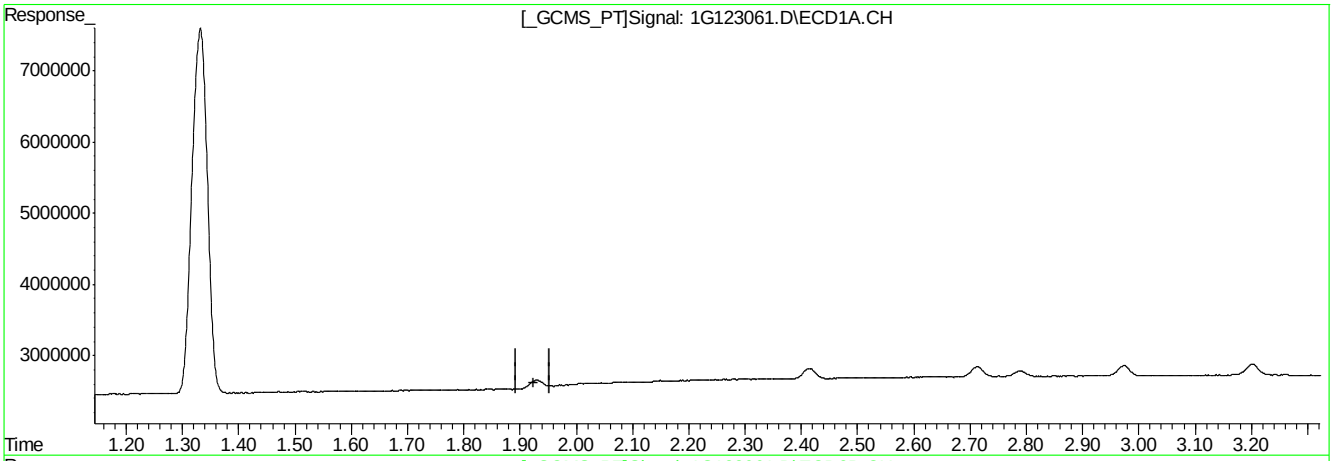
Sample Number:	G1G3988-IC3988	**Method:**	SW846 8081B
Lab FileID:	1G123061.D	**Analyst approved:**	05/16/16 15:18 Dhara Saparia
Injection Time:	05/16/16 10:11	**Supervisor approved:**	05/16/16 17:43 Gwendolyn Burns

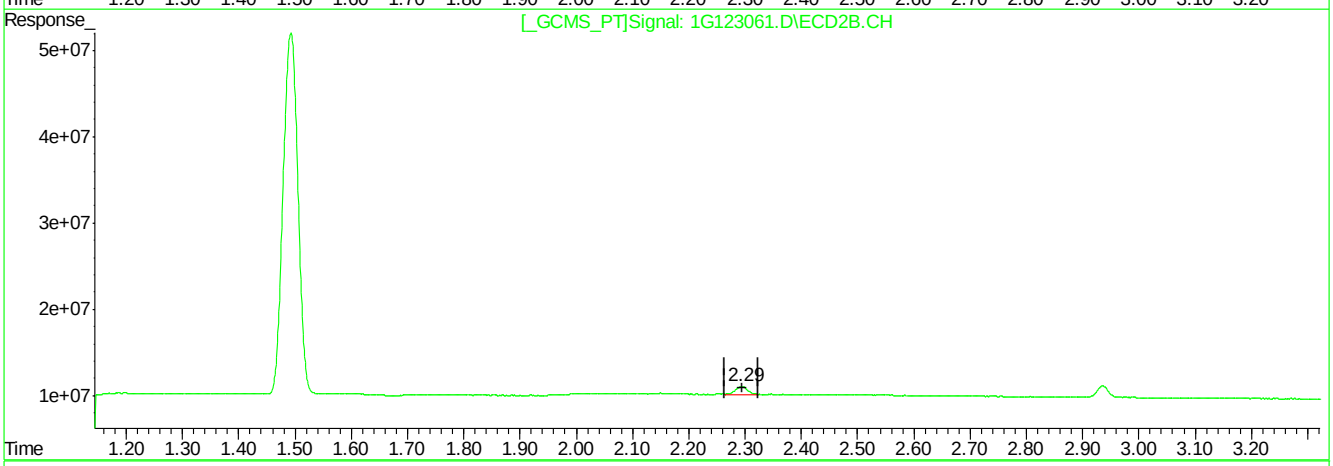
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.93	Poor instrument integration
beta-BHC	319-85-7	1	2.79	Poor instrument integration
4,4'-DDD	72-54-8	1	5.51	Poor instrument integration
4,4'-DDT	50-29-3	1	5.92	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.35	Poor instrument integration
Methoxychlor	72-43-5	1	6.70	Poor instrument integration
4,4'-DDT	50-29-3	2	7.36	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD2B.CH
Acq On    : 16 May 2016  10:11 am                    Operator: thomasl
Sample    : ic3988-1                                 Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 12:27 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

0.00min 0.000PPB

response 0

(2) Tetrachloro-m-xylene #2 (SAB)

2.29min 1.032PPB

response 13048604

(+) = Expected Retention Time

1G123061.D 1PST3988.M Mon May 16 12:27:54 2016 RPT1

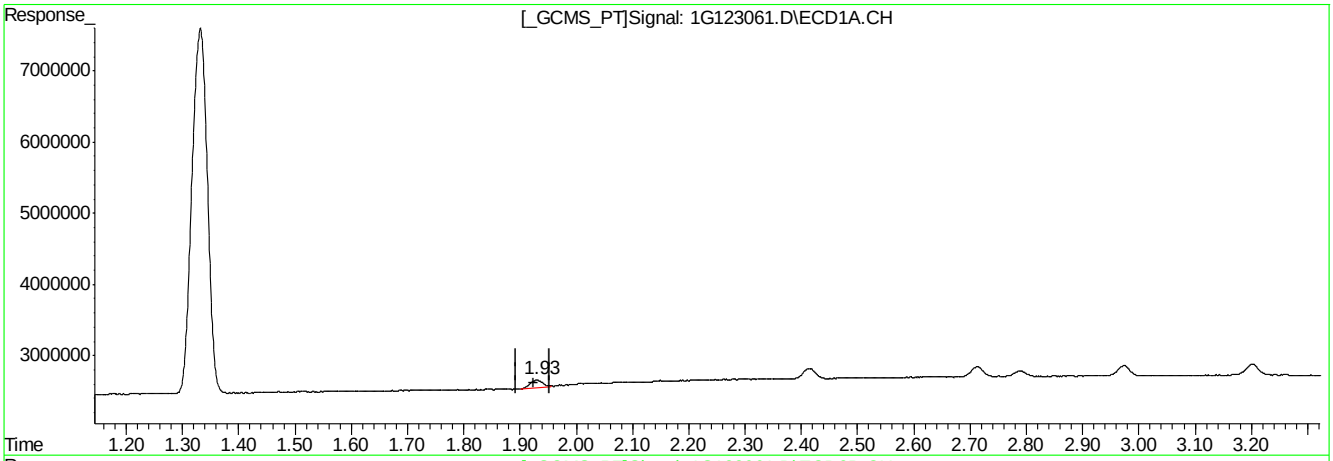
11.5.1.2

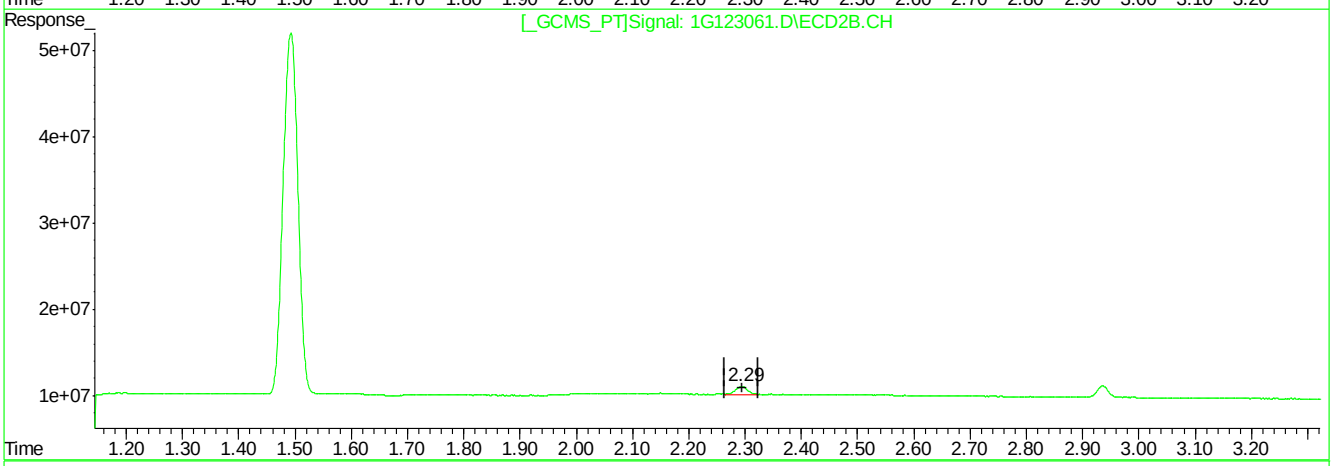
11

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD2B.CH
Acq On    : 16 May 2016  10:11 am                    Operator: thomasl
Sample    : ic3988-1                                 Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 12:27 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.93min 1.032PPB m

response 1593097

(2) Tetrachloro-m-xylene #2 (SAB)

2.29min 1.032PPB

response 13048604

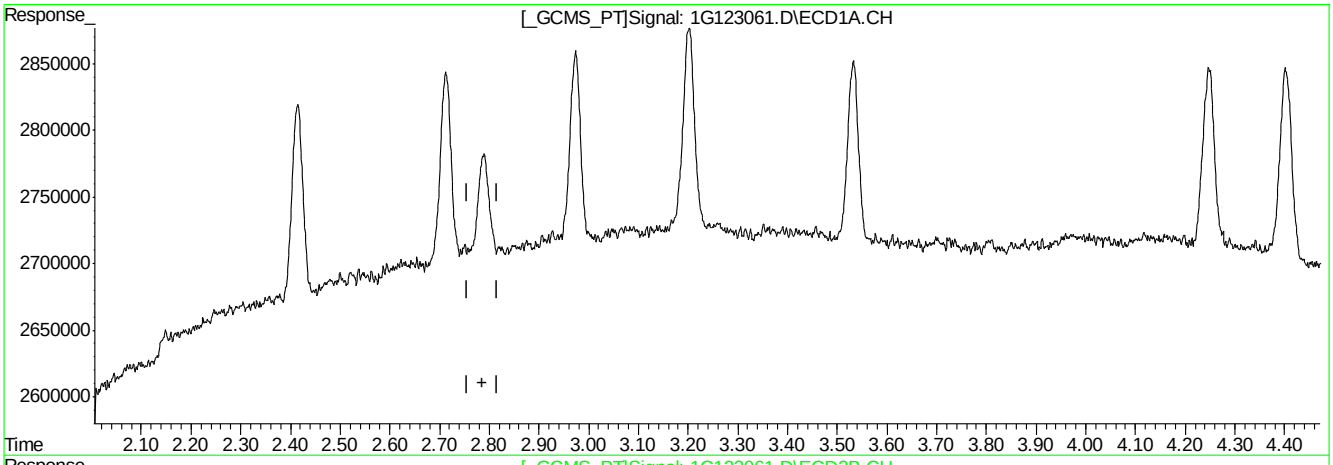
(+) = Expected Retention Time

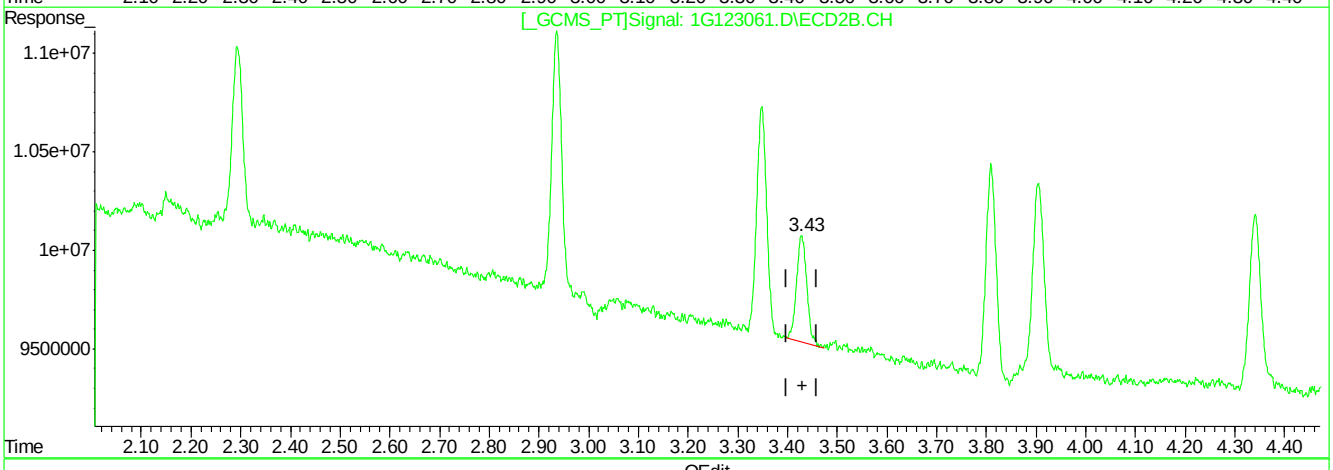
1G123061.D 1PST3988.M Mon May 16 12:28:03 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD2B.CH
Acq On : 16 May 2016 10:11 am Operator: thomasl
Sample : ic3988-1 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 12:27 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration





QEdit

(6) beta-BHC (B)

0.00min 0.000PPB

response 0

(6) beta-BHC #2 (B)

3.43min 1.022PPB

response 7800568

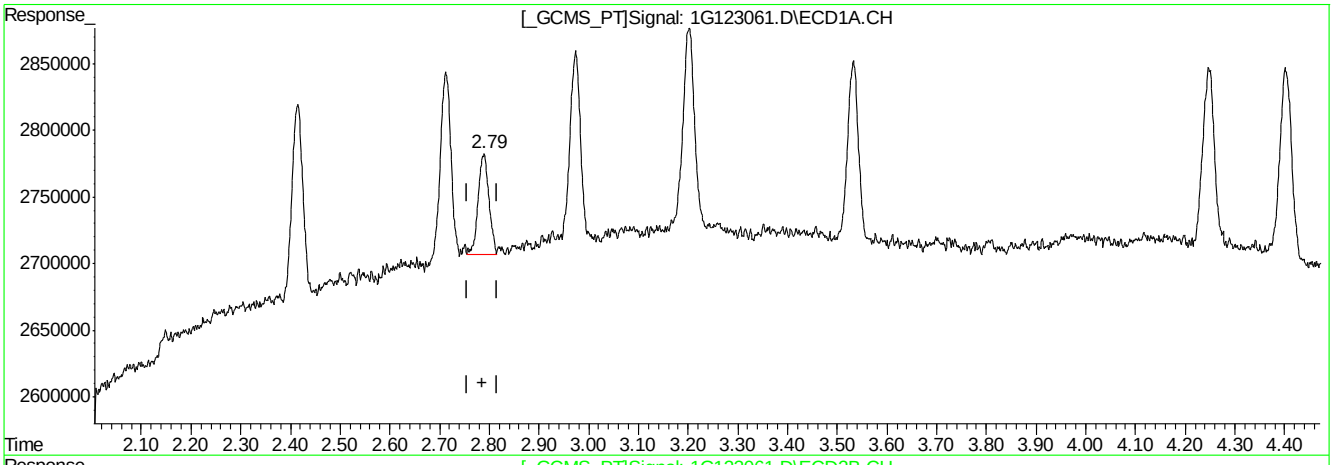
(+) = Expected Retention Time

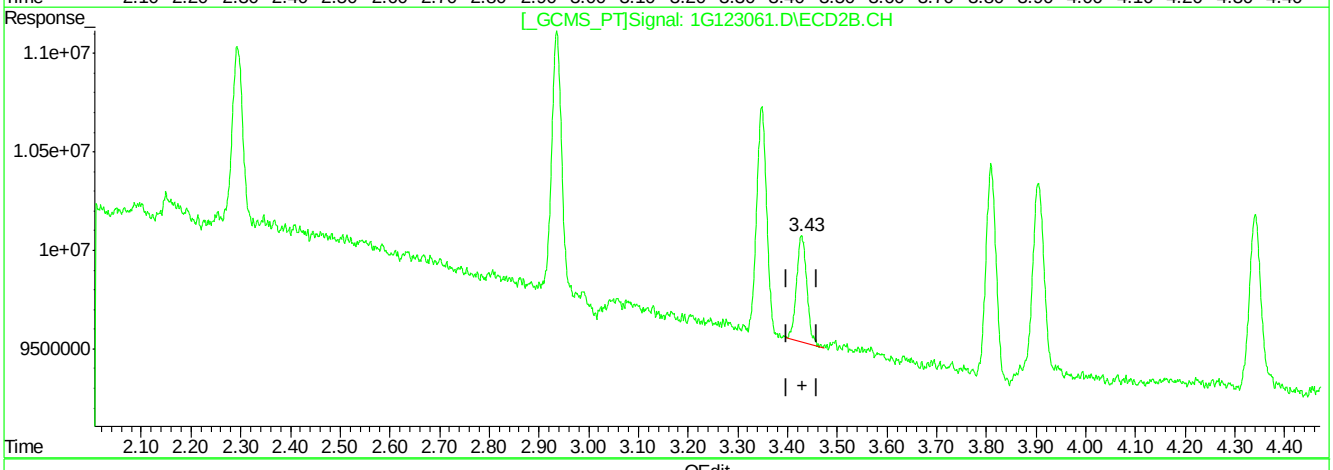
1G123061.D 1PST3988.M Mon May 16 12:28:09 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD2B.CH
Acq On    : 16 May 2016  10:11 am                    Operator: thomasl
Sample    : ic3988-1                                 Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 12:27 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(6) beta-BHC (B)

2.79min 1.050PPB m

response 1135172

(6) beta-BHC #2 (B)

3.43min 1.022PPB

response 7800568

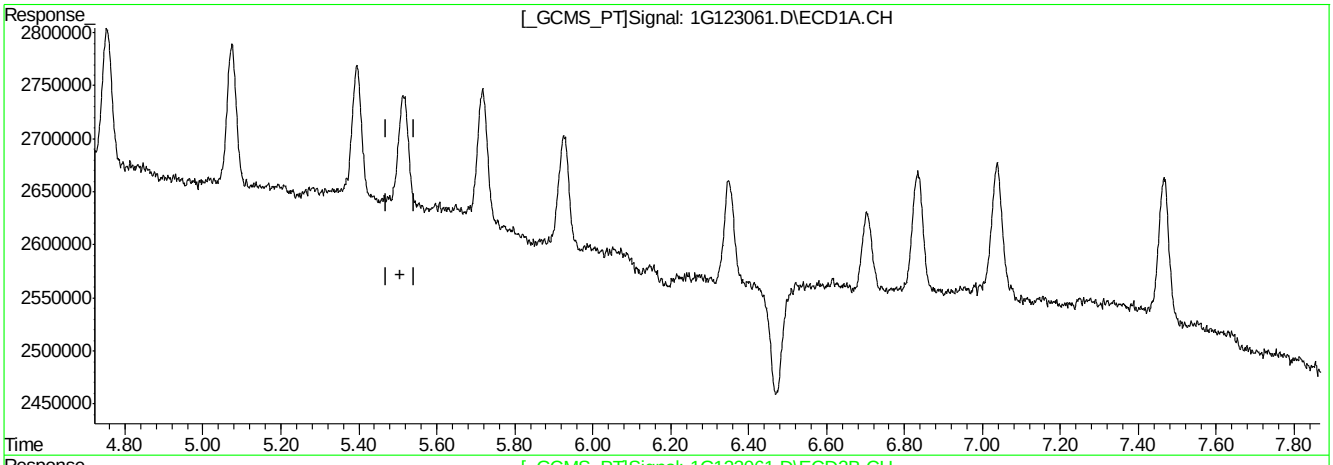
(+) = Expected Retention Time

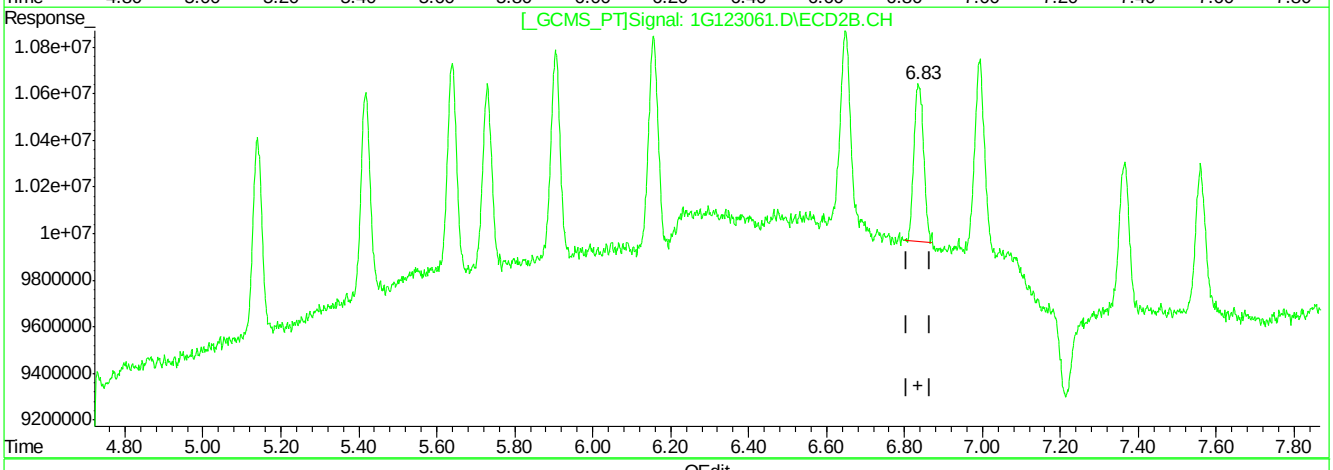
1G123061.D 1PST3988.M Mon May 16 12:28:17 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD2B.CH
Acq On : 16 May 2016 10:11 am Operator: thomasl
Sample : ic3988-1 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 12:27 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration





(16) 4,4'-DDD (A)

0.00min 0.000PPB

response 0

(16) 4,4'-DDD #2 (A)

6.84min 1.008PPB

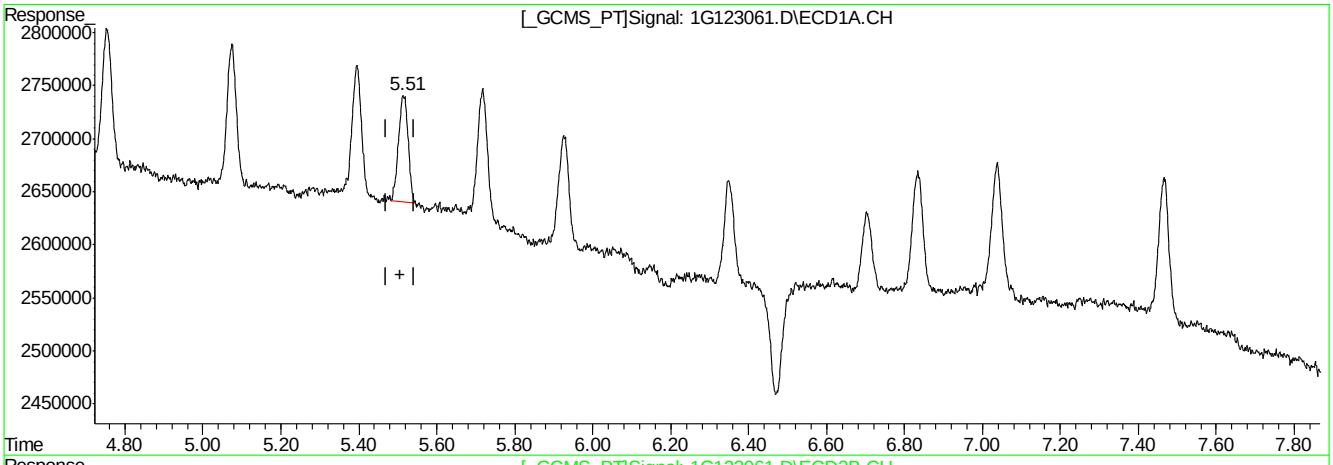
response 11581992

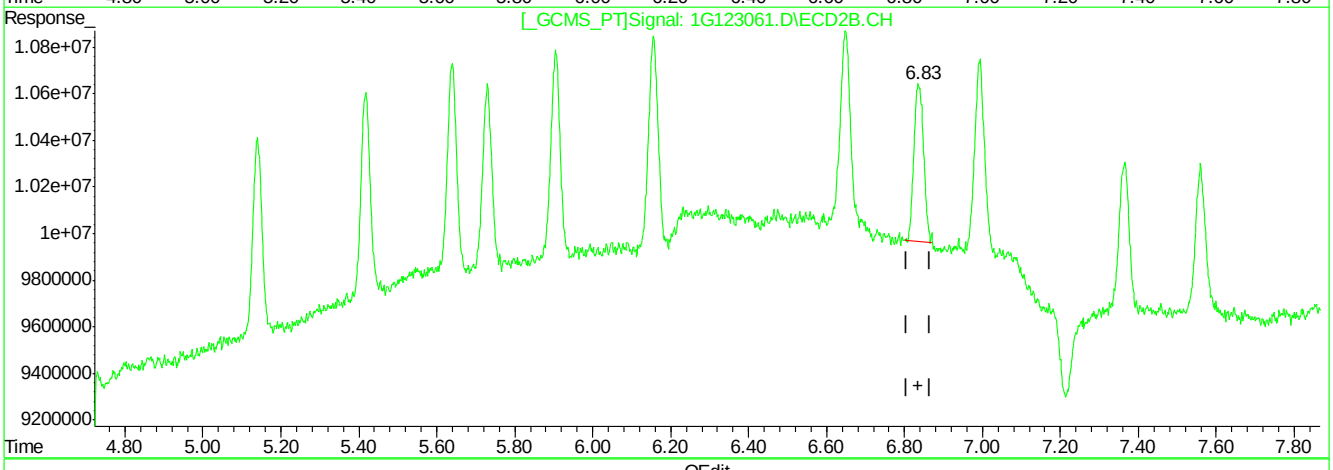
(+) = Expected Retention Time
1G123061.D 1PST3988.M Mon May 16 12:28:28 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD2B.CH
Acq On : 16 May 2016 10:11 am Operator: thomasl
Sample : ic3988-1 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 12:27 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration





QEdit

(16) 4,4'-DDD (A)

5.51min 0.985PPB m

response 1723248

(16) 4,4'-DDD #2 (A)

6.84min 1.008PPB

response 11581992

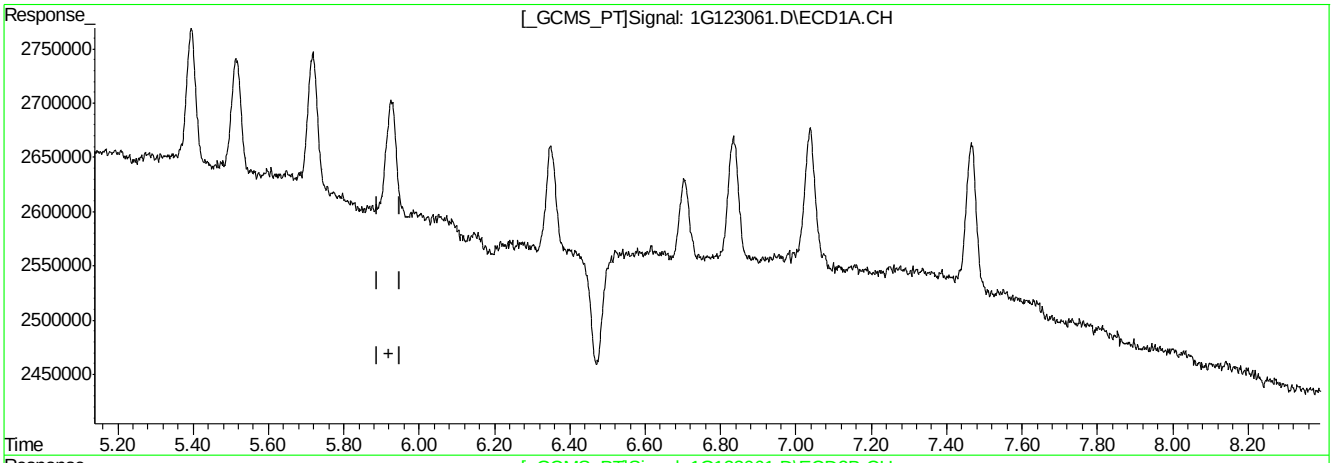
(+) = Expected Retention Time
1G123061.D 1PST3988.M Mon May 16 12:28:40 2016 RPT1

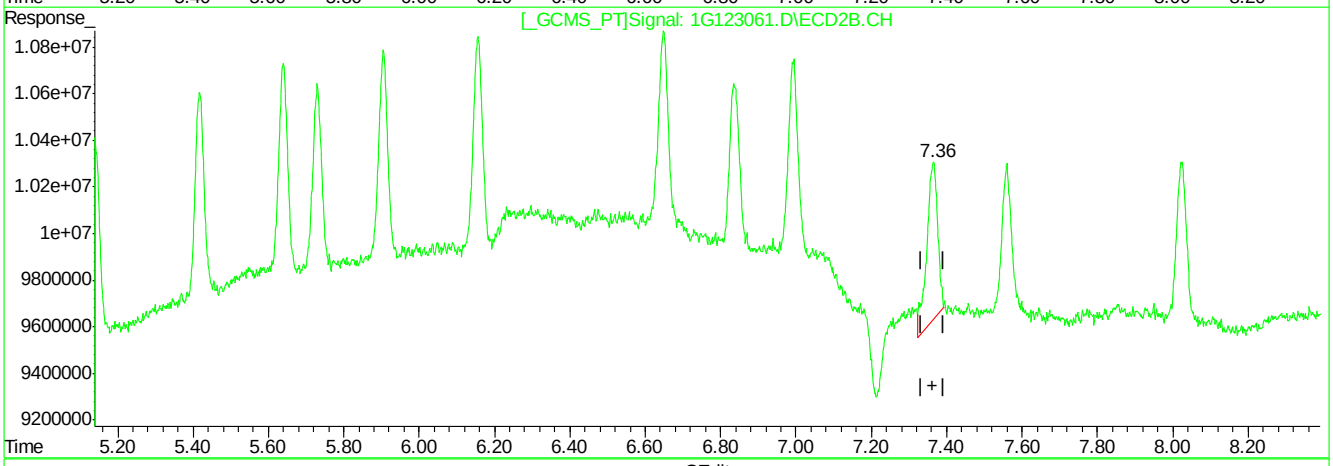
11.5.1.7 11

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD2B.CH
Acq On    : 16 May 2016  10:11 am                    Operator: thomasl
Sample    : ic3988-1                                 Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 12:27 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

0.00min 0.000PPB

response 0

(18) 4,4'-DDT #2 (MA)

7.36min 1.322PPB

response 13552736

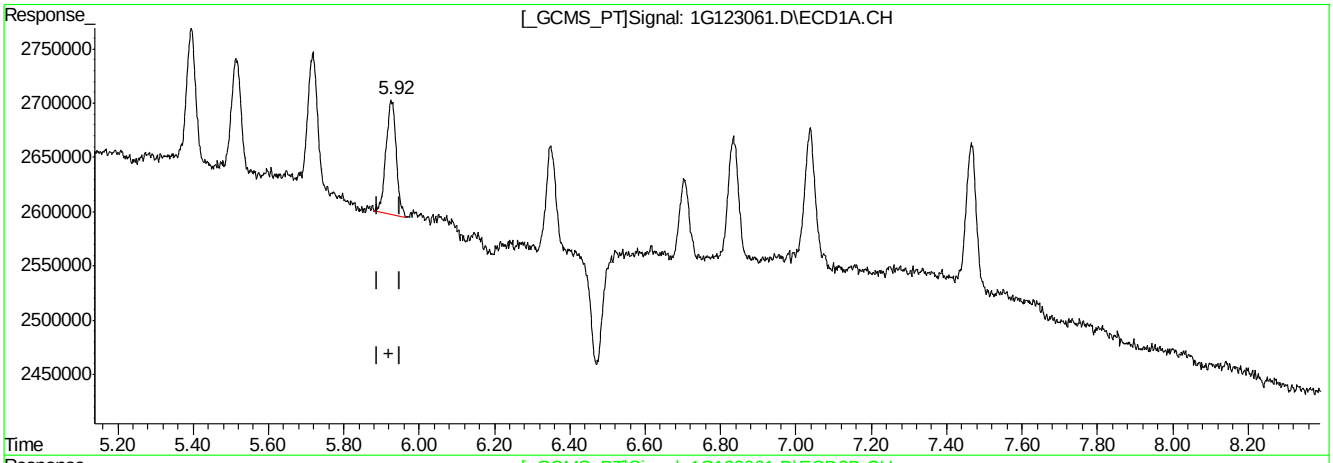
(+) = Expected Retention Time

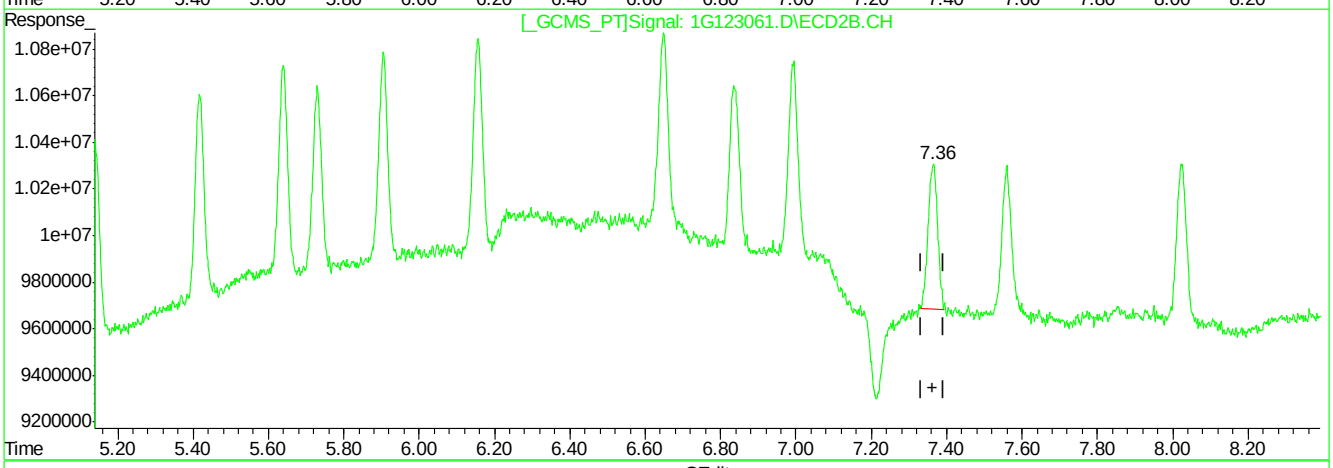
1G123061.D 1PST3988.M Mon May 16 12:28:45 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD2B.CH
Acq On    : 16 May 2016  10:11 am                    Operator: thomasl
Sample    : ic3988-1                                 Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 12:27 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.92min 1.050PPB m

response 1997680

(18) 4,4'-DDT #2 (MA)

7.36min 1.049PPB m

response 10752582

(+) = Expected Retention Time

1G123061.D 1PST3988.M Mon May 16 12:29:18 2016 RPT1

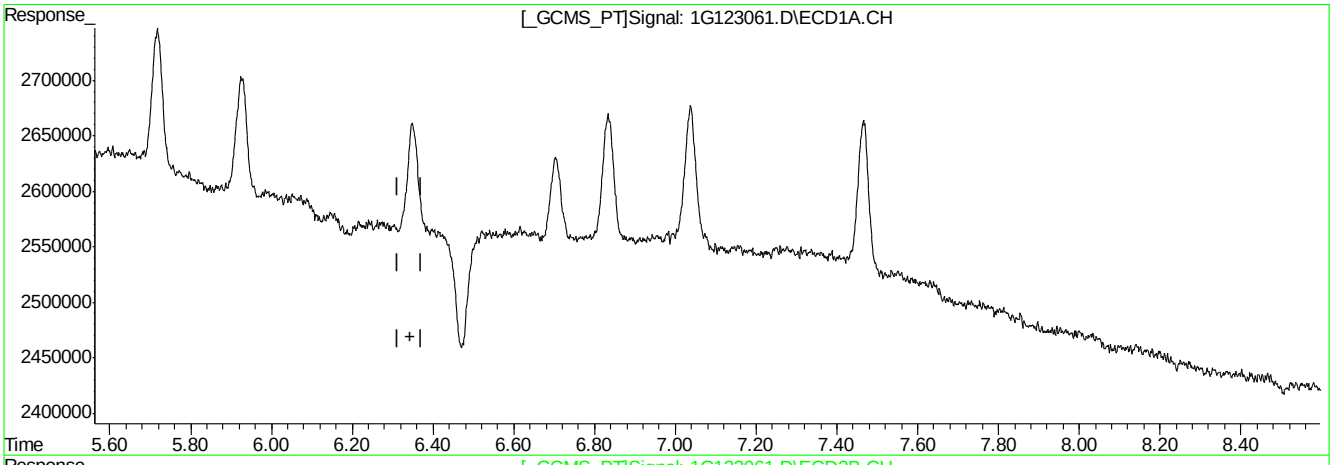
11.5.1.9

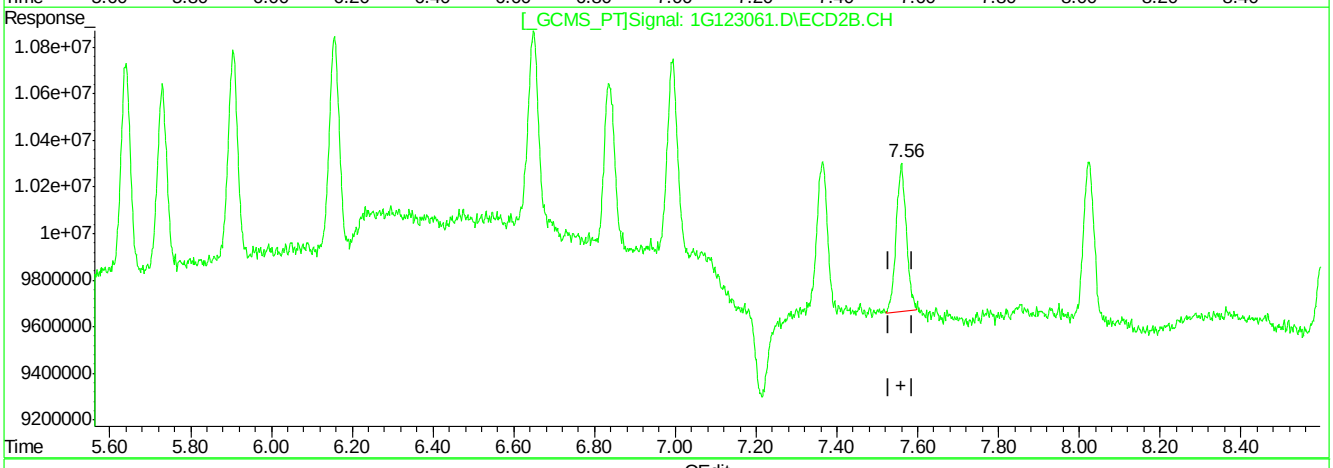
11

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD2B.CH
Acq On    : 16 May 2016  10:11 am                    Operator: thomasl
Sample    : ic3988-1                                 Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 12:27 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

0.00min 0.000PPB

response 0

(19) Endrin Aldehyde #2 (B)

7.56min 1.188PPB

response 11015067

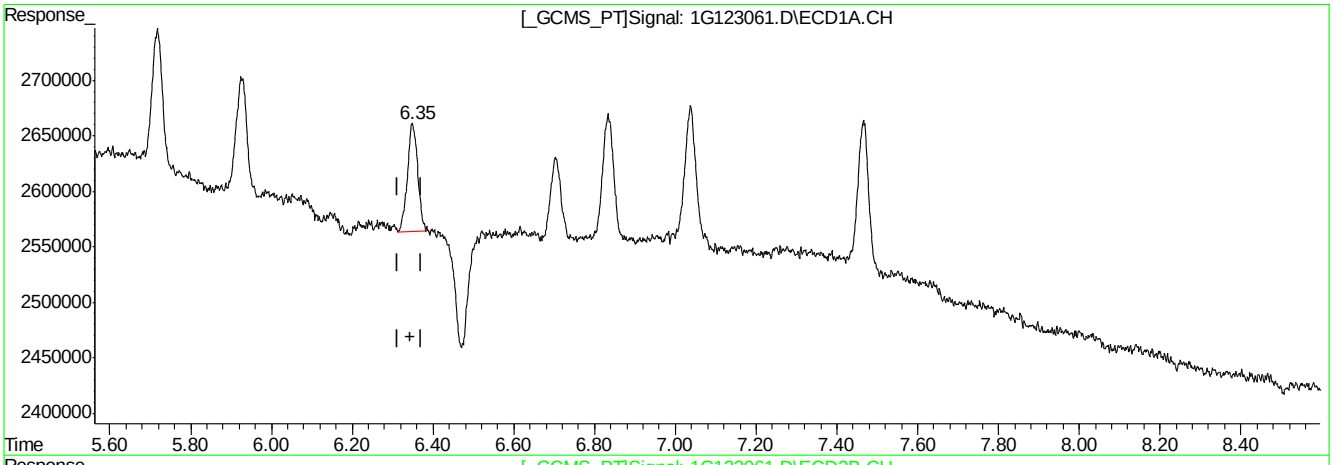
(+) = Expected Retention Time

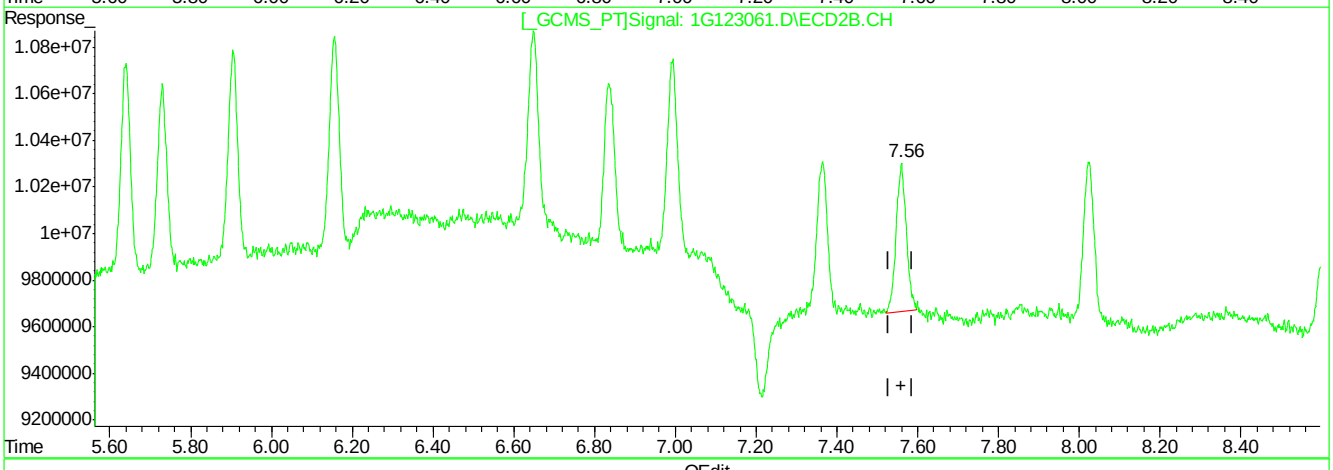
1G123061.D 1PST3988.M Mon May 16 12:29:21 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD2B.CH
Acq On    : 16 May 2016  10:11 am                    Operator: thomasl
Sample    : ic3988-1                                 Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 12:27 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.35min 1.117PPB m

response 1723536

(19) Endrin Aldehyde #2 (B)

7.56min 1.188PPB

response 11015067

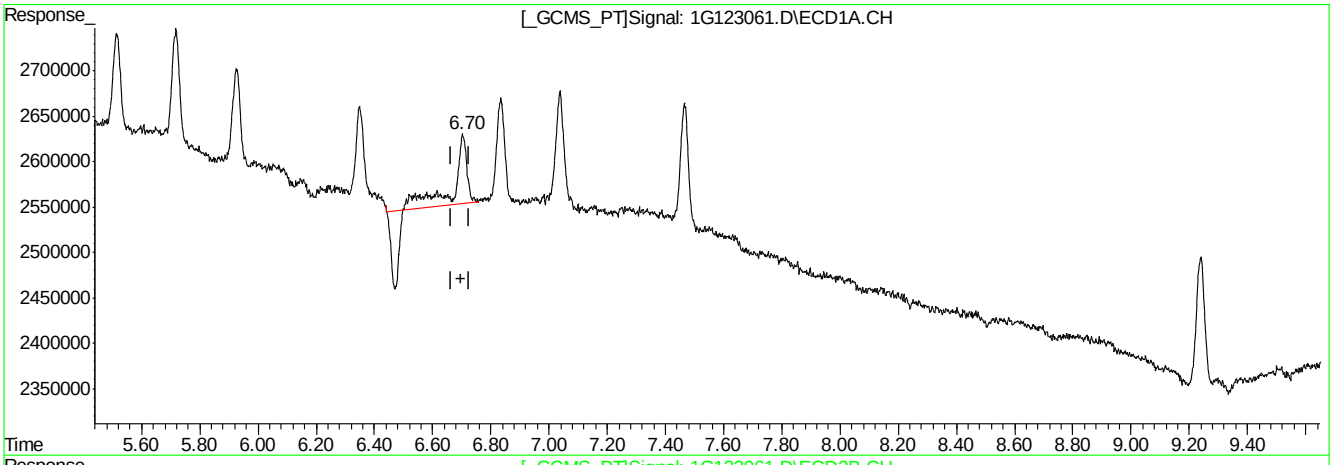
(+) = Expected Retention Time

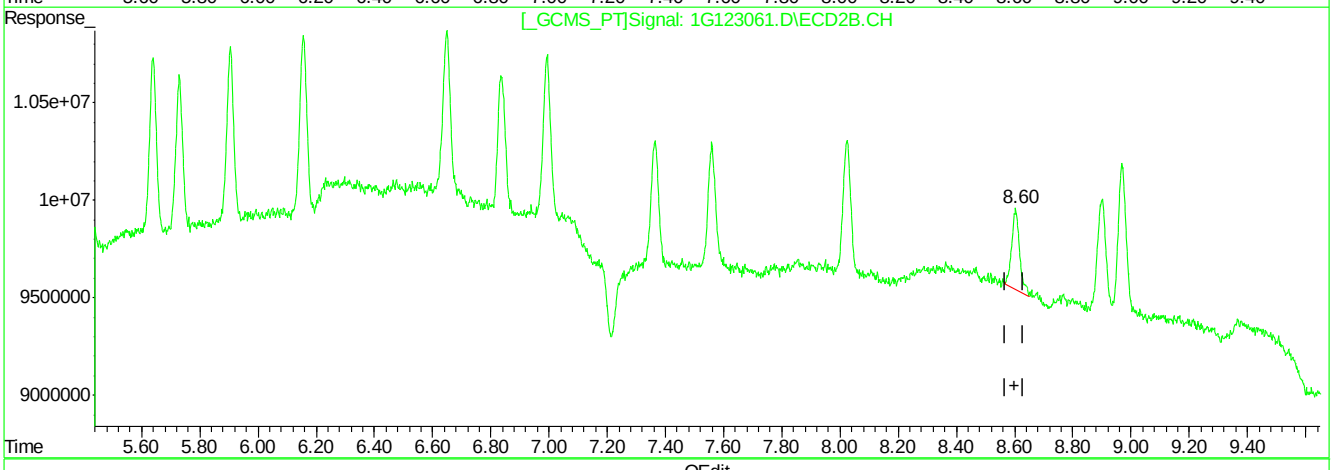
1G123061.D 1PST3988.M Mon May 16 12:29:30 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD2B.CH
Acq On    : 16 May 2016  10:11 am                    Operator: thomasl
Sample    : ic3988-1                                 Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 12:27 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.70min 1.199PPB

response 1190508

(21) Methoxychlor #2 (A)

8.60min 1.543PPB

response 7701428

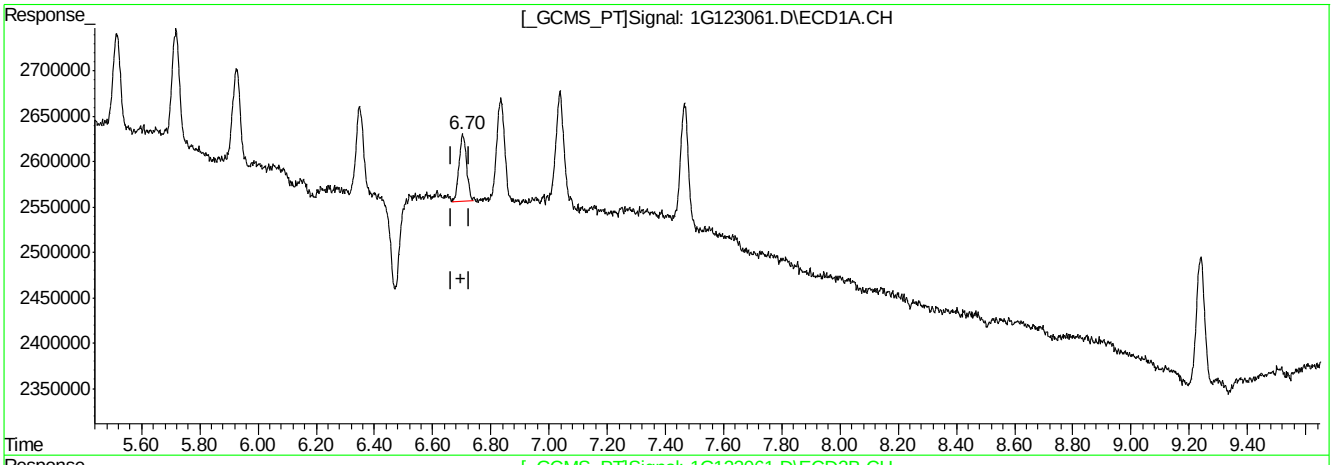
(+) = Expected Retention Time

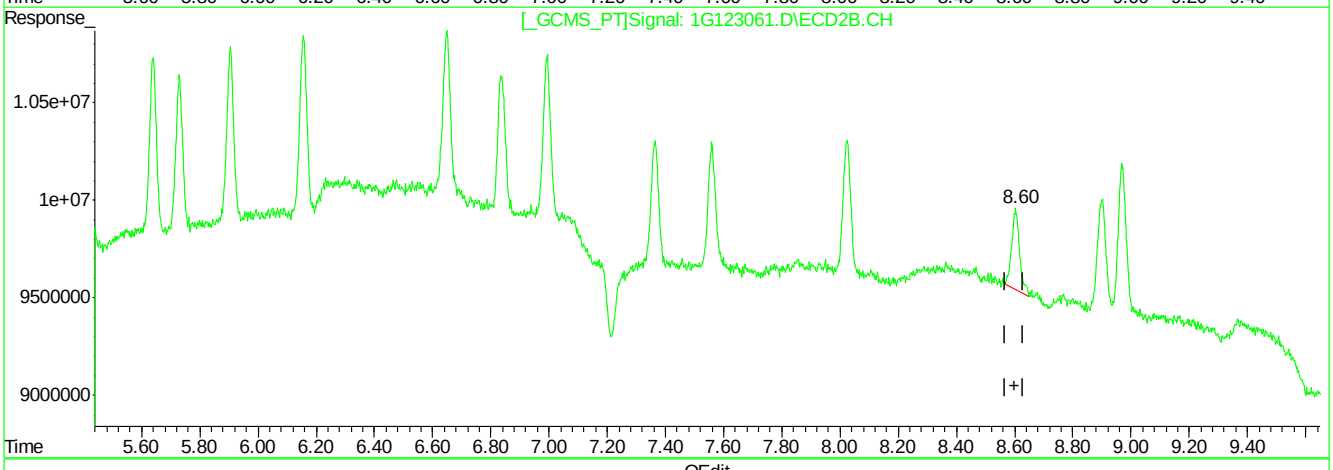
1G123061.D 1PST3988.M Mon May 16 12:29:34 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123061.D\ECD2B.CH
Acq On    : 16 May 2016  10:11 am                    Operator: thomasl
Sample    : ic3988-1                                 Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 12:27 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.70min 1.342PPB m

response 1332584

(21) Methoxychlor #2 (A)

8.60min 1.543PPB

response 7701428

(+) = Expected Retention Time

1G123061.D 1PST3988.M Mon May 16 12:29:42 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/16/16 17:43

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123062.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123062.D\ECD2B.CH
Acq On : 16 May 2016 10:28 am Operator: thomasl
Sample : ic3988-2 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:24 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	117.0E6	867.0E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.92	2.29	3768744	32599980	2.044	2.282
Spiked Amount	40.000	Range	30 - 150	Recovery	=	5.11%#	5.71%#
24) SA	Decachlorobiphen	9.23	10.68	6069623	23070405	2.332	2.302
Spiked Amount	40.000			Recovery	=	5.83%	5.76%
	Target Compounds						
3) A	alpha-BHC	2.41	2.94	5320474	48837024	1.868	2.301
4) MA	gamma-BHC	2.71	3.35	5018534	44847471	1.886m	2.335
5) MA	Heptachlor	3.20	3.90	5445600	44161193	2.001	2.449
6) B	beta-BHC	2.78	3.43	2769736	21541691	2.145	2.497
7) B	delta-BHC	2.97	3.81	4807183	46590770	1.863	2.480
8) MB	Aldrin	3.53	4.34	4740046	37530736	1.838	2.209
9) B	Heptachlor Epoxi	4.24	5.14	4685771	33501205	1.863	2.206
10) B	gamma-Chlordane	4.39	5.41	5037830	33533081	2.000	2.217
11) B	alpha-Chlordane	4.56	5.64	5027448	34398295	2.030	2.311
12) A	Endosulfan I	4.75	5.73	4802907	30738861	1.953	2.189
13) B	4,4'-DDE	4.68	5.90	5044117	32973270	1.965	2.212
14) MA	Dieldrin	5.07	6.15	4870970	34619553	1.833	2.246
15) MA	Endrin	5.39	6.65	4597980	30785656	1.930	2.593
16) A	4,4'-DDD	5.51	6.84	3866996	26908810	1.852	2.073
17) B	Endosulfan II	5.71	6.99	4782891	32023828	1.940	2.127
18) MA	4,4'-DDT	5.92	7.36	4038475	26426436	1.778	2.282
19) B	Endrin Aldehyde	6.34	7.56	3844888	23619944	2.087	2.253
20) B	Endosulfan Sulfa	7.03	8.02	4353332	27916601	2.218	2.466
21) A	Methoxychlor	6.70	8.60	2673330	14224405	2.255m	2.522m
22)	Mirex	6.83	8.90	4711419	23364971	2.293	2.351
23) B	Endrin Ketone	7.46	8.97	4883106	31085411	2.222	2.465

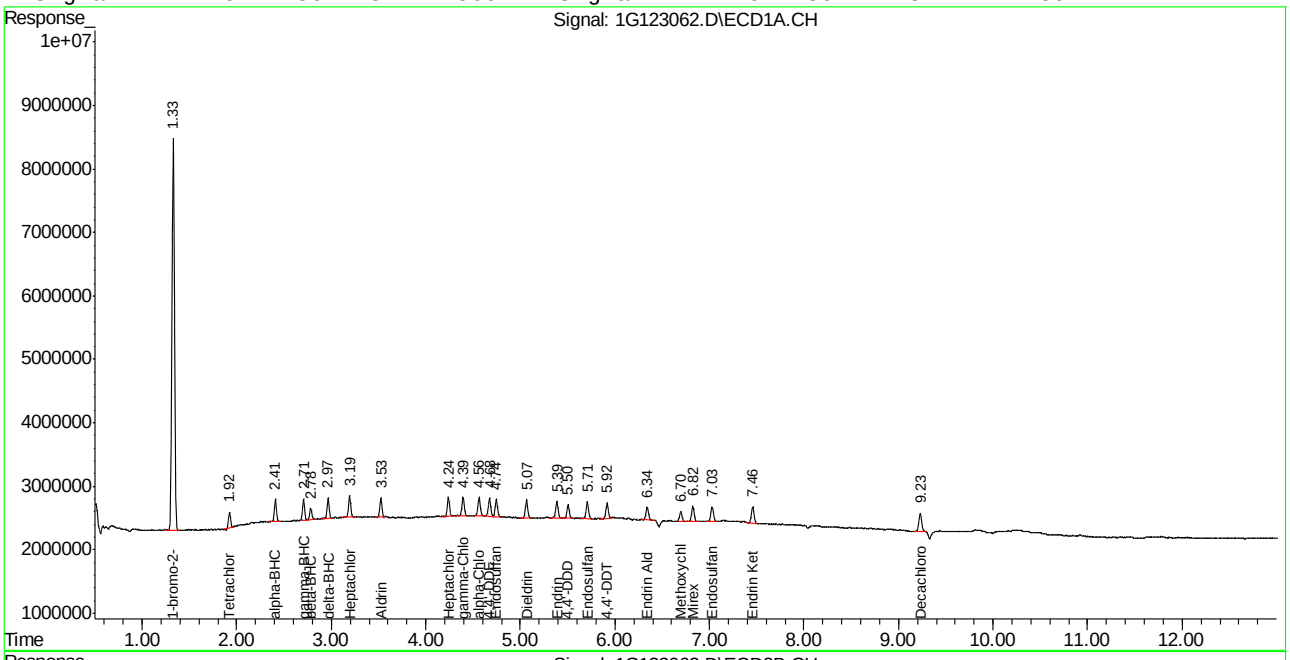
(f)=RT Delta > 1/2 Window (m)=manual int.

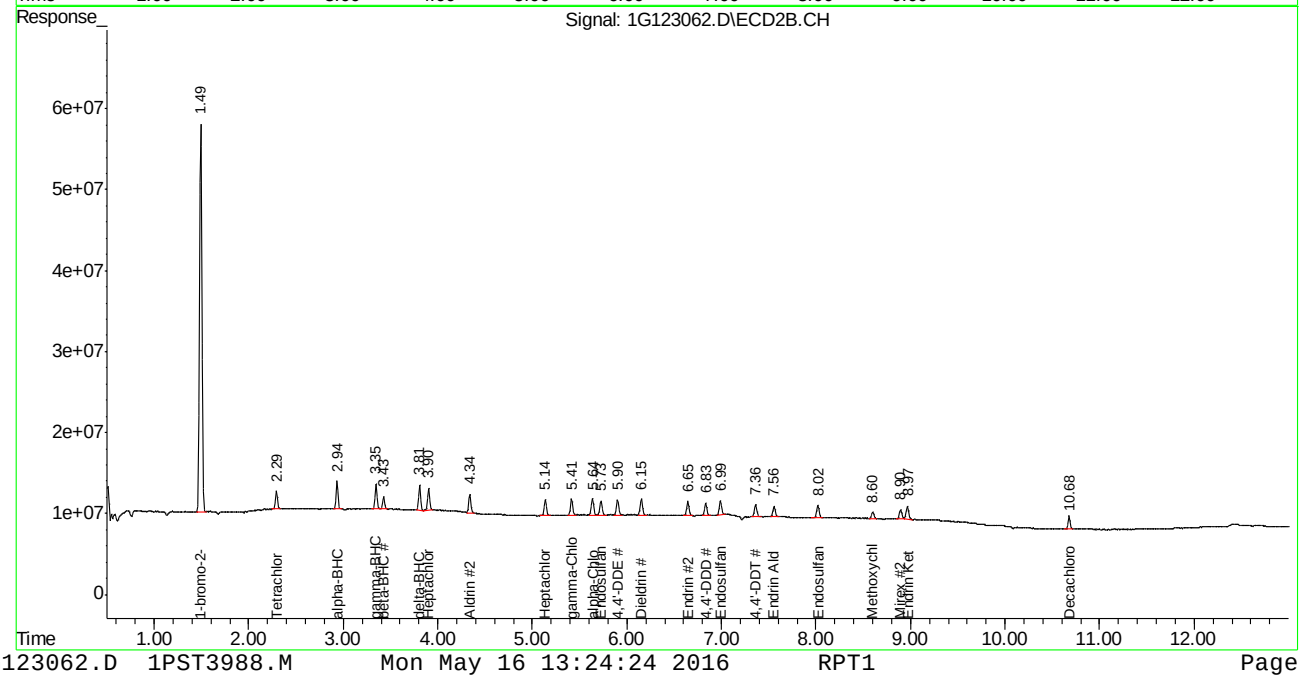
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123062.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123062.D\ECD2B.CH
Acq On : 16 May 2016 10:28 am Operator: thomasl
Sample : ic3988-2 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:24 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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





1G123062.D 1PST3988.M Mon May 16 13:24:24 2016 RPT1 Page 2

SGS ACCUTEST JC20314

Manual Integration Approval Summary

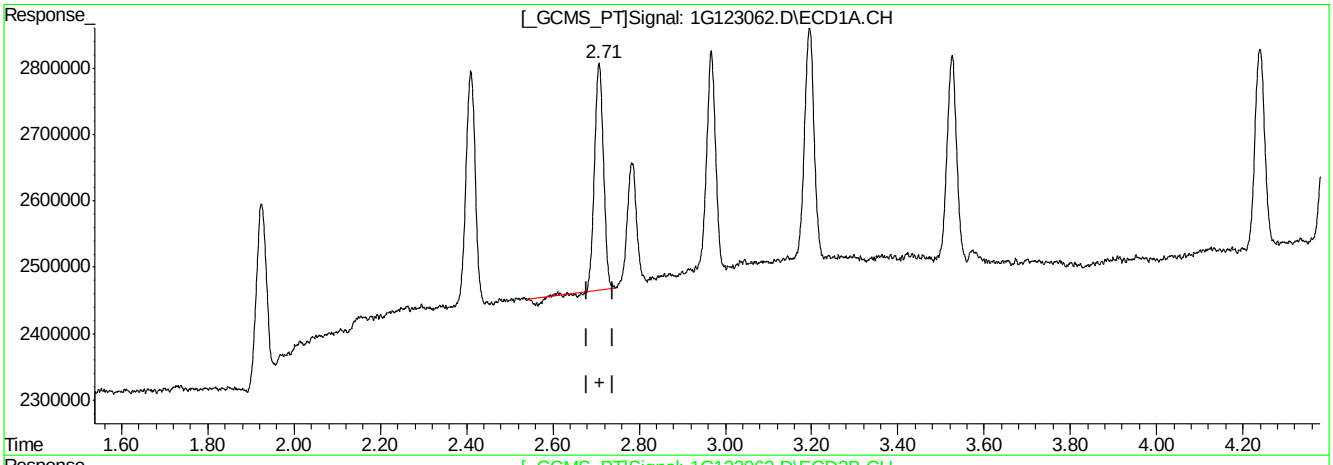
Sample Number:	G1G3988-IC3988	**Method:**	SW846 8081B
Lab FileID:	1G123062.D	**Analyst approved:**	05/16/16 15:18 Dhara Saparia
Injection Time:	05/16/16 10:28	**Supervisor approved:**	05/16/16 17:43 Gwendolyn Burns

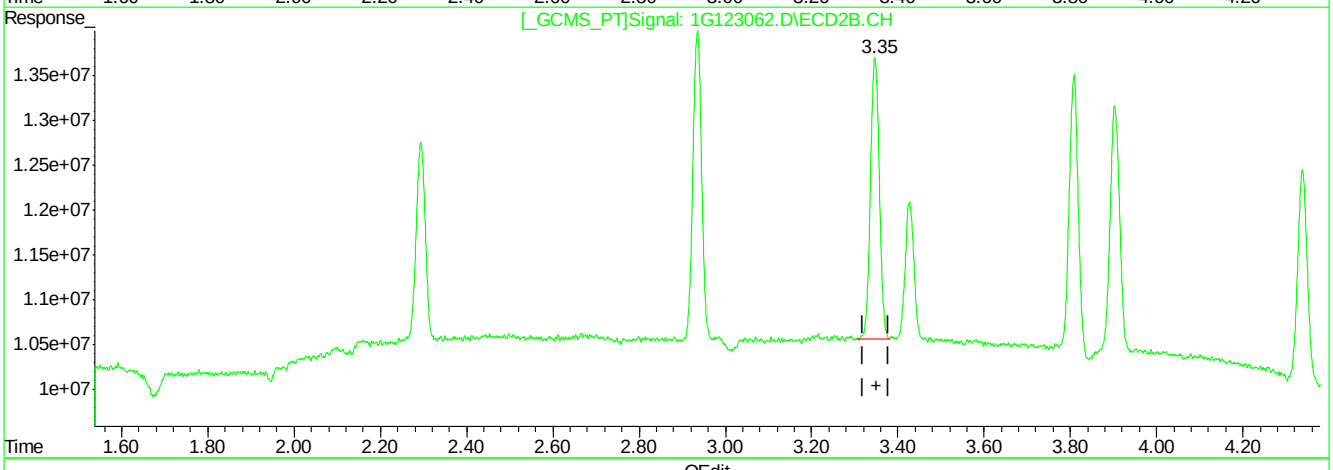
Parameter	CAS	Sig#	R.T. (min.)	Reason
gamma-BHC (Lindane)	58-89-9	1	2.71	Poor instrument integration
Methoxychlor	72-43-5	1	6.70	Poor instrument integration
Methoxychlor	72-43-5	2	8.60	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123062.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123062.D\ECD2B.CH
Acq On    : 16 May 2016  10:28 am                    Operator: thomasl
Sample    : ic3988-2                                 Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 12:13 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(4) gamma-BHC (MA)

2.71min 1.804PPB

response 4799798

(4) gamma-BHC #2 (MA)

3.35min 2.335PPB

response 44847471

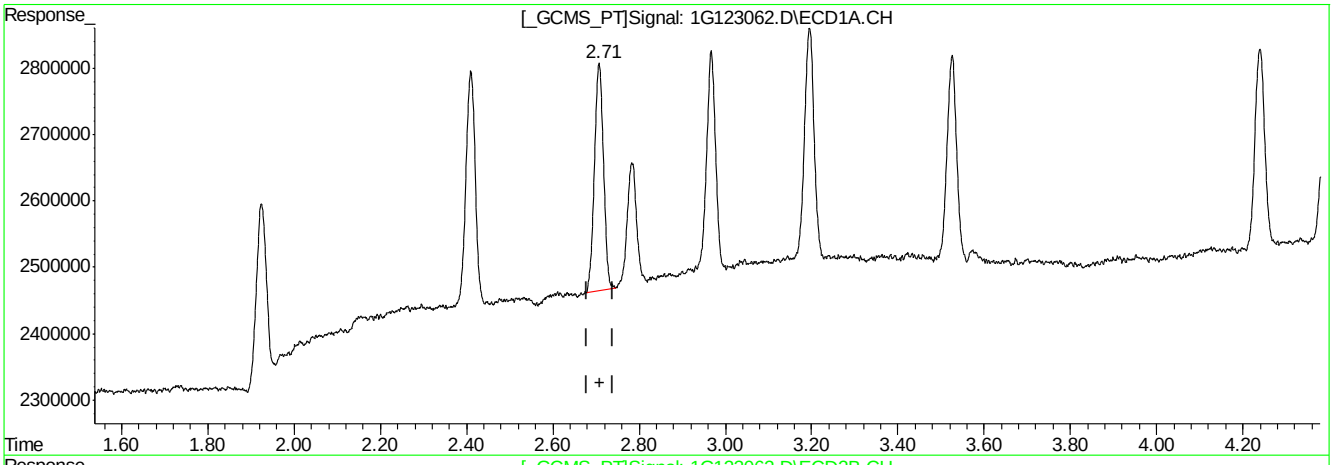
(+) = Expected Retention Time

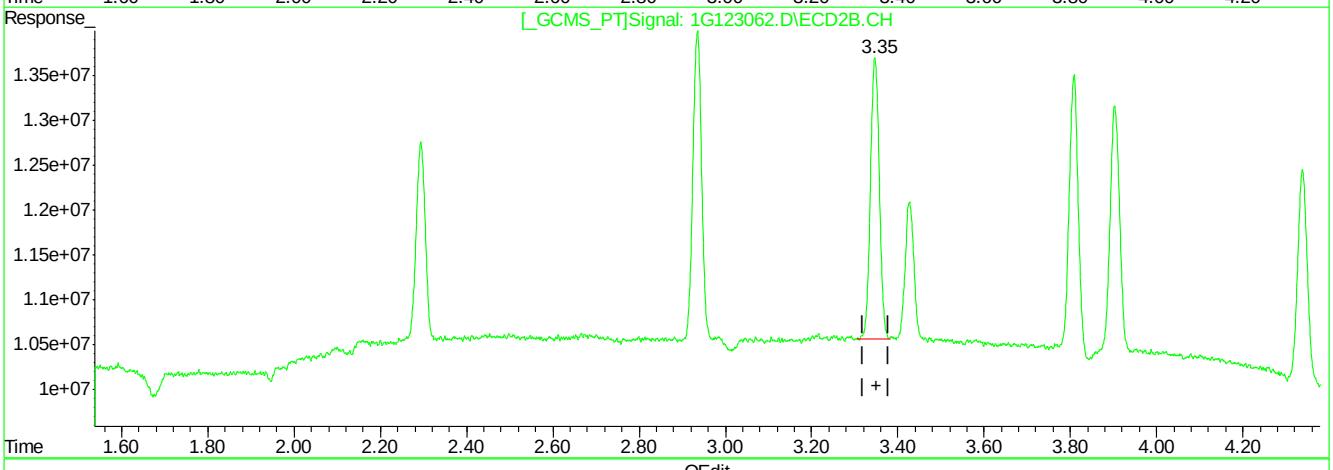
1G123062.D 1PST3988.M Mon May 16 12:13:40 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123062.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123062.D\ECD2B.CH
Acq On    : 16 May 2016  10:28 am                    Operator: thomasl
Sample    : ic3988-2                                 Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 12:13 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(4) gamma-BHC (MA)

2.71min 1.886PPB m

response 5018534

(4) gamma-BHC #2 (MA)

3.35min 2.335PPB

response 44847471

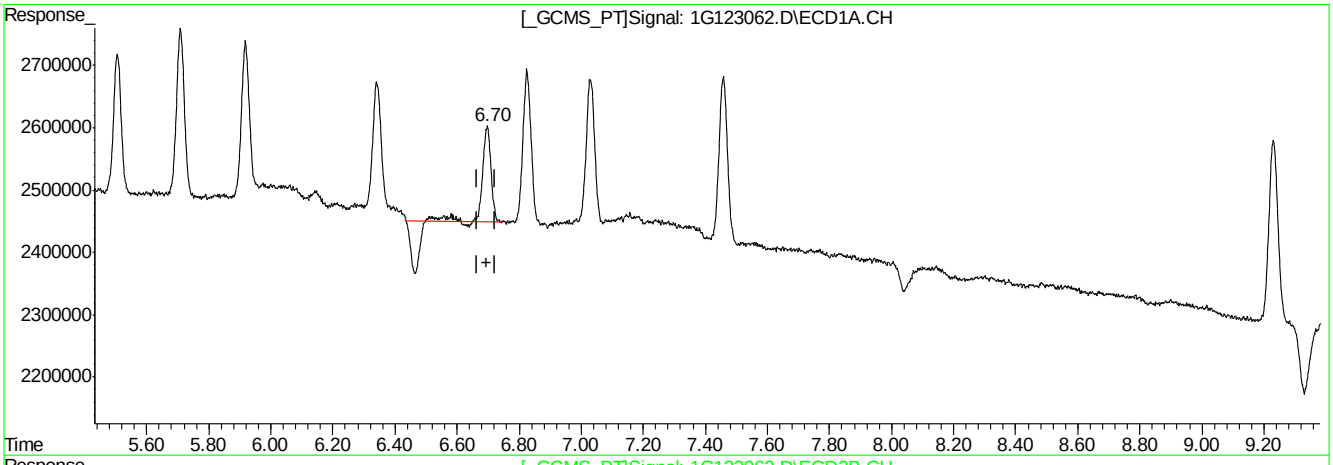
(+) = Expected Retention Time

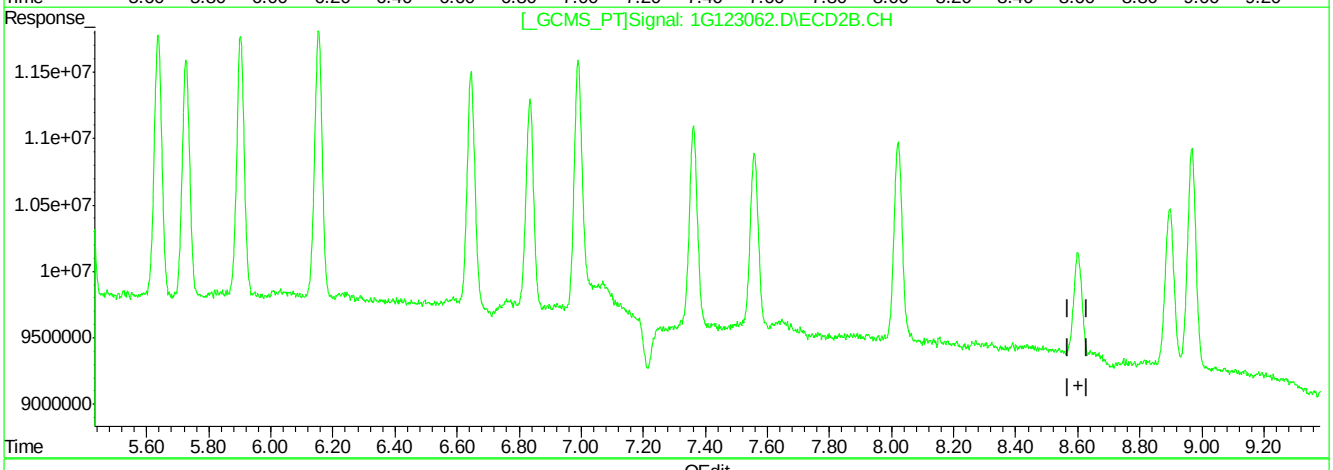
1G123062.D 1PST3988.M Mon May 16 12:13:48 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123062.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123062.D\ECD2B.CH
Acq On    : 16 May 2016  10:28 am                    Operator: thomasl
Sample    : ic3988-2                                 Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 12:13 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.70min 1.395PPB

response 1654441

(21) Methoxychlor #2 (A)

0.00min 0.000PPB

response 0

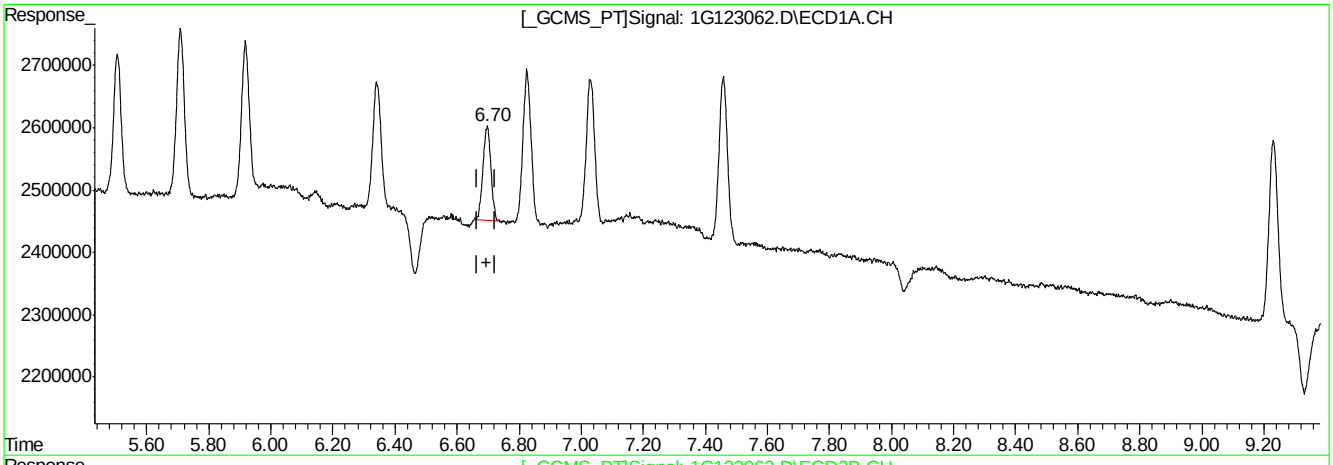
(+) = Expected Retention Time

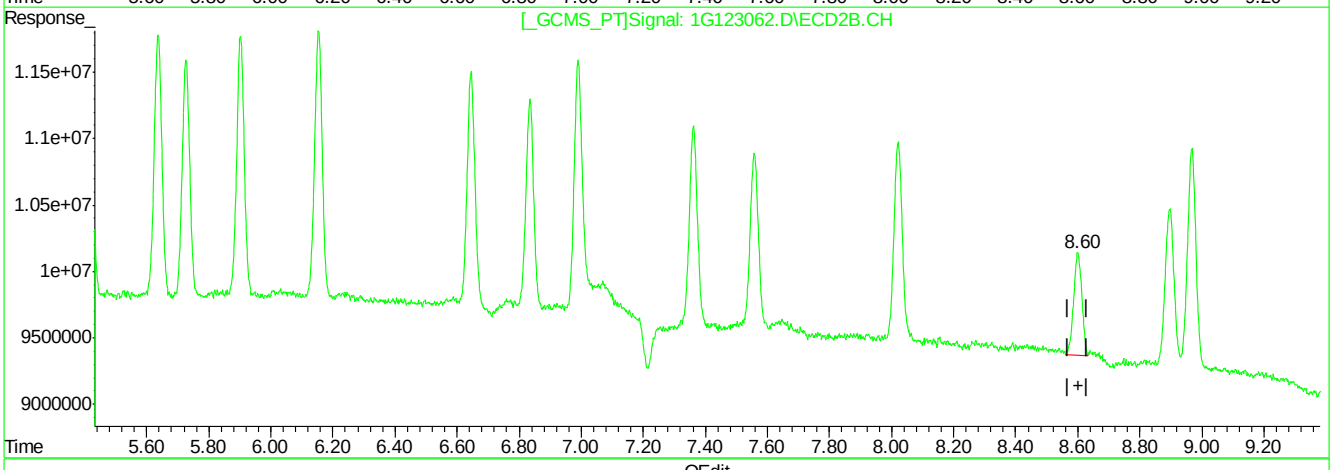
1G123062.D 1PST3988.M Mon May 16 12:14:00 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123062.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123062.D\ECD2B.CH
Acq On : 16 May 2016 10:28 am Operator: thomasl
Sample : ic3988-2 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 12:13 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration





QEdit

(21) Methoxychlor (A)

6.70min 2.255PPB m

response 2673330

(21) Methoxychlor #2 (A)

8.60min 2.522PPB m

response 14224405

(+) = Expected Retention Time

1G123062.D 1PST3988.M Mon May 16 12:14:24 2016 RPT1

SGS ACCUTEST JC20314

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123063.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123063.D\ECD2B.CH
Acq On : 16 May 2016 10:46 am Operator: thomasl
Sample : ic3988-5 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 17:21 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 13:30:31 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	113.6E6	855.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.92	2.29	10136401	81388560	4.936	5.348
Spiked Amount	40.000	Range	30 - 150	Recovery	=	12.34%#	13.37%#
24) SA	Decachlorobiphen	9.23	10.68	14488084	57537937	5.189	5.382
Spiked Amount	40.000			Recovery	=	12.97%	13.46%
	Target Compounds						
3) A	alpha-BHC	2.41	2.94	13729734	119.5E6	4.674	5.244
4) MA	gamma-BHC	2.71	3.35	13145392	111.6E6	4.789	5.413
5) MA	Heptachlor	3.20	3.90	13674867	105.3E6	4.894	5.470
6) B	beta-BHC	2.78	3.43	6640000	54109928	5.055	5.723
7) B	delta-BHC	2.97	3.81	12394888	110.1E6	4.606	5.338
8) MB	Aldrin	3.53	4.34	12380831	93164632	4.862	5.289
9) B	Heptachlor Epoxi	4.24	5.14	12130184	84083910	4.834	5.336
10) B	gamma-Chlordane	4.40	5.42	12491341	84035576	4.836	5.221
11) B	alpha-Chlordane	4.56	5.64	12579719	84688404	4.911	5.313
12) A	Endosulfan I	4.75	5.73	12108270	78325452	4.913	5.328
13) B	4,4'-DDE	4.67	5.90	12623806	82683735	4.888	5.229
14) MA	Dieldrin	5.07	6.15	12336127	85228777	4.807	5.164
15) MA	Endrin	5.39	6.65	11285271	81139456	4.851	5.585
16) A	4,4'-DDD	5.51	6.83	9740947	71643432	4.802	5.503
17) B	Endosulfan II	5.71	6.99	12115481	78275160	4.970	5.264
18) MA	4,4'-DDT	5.92	7.36	10495672	66836532	4.750	5.231
19) B	Endrin Aldehyde	6.34	7.56	9494629	59981905	4.931	5.257
20) B	Endosulfan Sulfa	7.03	8.02	11187191	69329572	4.780	5.328
21) A	Methoxychlor	6.70	8.60	6739268	34874789	5.150	5.083
22)	Mirex	6.83	8.90	11682729	58478048	5.247	5.379
23) B	Endrin Ketone	7.46	8.97	12910199	77332804	4.875	5.302

(f)=RT Delta > 1/2 Window (m)=manual int.

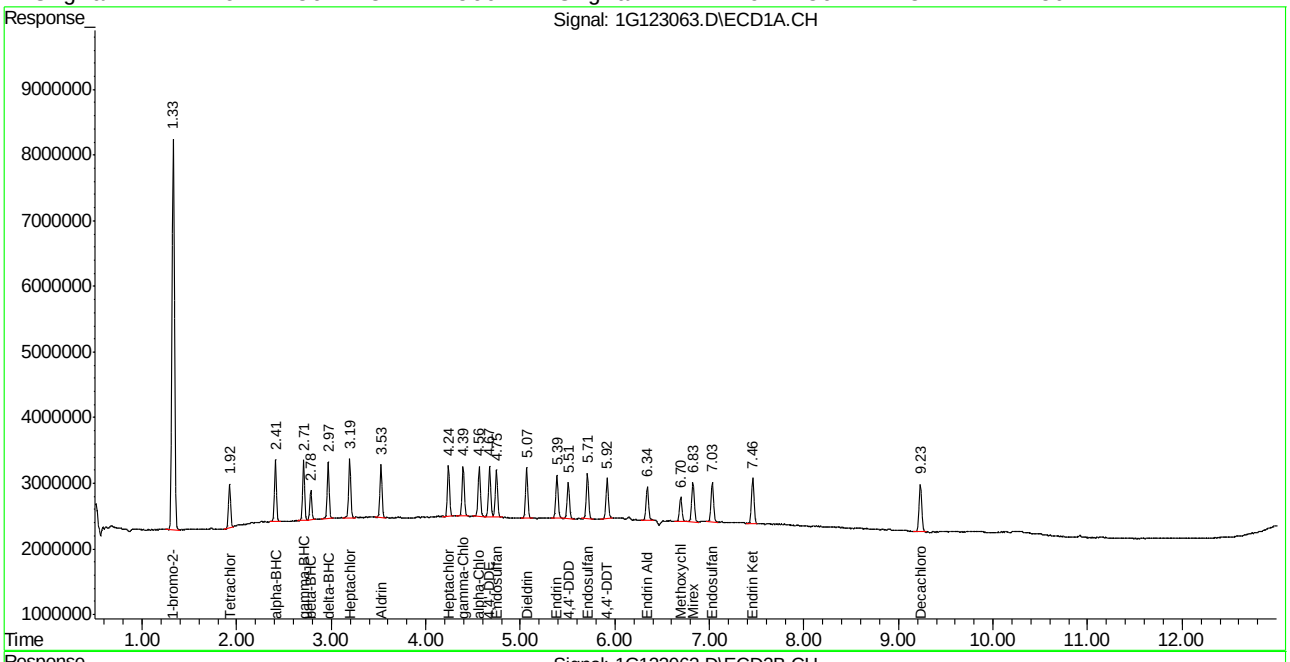
SGS ACCUTEST JC20314

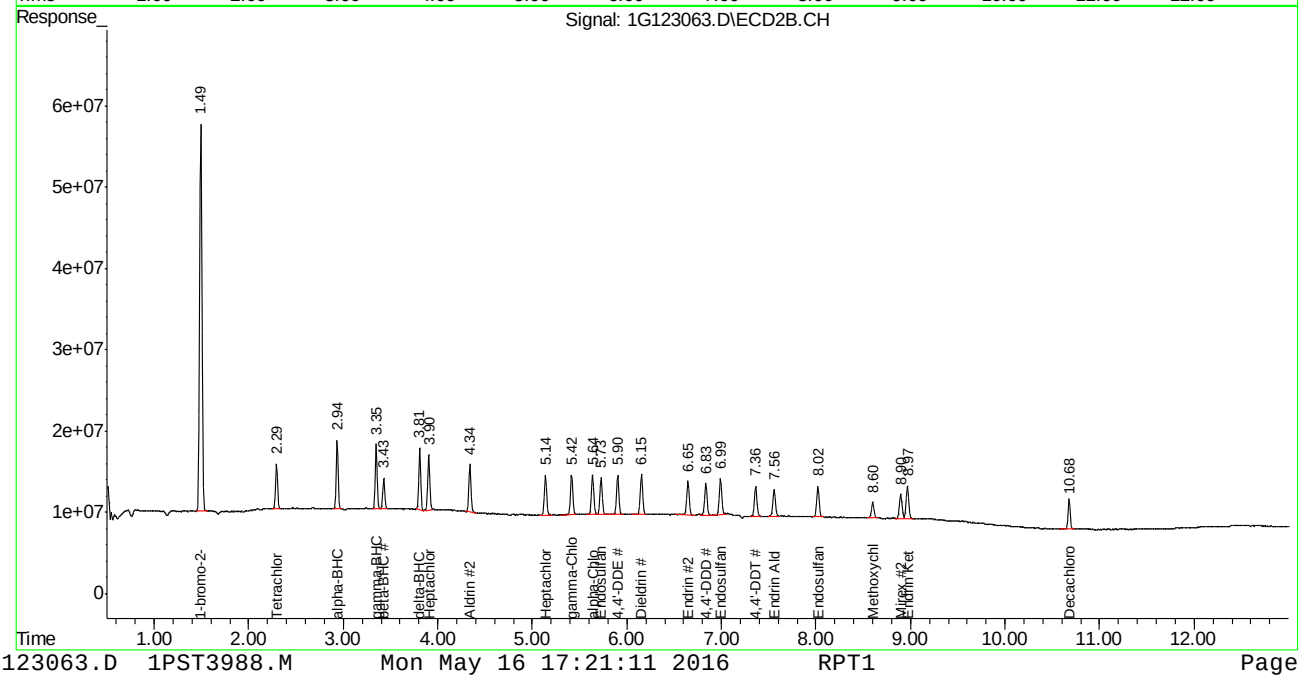
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123063.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123063.D\ECD2B.CH
Acq On : 16 May 2016 10:46 am Operator: thomasl
Sample : ic3988-5 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 17:21 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 13:30:31 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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 JC20314

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/16/16 17:43

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123064.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123064.D\ECD2B.CH
Acq On : 16 May 2016 11:03 am Operator: thomasl
Sample : ic3988-10 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:24 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	116.2E6	865.7E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.92	2.29	20750289	161.5E6	11.337	11.324
Spiked Amount	40.000	Range	30 - 150	Recovery	=	28.34%#	28.31%#
24) SA	Decachlorobiphen	9.23	10.68	28580121	110.5E6	11.061	11.042
Spiked Amount	40.000			Recovery	=	27.65%	27.61%
	Target Compounds						
3) A	alpha-BHC	2.41	2.94	27666553	236.8E6	9.785	11.172
4) MA	gamma-BHC	2.71	3.35	26439385	213.7E6	10.012	11.144
5) MA	Heptachlor	3.20	3.90	26685288	200.9E6	9.879	11.159
6) B	beta-BHC	2.78	3.43	12999848	99651131	10.141	11.571
7) B	delta-BHC	2.97	3.81	25401856	210.2E6	9.915	11.208
8) MB	Aldrin	3.53	4.34	24498041	179.8E6	9.569	10.600
9) B	Heptachlor Epoxi	4.24	5.14	24743436	159.8E6	9.911	10.536
10) B	gamma-Chlordane	4.40	5.41	24283346	160.9E6	9.712	10.656
11) B	alpha-Chlordane	4.57	5.64	24561033	160.1E6	9.992	10.773
12) A	Endosulfan I	4.75	5.73	23759924	152.6E6	9.734	10.882
13) B	4,4'-DDE	4.68	5.90	24597236	159.1E6	9.654	10.691
14) MA	Dieldrin	5.07	6.15	24330429	163.9E6	9.221	10.647
15) MA	Endrin	5.39	6.65	22119397	147.4E6	9.355	12.432
16) A	4,4'-DDD	5.51	6.83	19255220	131.2E6	9.288	10.124
17) B	Endosulfan II	5.71	6.99	23501982	148.7E6	9.600	9.892
18) MA	4,4'-DDT	5.92	7.36	21117760	127.9E6	9.367	11.056m
19) B	Endrin Aldehyde	6.34	7.56	18612425	115.5E6	10.178	11.037
20) B	Endosulfan Sulfa	7.03	8.02	22259824	132.5E6	11.425	11.723
21) A	Methoxychlor	6.70	8.60	13073987	68225543	11.107	12.114
22)	Mirex	6.82	8.89	22387131	112.7E6	10.976	11.356
23) B	Endrin Ketone	7.46	8.97	25533264	148.8E6	11.705	11.820

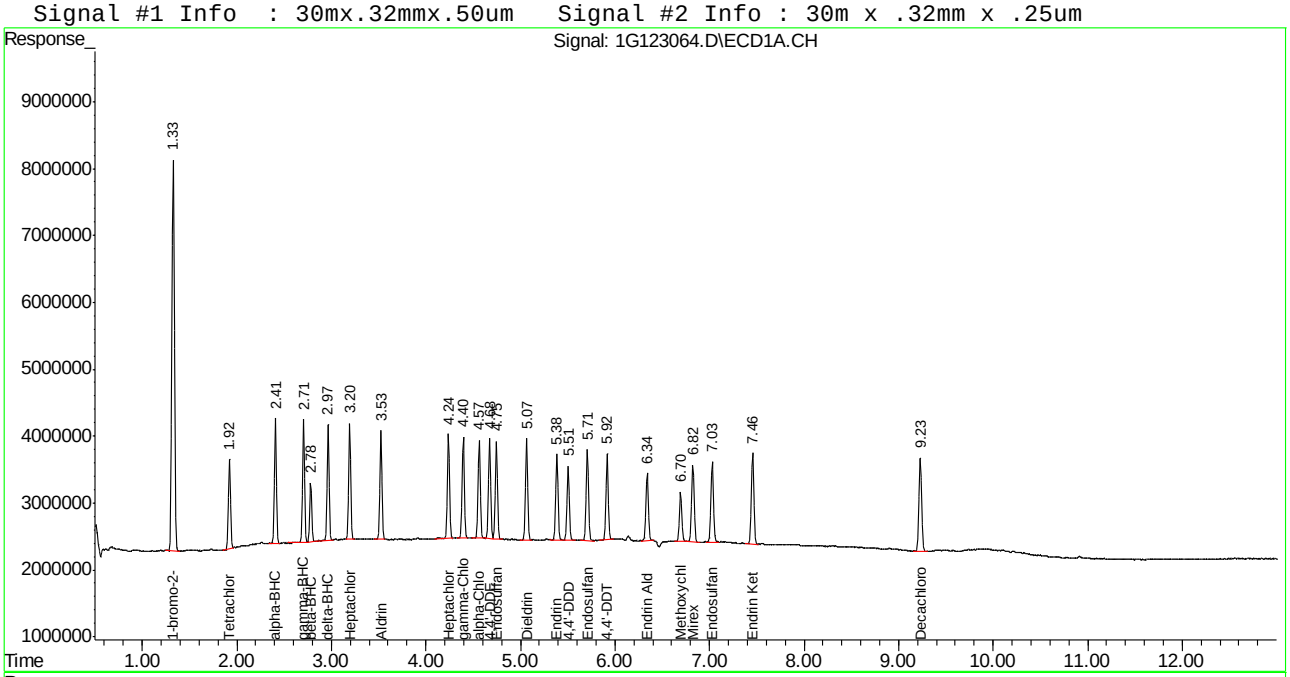
(f)=RT Delta > 1/2 Window (m)=manual int.

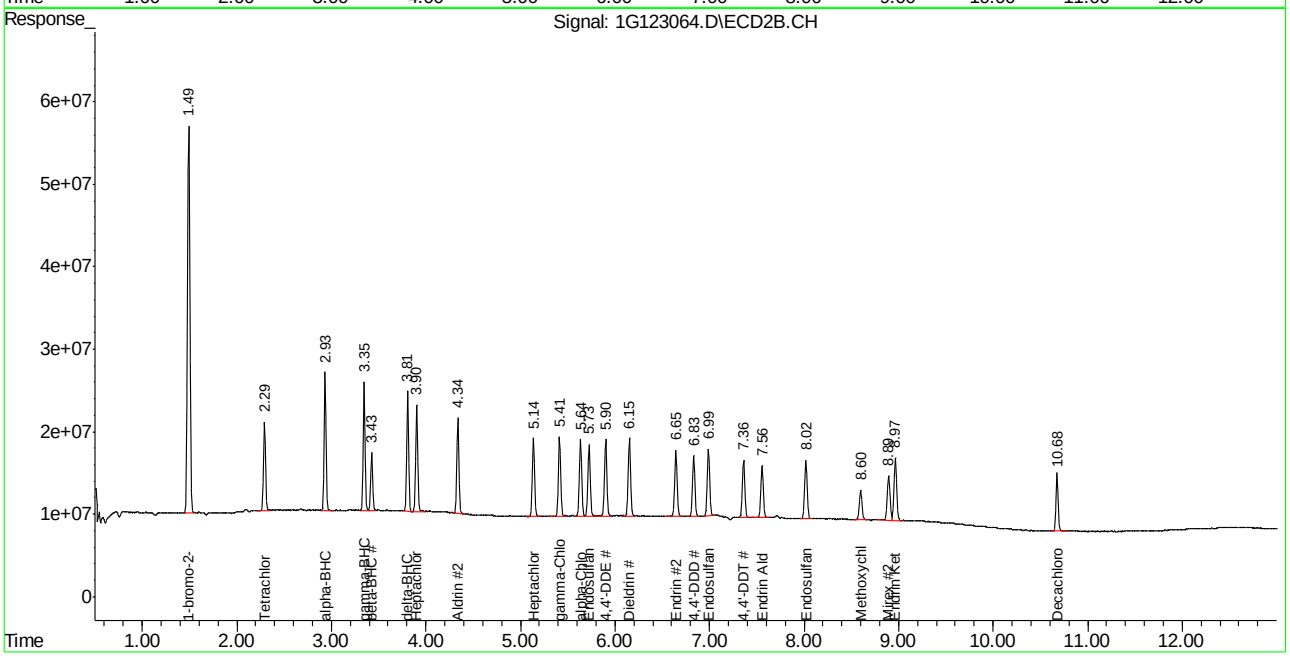
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123064.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123064.D\ECD2B.CH
Acq On : 16 May 2016 11:03 am Operator: thomasl
Sample : ic3988-10 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:24 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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 JC20314

Manual Integration Approval Summary

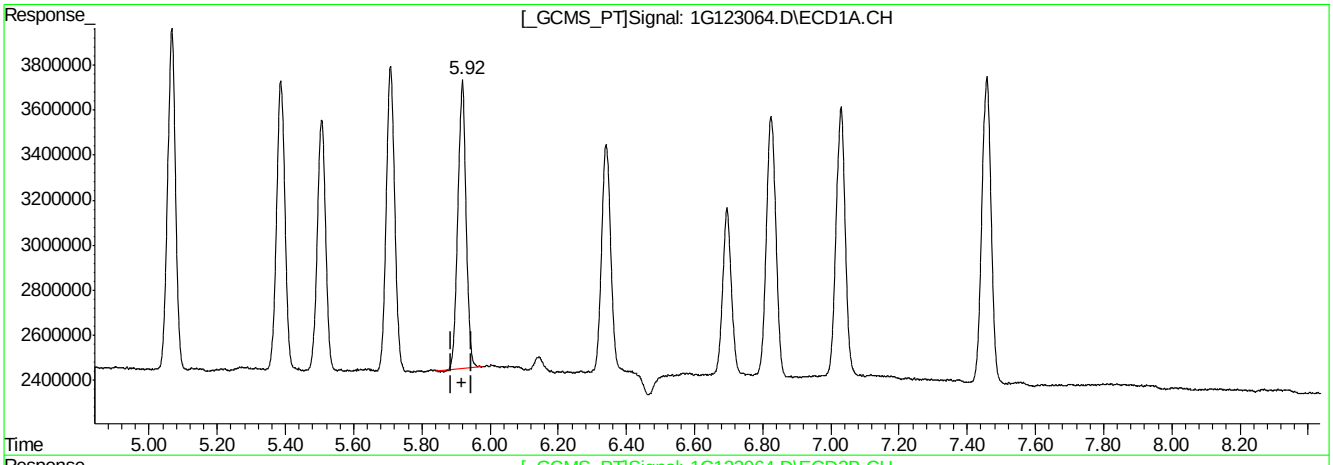
Sample Number:	G1G3988-IC3988	**Method:**	SW846 8081B
Lab FileID:	1G123064.D	**Analyst approved:**	05/16/16 15:18 Dhara Saparia
Injection Time:	05/16/16 11:03	**Supervisor approved:**	05/16/16 17:43 Gwendolyn Burns

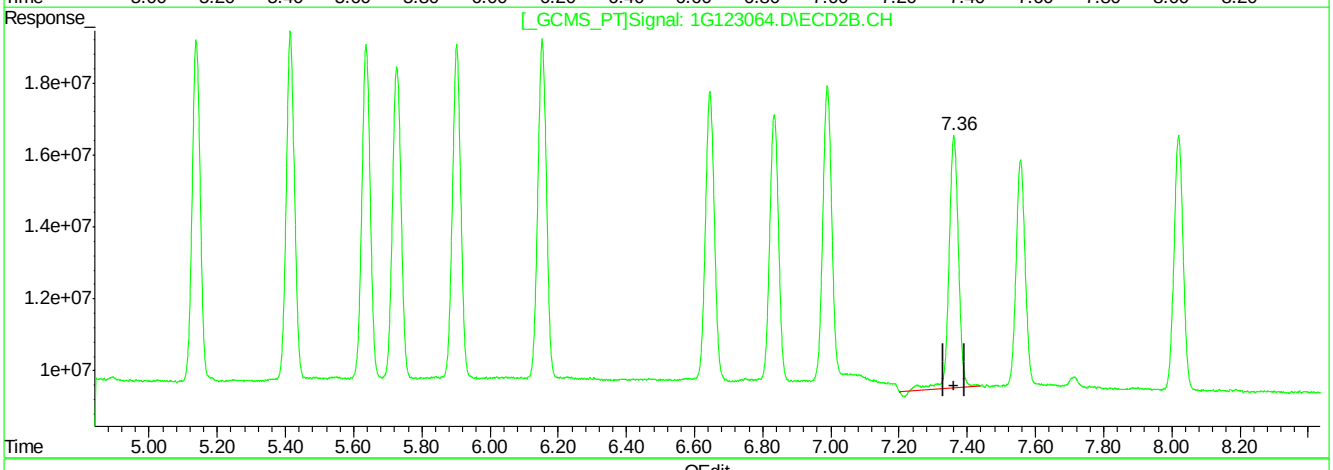
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDT	50-29-3	2	7.36	Poor instrument integration

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123064.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123064.D\ECD2B.CH
Acq On : 16 May 2016 11:03 am Operator: thomasl
Sample : ic3988-10 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 12:10 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDT (MA)

5.92min 9.367PPB

response 21117760

(18) 4,4'-DDT #2 (MA)

7.36min 11.861PPB

response 137166036

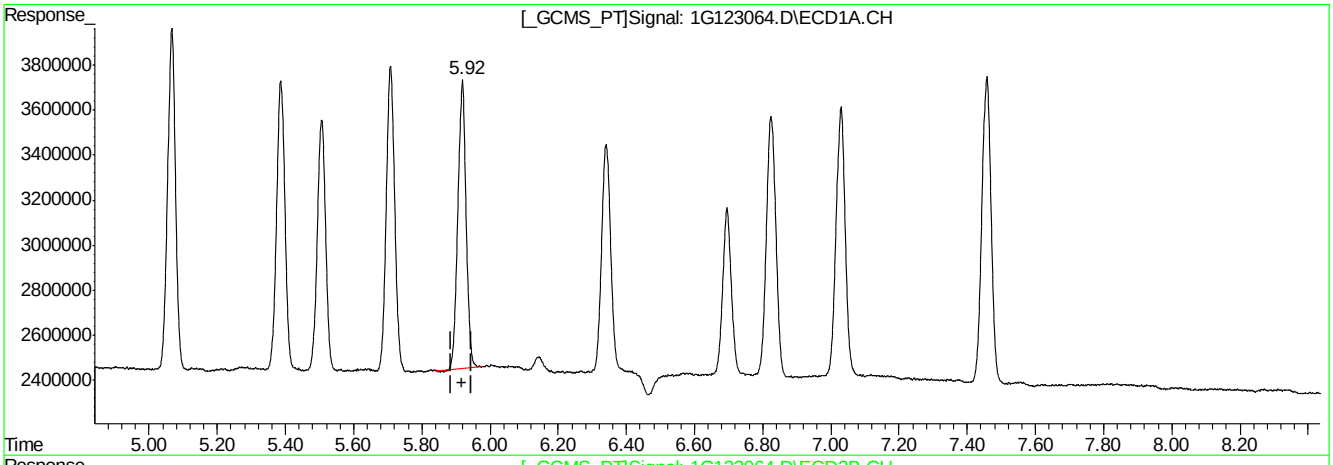
(+) = Expected Retention Time

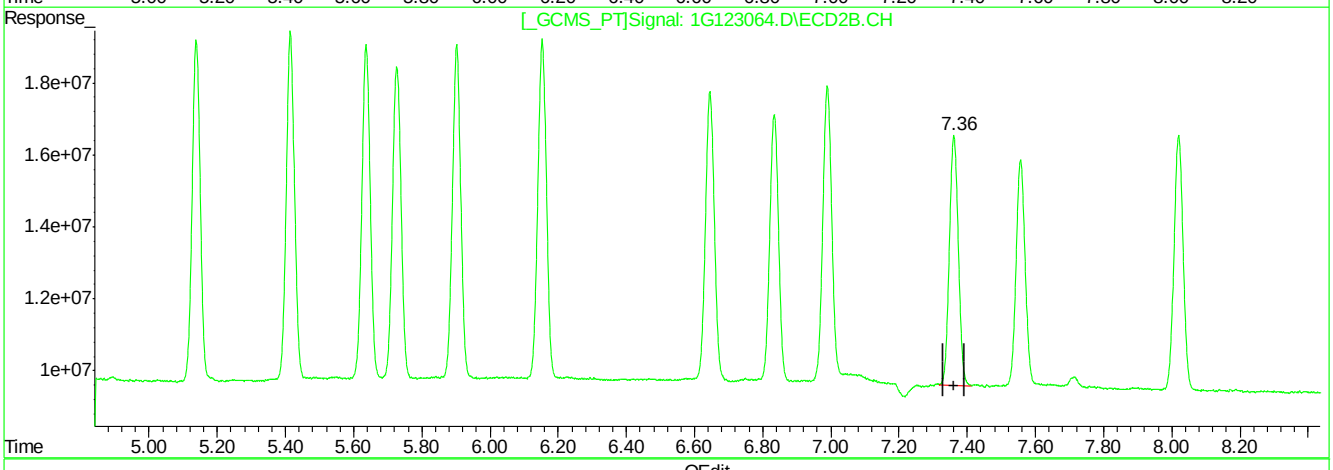
1G123064.D 1PST3988.M Mon May 16 12:10:34 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123064.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123064.D\ECD2B.CH
Acq On : 16 May 2016 11:03 am Operator: thomasl
Sample : ic3988-10 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 12:10 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration





QEdit

(18) 4,4'-DDT (MA)

5.92min 9.367PPB

response 21117760

(18) 4,4'-DDT #2 (MA)

7.36min 11.056PPB m

response 127854903

(+) = Expected Retention Time

1G123064.D 1PST3988.M Mon May 16 12:10:48 2016 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123065.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123065.D\ECD2B.CH
Acq On : 16 May 2016 11:21 am Operator: thomasl
Sample : icc3988-25 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:25 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.50	120.1E6	887.9E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.93	2.30	56001112	401.1E6	29.592	27.416
Spiked Amount	40.000	Range	30 - 150	Recovery	=	73.98%	68.54%
24) SA	Decachlorobiphen	9.23	10.68	72131465	269.7E6	27.000	26.273
Spiked Amount	40.000			Recovery	=	67.50%	65.68%
	Target Compounds						
3) A	alpha-BHC	2.41	2.94	77477232	590.0E6	26.502	27.144
4) MA	gamma-BHC	2.71	3.35	73074919	538.3E6	26.763	27.368
5) MA	Heptachlor	3.20	3.90	72196368	488.8E6	25.851	26.479
6) B	beta-BHC	2.78	3.43	33996166	246.9E6	25.651	27.951
7) B	delta-BHC	2.97	3.81	70029708	534.0E6	26.437	27.758
8) MB	Aldrin	3.53	4.34	67086616	462.1E6	25.345	26.565
9) B	Heptachlor Epoxi	4.24	5.14	65839458	407.4E6	25.506	26.192
10) B	gamma-Chlordane	4.40	5.42	65644651	417.8E6	25.392	26.971
11) B	alpha-Chlordane	4.57	5.64	65894613	408.3E6	25.928	26.785
12) A	Endosulfan I	4.75	5.73	63722290	393.7E6	25.250	27.380
13) B	4,4'-DDE	4.68	5.90	66665136	410.5E6	25.307	26.890
14) MA	Dieldrin	5.07	6.15	66773431	427.0E6	24.476	27.049
15) MA	Endrin	5.39	6.65	59199626	367.8E6	24.216	30.253
16) A	4,4'-DDD	5.51	6.83	52918646	342.4E6	24.690	25.764
17) B	Endosulfan II	5.71	6.99	63186885	378.6E6	24.965	24.557
18) MA	4,4'-DDT	5.92	7.36	57322192	339.4E6	24.591	28.615
19) B	Endrin Aldehyde	6.34	7.56	48971969	293.6E6	25.902	27.348
20) B	Endosulfan Sulfa	7.03	8.02	59336726	338.5E6	29.456	29.200
21) A	Methoxychlor	6.70	8.60	34211597	170.1E6	28.111	29.441
22)	Mirex	6.82	8.90	57582116	271.3E6	27.304	26.659
23) B	Endrin Ketone	7.46	8.97	69042755	375.5E6	30.612	29.080

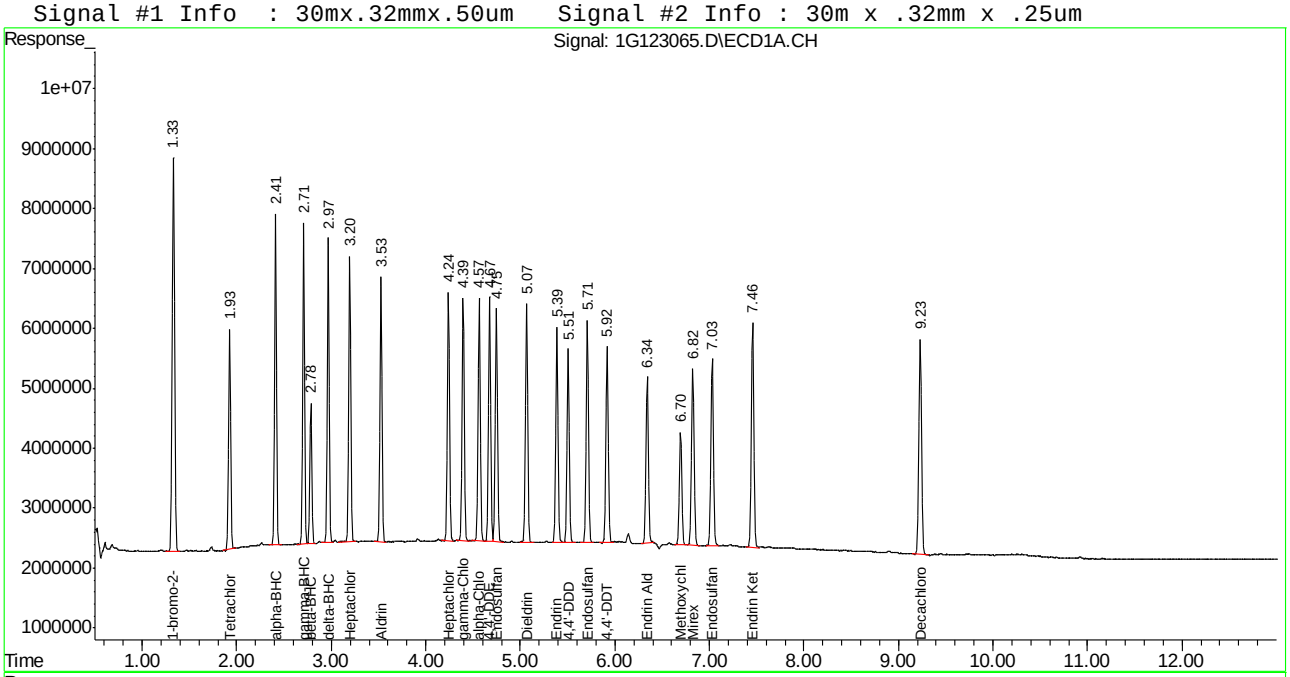
(f)=RT Delta > 1/2 Window (m)=manual int.
1G123065.D 1PST3988.M Mon May 16 13:25:11 2016 RPT1 Page 1

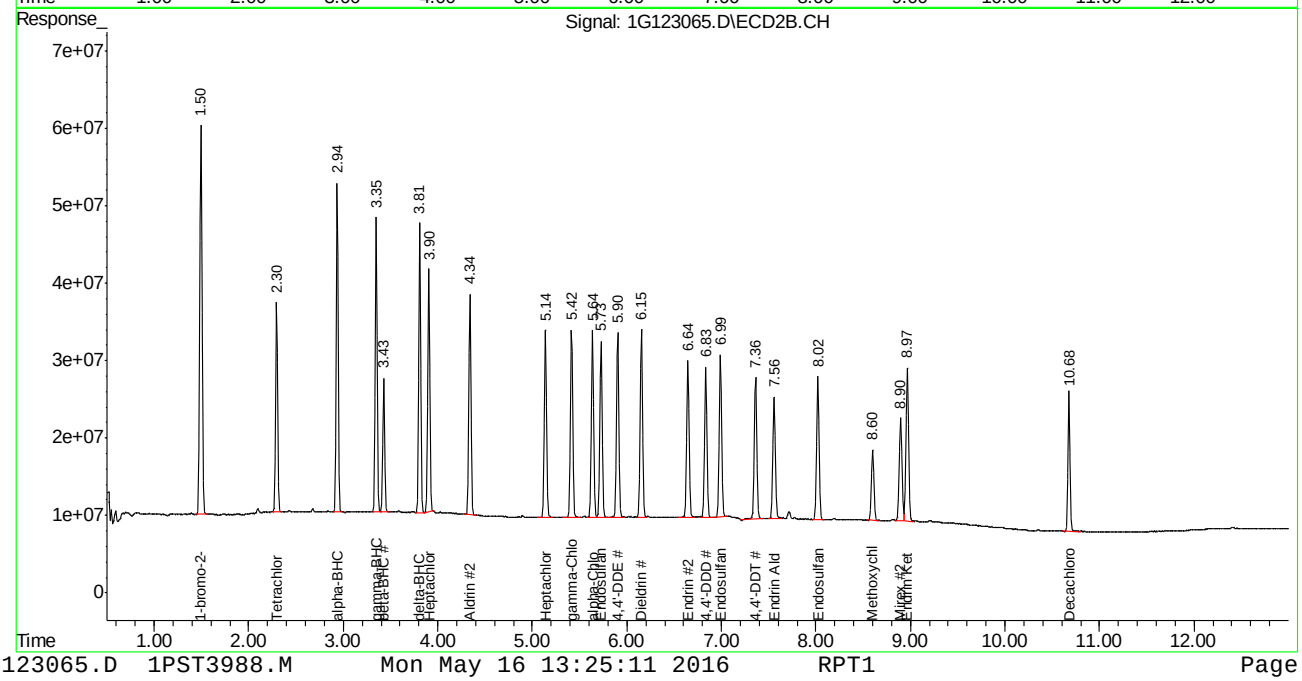
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123065.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123065.D\ECD2B.CH
Acq On : 16 May 2016 11:21 am Operator: thomasl
Sample : icc3988-25 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:25 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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\1G3988\1G123066.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123066.D\ECD2B.CH
Acq On : 16 May 2016 11:38 am Operator: thomasl
Sample : ic3988-50 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:25 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	120.8E6	899.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.93	2.30	115.7E6	785.5E6	60.809	53.005
Spiked Amount	40.000	Range	30 - 150	Recovery	=	152.02%#	132.51%
24) SA	Decachlorobiphen	9.23	10.68	142.6E6	522.4E6	53.051	50.240
Spiked Amount	40.000			Recovery	=	132.63%	125.60%
	Target Compounds						
3) A	alpha-BHC	2.41	2.94	169.9E6	1192.7E6	57.785	54.166
4) MA	gamma-BHC	2.71	3.35	158.0E6	1075.0E6	57.533	53.959
5) MA	Heptachlor	3.20	3.90	152.7E6	983.9E6	54.351	52.609
6) B	beta-BHC	2.78	3.43	70021076	472.4E6	52.527	52.797
7) B	delta-BHC	2.97	3.81	154.5E6	1079.6E6	57.976	55.398
8) MB	Aldrin	3.53	4.34	143.3E6	926.1E6	53.808	52.561
9) B	Heptachlor Epoxi	4.24	5.14	137.7E6	807.0E6	53.041	51.220
10) B	gamma-Chlordane	4.40	5.42	138.4E6	824.0E6	53.236	52.515
11) B	alpha-Chlordane	4.57	5.64	137.3E6	802.8E6	53.722	51.988
12) A	Endosulfan I	4.75	5.73	132.7E6	768.1E6	52.275	52.728
13) B	4,4'-DDE	4.68	5.90	139.7E6	809.7E6	52.740	52.357
14) MA	Dieldrin	5.07	6.15	141.6E6	845.4E6	51.608	52.867
15) MA	Endrin	5.39	6.65	124.2E6	728.6E6	50.505	59.165
16) A	4,4'-DDD	5.51	6.84	112.4E6	673.3E6	52.150	50.009
17) B	Endosulfan II	5.71	6.99	131.5E6	738.9E6	51.652	47.319
18) MA	4,4'-DDT	5.92	7.36	122.1E6	670.4E6	52.057	55.798
19) B	Endrin Aldehyde	6.34	7.56	102.4E6	578.2E6	53.862	53.179
20) B	Endosulfan Sulfa	7.03	8.02	121.8E6	664.2E6	60.105	56.569
21) A	Methoxychlor	6.70	8.60	69094100	335.2E6	56.445	57.285
22)	Mirex	6.83	8.90	113.1E6	526.9E6	53.322	51.106
23) B	Endrin Ketone	7.46	8.97	142.8E6	734.5E6	62.947	56.149

(f)=RT Delta > 1/2 Window (m)=manual int.

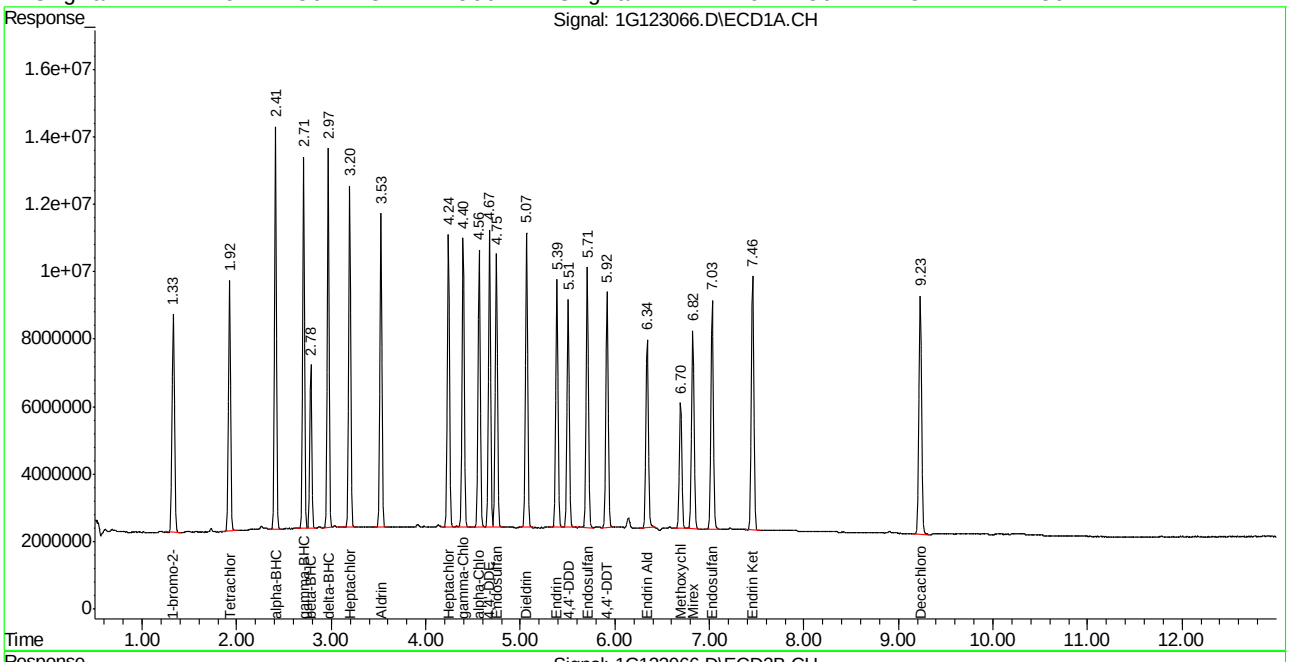
SGS ACCUTEST JC20314

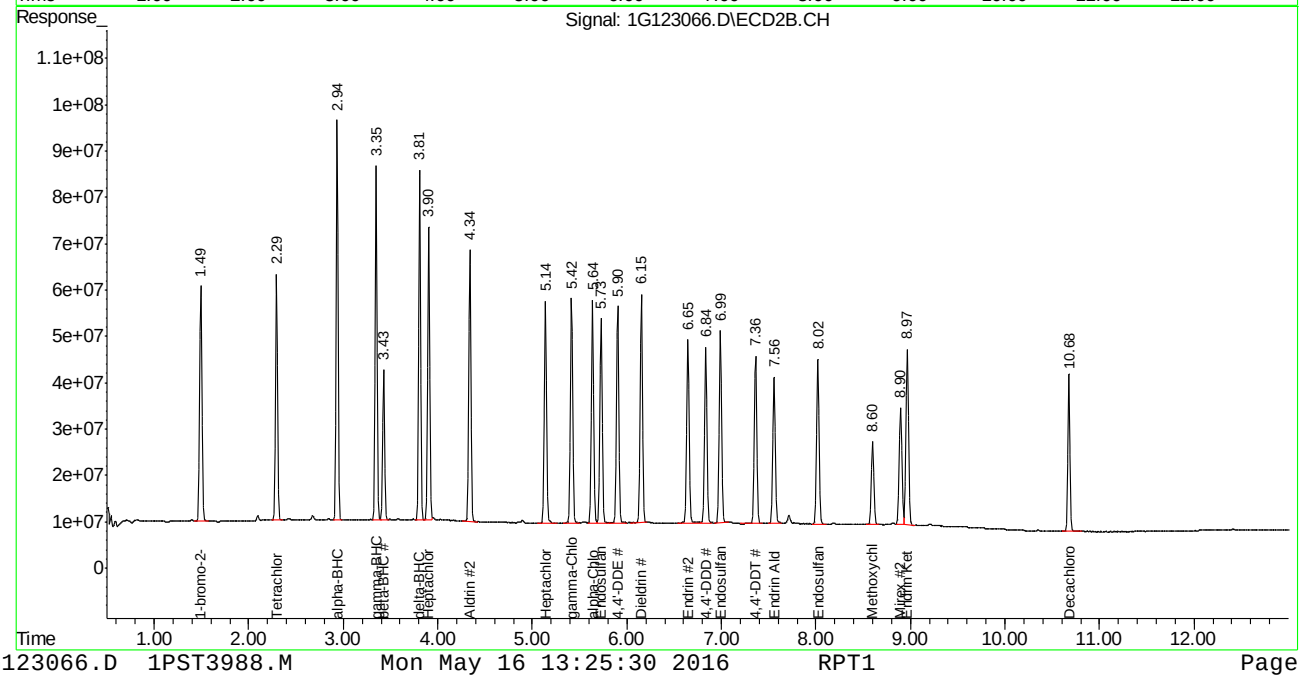
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123066.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123066.D\ECD2B.CH
Acq On : 16 May 2016 11:38 am Operator: thomasl
Sample : ic3988-50 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:25 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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\1G3988\1G123067.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123067.D\ECD2B.CH
Acq On : 16 May 2016 11:56 am Operator: thomasl
Sample : ic3988-75 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:25 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	119.1E6	896.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.92	2.29	171.1E6	1124.0E6	91.121	76.126
Spiked Amount	40.000	Range	30 - 150	Recovery	=	227.80%#	190.32%#
24) SA	Decachlorobiphen	9.23	10.68	209.2E6	753.7E6	78.927	72.756
Spiked Amount	40.000			Recovery	=	197.32%	181.89%
	Target Compounds						
3) A	alpha-BHC	2.41	2.94	260.0E6	1760.3E6	89.653	80.238
4) MA	gamma-BHC	2.71	3.35	239.5E6	1574.7E6	88.422	79.328
5) MA	Heptachlor	3.20	3.90	229.0E6	1428.6E6	82.654	76.671
6) B	beta-BHC	2.78	3.43	103.0E6	676.1E6	78.339	75.834
7) B	delta-BHC	2.97	3.81	236.1E6	1584.9E6	89.839	81.626
8) MB	Aldrin	3.53	4.34	216.8E6	1353.7E6	82.580	77.109
9) B	Heptachlor Epoxi	4.24	5.14	204.0E6	1169.6E6	79.673	74.503
10) B	gamma-Chlordane	4.40	5.42	205.9E6	1198.4E6	80.294	76.654
11) B	alpha-Chlordane	4.56	5.64	204.3E6	1161.7E6	81.016	75.507
12) A	Endosulfan I	4.75	5.73	197.0E6	1106.9E6	78.683	76.266
13) B	4,4'-DDE	4.67	5.90	208.2E6	1176.4E6	79.665	76.348
14) MA	Dieldrin	5.07	6.15	213.2E6	1227.7E6	78.774	77.055
15) MA	Endrin	5.39	6.65	185.1E6	1028.9E6	76.327	83.860
16) A	4,4'-DDD	5.51	6.83	169.4E6	972.5E6	79.648	72.496
17) B	Endosulfan II	5.71	6.99	194.8E6	1067.4E6	77.591	68.606
18) MA	4,4'-DDT	5.92	7.36	183.5E6	982.5E6	79.339	82.072
19) B	Endrin Aldehyde	6.34	7.56	158.6E6	851.7E6	84.543	78.618
20) B	Endosulfan Sulfa	7.03	8.02	180.5E6	960.8E6	90.343	82.129
21) A	Methoxychlor	6.70	8.60	101.3E6	491.6E6	83.867	84.322
22)	Mirex	6.83	8.90	165.0E6	759.7E6	78.872	73.959
23) B	Endrin Ketone	7.46	8.97	213.9E6	1065.0E6	95.611	81.705

(f)=RT Delta > 1/2 Window (m)=manual int.

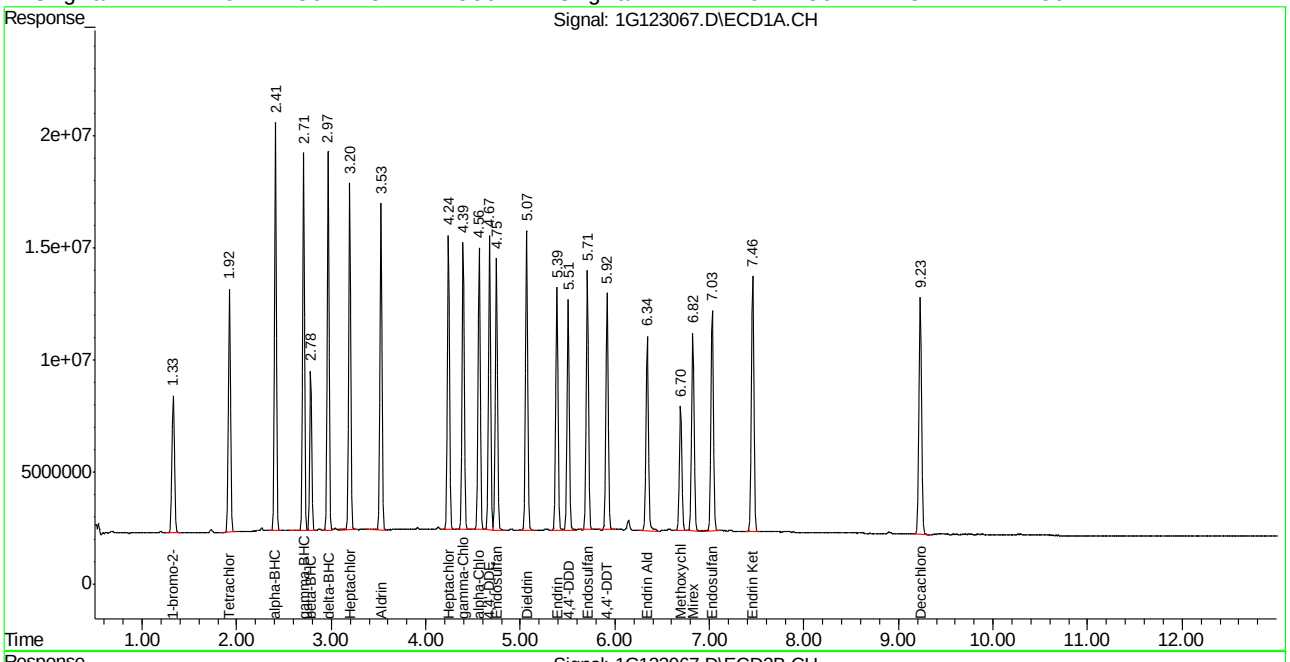
SGS ACCUTEST JC20314

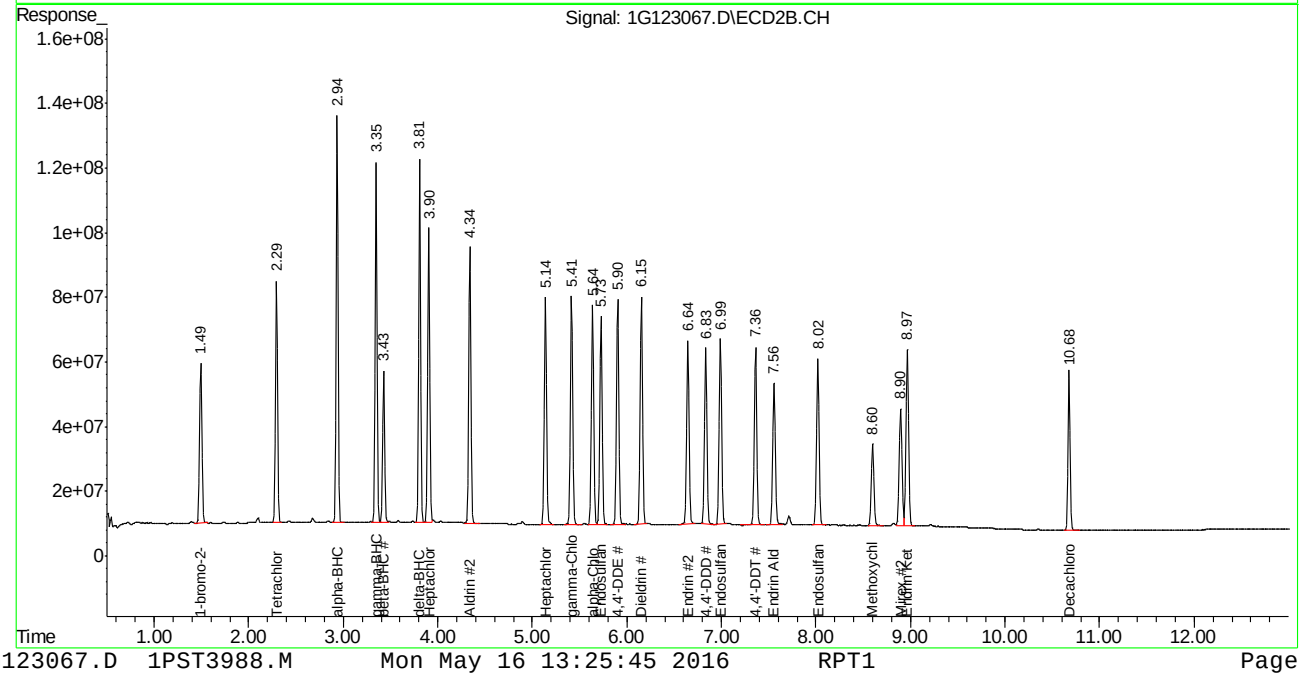
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123067.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123067.D\ECD2B.CH
Acq On : 16 May 2016 11:56 am Operator: thomasl
Sample : ic3988-75 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:25 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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\1G3988\1G123068.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123068.D\ECD2B.CH
Acq On : 16 May 2016 12:13 pm Operator: thomasl
Sample : ic3988-100 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:25 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.50	120.7E6	915.9E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.93	2.30	235.1E6	1510.5E6	123.638	100.097
Spiked Amount	40.000	Range	30 - 150	Recovery	=	309.10%#	250.24%#
24) SA	Decachlorobiphen	9.23	10.68	278.0E6	995.2E6	103.549	94.001
Spiked Amount	40.000			Recovery	=	258.87%	235.00%
	Target Compounds						
3) A	alpha-BHC	2.41	2.94	367.0E6	2399.7E6	124.938	107.027
4) MA	gamma-BHC	2.71	3.35	337.6E6	2141.8E6	123.055	105.571
5) MA	Heptachlor	3.20	3.91	320.1E6	1943.4E6	114.072	102.051
6) B	beta-BHC	2.78	3.43	141.7E6	903.6E6	106.372	99.171
7) B	delta-BHC	2.97	3.81	335.1E6	2163.1E6	125.901	109.003
8) MB	Aldrin	3.53	4.34	304.8E6	1851.8E6	114.591	103.210
9) B	Heptachlor Epoxi	4.24	5.14	285.2E6	1595.1E6	109.969	99.415
10) B	gamma-Chlordane	4.40	5.42	290.7E6	1644.1E6	111.892	102.900
11) B	alpha-Chlordane	4.56	5.64	285.7E6	1590.4E6	111.868	101.145
12) A	Endosulfan I	4.75	5.73	274.8E6	1505.9E6	108.375	101.521
13) B	4,4'-DDE	4.68	5.90	292.2E6	1618.8E6	110.382	102.793
14) MA	Dieldrin	5.07	6.16	299.3E6	1678.2E6	109.180	103.056
15) MA	Endrin	5.39	6.65	258.1E6	1420.5E6	105.072	113.280
16) A	4,4'-DDD	5.51	6.83	238.3E6	1342.2E6	110.627	97.896
17) B	Endosulfan II	5.71	6.99	270.3E6	1469.5E6	106.279	92.417
18) MA	4,4'-DDT	5.92	7.36	257.7E6	1338.6E6	110.029	109.412
19) B	Endrin Aldehyde	6.34	7.56	216.5E6	1144.8E6	113.944	103.394
20) B	Endosulfan Sulfa	7.03	8.02	247.8E6	1299.2E6	122.436	108.665
21) A	Methoxychlor	6.70	8.60	137.7E6	644.4E6	112.618	108.154
22)	Mirex	6.83	8.90	222.5E6	1012.6E6	104.993	96.451
23) B	Endrin Ketone	7.46	8.97	293.1E6	1431.8E6	129.340	107.484

(f)=RT Delta > 1/2 Window (m)=manual int.

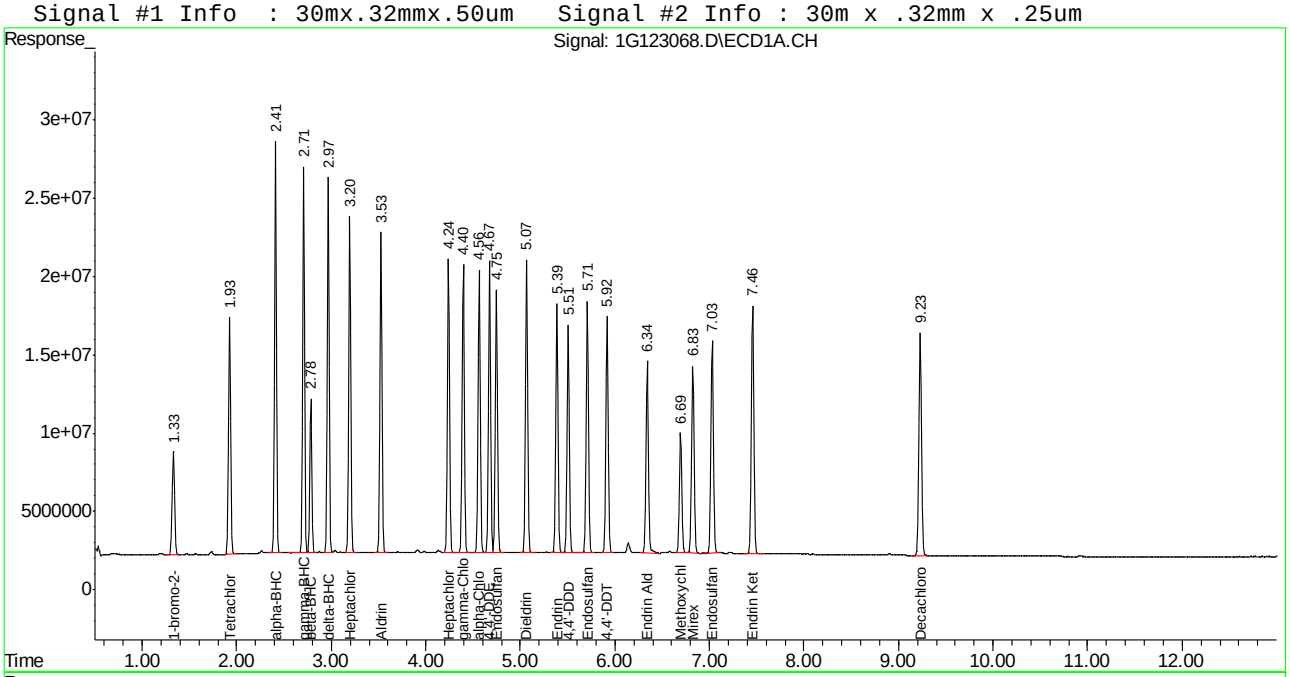
SGS ACCUTEST JC20314

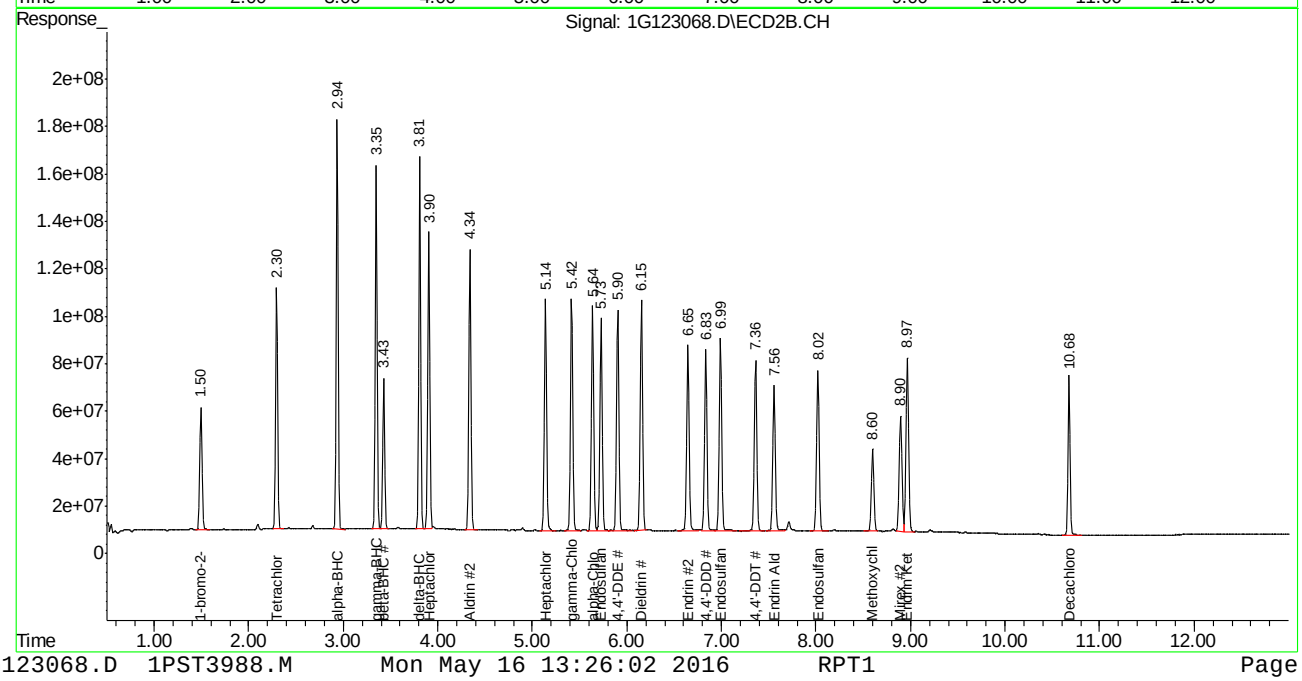
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123068.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123068.D\ECD2B.CH
Acq On : 16 May 2016 12:13 pm Operator: thomasl
Sample : ic3988-100 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:25 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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 JC20314

Manual Integrations
APPROVED
(compounds with "m" flag)
Gwendolyn Burns
05/16/16 17:43

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123069.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123069.D\ECD2B.CH
Acq On : 16 May 2016 12:31 pm Operator: thomasl
Sample : ic3988-500 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:26 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	116.8E6	869.4E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
32)	Chlordane {A}	3.11	3.71	42766969	319.2E6	567.867	591.249
33)	Chlordane {B}	3.67	4.53	55545856	323.4E6	556.551	520.110
34)	Chlordane {C}	4.40	5.42	189.5E6	1058.3E6	547.997	549.001
35)	Chlordane {D}	4.56	5.64	296.0E6	1751.4E6	550.296	554.452m
36)	Chlordane {E}	5.61	7.07	44250029	315.1E6	588.663	506.346

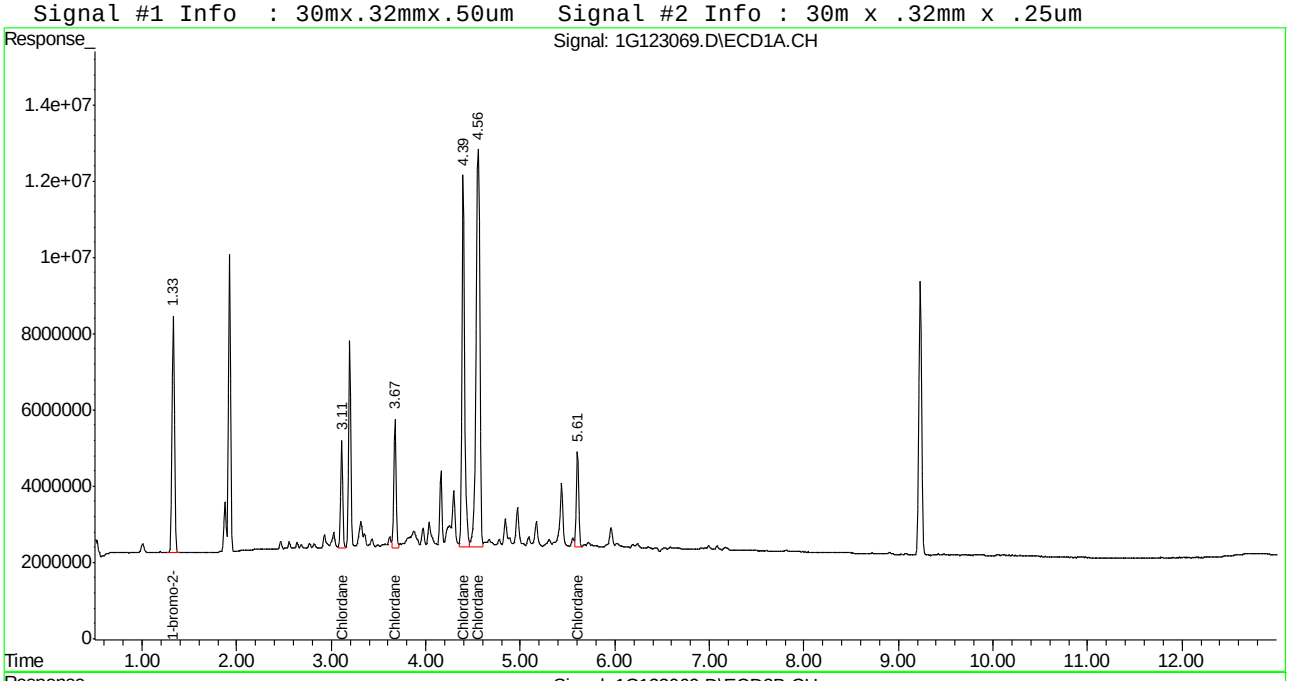
(f)=RT Delta > 1/2 Window (m)=manual int.
1G123069.D 1PST3988.M Mon May 16 13:26:21 2016 RPT1 Page 1

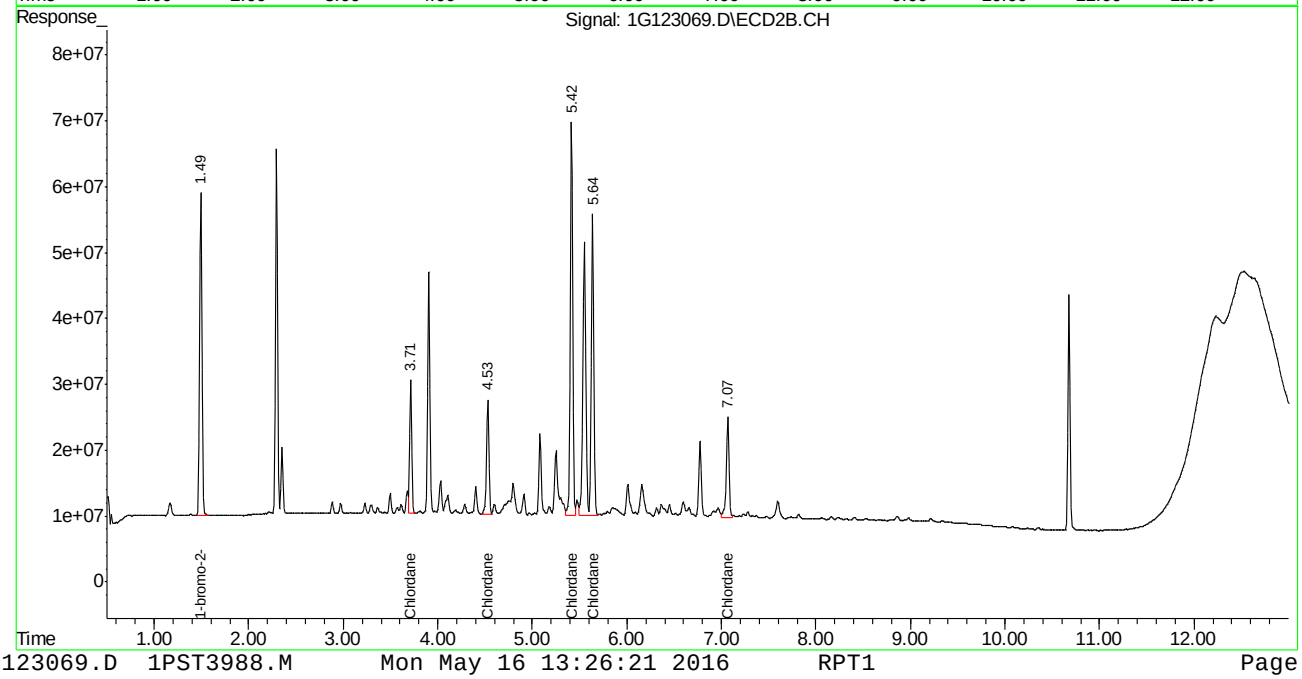
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123069.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123069.D\ECD2B.CH
Acq On : 16 May 2016 12:31 pm Operator: thomasl
Sample : ic3988-500 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:26 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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 JC20314

Manual Integration Approval Summary

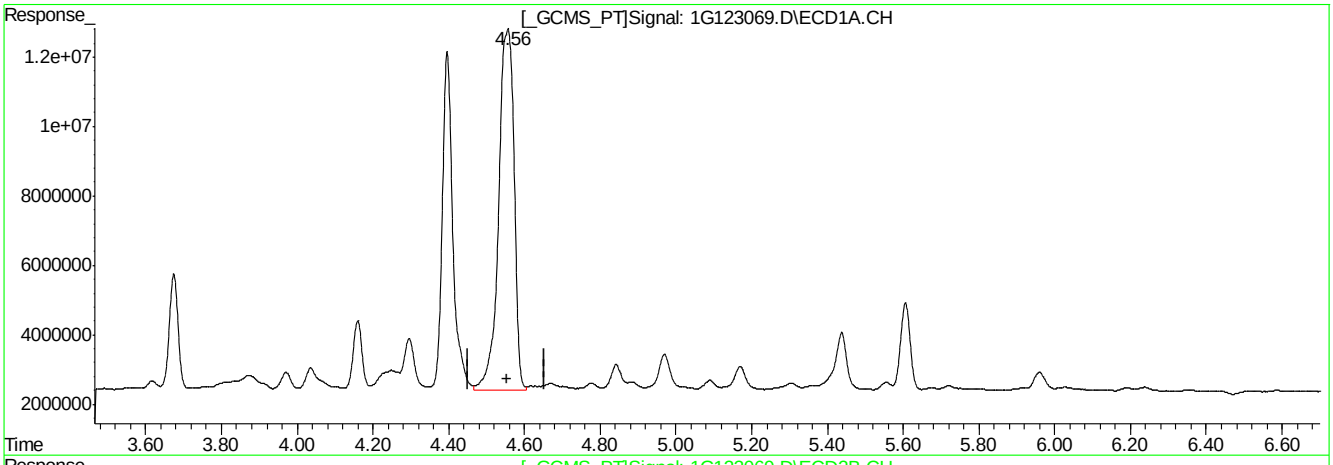
Sample Number:	G1G3988-IC3988	**Method:**	SW846 8081B
Lab FileID:	1G123069.D	**Analyst approved:**	05/16/16 15:18 Dhara Saparia
Injection Time:	05/16/16 12:31	**Supervisor approved:**	05/16/16 17:43 Gwendolyn Burns

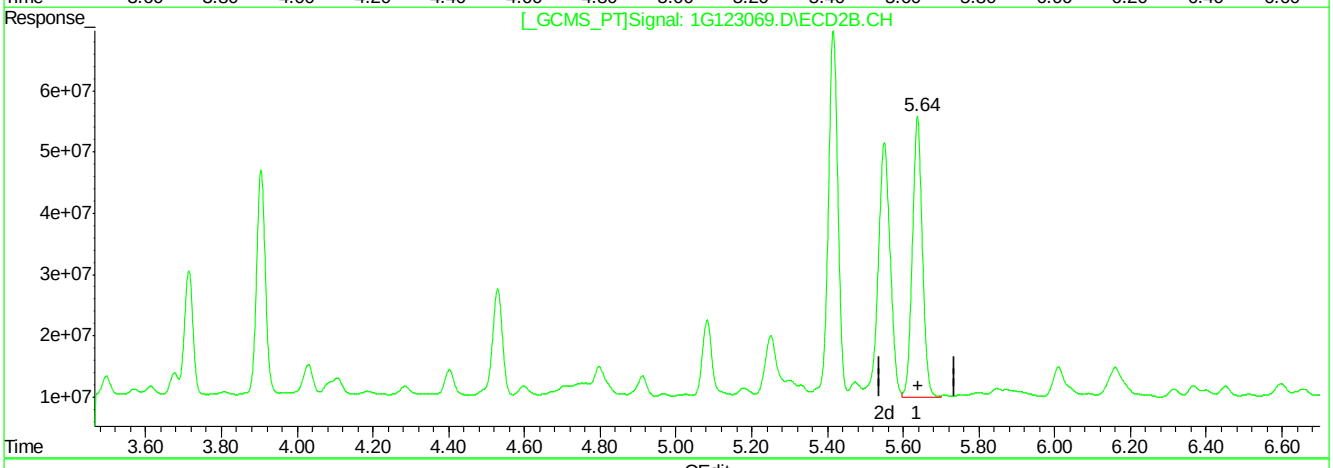
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	5.64	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123069.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123069.D\ECD2B.CH
Acq On    : 16 May 2016  12:31 pm                    Operator: thomasl
Sample    : ic3988-500                               Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 13:08 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.56min 550.296PPB

response 295995575

(35) Chlordane {D} #2

5.64min 265.578PPB

response 838910491

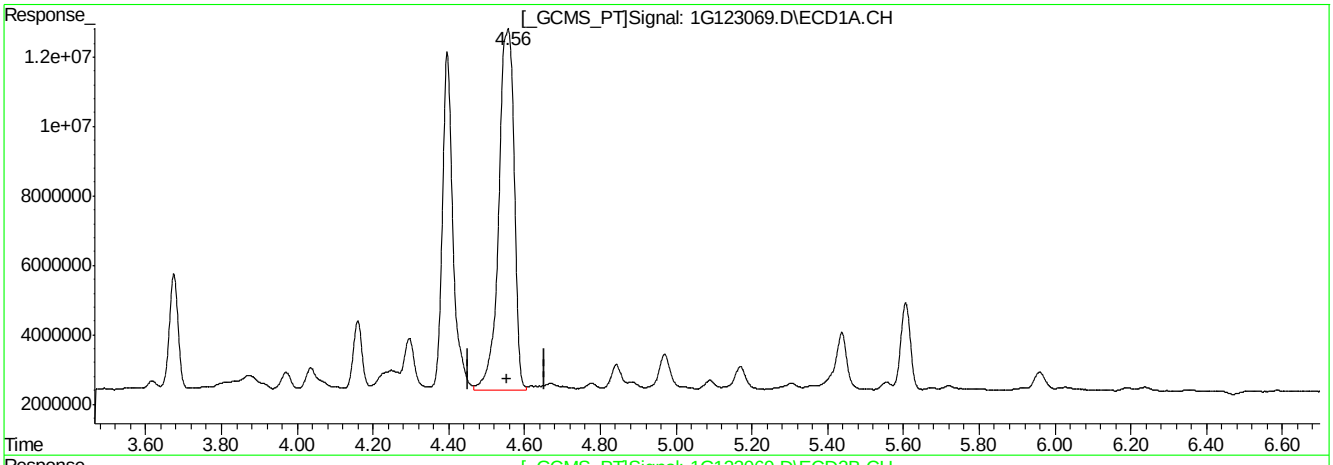
(+) = Expected Retention Time

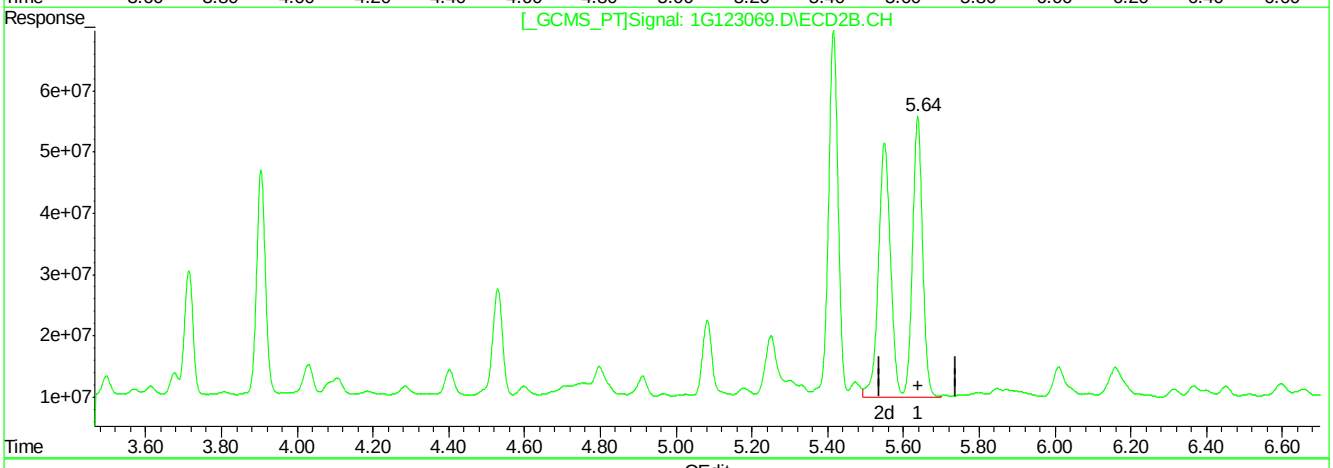
1G123069.D 1PST3988.M Mon May 16 13:08:12 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123069.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123069.D\ECD2B.CH
Acq On    : 16 May 2016  12:31 pm                    Operator: thomasl
Sample    : ic3988-500                               Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 13:08 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.56min 550.296PPB

response 295995575

(35) Chlordane {D} #2

5.64min 554.452PPB m

response 1751408243

(+) = Expected Retention Time

1G123069.D 1PST3988.M Mon May 16 13:09:04 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/16/16 17:43

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123070.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123070.D\ECD2B.CH
Acq On : 16 May 2016 12:48 pm Operator: thomasl
Sample : ic3988-500 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:26 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	123.2E6	905.8E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
26) L8	Toxaphene{A}	5.08	6.12	20160542	122.0E6	498.711	522.284
27) L8	Toxaphene{B}	5.69	6.96	57479048	263.2E6	665.347	775.867
28) L8	Toxaphene{C}	5.87	7.12	30957300	459.8E6	476.346m	584.300m
29) L8	Toxaphene{D}	6.20	7.56	35322203	286.1E6	520.794	577.370
30) L8	Toxaphene{E}	6.85	8.44	40690779	273.5E6	526.068	646.077

11.5.10 11

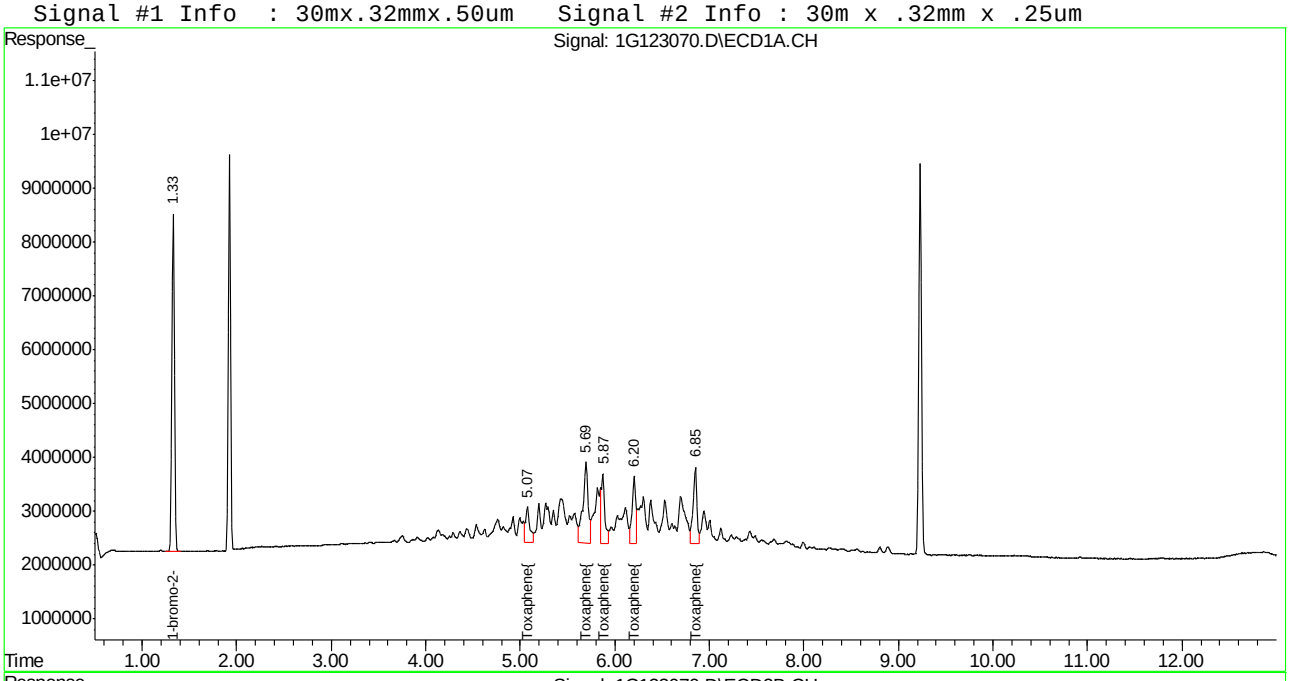
(f)=RT Delta > 1/2 Window (m)=manual int.
1G123070.D 1PST3988.M Mon May 16 13:26:42 2016 RPT1 Page 1

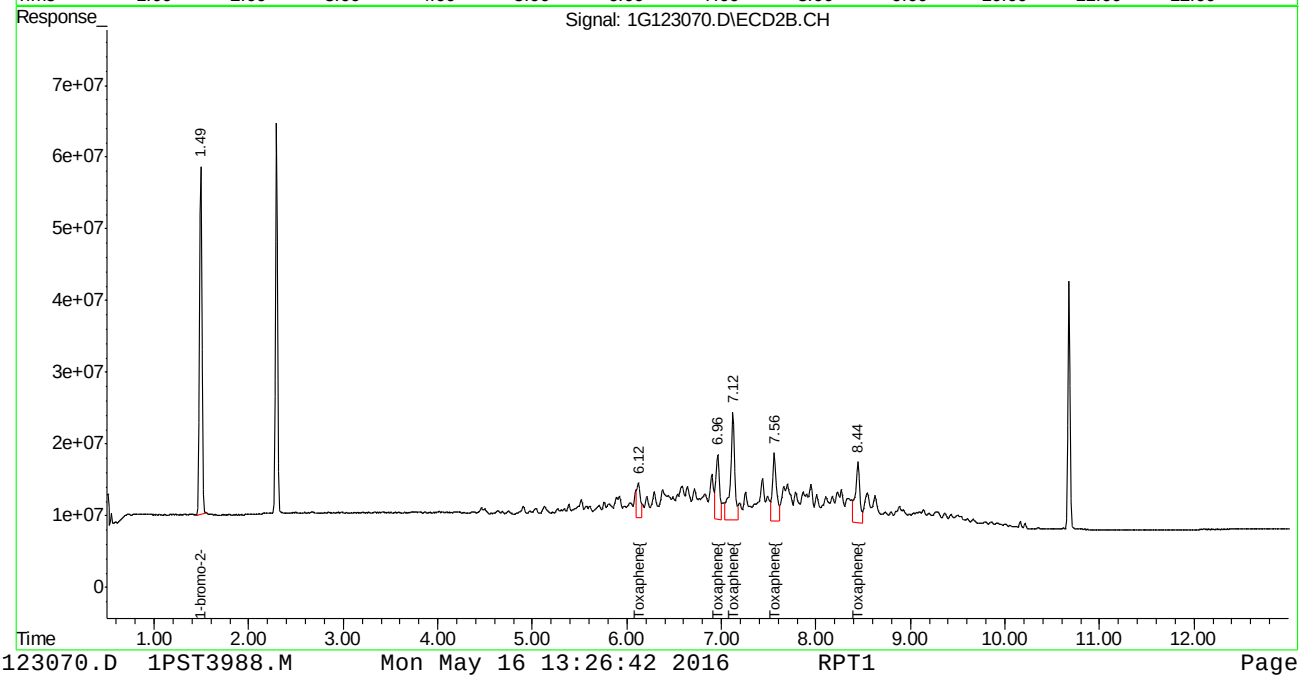
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123070.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123070.D\ECD2B.CH
Acq On : 16 May 2016 12:48 pm Operator: thomasl
Sample : ic3988-500 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 13:26 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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

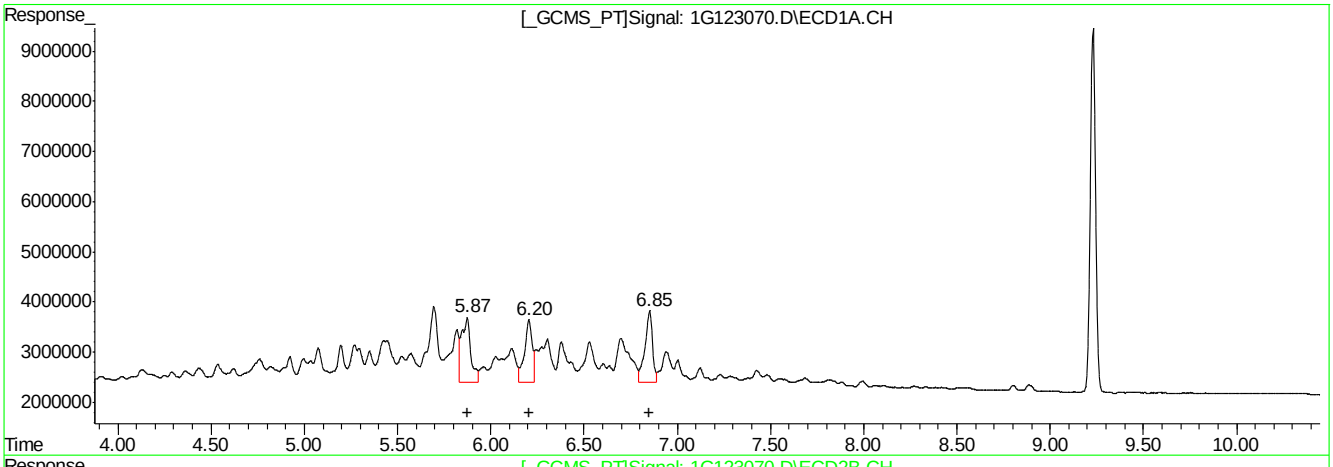
Sample Number:	G1G3988-IC3988	**Method:**	SW846 8081B
Lab FileID:	1G123070.D	**Analyst approved:**	05/16/16 15:18 Dhara Saparia
Injection Time:	05/16/16 12:48	**Supervisor approved:**	05/16/16 17:43 Gwendolyn Burns

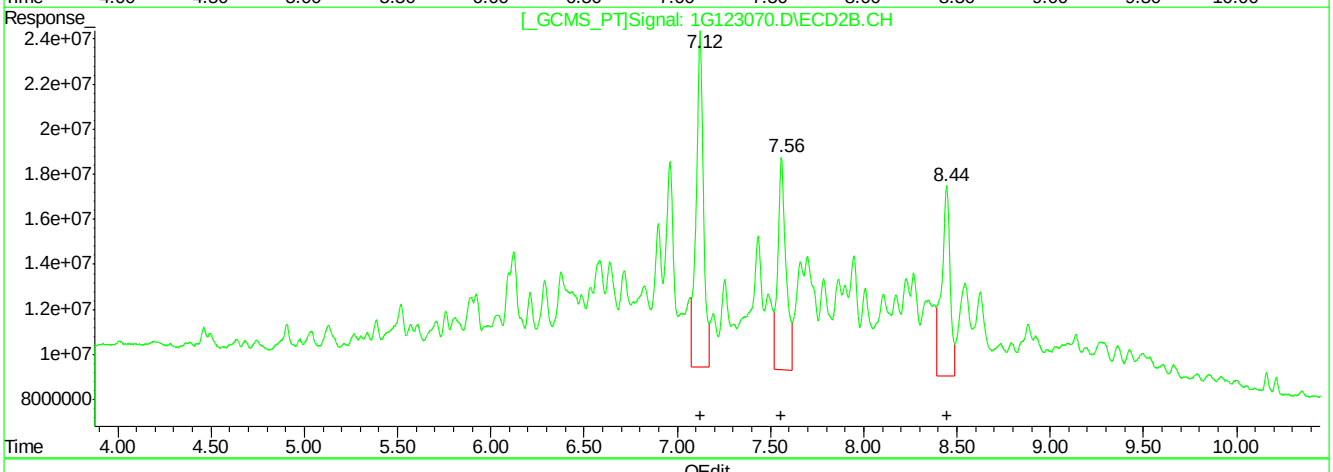
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-C		1	5.87	Poor instrument integration
Toxaphene-C		2	7.12	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123070.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123070.D\ECD2B.CH
Acq On    : 16 May 2016  12:48 pm                    Operator: thomasl
Sample    : ic3988-500                               Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 13:14 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(28) Toxaphene{C} (L8)

R.T.	Response	Conc
5.87	43893204	675.39
6.20	35322203	520.79
6.85	40690779	526.07

(28) Toxaphene{C} #2 (L8)

R.T.	Response	Conc
7.12	396795147	504.20
7.56	286123301	577.37
8.44	273520737	646.08

(+) = Expected Retention Time

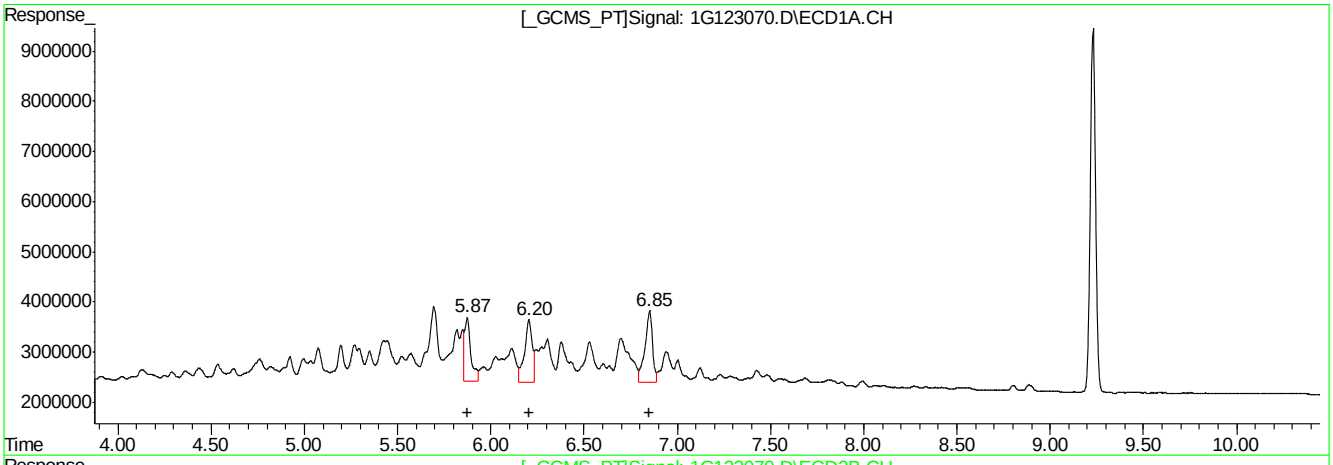
1G123070.D 1PST3988.M Mon May 16 13:19:55 2016 RPT1

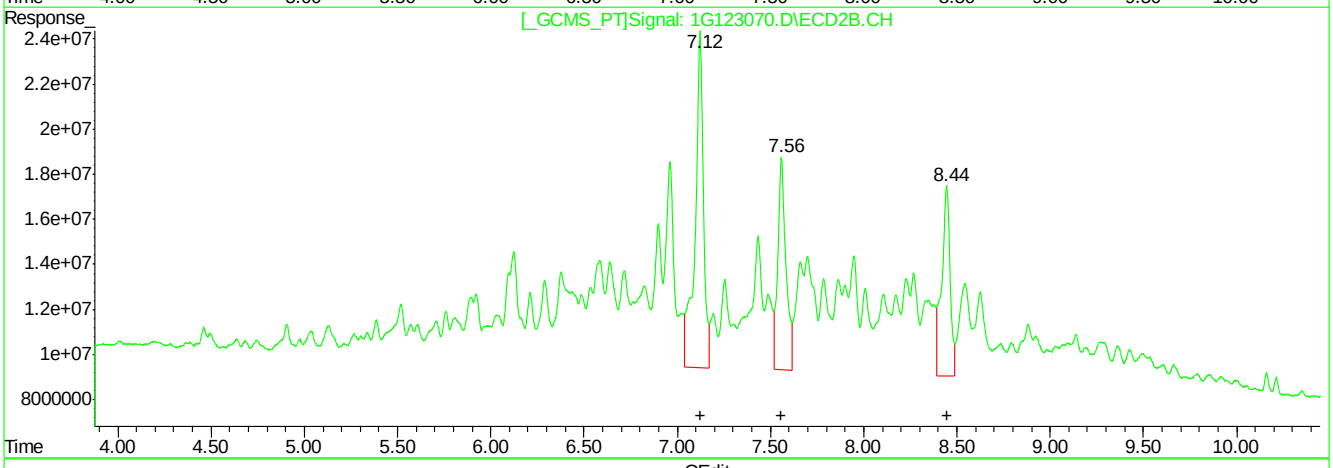
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123070.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123070.D\ECD2B.CH
Acq On    : 16 May 2016  12:48 pm                    Operator: thomasl
Sample    : ic3988-500                               Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 13:14 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 09:01:14 2016
Response via : Multiple Level Calibration
```





QEdit

(28) Toxaphene{C} #2 (L8)

R.T.	Response	Conc
5.87	30957300	476.35
6.20	35322203	520.79
6.85	40690779	526.07

(28) Toxaphene{C} #2 (L8)

R.T.	Response	Conc
7.12	459829039	584.30
7.56	286123301	577.37
8.44	273520737	646.08

(+) = Expected Retention Time

1G123070.D 1PST3988.M Mon May 16 13:21:52 2016 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123071.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123071.D\ECD2B.CH
Acq On : 5-16-16 01:06:17 PM Operator: thomasl
Sample : icv3988-25 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 17:23 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	125.2E6	922.1E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.33	1.49	125.2E6	922.1E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.33	1.49	125.2E6	922.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.92	2.29	53419128	393.3E6	23.624	23.987
Spiked Amount	40.000 Range	30 - 150	Recovery	=		59.06%	59.97%
24) SA	Decachlorobiphen	9.23	10.68	71179744	270.2E6	23.136	23.468
Spiked Amount	40.000		Recovery	=		57.84%	58.67%
	Target Compounds						
3) A	alpha-BHC	2.41	2.94	69973400	549.9E6	21.626	22.397
4) MA	gamma-BHC	2.71	3.35	66781531	500.5E6	22.081	22.520
5) MA	Heptachlor	3.19	3.90	65404367	461.2E6	21.249	22.221
6) B	beta-BHC	2.78	3.43	31083974	226.9E6	21.481	22.291
7) B	delta-BHC	2.97	3.81	68657461	522.6E6	23.158	23.527
8) MB	Aldrin	3.53	4.34	61093108	442.8E6	21.773	23.294
9) B	Heptachlor Epoxi	4.24	5.14	60578460	393.3E6	22.001	23.188
10) B	gamma-Chlordane	4.40	5.42	61356009	407.7E6	21.605	23.534
11) B	alpha-Chlordane	4.56	5.64	60710912	389.7E6	21.523	22.652
12) A	Endosulfan I	4.75	5.73	56933601	366.9E6	20.967	23.140
13) B	4,4'-DDE	4.68	5.90	61141327	390.5E6	21.479	22.881
14) MA	Dieldrin	5.07	6.15	61381168	410.2E6	21.711	23.086
15) MA	Endrin	5.39	6.65	54757160	346.2E6	21.377	22.030
16) A	4,4'-DDD	5.51	6.83	48859032	325.7E6	21.872	23.151
17) B	Endosulfan II	5.71	6.99	57469158	359.5E6	21.390	22.452
18) MA	4,4'-DDT	5.92	7.36	50470978	309.2E6	20.745	22.531
19) B	Endrin Aldehyde	6.34	7.56	47393363	293.9E6	22.319	23.920
20) B	Endosulfan Sulfa	7.03	8.02	54345520	324.3E6	21.075	23.134
21) A	Methoxychlor	6.70	8.60	29944802	158.4E6	20.420	21.555
23) B	Endrin Ketone	7.46	8.97	63565849	362.6E6	21.784	23.099

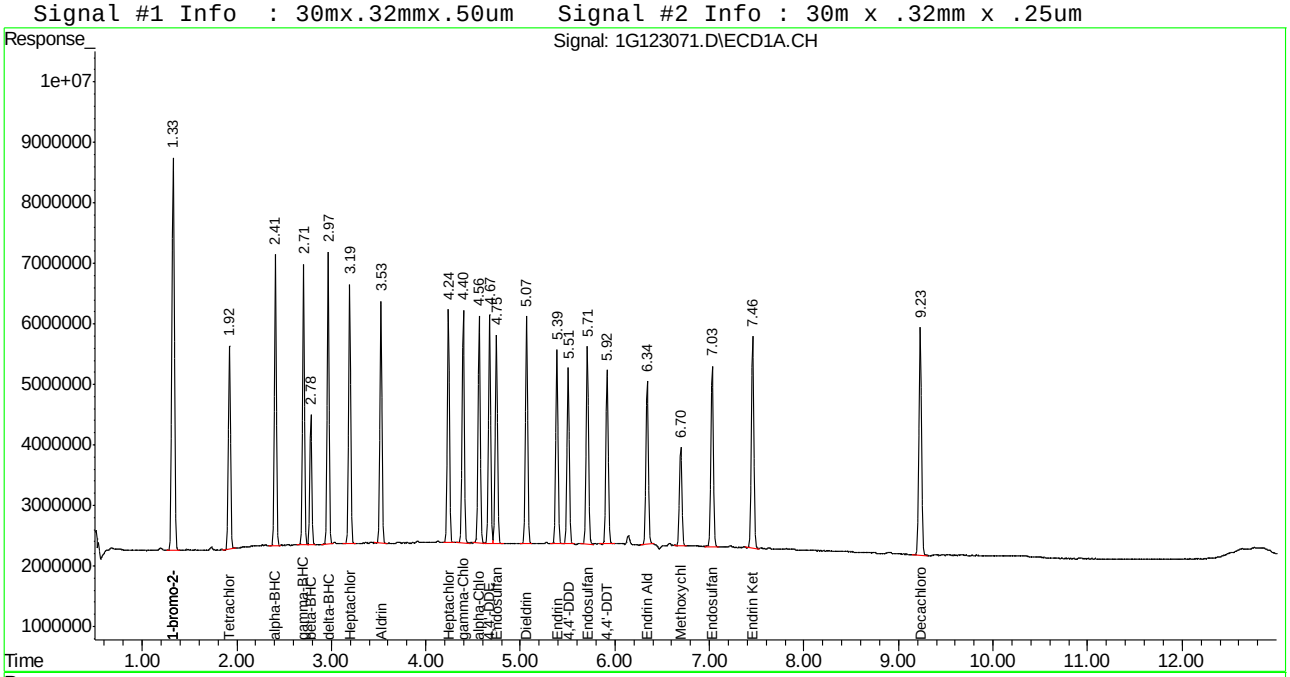
(f)=RT Delta > 1/2 Window (m)=manual int.
1G123071.D 1PST3988.M Mon May 16 17:23:59 2016 RPT1 Page 1

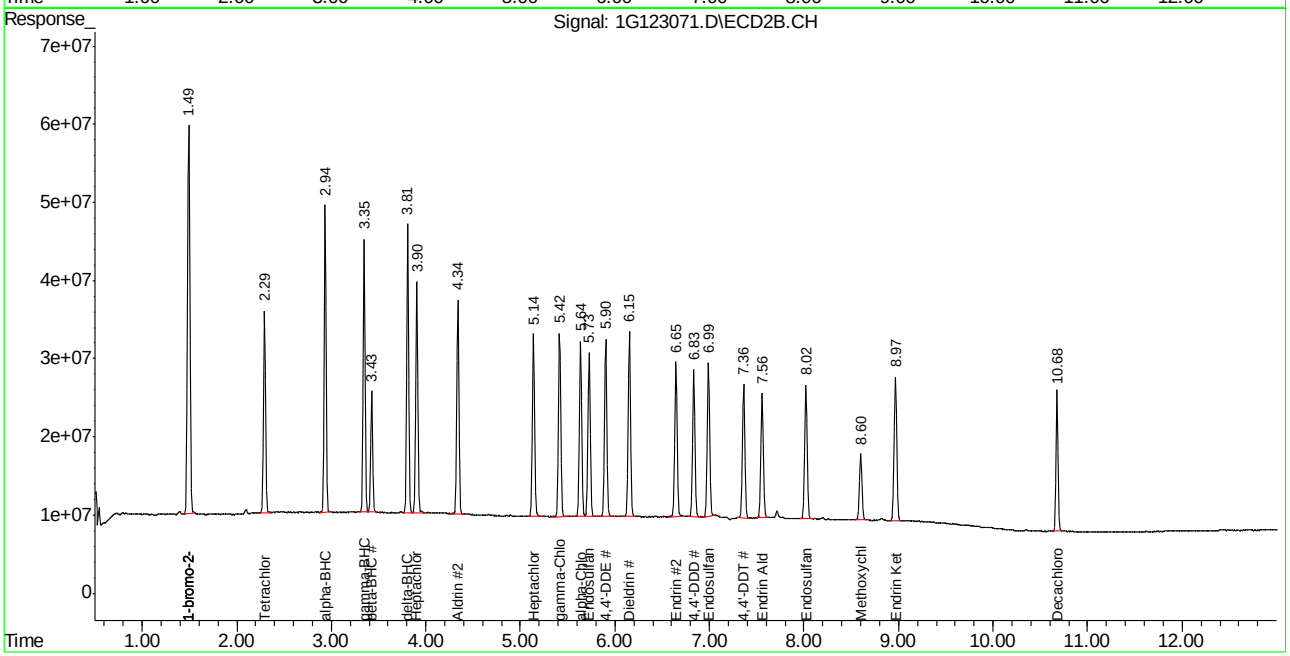
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123071.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123071.D\ECD2B.CH
Acq On : 5-16-16 01:06:17 PM Operator: thomasl
Sample : icv3988-25 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 17:23 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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 JC20314

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123072.D\ECD1A.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123072.D\ECD2B.CH
Acq On : 5-16-16 01:23:45 PM Operator: thomasl
Sample : icv3988-25 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 17:24 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.50	124.5E6	923.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.33	1.50	124.5E6	923.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.33	1.50	124.5E6	923.2E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
22)	Mirex	6.83	8.90	55767800	276.1E6	22.863	23.537

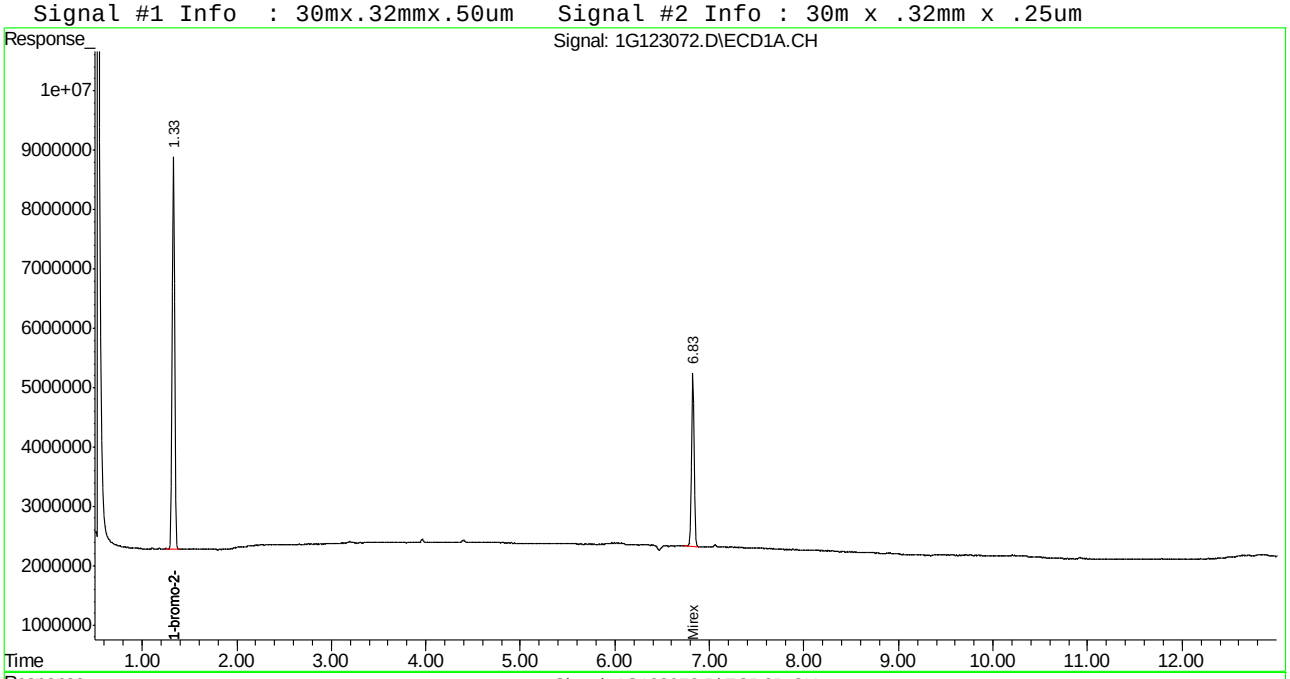
(f)=RT Delta > 1/2 Window (m)=manual int.
1G123072.D 1PST3988.M Mon May 16 17:24:33 2016 RPT1 Page 1

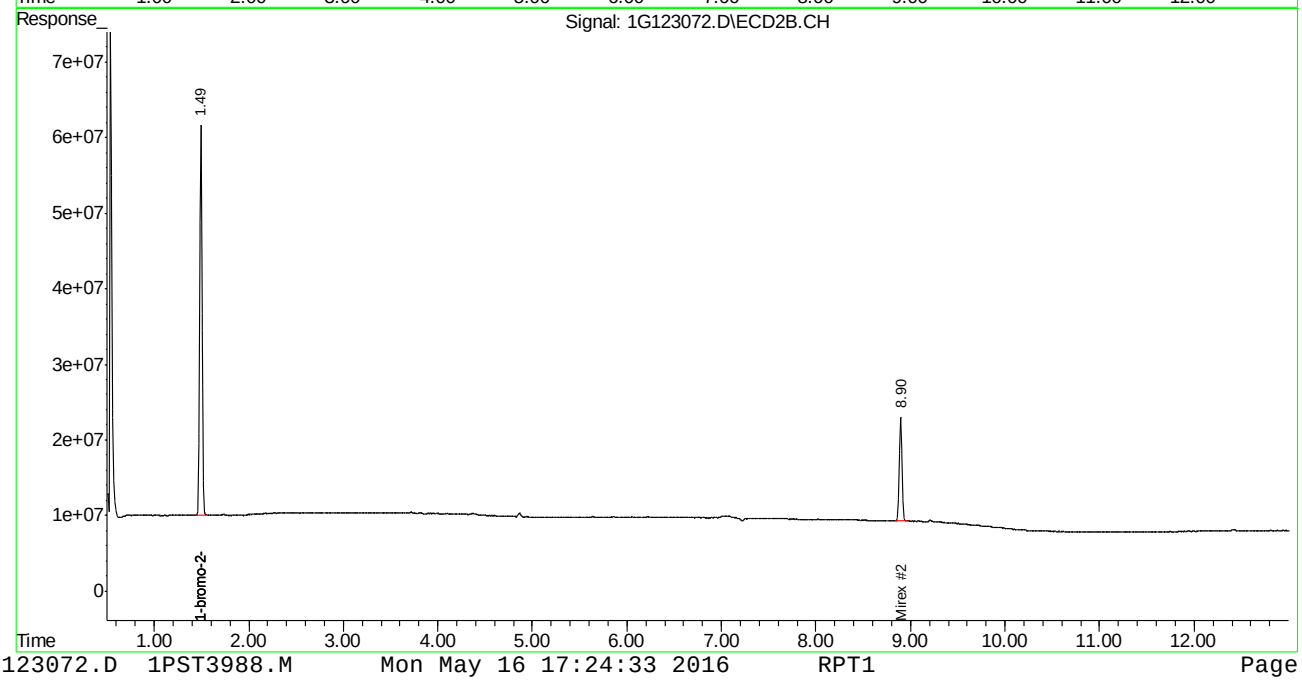
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123072.D\ECD1A.CH Vial: 17
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123072.D\ECD2B.CH
Acq On : 5-16-16 01:23:45 PM Operator: thomasl
Sample : icv3988-25 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 17:24 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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





1G123072.D 1PST3988.M Mon May 16 17:24:33 2016 RPT1 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/16/16 17:43

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123073.D\ECD1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123073.D\ECD2B.CH
Acq On : 5-16-16 01:41:21 PM Operator: thomasl
Sample : icv3988-500 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 14:56 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 13:30:31 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	123.5E6	900.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.33	1.49	123.5E6	900.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.33	1.49	123.5E6	900.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.92	2.29	105.8E6	734.7E6	47.413	45.875
Spiked Amount	40.000	Range	30 - 150	Recovery	=	118.53%	114.69%
24) SA	Decachlorobiphen	9.23	10.68	139.4E6	525.8E6	45.949	46.731
Spiked Amount	40.000			Recovery	=	114.87%	116.83%
	Target Compounds						
32)	Chlordane {A}	3.11	3.71	48030860	359.5E6	531.033	543.871
33)	Chlordane {B}	3.67	4.53	54143132	326.9E6	460.895	488.212
34)	Chlordane {C}	4.40	5.42	175.2E6	999.5E6	437.175	456.024
35)	Chlordane {D}	4.55	5.64	279.1E6	1667.0E6	445.780	459.597m
36)	Chlordane {E}	5.60	7.07	43378325	296.3E6	463.521	453.997

(f)=RT Delta > 1/2 Window (m)=manual int.

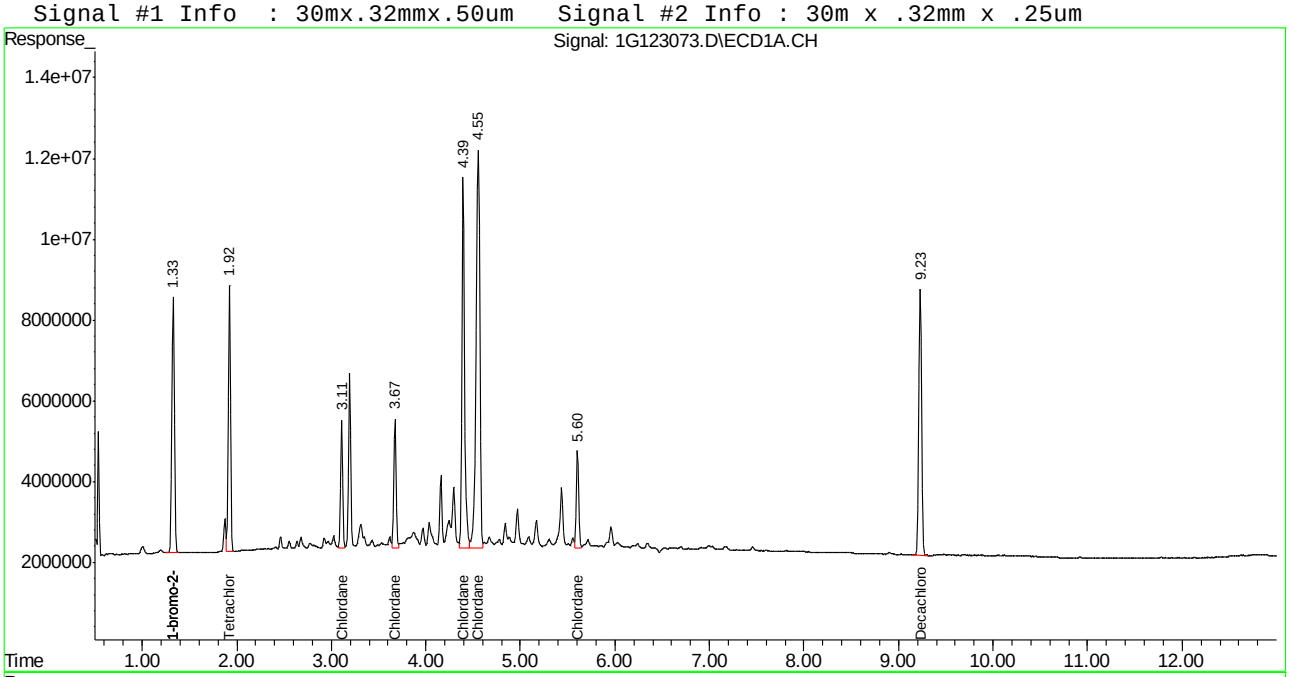
SGS ACCUTEST JC20314

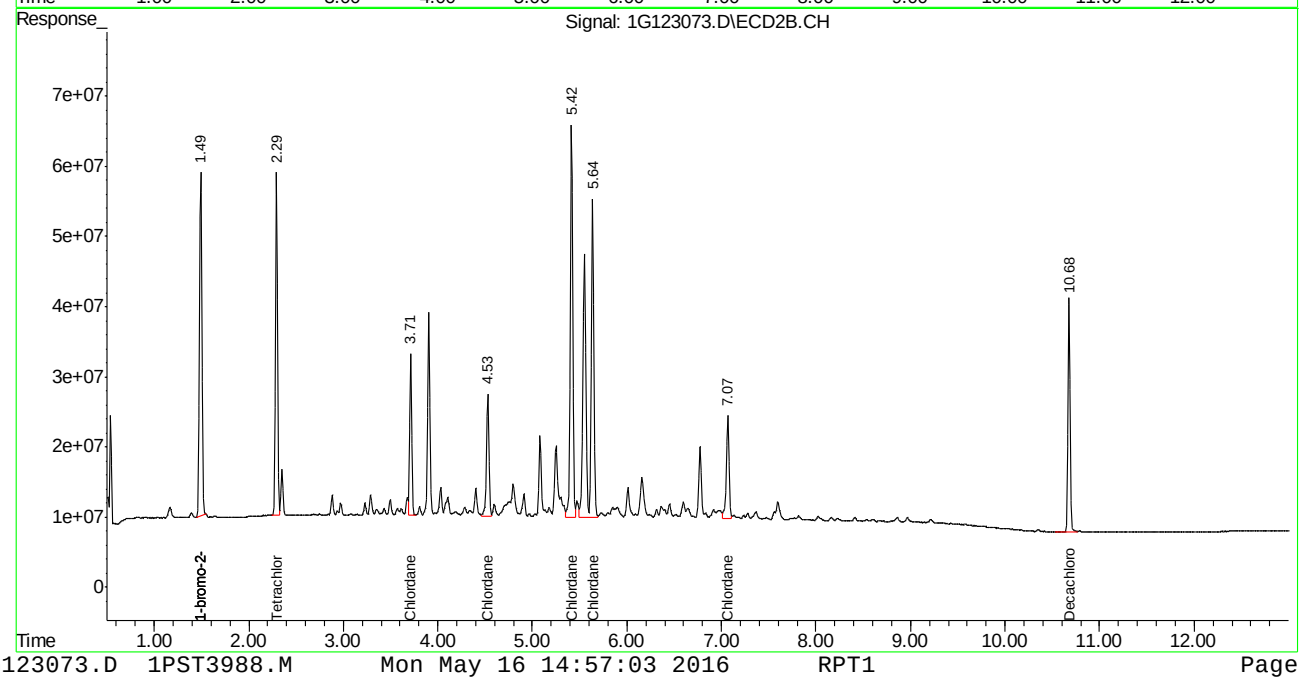
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123073.D\ECD1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123073.D\ECD2B.CH
Acq On : 5-16-16 01:41:21 PM Operator: thomasl
Sample : icv3988-500 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 14:56 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 13:30:31 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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





1G123073.D 1PST3988.M Mon May 16 14:57:03 2016 RPT1 Page 2

Manual Integration Approval Summary

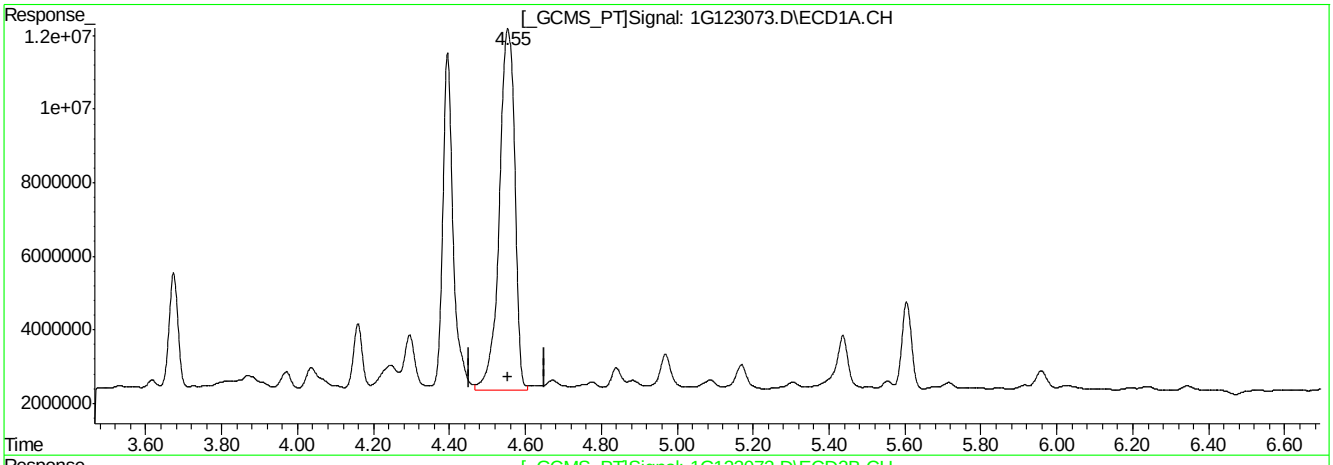
Sample Number:	G1G3988-ICV3988	**Method:**	SW846 8081B
Lab FileID:	1G123073.D	**Analyst approved:**	05/16/16 15:18 Dhara Saparia
Injection Time:	05/16/16 13:41	**Supervisor approved:**	05/16/16 17:43 Gwendolyn Burns

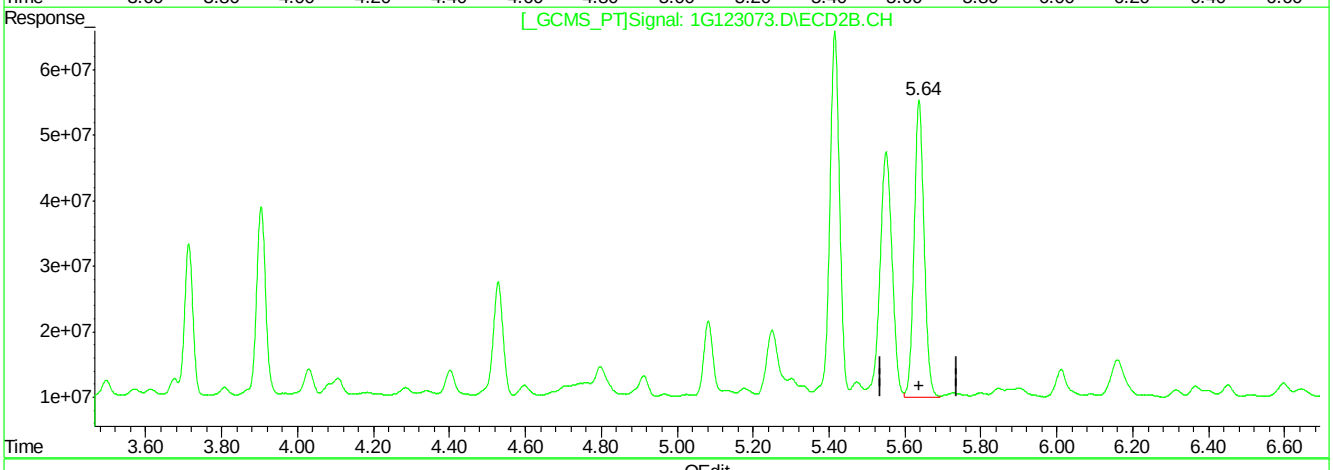
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	5.64	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123073.D\ECD1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123073.D\ECD2B.CH
Acq On    : 5-16-16 01:41:21 PM                      Operator: thomasl
Sample    : icv3988-500                              Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 14:55 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 13:30:31 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.55min 445.780PPB

response 279058613

(35) Chlordane {D} #2

5.64min 228.397PPB

response 828390770

(+) = Expected Retention Time

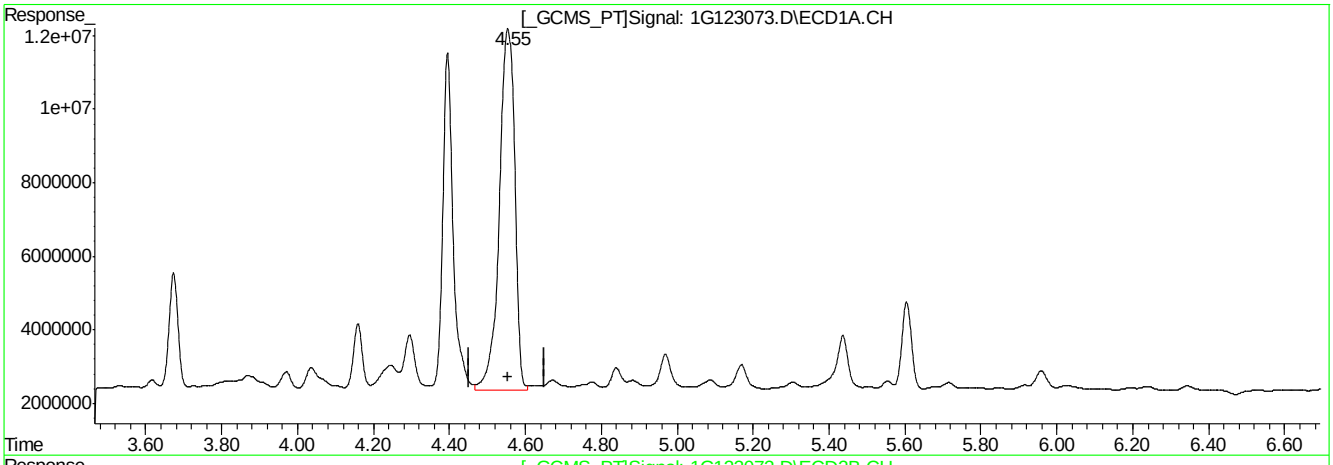
1G123073.D 1PST3988.M Mon May 16 14:56:04 2016 RPT1

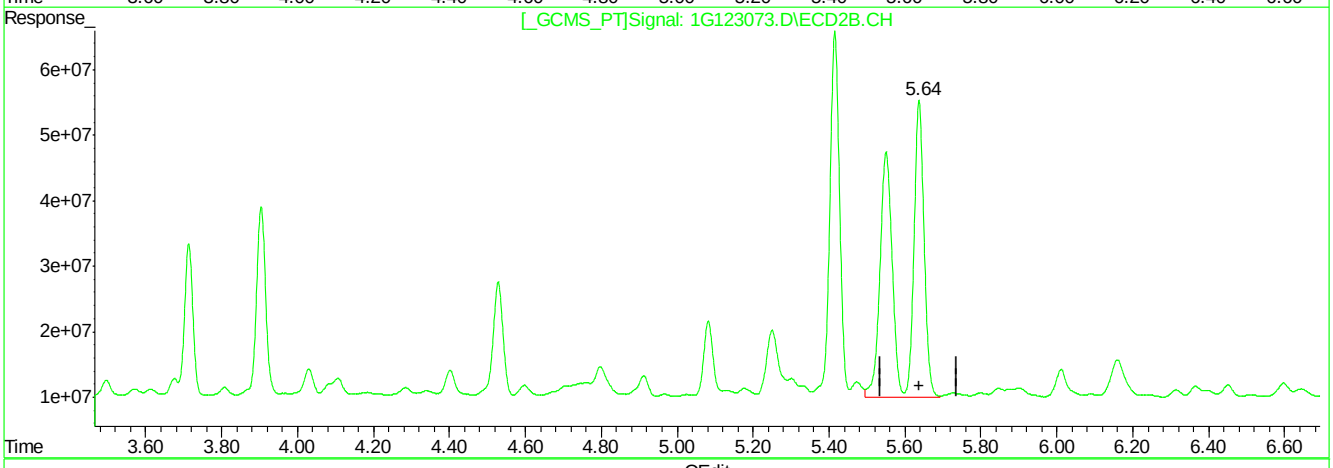
11.5.13.2 11

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123073.D\ECD1A.CH Vial: 18
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123073.D\ECD2B.CH
Acq On    : 5-16-16 01:41:21 PM                      Operator: thomasl
Sample    : icv3988-500                              Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 14:55 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 13:30:31 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.55min 445.780PPB

response 279058613

(35) Chlordane {D} #2

5.64min 459.597PPB m

response 1666951512

(+) = Expected Retention Time

1G123073.D 1PST3988.M Mon May 16 14:56:47 2016 RPT1

SGS ACCUTEST JC20314

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/16/16 17:43

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD2B.CH
Acq On : 5-16-16 01:58:48 PM Operator: thomasl
Sample : icv3988-500 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 15:06 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 13:30:31 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	124.8E6	901.9E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.33	1.49	124.8E6	901.9E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.33	1.49	124.8E6	901.9E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.92	2.30	105.3E6	732.6E6	46.665	45.661
Spiked Amount	40.000	Range	30 - 150	Recovery	=	116.66%	114.15%
24) SA	Decachlorobiphen	9.23	10.68	136.1E6	519.0E6	44.369	46.037
Spiked Amount	40.000			Recovery	=	110.92%	115.09%
	Target Compounds						
26) L8	Toxaphene{A}	5.07	6.12	23030714	124.7E6	563.788	513.130m
27) L8	Toxaphene{B}	5.70	6.96	58437381	282.7E6	501.755	539.366
28) L8	Toxaphene{C}	5.87	7.12	32628867	473.3E6	520.175m	516.853
29) L8	Toxaphene{D}	6.20	7.56	36980687	294.9E6	516.700m	517.505
30) L8	Toxaphene{E}	6.85	8.44	40360721	279.0E6	489.524	512.161

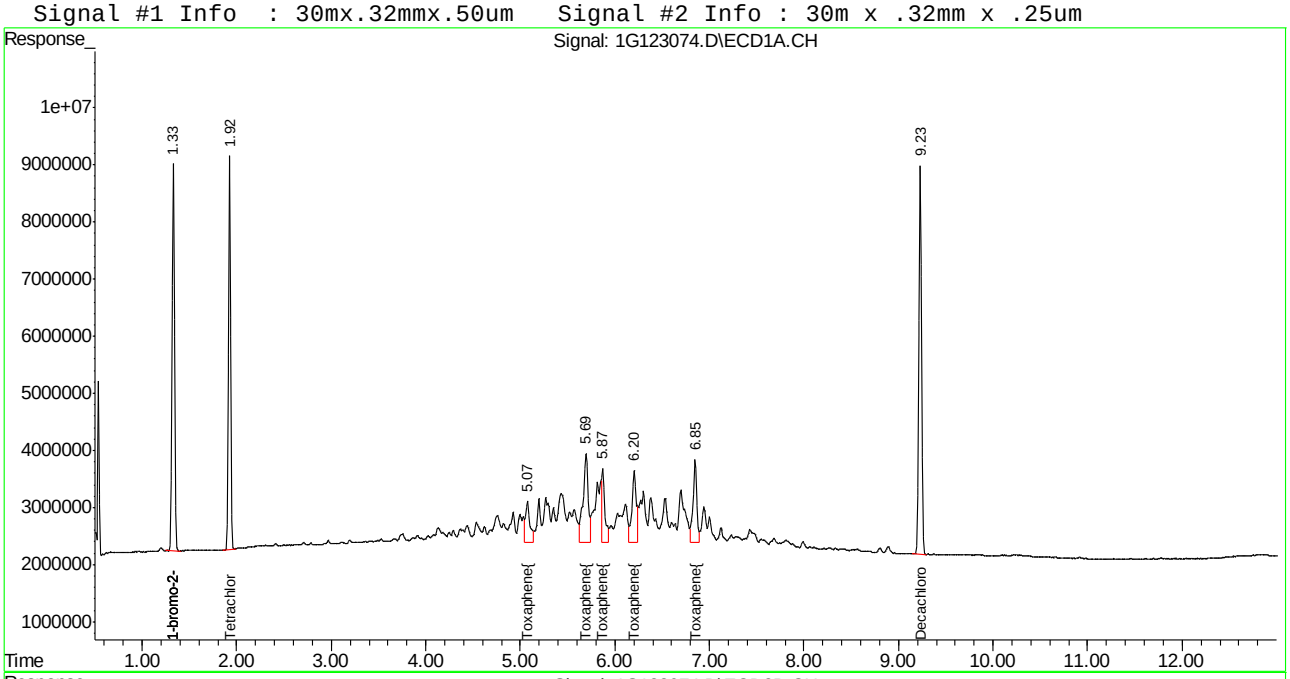
(f)=RT Delta > 1/2 Window (m)=manual int.

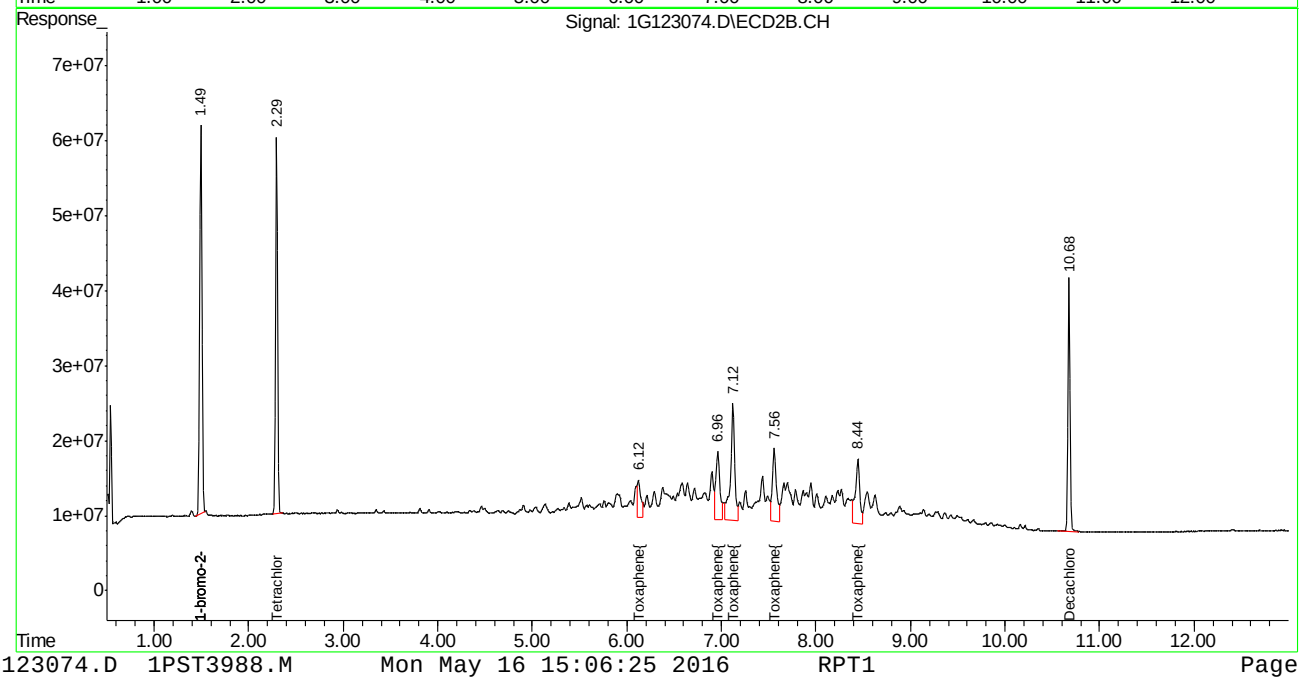
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD2B.CH
Acq On : 5-16-16 01:58:48 PM Operator: thomasl
Sample : icv3988-500 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 15:06 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 13:30:31 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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 JC20314

Manual Integration Approval Summary

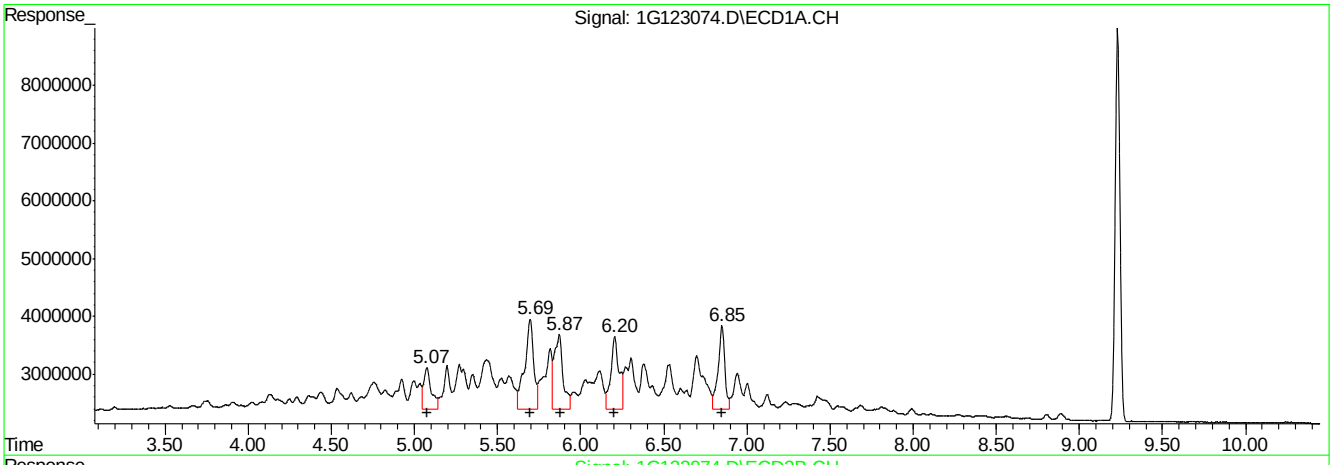
Sample Number:	G1G3988-ICV3988	**Method:**	SW846 8081B
Lab FileID:	1G123074.D	**Analyst approved:**	05/16/16 15:18 Dhara Saparia
Injection Time:	05/16/16 13:58	**Supervisor approved:**	05/16/16 17:43 Gwendolyn Burns

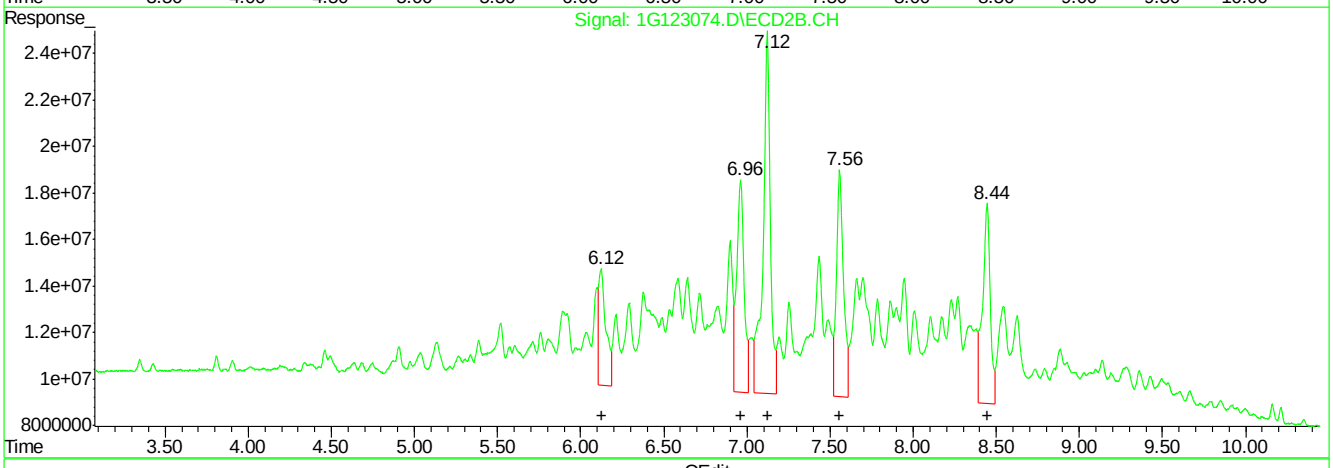
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-C		1	5.87	Poor instrument integration
Toxaphene-A		2	6.12	Poor instrument integration
Toxaphene-D		1	6.20	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD2B.CH
Acq On    : 5-16-16 01:58:48 PM                      Operator: thomasl
Sample    : icv3988-500                              Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 15:04 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 13:30:31 2016
Response via : Multiple Level Calibration
```





QEdit

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
5.07	23030714	563.79
5.70	58437381	501.76
5.87	46177996	736.18
6.20	43685039	610.37
6.85	40360721	489.52

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.12	148449773	611.04
6.96	282709621	539.37
7.12	473281843	516.85
7.56	294865837	517.51
8.44	278967293	512.16

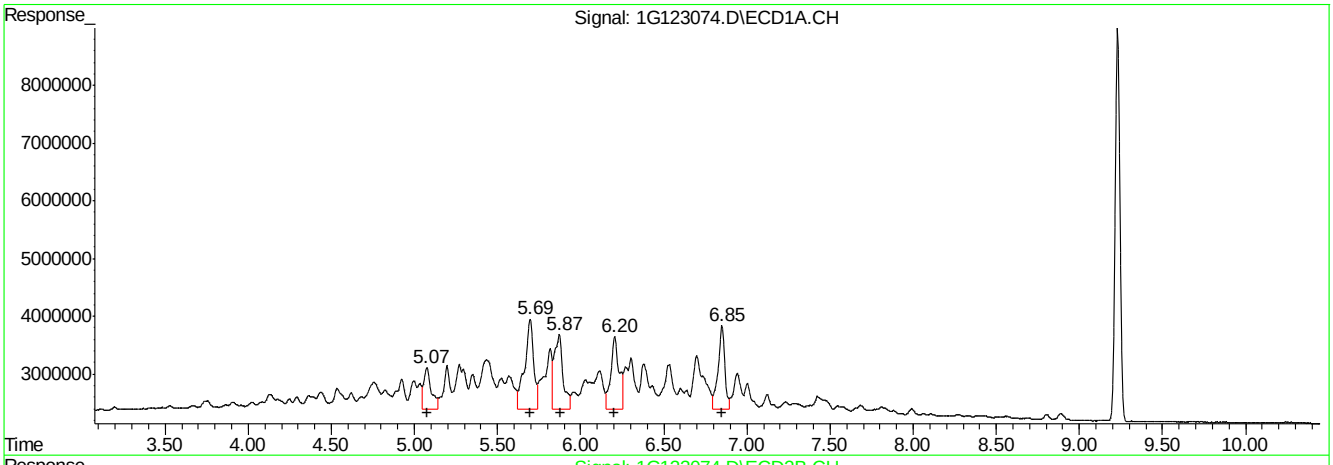
(+) = Expected Retention Time

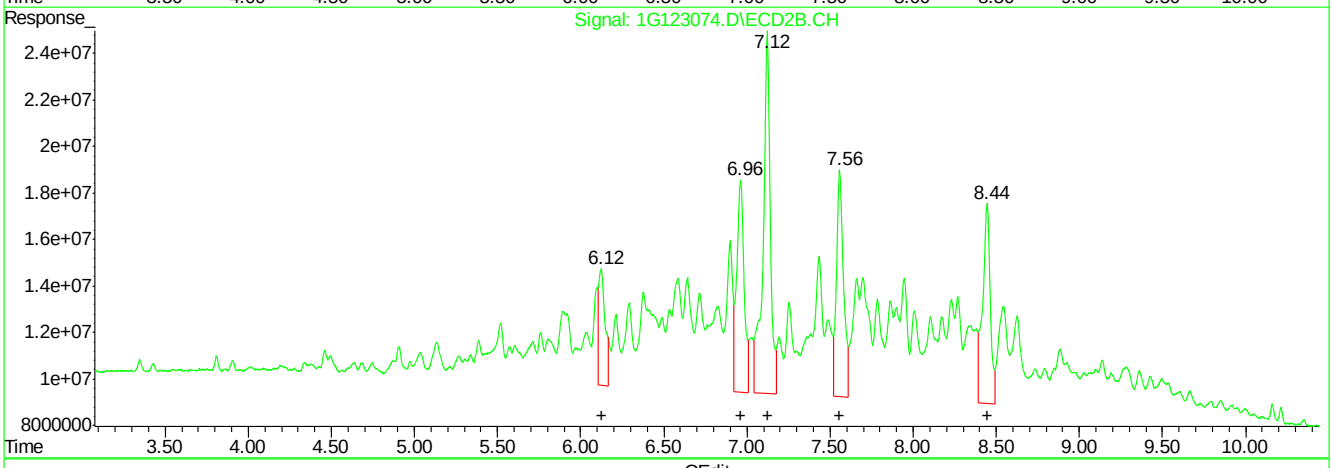
1G123074.D 1PST3988.M Mon May 16 15:04:32 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD2B.CH
Acq On    : 5-16-16 01:58:48 PM                      Operator: thomasl
Sample    : icv3988-500                              Inst    : GC1G
Misc      : op93854,g1g3988,930,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 16 15:04 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 13:30:31 2016
Response via : Multiple Level Calibration
```





QEdit

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
5.07	23030714	563.79
5.70	58437381	501.76
5.87	46177996	736.18
6.20	43685039	610.37
6.85	40360721	489.52

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.12	124663264	513.13
6.96	282709621	539.37
7.12	473281843	516.85
7.56	294865837	517.51
8.44	278967293	512.16

(+) = Expected Retention Time

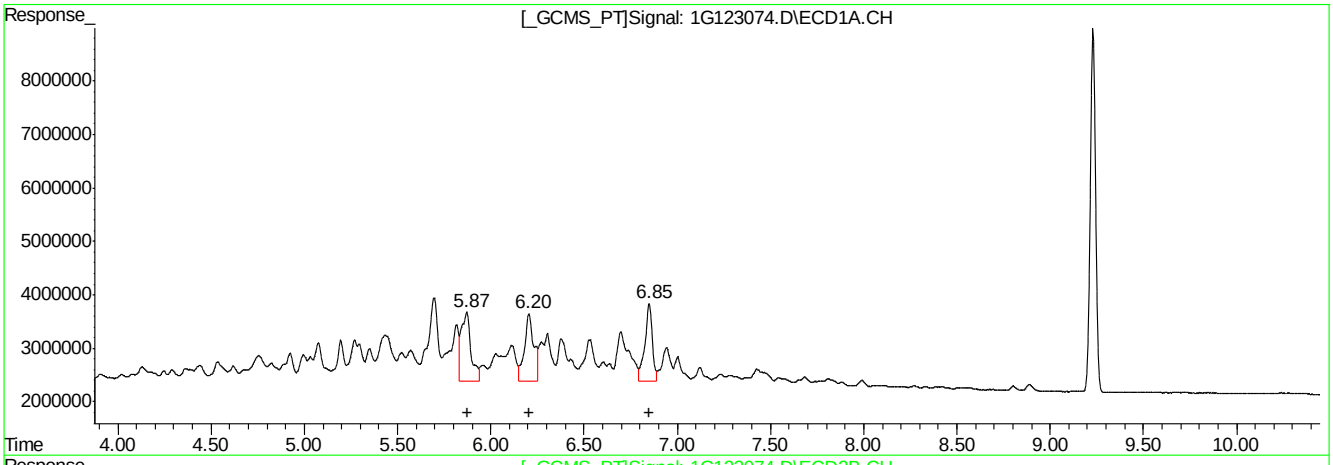
1G123074.D 1PST3988.M Mon May 16 15:05:02 2016 RPT1

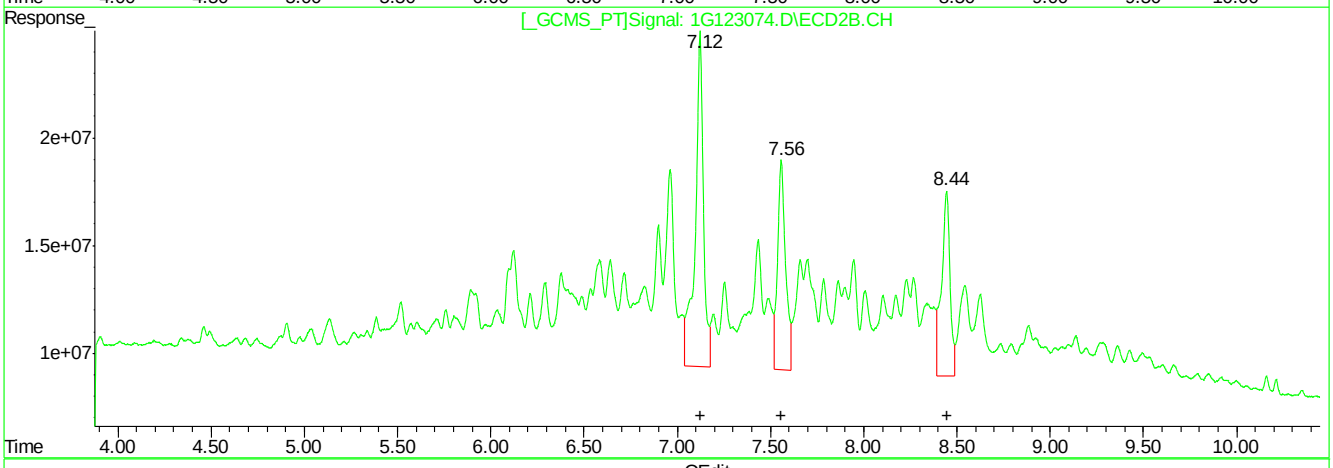
11.5.14.3 11

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD2B.CH
Acq On : 5-16-16 01:58:48 PM Operator: thomasl
Sample : icv3988-500 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 15:04 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 13:30:31 2016
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene{C} (L8)

R.T.	Response	Conc
5.87	46177996	736.18
6.20	43685039	610.37
6.85	40360721	489.52

(28) Toxaphene{C} #2 (L8)

R.T.	Response	Conc
7.12	473281843	516.85
7.56	294865837	517.51
8.44	278967293	512.16

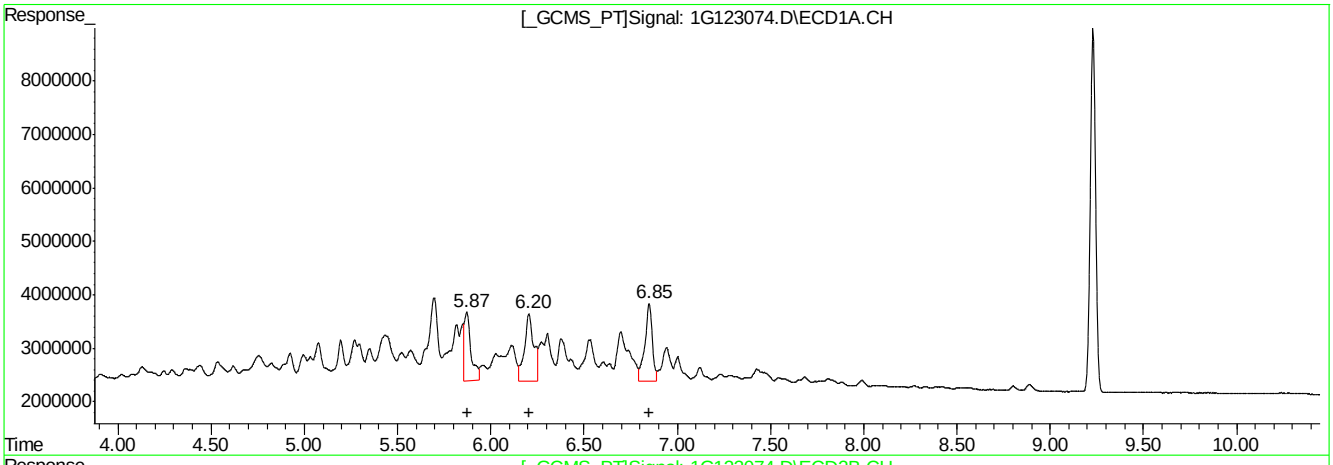
(+) = Expected Retention Time

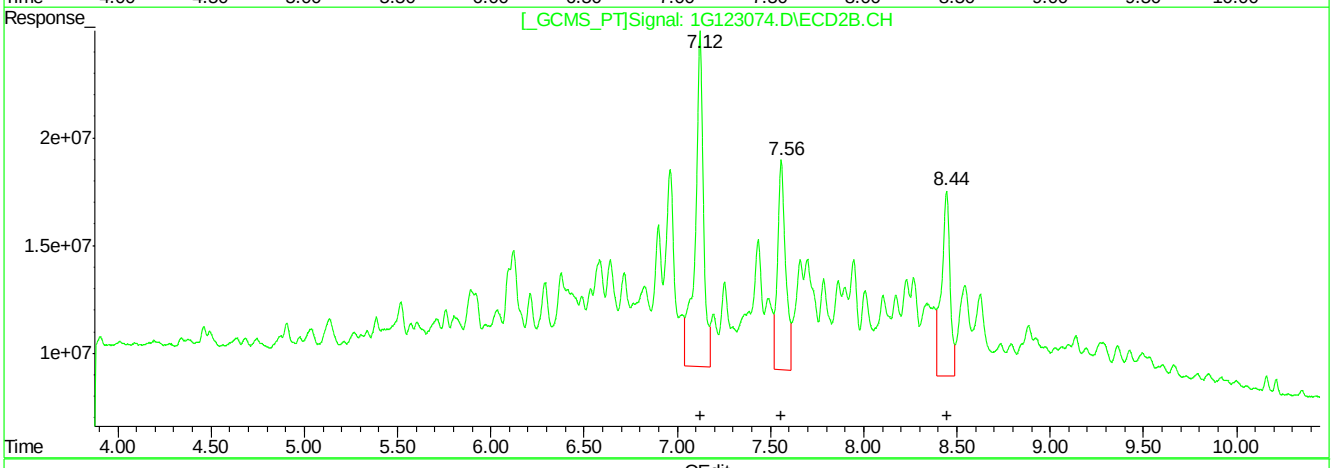
1G123074.D 1PST3988.M Mon May 16 15:05:12 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD2B.CH
Acq On : 5-16-16 01:58:48 PM Operator: thomasl
Sample : icv3988-500 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 15:05 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 13:30:31 2016
Response via : Multiple Level Calibration





QEdit

(28) Toxaphene{C} (L8)

R.T.	Response	Conc
5.87	32628867	520.18
6.20	43685039	610.37
6.85	40360721	489.52

(28) Toxaphene{C} #2 (L8)

R.T.	Response	Conc
7.12	473281843	516.85
7.56	294865837	517.51
8.44	278967293	512.16

(+) = Expected Retention Time

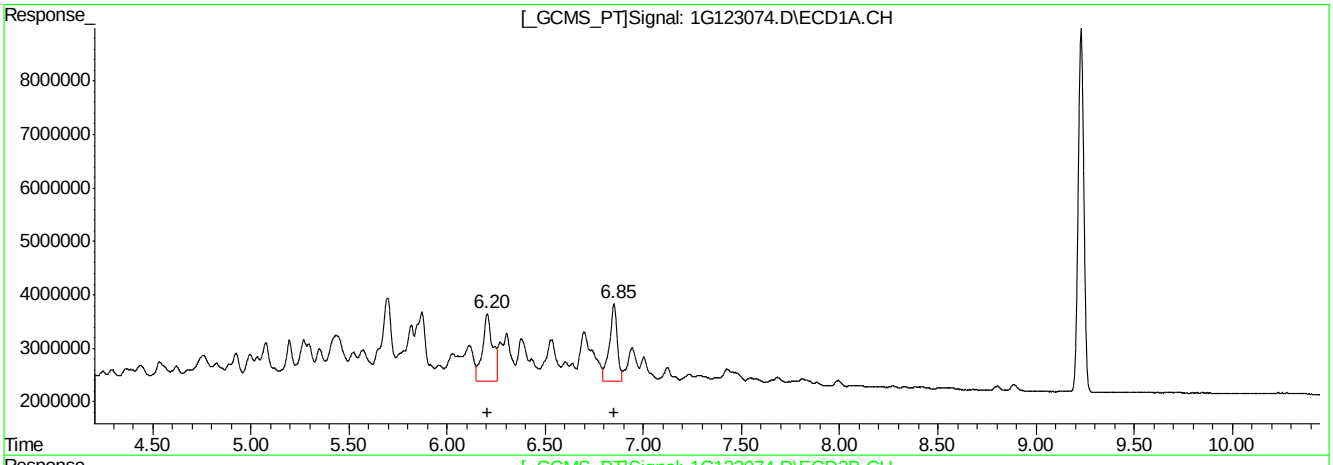
1G123074.D 1PST3988.M Mon May 16 15:05:57 2016 RPT1

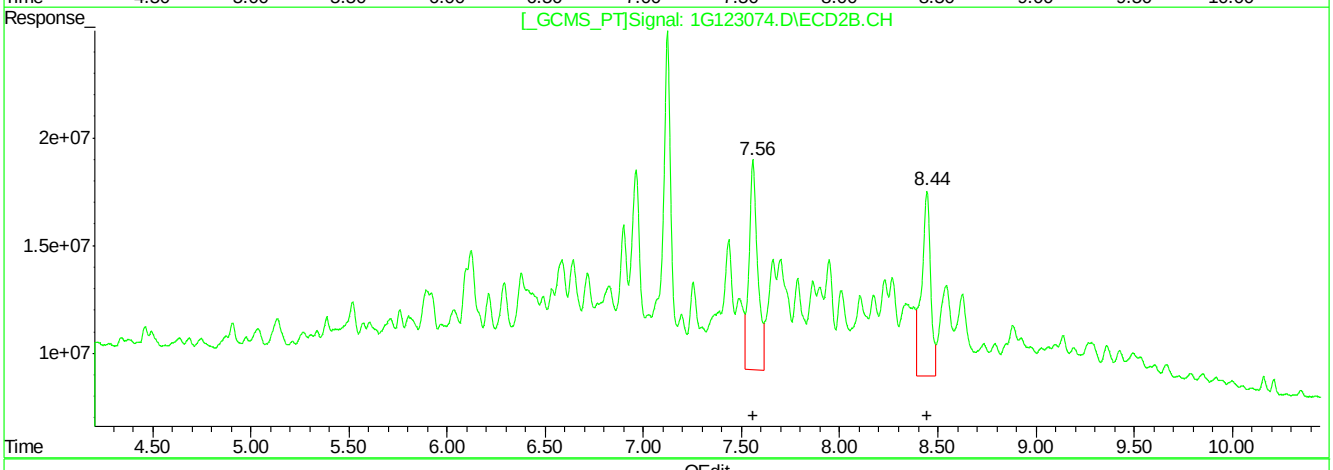
SGS ACCUTEST JC20314

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD2B.CH
Acq On : 5-16-16 01:58:48 PM Operator: thomasl
Sample : icv3988-500 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 15:05 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 13:30:31 2016
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene{D} (L8)

R.T.	Response	Conc
6.20	43685039	610.37
6.85	40360721	489.52

(29) Toxaphene{D} #2 (L8)

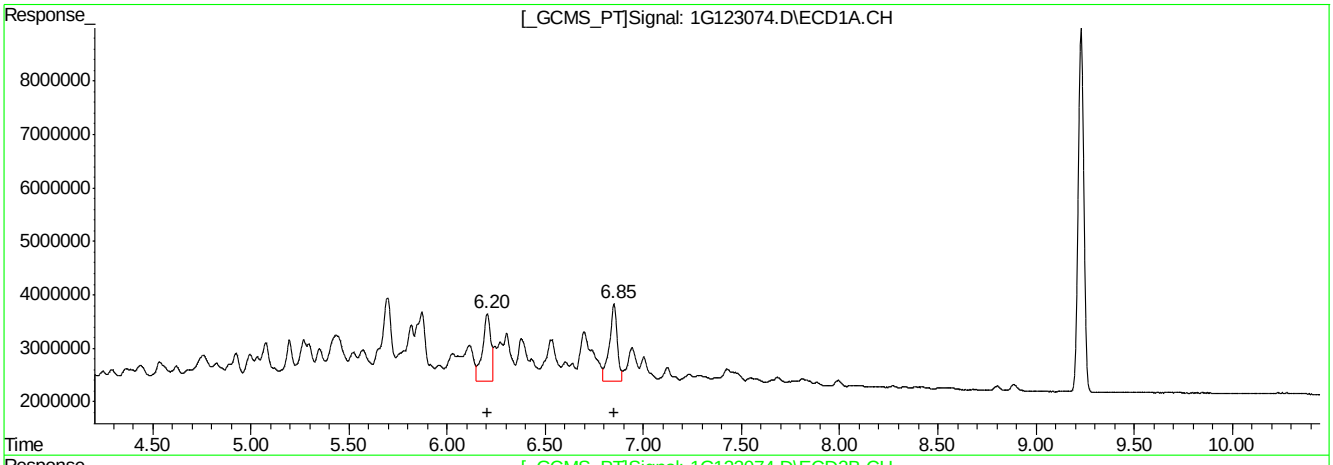
R.T.	Response	Conc
7.56	294865837	517.51
8.44	278967293	512.16

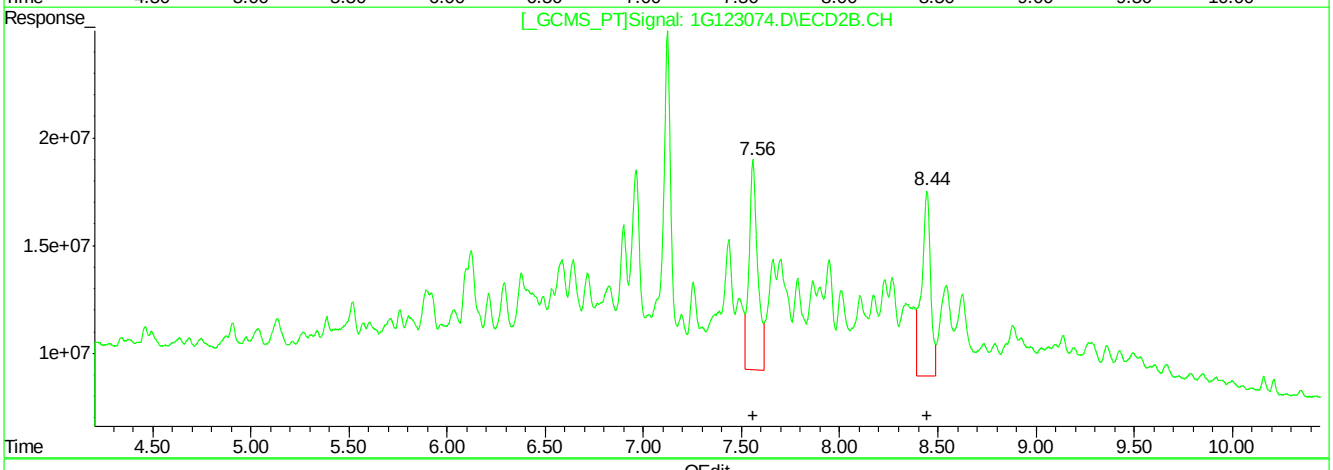
(+) = Expected Retention Time
1G123074.D 1PST3988.M Mon May 16 15:06:01 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD1A.CH Vial: 19
Signal #2 : C:\MSDCHEM\1\DATA\1G3988\1G123074.D\ECD2B.CH
Acq On : 5-16-16 01:58:48 PM Operator: thomasl
Sample : icv3988-500 Inst : GC1G
Misc : op93854,g1g3988,930,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 16 15:05 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 13:30:31 2016
Response via : Multiple Level Calibration





QEdit

(29) Toxaphene{D} #2 (L8)

R.T.	Response	Conc
6.20	36980687	516.70
6.85	40360721	489.52

(29) Toxaphene{D} #2 (L8)

R.T.	Response	Conc
7.56	294865837	517.51
8.44	278967293	512.16

(+) = Expected Retention Time

1G123074.D 1PST3988.M Mon May 16 15:06:12 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/17/16 13:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123133.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123133.D\ECD2B.CH
Acq On : 5-17-16 08:45:06 AM Operator: rebeccak
Sample : cc3988-50 Inst : GC1G
Misc : op93908,g1g3990,5.4,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 12:34 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.50	125.9E6	842.1E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.33	1.50	125.9E6	842.1E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.33	1.50	125.9E6	842.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.92	2.30	110.8E6	688.0E6	48.732	45.947
Spiked Amount	40.000	Range	30 - 150	Recovery	=	121.83%	114.87%
24) SA	Decachlorobiphen	9.23	10.68	141.9E6	496.1E6	45.857	47.189
Spiked Amount	40.000			Recovery	=	114.64%	117.97%
	Target Compounds						
3) A	alpha-BHC	2.41	2.94	162.6E6	1024.9E6	49.976	45.710
4) MA	gamma-BHC	2.71	3.35	150.7E6	931.3E6	49.554	45.880
5) MA	Heptachlor	3.20	3.90	151.3E6	872.0E6	48.872	46.005
6) B	beta-BHC	2.78	3.43	66304963	399.0E6	45.566	42.928
7) B	delta-BHC	2.97	3.81	146.0E6	913.4E6	48.975	45.022
8) MB	Aldrin	3.53	4.34	140.0E6	808.5E6	49.599	46.570
9) B	Heptachlor Epoxi	4.24	5.14	138.8E6	730.1E6	50.140	47.130
10) B	gamma-Chlordane	4.40	5.42	128.8E6	734.5E6	45.103	46.420
11) B	alpha-Chlordane	4.56	5.64	129.4E6	710.6E6	45.603	45.230
12) A	Endosulfan I	4.75	5.73	126.2E6	687.0E6	46.226	47.442
13) B	4,4'-DDE	4.67	5.90	132.7E6	724.7E6	46.353	46.501
14) MA	Dieldrin	5.07	6.15	136.0E6	755.8E6	47.845	46.583
15) MA	Endrin	5.39	6.65	125.7E6	681.4E6	48.783	47.478
16) A	4,4'-DDD	5.50	6.83	107.3E6	603.5E6	47.752	46.975
17) B	Endosulfan II	5.71	6.99	124.3E6	660.9E6	45.991	45.201
18) MA	4,4'-DDT	5.92	7.36	115.1E6	603.8E6	47.045	48.169
19) B	Endrin Aldehyde	6.34	7.56	95082552	507.0E6	44.529m	45.184
20) B	Endosulfan Sulfa	7.03	8.02	112.4E6	576.8E6	43.340	45.053
21) A	Methoxychlor	6.69	8.60	66704590	320.4E6	45.235m	47.757
22)	Mirex	6.82	8.90	105.1E6	466.9E6	42.606	43.637
23) B	Endrin Ketone	7.45	8.97	123.4E6	624.3E6	42.038	43.556

(f)=RT Delta > 1/2 Window (m)=manual int.

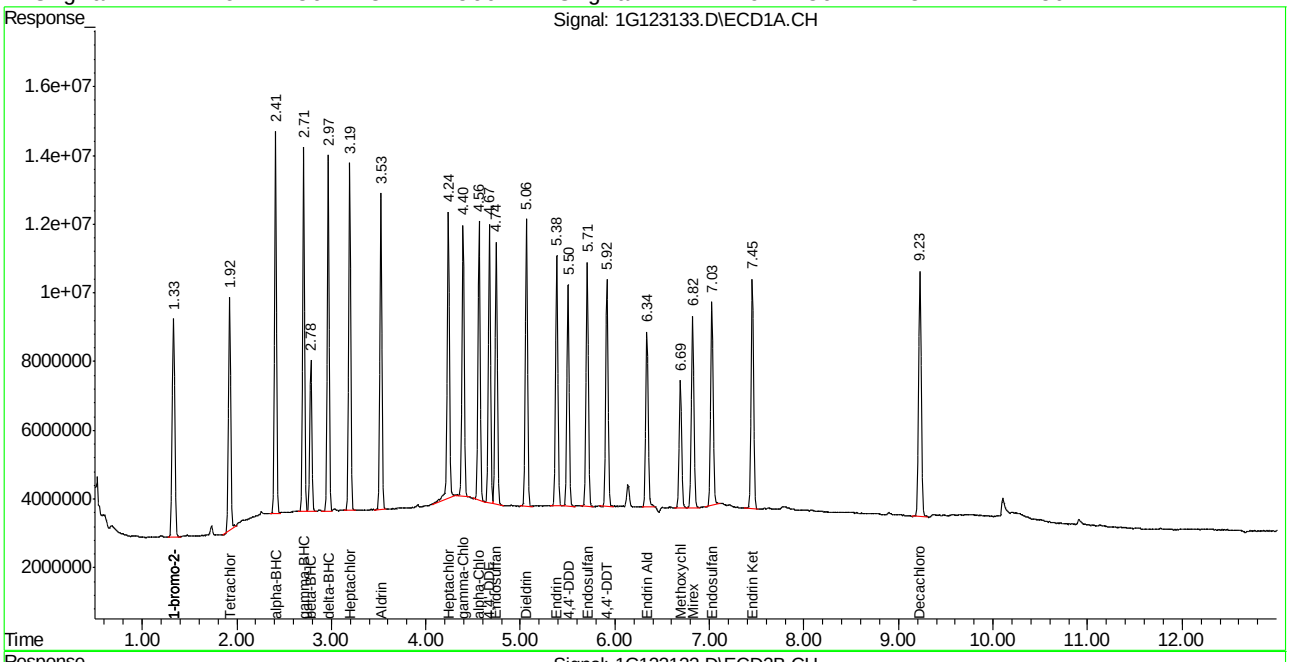
SGS ACCUTEST JC20314

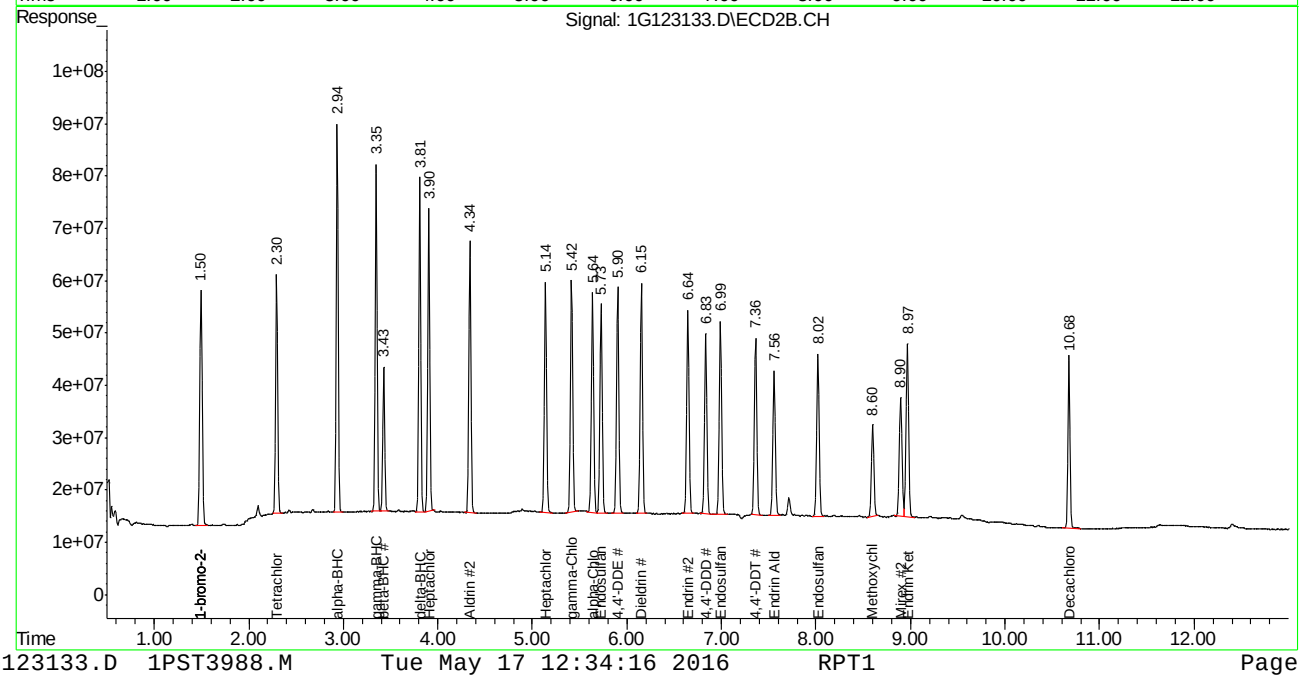
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123133.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123133.D\ECD2B.CH
Acq On : 5-17-16 08:45:06 AM Operator: rebeccak
Sample : cc3988-50 Inst : GC1G
Misc : op93908,g1g3990,5.4,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 12:34 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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 JC20314

Manual Integration Approval Summary

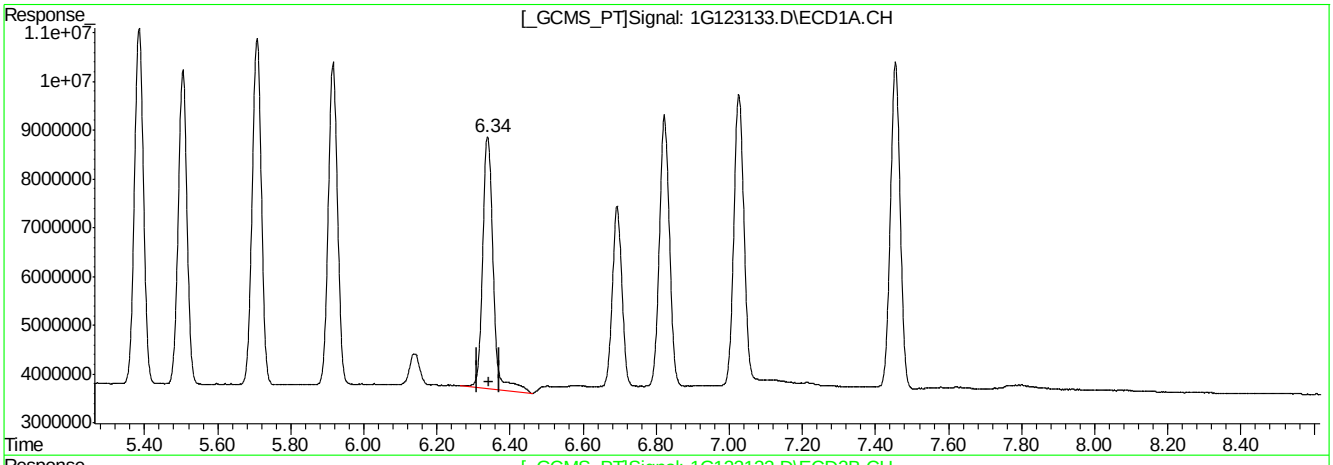
Sample Number:	G1G3990-CC3988	**Method:**	SW846 8081B
Lab FileID:	1G123133.D	**Analyst approved:**	05/17/16 12:55 Dhara Saparia
Injection Time:	05/17/16 08:45	**Supervisor approved:**	05/17/16 13:17 Gwendolyn Burns

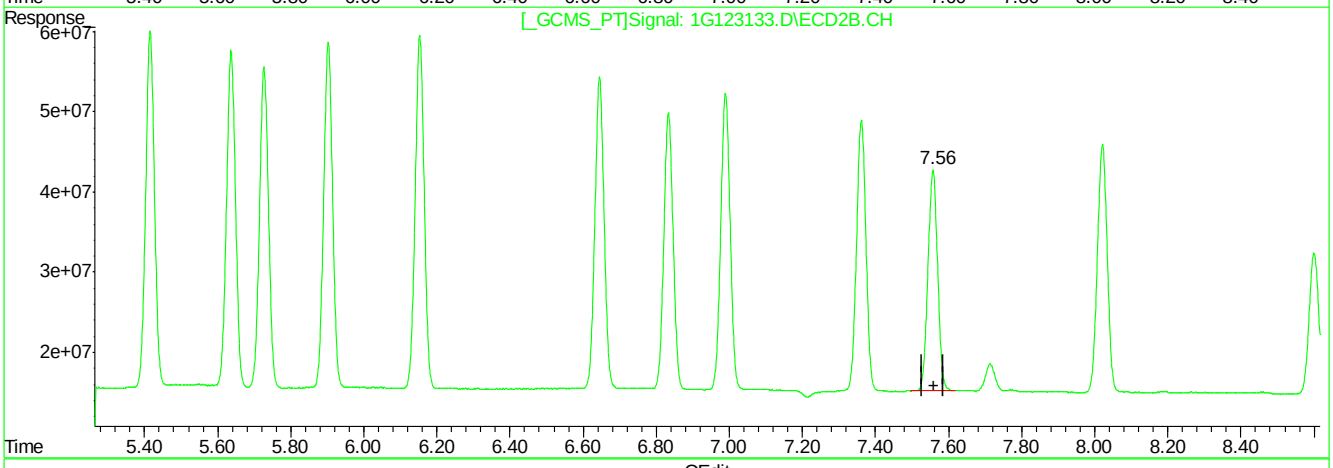
Parameter	CAS	Sig#	R.T. (min.)	Reason
Endrin aldehyde	7421-93-4	1	6.34	Poor instrument integration
Methoxychlor	72-43-5	1	6.69	Poor instrument integration

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123133.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123133.D\ECD2B.CH
Acq On : 5-17-16 08:45:06 AM Operator: rebeccak
Sample : cc3988-50 Inst : GC1G
Misc : op93908,g1g3990,5.4,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 12:33 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration





QEdit

(19) Endrin Aldehyde (B)

6.34min 48.408PPB

response 103365576

(19) Endrin Aldehyde #2 (B)

7.56min 45.184PPB

response 507009260

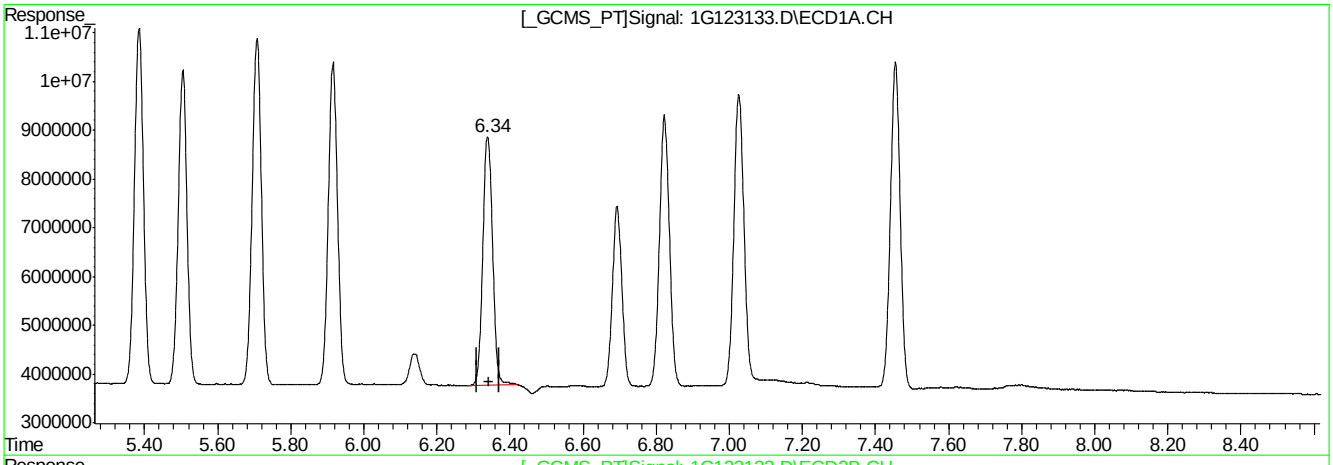
(+) = Expected Retention Time

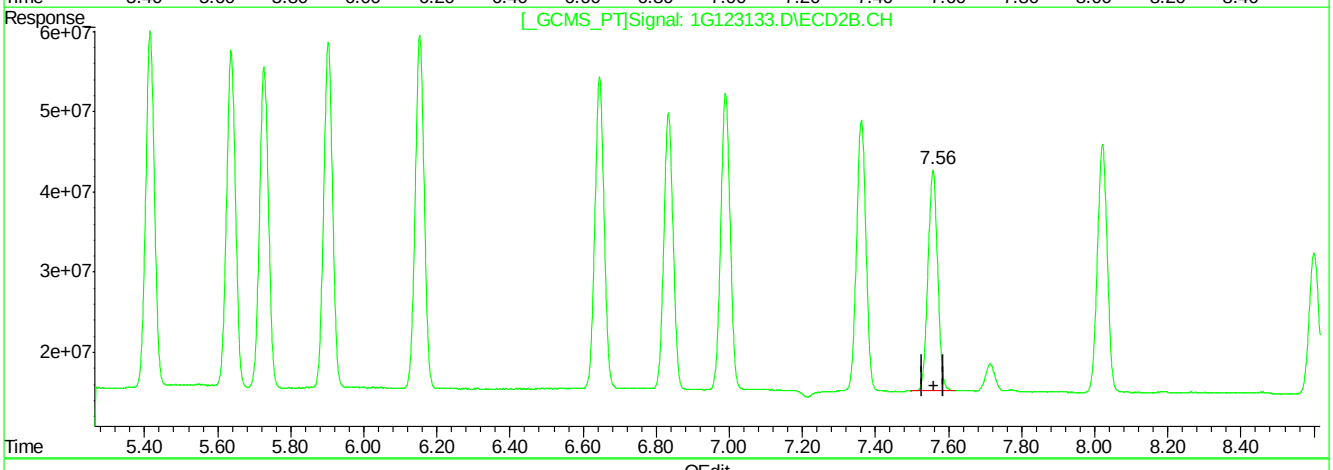
1G123133.D 1PST3988.M Tue May 17 12:33:50 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123133.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123133.D\ECD2B.CH
Acq On : 5-17-16 08:45:06 AM Operator: rebeccak
Sample : cc3988-50 Inst : GC1G
Misc : op93908,g1g3990,5.4,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 12:33 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration





QEdit

(19) Endrin Aldehyde (B)

6.34min 44.529PPB m

response 95082552

(19) Endrin Aldehyde #2 (B)

7.56min 45.184PPB

response 507009260

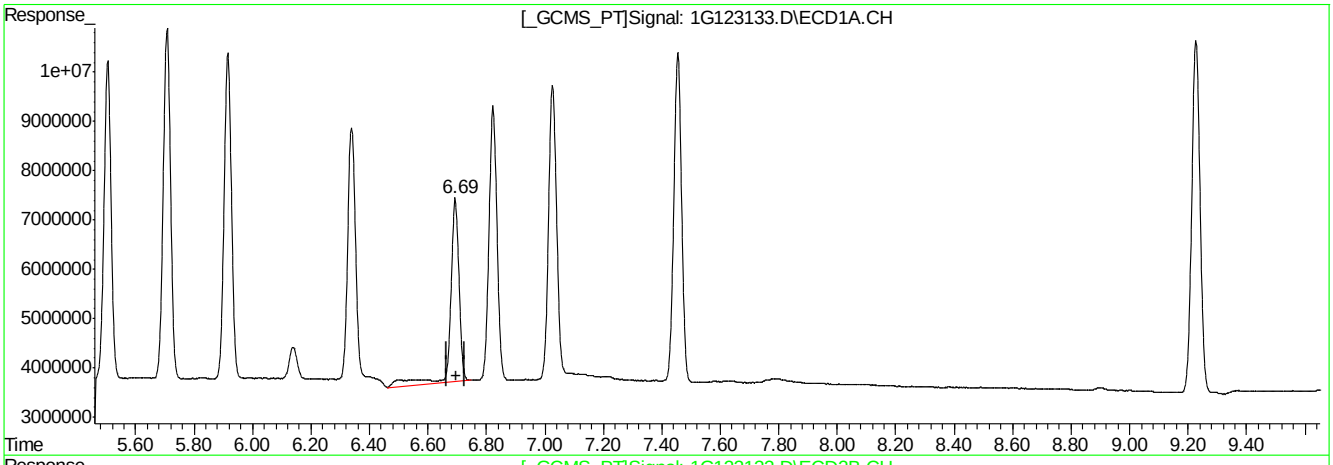
(+) = Expected Retention Time

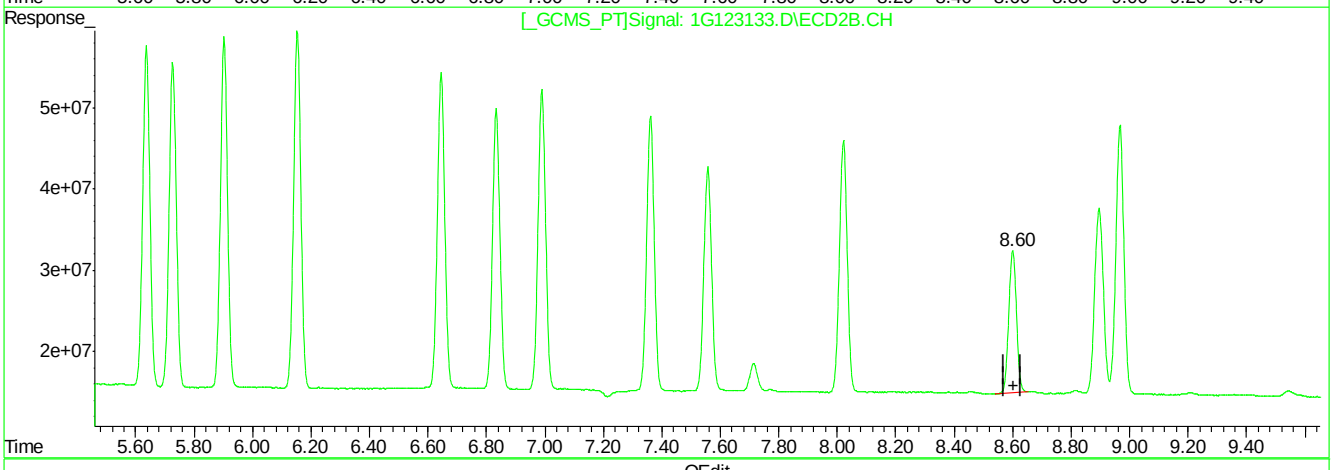
1G123133.D 1PST3988.M Tue May 17 12:33:59 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123133.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123133.D\ECD2B.CH
Acq On : 5-17-16 08:45:06 AM Operator: rebeccak
Sample : cc3988-50 Inst : GC1G
Misc : op93908,g1g3990,5.4,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 12:33 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration





QEdit

(21) Methoxychlor (A)

6.69min 52.157PPB

response 76911756

(21) Methoxychlor #2 (A)

8.60min 47.757PPB

response 320430708

(+) = Expected Retention Time

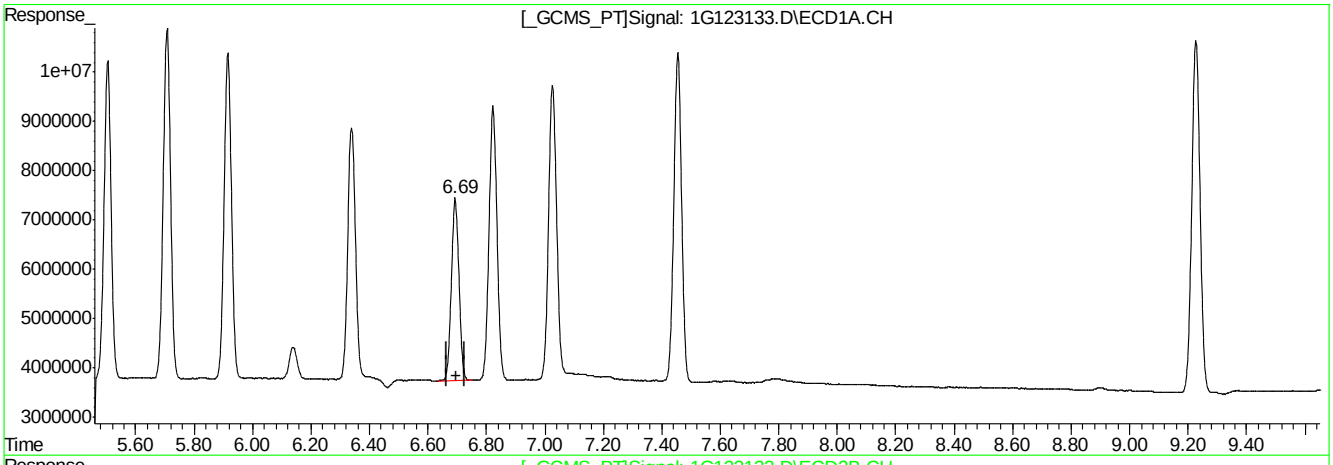
1G123133.D 1PST3988.M Tue May 17 12:34:03 2016 RPT1

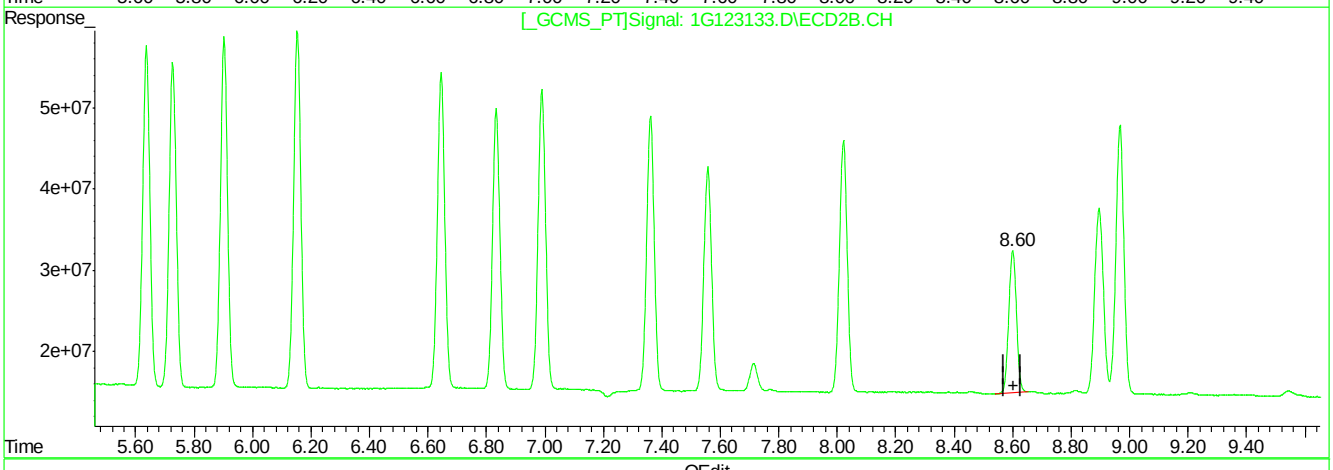
11.5.15.4 11

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123133.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123133.D\ECD2B.CH
Acq On : 5-17-16 08:45:06 AM Operator: rebeccak
Sample : cc3988-50 Inst : GC1G
Misc : op93908,g1g3990,5.4,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 12:33 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration





QEdit

(21) Methoxychlor (A)

6.69min 45.235PPB m

response 66704590

(21) Methoxychlor #2 (A)

8.60min 47.757PPB

response 320430708

(+) = Expected Retention Time

1G123133.D 1PST3988.M Tue May 17 12:34:11 2016 RPT1

11.5.15.5

11

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/18/16 15:12

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD2B.CH
Acq On : 5-17-16 04:19:00 PM Operator: dharas
Sample : cc3988-25 Inst : GC1G
Misc : op93854,g1g3990,910,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 16:42 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.50	128.2E6	895.4E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.33	1.50	128.2E6	895.4E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.33	1.50	128.2E6	895.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.92	2.30	57701426	387.4E6	24.921	24.333
Spiked Amount	40.000	Range	30 - 150	Recovery	=	62.30%	60.83%
24) SA	Decachlorobiphen	9.22	10.67	79547637	289.9E6	25.251m	25.937
Spiked Amount	40.000			Recovery	=	63.13%	64.84%
	Target Compounds						
3) A	alpha-BHC	2.41	2.94	81525345	575.7E6	24.606	24.149
4) MA	gamma-BHC	2.71	3.35	77191549	524.0E6	24.926	24.280
5) MA	Heptachlor	3.19	3.90	78769979	500.0E6	24.993	24.807
6) B	beta-BHC	2.78	3.43	36511611	236.5E6	24.641	23.931
7) B	delta-BHC	2.97	3.81	73810138	517.6E6	24.313	23.993
8) MB	Aldrin	3.52	4.34	72313859	457.4E6	25.169	24.778
9) B	Heptachlor Epoxi	4.24	5.14	69829141	414.3E6	24.767	25.152
10) B	gamma-Chlordane	4.39	5.41	69600344	418.0E6	23.934	24.847
11) B	alpha-Chlordane	4.56	5.64	70272542	410.6E6	24.330	24.579
12) A	Endosulfan I	4.74	5.73	68091651	391.7E6	24.490	25.438
13) B	4,4'-DDE	4.67	5.90	71459817	413.2E6	24.516	24.933
14) MA	Dieldrin	5.06	6.15	71798298	430.0E6	24.802	24.928
15) MA	Endrin	5.38	6.64	66741644	390.6E6	25.446	25.597
16) A	4,4'-DDD	5.50	6.83	57050184	349.3E6	24.941	25.572
17) B	Endosulfan II	5.71	6.99	67690060	383.0E6	24.605	24.634
18) MA	4,4'-DDT	5.91	7.36	62846107	352.6E6	25.227	26.459
19) B	Endrin Aldehyde	6.34	7.55	51514420	292.7E6	23.692m	24.536
20) B	Endosulfan Sulfa	7.02	8.02	62992728	337.7E6	23.857	24.809
21) A	Methoxychlor	6.69	8.60	38454129	185.2E6	25.610m	25.957
22)	Mirex	6.82	8.89	61630740	274.6E6	24.538	24.141
23) B	Endrin Ketone	7.45	8.97	71743681	373.2E6	24.011	24.490

(f)=RT Delta > 1/2 Window (m)=manual int.

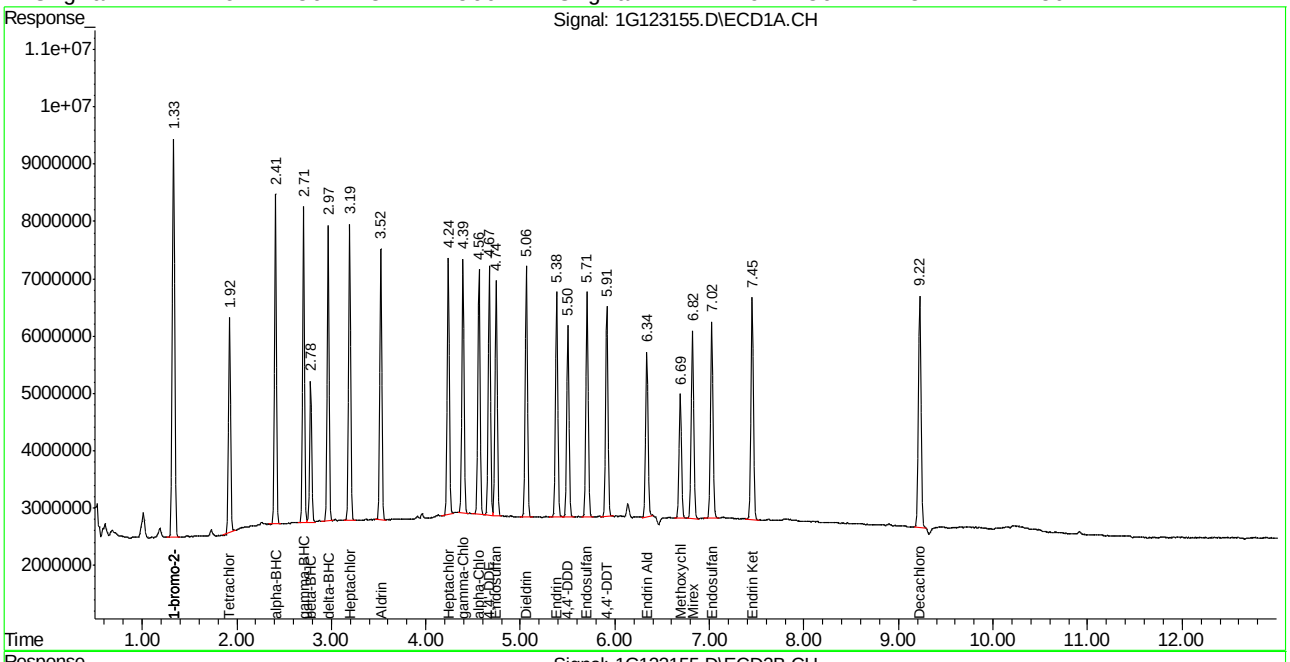
SGS ACCUTEST JC20314

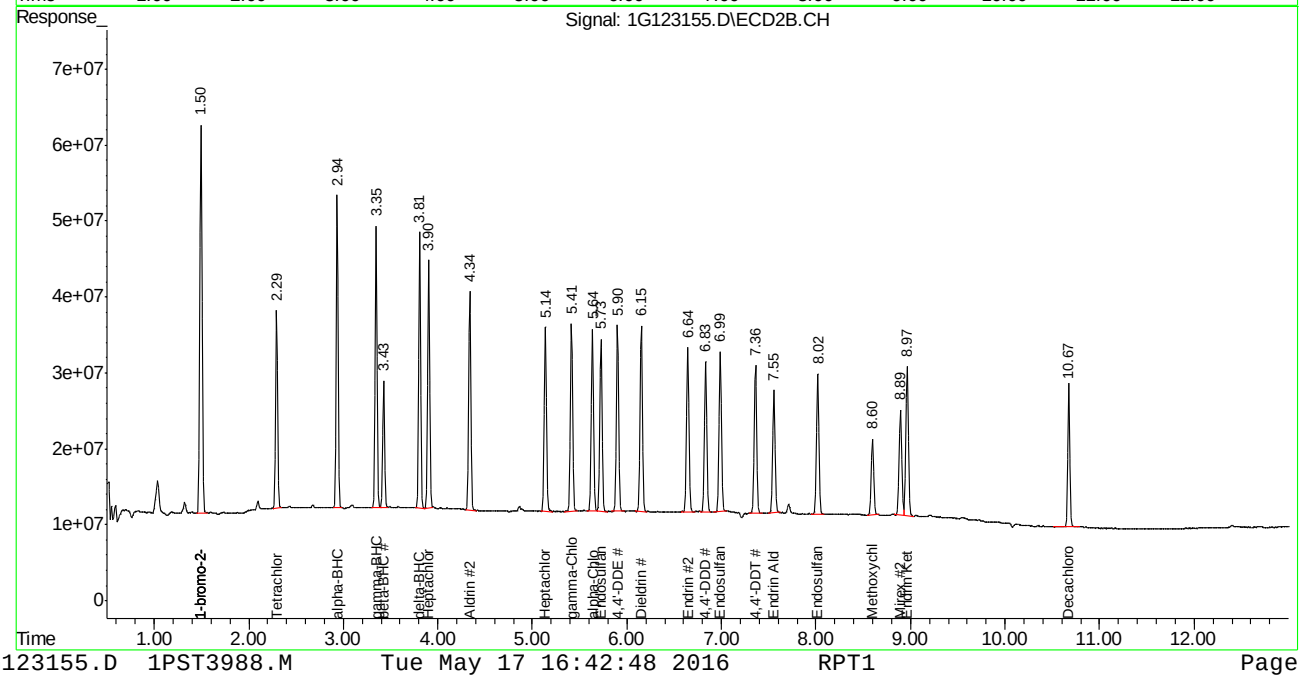
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD2B.CH
Acq On : 5-17-16 04:19:00 PM Operator: dharas
Sample : cc3988-25 Inst : GC1G
Misc : op93854,g1g3990,910,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 16:42 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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





1G123155.D 1PST3988.M Tue May 17 16:42:48 2016 RPT1 Page 2

Manual Integration Approval Summary

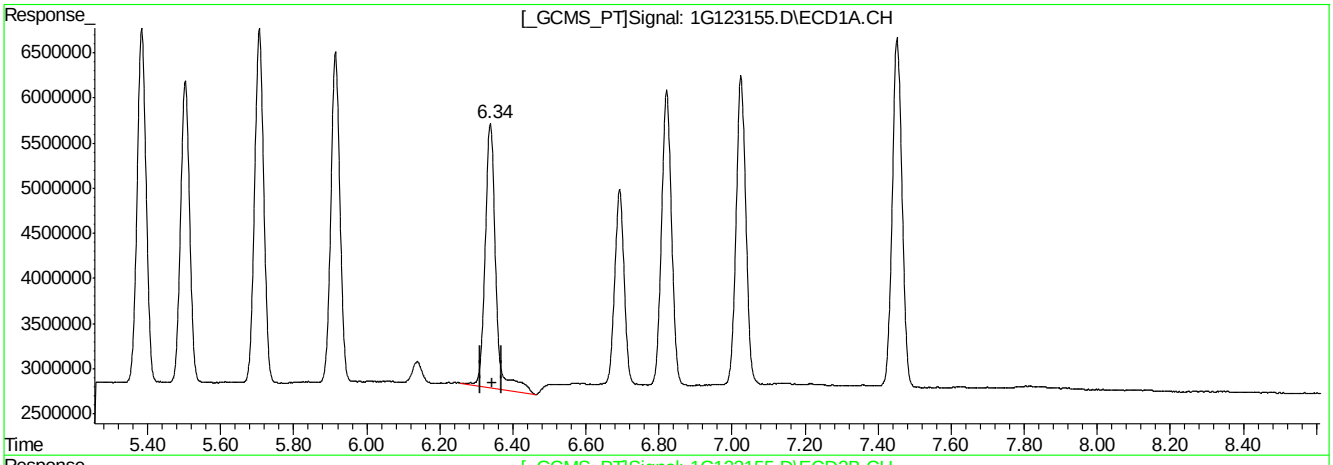
Sample Number:	G1G3990-CC3988	**Method:**	SW846 8081B
Lab FileID:	1G123155.D	**Analyst approved:**	05/18/16 12:42 Dhara Saparia
Injection Time:	05/17/16 16:19	**Supervisor approved:**	05/18/16 15:12 Gwendolyn Burns

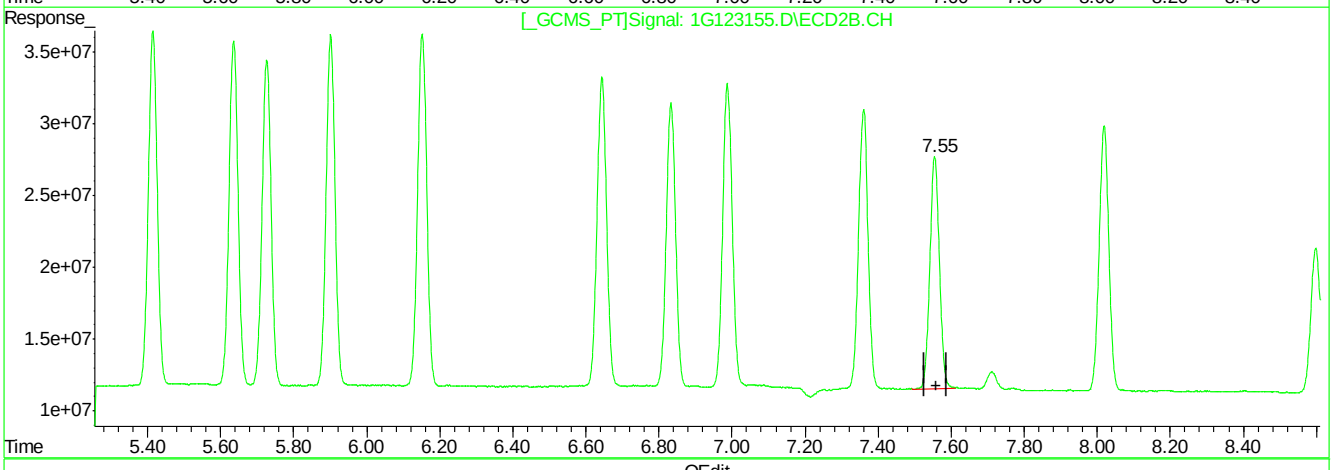
Parameter	CAS	Sig#	R.T. (min.)	Reason
Endrin aldehyde	7421-93-4	1	6.34	Poor instrument integration
Methoxychlor	72-43-5	1	6.69	Poor instrument integration
Decachlorobiphenyl	2051-24-3	1	9.22	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD2B.CH
Acq On    : 5-17-16 04:19:00 PM                      Operator: dharas
Sample    : cc3988-25                                Inst    : GC1G
Misc      : op93854,g1g3990,910,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 16:40 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.34min 27.198PPB

response 59136788

(19) Endrin Aldehyde #2 (B)

7.55min 24.536PPB

response 292730632

(+) = Expected Retention Time

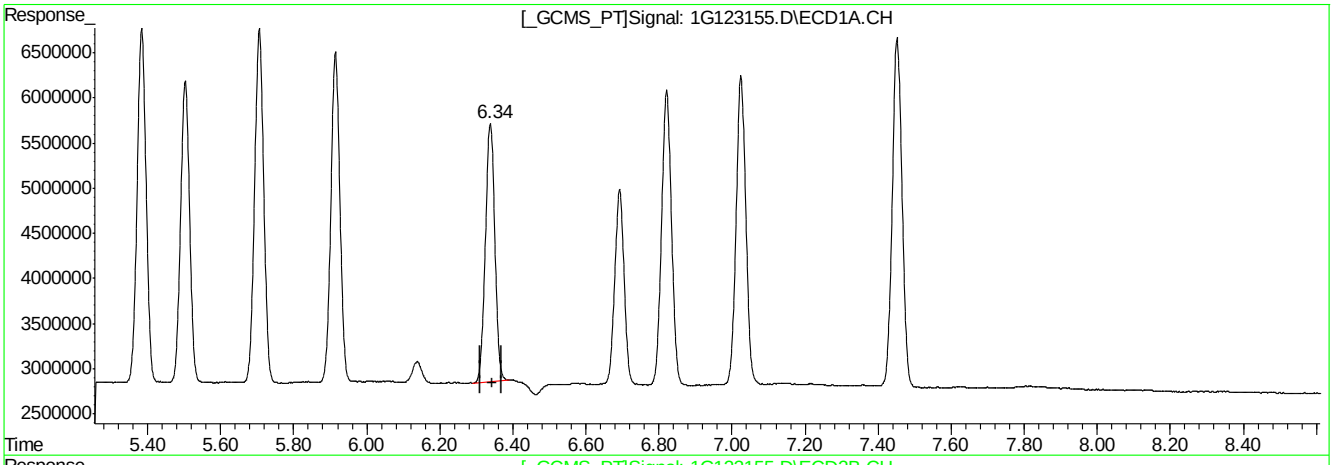
1G123155.D 1PST3988.M Tue May 17 16:41:44 2016 RPT1

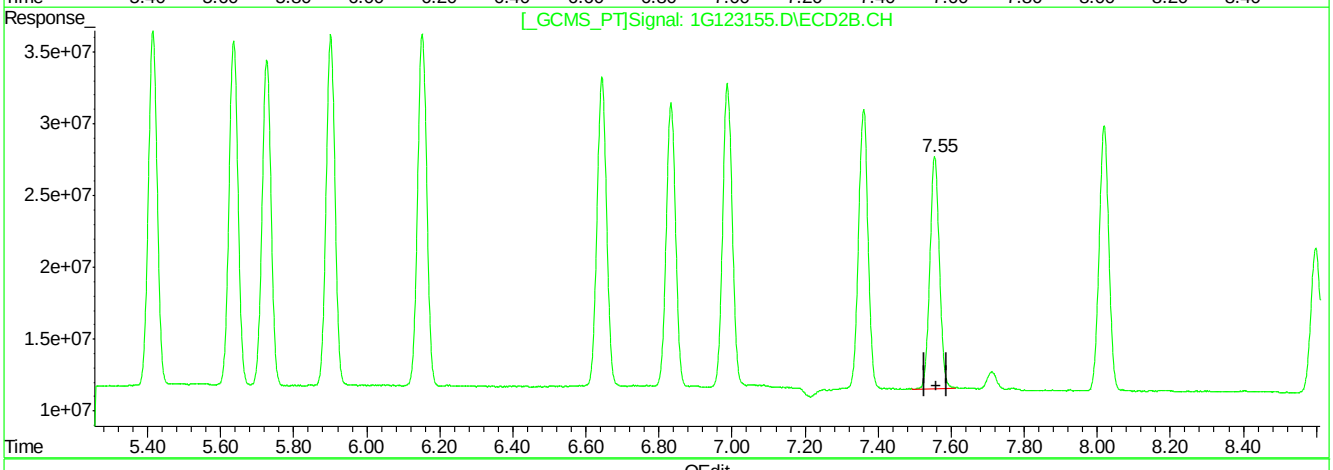
11.5.16.2 11

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD2B.CH
Acq On    : 5-17-16 04:19:00 PM                      Operator: dharas
Sample    : cc3988-25                                Inst    : GC1G
Misc      : op93854,g1g3990,910,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 16:40 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.34min 23.692PPB m

response 51514420

(19) Endrin Aldehyde #2 (B)

7.55min 24.536PPB

response 292730632

(+) = Expected Retention Time

1G123155.D 1PST3988.M Tue May 17 16:41:51 2016 RPT1

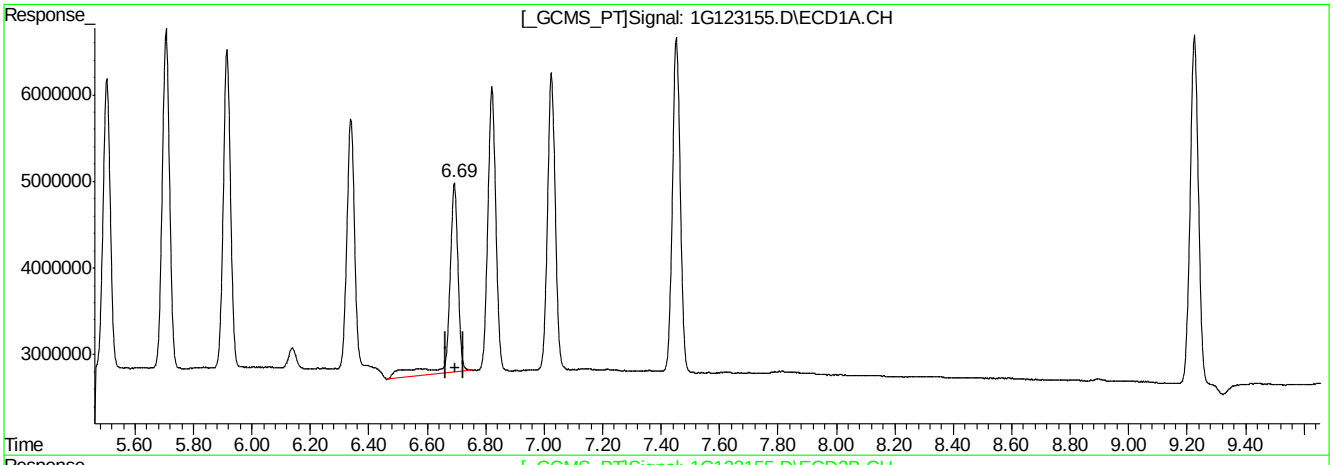
11.5.16.3

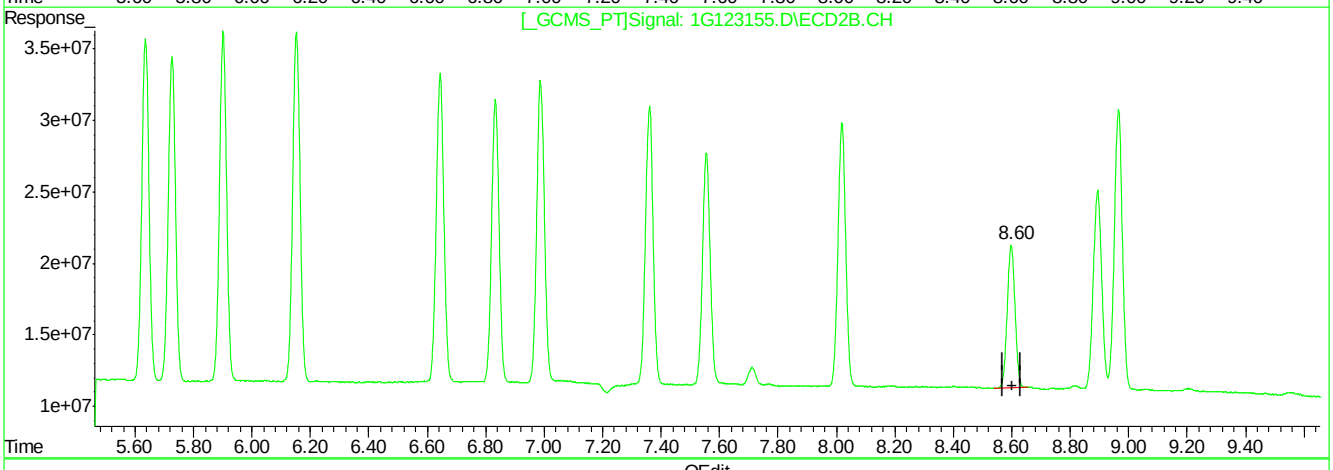
11

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD2B.CH
Acq On : 5-17-16 04:19:00 PM Operator: dharas
Sample : cc3988-25 Inst : GC1G
Misc : op93854,g1g3990,910,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 16:40 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration





QEdit

(21) Methoxychlor (A)

6.69min 31.756PPB

response 47682788

(21) Methoxychlor #2 (A)

8.60min 25.957PPB

response 185175499

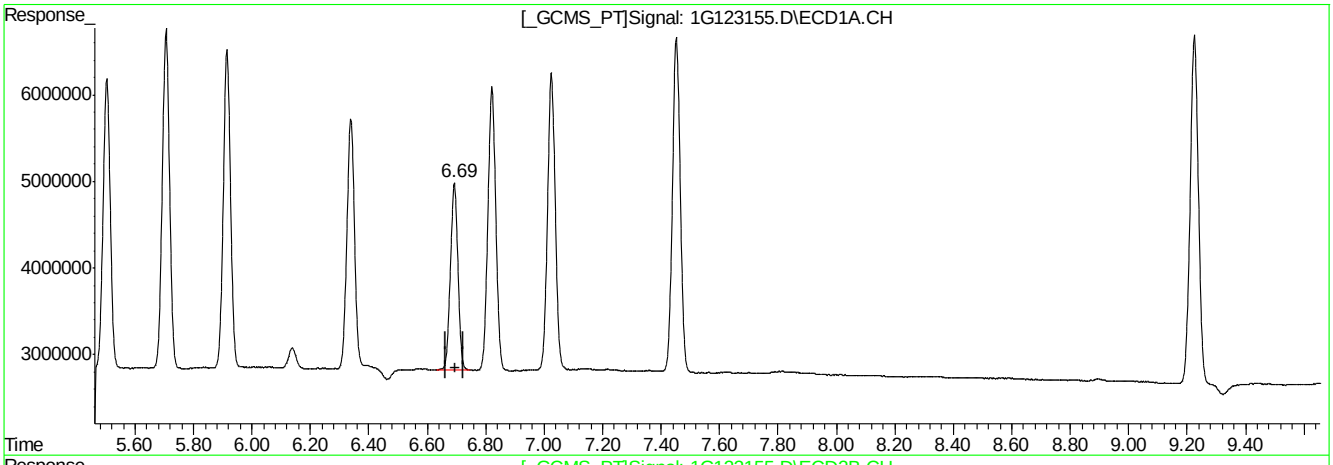
(+) = Expected Retention Time
1G123155.D 1PST3988.M Tue May 17 16:42:00 2016 RPT1

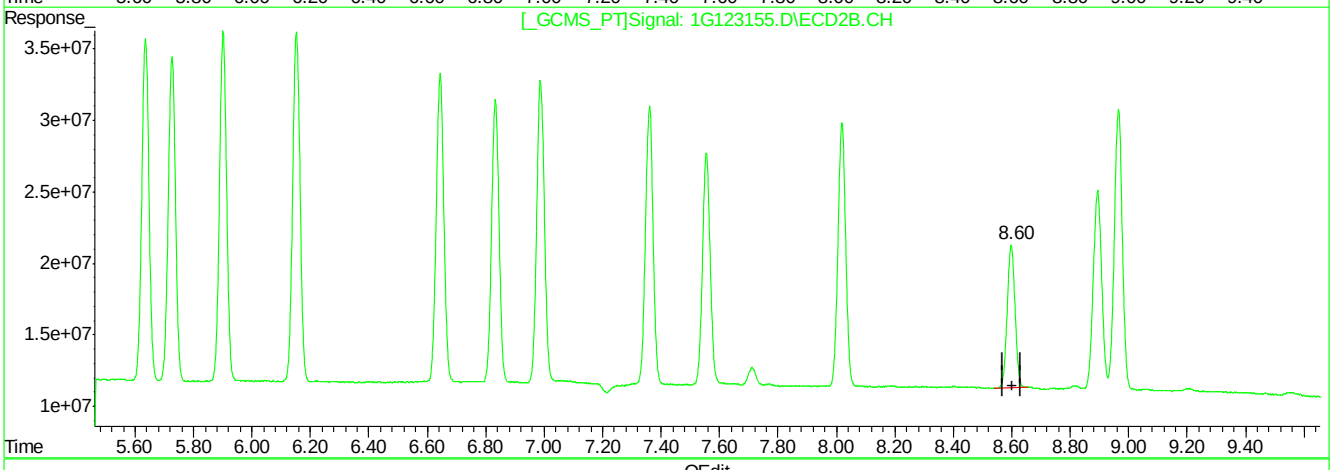
11.5.16.4 11

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD2B.CH
Acq On    : 5-17-16 04:19:00 PM                      Operator: dharas
Sample    : cc3988-25                                Inst    : GC1G
Misc      : op93854,g1g3990,910,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 16:40 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.69min 25.610PPB m

response 38454129

(21) Methoxychlor #2 (A)

8.60min 25.957PPB

response 185175499

(+) = Expected Retention Time

1G123155.D 1PST3988.M Tue May 17 16:42:07 2016 RPT1

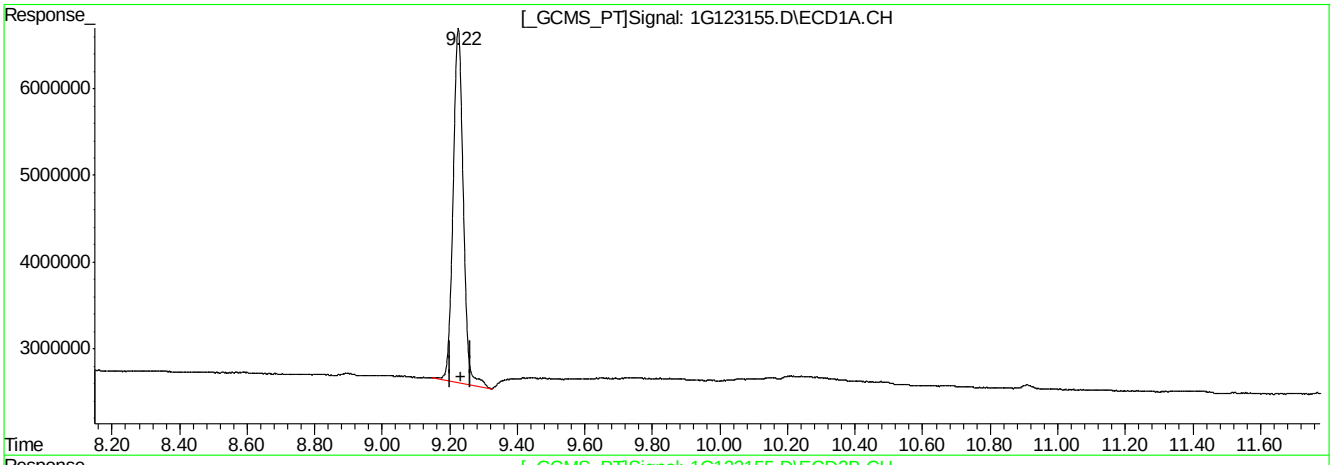
11.5.16.5

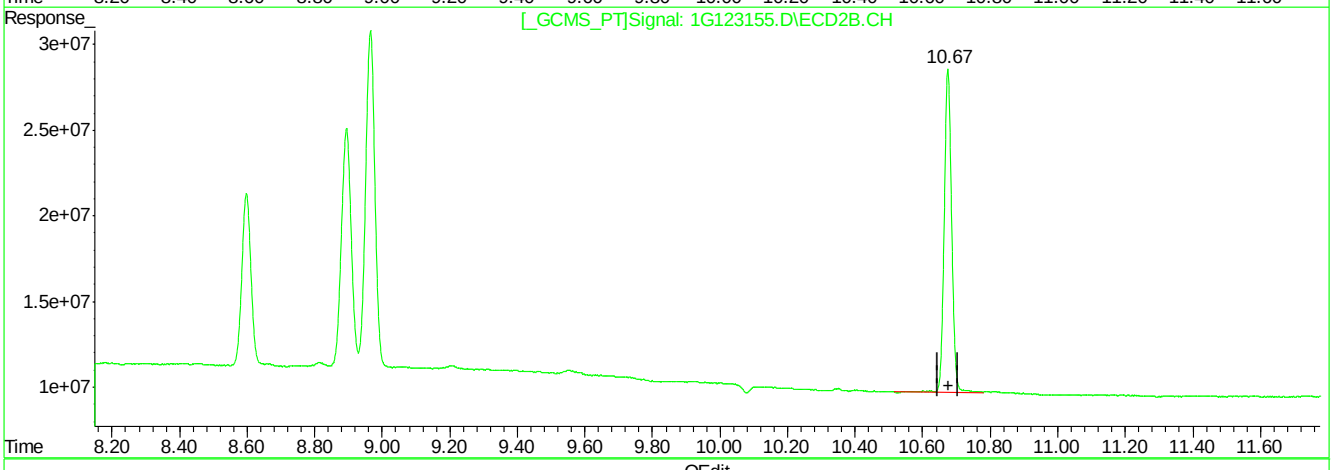
11

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD2B.CH
Acq On    : 5-17-16 04:19:00 PM                      Operator: dharas
Sample    : cc3988-25                                Inst    : GC1G
Misc      : op93854,g1g3990,910,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 16:40 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(24) Decachlorobiphenyl (SA)

9.23min 26.657PPB

response 83975221

(24) Decachlorobiphenyl #2 (SA)

10.67min 25.937PPB

response 289948540

(+) = Expected Retention Time

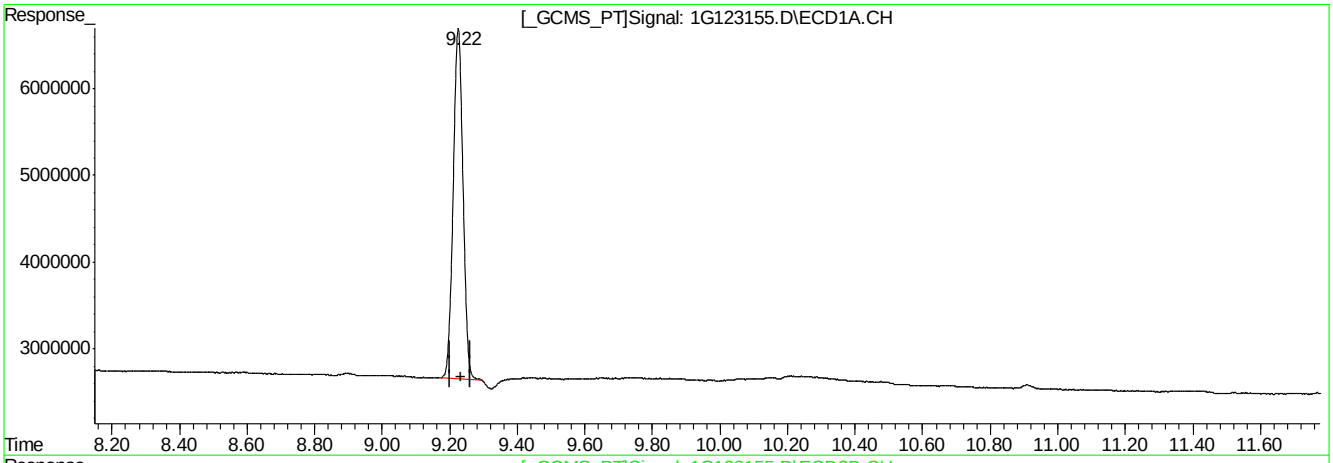
1G123155.D 1PST3988.M Tue May 17 16:42:14 2016 RPT1

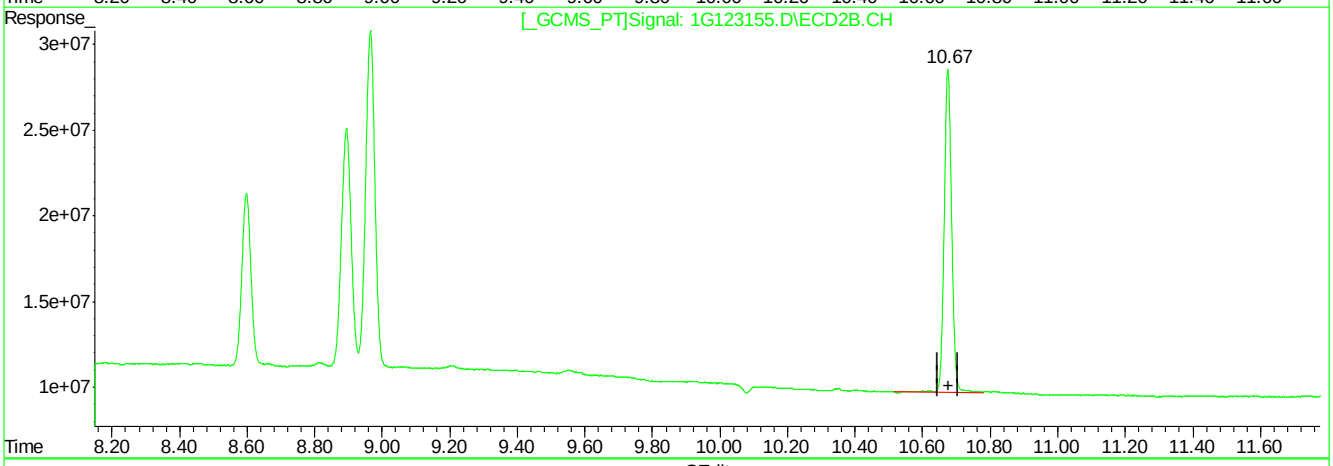
11.5.16.6 11

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123155.D\ECD2B.CH
Acq On    : 5-17-16 04:19:00 PM                      Operator: dharas
Sample    : cc3988-25                                Inst    : GC1G
Misc      : op93854,g1g3990,910,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 16:40 2016  Quant Results File: 1PST3988.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(24) Decachlorobiphenyl (SA)

9.22min 25.251PPB m

response 79547637

(24) Decachlorobiphenyl #2 (SA)

10.67min 25.937PPB

response 289948540

(+) = Expected Retention Time

1G123155.D 1PST3988.M Tue May 17 16:42:22 2016 RPT1

11.5.16.7

11

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/18/16 15:12

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123156.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123156.D\ECD2B.CH
Acq On : 5-17-16 04:36:31 PM Operator: dharas
Sample : cc3988-500 Inst : GC1G
Misc : op93854,g1g3990,910,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 18:07 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3988.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	1.33	1.49	124.3E6	862.9E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.33	1.49	124.3E6	862.9E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.33	1.49	124.3E6	862.9E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.92	2.29	123.6E6	777.0E6	55.022	50.642
Spiked Amount	40.000	Range	30 - 150	Recovery	=	137.56%	126.61%
24) SA	Decachlorobiphen	9.23	10.67	159.3E6	549.3E6	52.128m	50.985m
Spiked Amount	40.000			Recovery	=	130.32%	127.46%
	Target Compounds						
32)	Chlordane {A}	3.11	3.71	42991301	296.5E6	472.211	468.017
33)	Chlordane {B}	3.67	4.53	53640688	302.8E6	453.635	471.748
34)	Chlordane {C}	4.39	5.41	194.3E6	1021.5E6	481.566	486.215
35)	Chlordane {D}	4.55	5.64	305.0E6	1685.8E6	484.025	484.899m
36)	Chlordane {E}	5.60	7.07	45782590	282.3E6	486.017	451.254

11.5.17 11

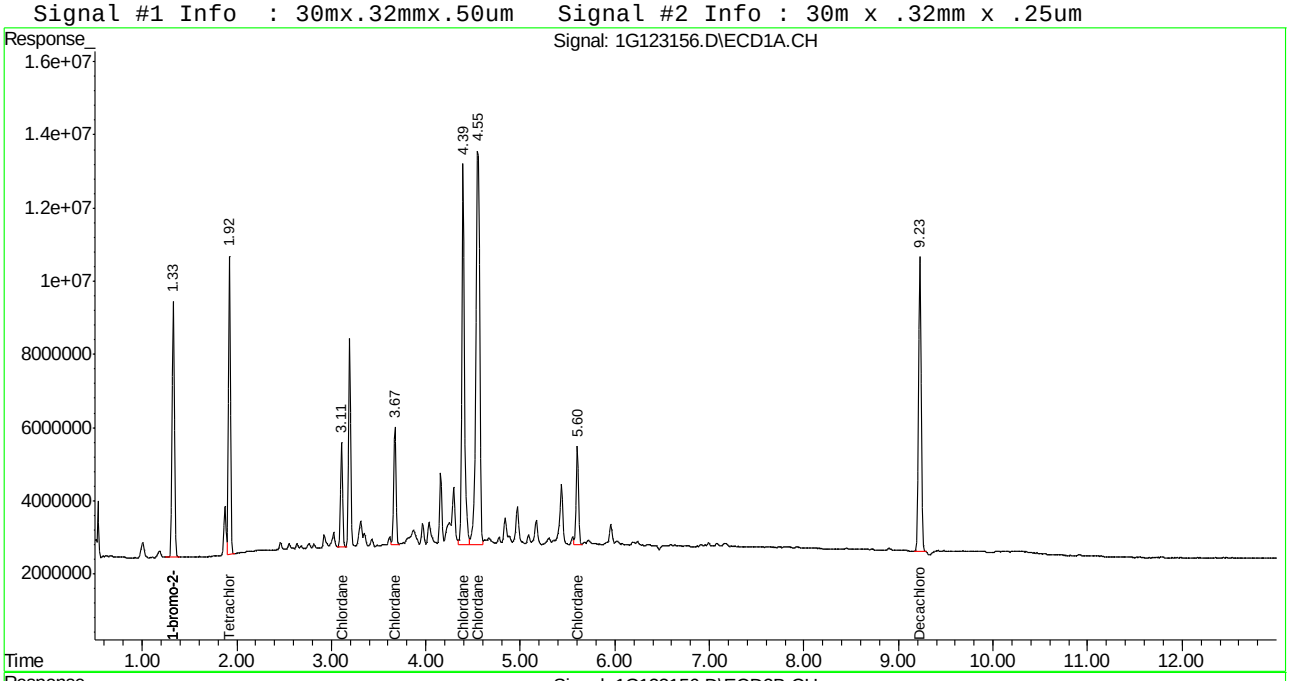
(f)=RT Delta > 1/2 Window (m)=manual int.
1G123156.D 1PST3988.M Tue May 17 18:07:57 2016 RPT1 Page 1

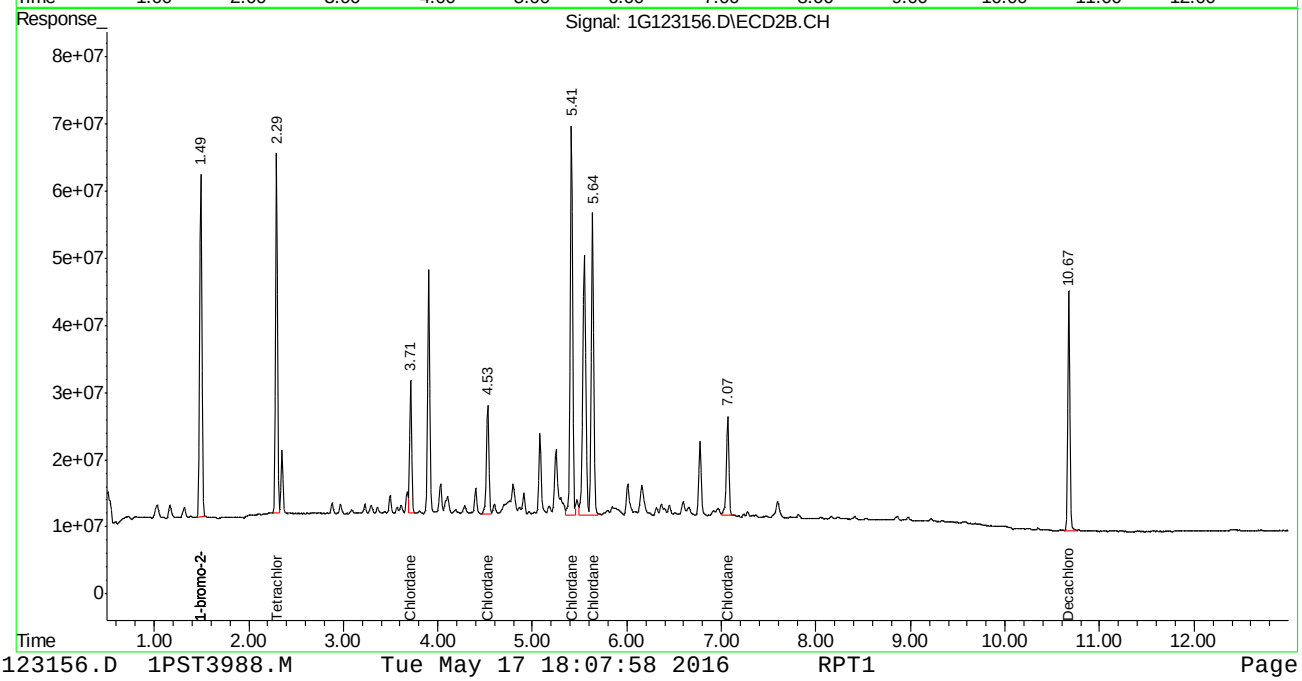
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123156.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123156.D\ECD2B.CH
Acq On : 5-17-16 04:36:31 PM Operator: dharas
Sample : cc3988-500 Inst : GC1G
Misc : op93854,g1g3990,910,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 18:07 2016 Quant Results File: 1PST3988.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3988.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 JC20314

Manual Integration Approval Summary

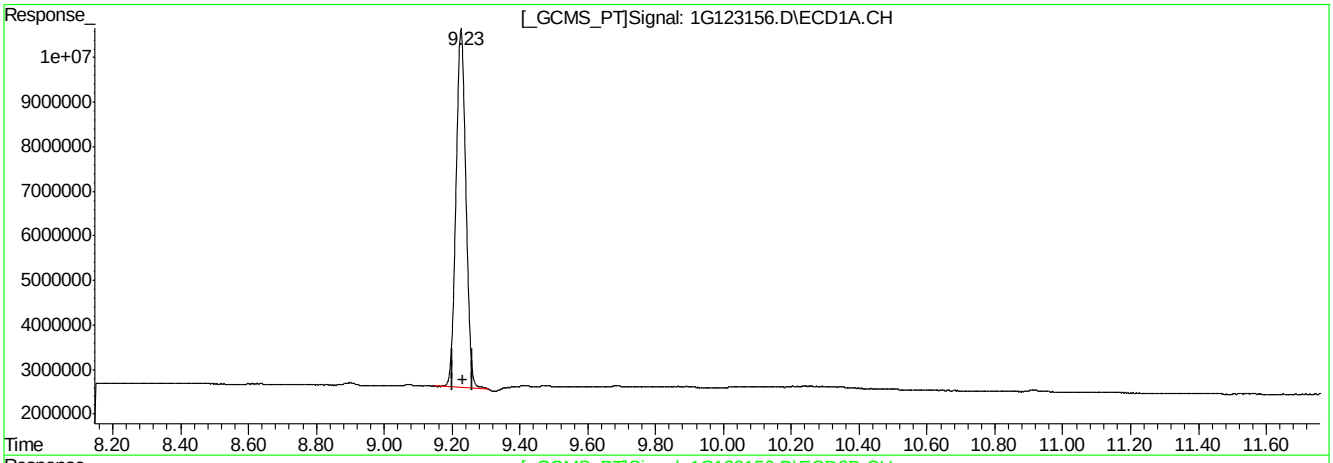
Sample Number:	G1G3990-CC3988	**Method:**	SW846 8081B
Lab FileID:	1G123156.D	**Analyst approved:**	05/18/16 12:42 Dhara Saparia
Injection Time:	05/17/16 16:36	**Supervisor approved:**	05/18/16 15:12 Gwendolyn Burns

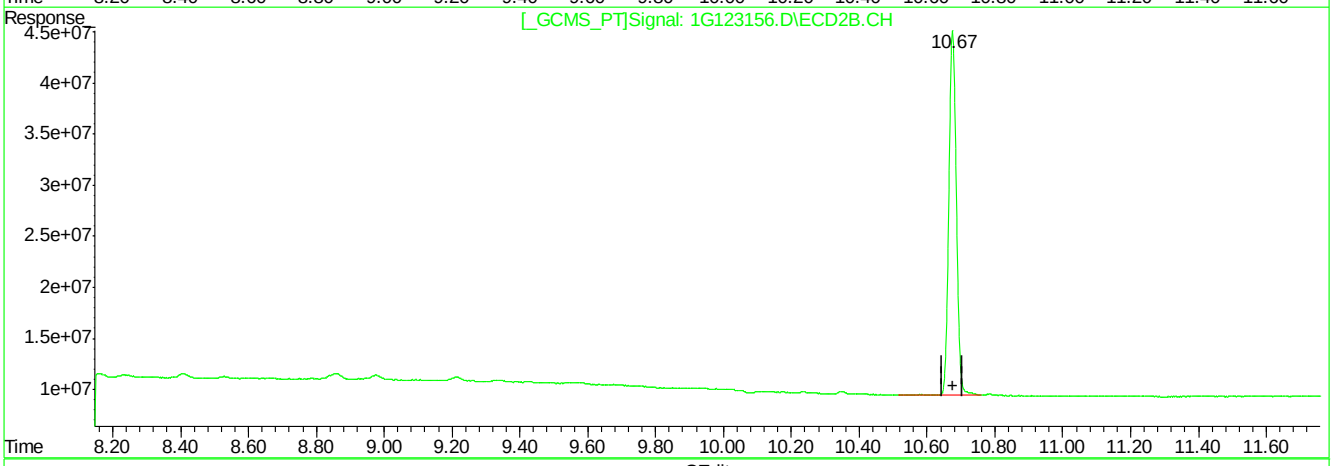
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	5.64	Poor instrument integration
Decachlorobiphenyl	2051-24-3	1	9.23	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	10.67	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123156.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123156.D\ECD2B.CH
Acq On    : 5-17-16 04:36:31 PM                      Operator: dharas
Sample    : cc3988-500                               Inst    : GC1G
Misc      : op93854,g1g3990,910,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 18:05 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(24) Decachlorobiphenyl (SA)

9.23min 52.792PPB

response 161301341

(24) Decachlorobiphenyl #2 (SA)

10.68min 51.238PPB

response 552045563

(+) = Expected Retention Time

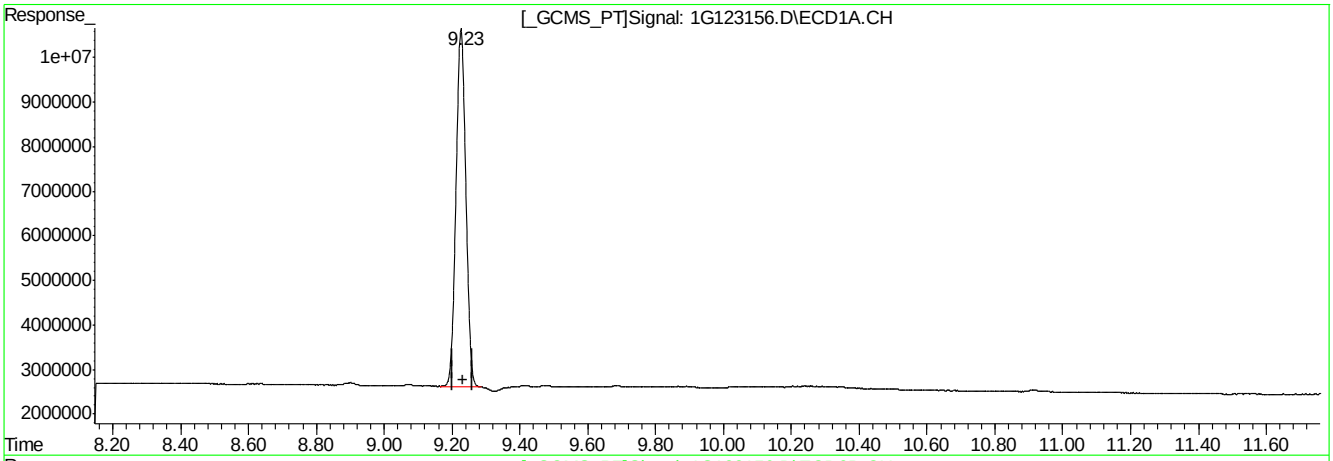
1G123156.D 1PST3988.M Tue May 17 18:06:22 2016 RPT1

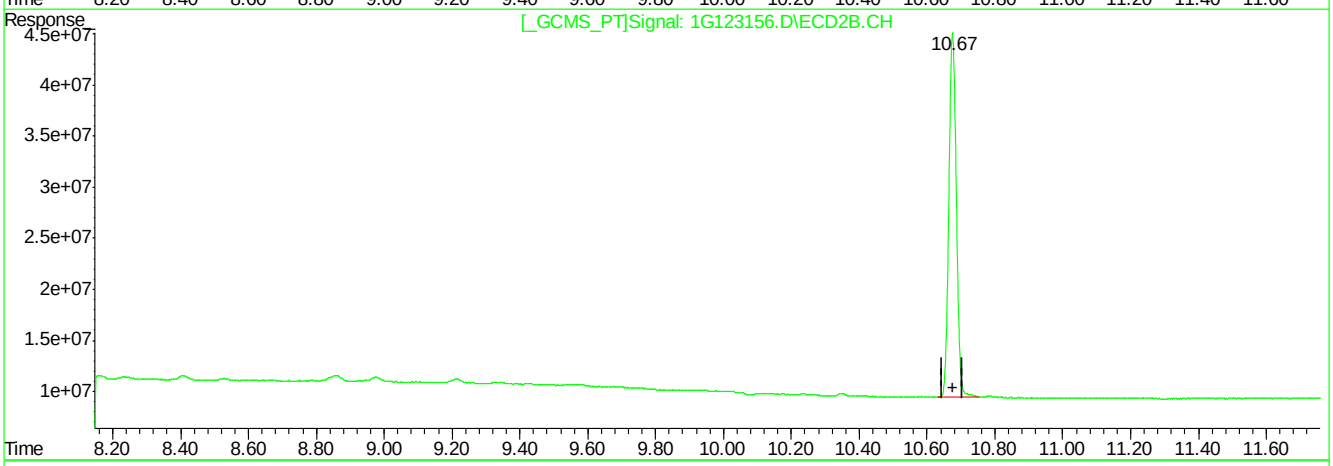
11.5.17.2 11

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123156.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123156.D\ECD2B.CH
Acq On    : 5-17-16 04:36:31 PM                      Operator: dharas
Sample    : cc3988-500                               Inst    : GC1G
Misc      : op93854,g1g3990,910,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May 17 18:05 2016  Quant Results File: 1PST3988.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration
```





QEdit

(24) Decachlorobiphenyl (SA)

9.23min 52.128PPB m

response 159274009

(24) Decachlorobiphenyl #2 (SA)

10.67min 50.985PPB m

response 549315983

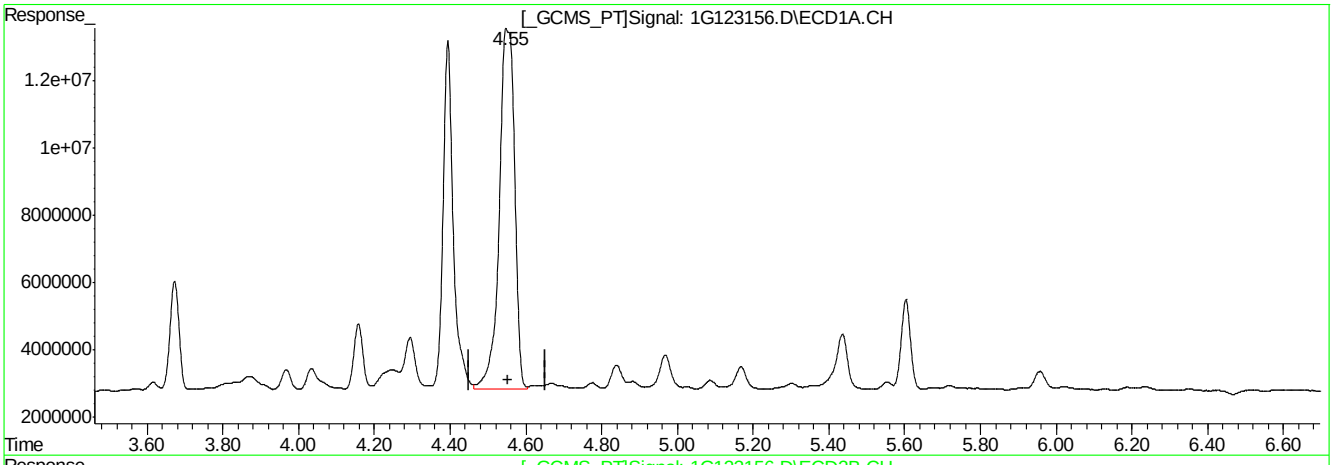
(+) = Expected Retention Time

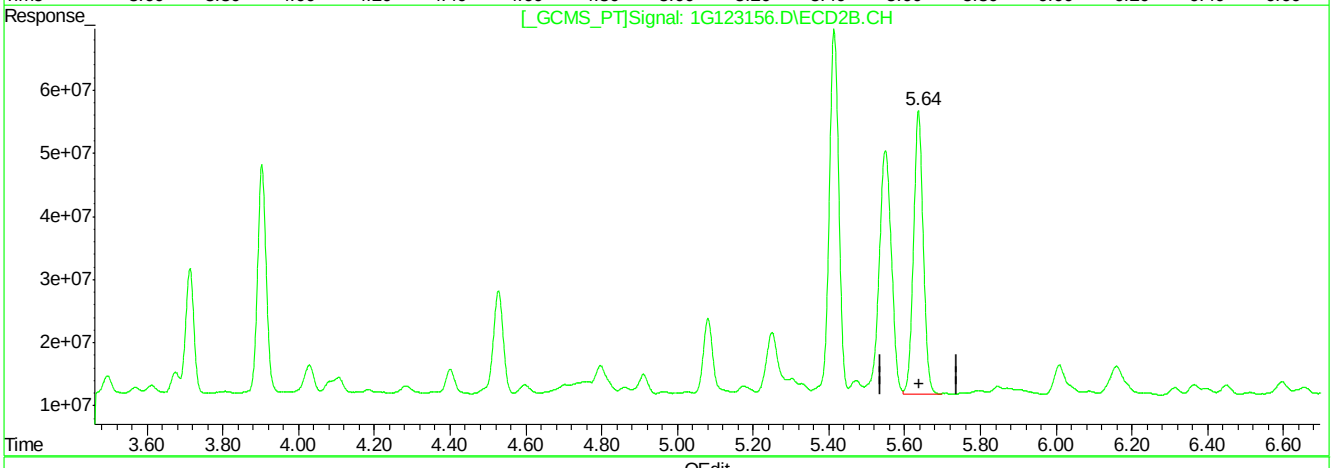
1G123156.D 1PST3988.M Tue May 17 18:06:36 2016 RPT1

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123156.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123156.D\ECD2B.CH
Acq On : 5-17-16 04:36:31 PM Operator: dharas
Sample : cc3988-500 Inst : GC1G
Misc : op93854,g1g3990,910,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 18:05 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration





QEdit

(35) Chlordane {D}

4.55min 484.025PPB

response 304991903

(35) Chlordane {D} #2

5.64min 231.658PPB

response 805402855

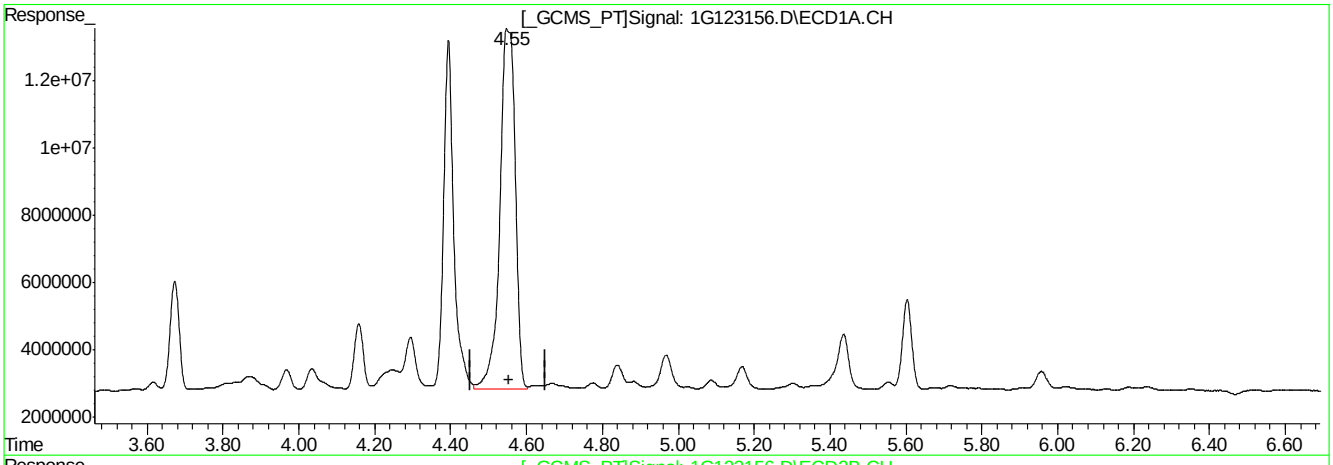
(+) = Expected Retention Time
1G123156.D 1PST3988.M Tue May 17 18:06:47 2016 RPT1

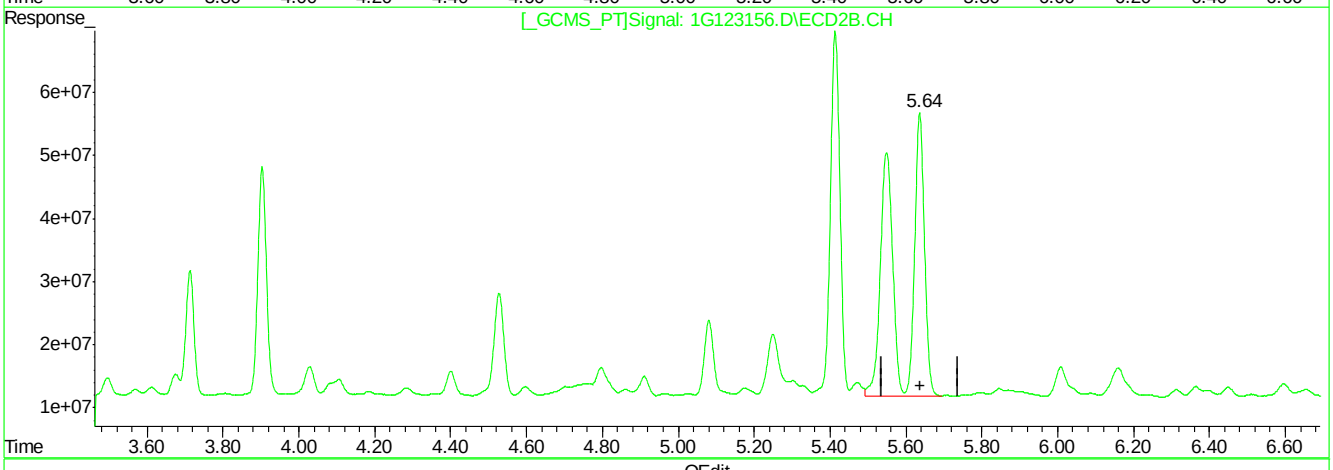
11.5.17.4 11

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3990\1G123156.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3990\1G123156.D\ECD2B.CH
Acq On : 5-17-16 04:36:31 PM Operator: dharas
Sample : cc3988-500 Inst : GC1G
Misc : op93854,g1g3990,910,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 17 18:05 2016 Quant Results File: 1PST3988.RES

Method : C:\MSDCHEM\1\METHODS\1PST3988.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon May 16 17:21:26 2016
Response via : Multiple Level Calibration





QEdit

(35) Chlordane {D}

4.55min 484.025PPB

response 304991903

(35) Chlordane {D} #2

5.64min 484.899PPB m

response 1685845873

(+) = Expected Retention Time

1G123156.D 1PST3988.M Tue May 17 18:07:25 2016 RPT1

11.5.17.5 11

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G3988

Print Analyst Name: Rebecca Krug

Analyst Signature: RK

Date: 5/16/16

Columns: ZB CLPI / ZB CLPII

Method 8081

Initial Cal. Method IPST3988

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.
SV161874-1	Pest mix 1st source	25 ppb
-1		50
-1		2
-1		5
-1		10
-1		75
-1		100
8191712999	mirex 2nd source	250 ppb

Standard Data

Lot #	Description	Conc.
SV161874-19	Pest DSTD	5 ppm
-79	PCM	10-250 ppm
161933-09	DB	20 ppb
161874-20	chlordane 1st source	10 ppm
-21	Toxaphene 1st source	10 ppm
-96	Chlordane 2nd source	500 ppb
-97	Toxaphene 2nd source	500 ppb
160563	Hexane Cleanup	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5/19/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	123059 1g1G29 RK 5/16/16	dclt				1			✓	OK	
	060	IB				2			✓	OK	
	061	IC3988-1	Pest mix	1st source		6			✓	OK	
	062	-2				7			✓	OK	
	063	-5				8			✓	OK	
	064	-10				9			✓	OK	
	065	IC3988-25				10			✓	OK	
	066	IC3988-50				11			✓	OK	
	067	-75				12			✓	OK	
	068	-100				13			✓	OK	
	069	-500	CHL			14	20		✓	OK	
	070	-500	Tox			15	20		✓	OK	
	071	ICV3988-25	Pest	2nd source		16	10		✓	OK	lot # SV16.1874.95
	072	-25	mirex			17	10		✓	OK	
	073	-500	CHL			18			✓	OK	
	074	-500	Tox			19			✓	OK	
											RK 5/17/16

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G3990

Print Analyst Name: Rebecca Krug

Analyst Signature: RK

Date: 5/17/16

Columns: ZBCLPI/ZBCLPII

Method 8081

Initial Cal. Method IPST 3988

Injection Volume: 1.0 ul

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
5/16 IPM-1155	Pest IDSD	500 ppm
-79	PCM	10-250 ppm
-1158A	Pest mix	25 ppb
-1158	Pest mix	50
1619327-09	2/3	20
180563	Hexane (Fisher)	–

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5/19/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	lg123 132	ddt				1		✓	✓	OK	
	133	cc3988-50				4		✓	✓	OK	
	134	IB				3		✓	✓	OK	
	135	OP93854-MB1	93854	AP9 8081	W	51		✓	✓	OK	
	136	OP93854-BS1				52		✓	✓	OK	
	137	OP93925-MB1	93925			53		✓	✓	OK	
	138	OP93925-BS1				54		✓	✓	OK	
	139	OP93925-BSD				55		✓	✓	OK	
	140	JC20314-2				56		✓	✓	OK	
	141	JC20133-11	93908			57		✓	✓	OK	
	142	JC20150-1	93938 6 RK 5/17/16	tclp 8081	W	58		✓	✓	RX	↓ TOMF
	143	JC20113-5A				59		✓	✓	OK	
	144	JC20111-5A				60		✓	✓	OK	
	145	OP93907-MS	93907	tcl 8081	W	61		✓	✓	OK	
	146	OP93907-MSD				62		✓	✓	OK	
	147	JC20017-5	93838	tcl 8081	S	63		✓	✓	OK	
	148	-6		sc08 8081		64		✓	✓	OK	
	149	-7				65		✓	✓	OK	
	150	-8				66		✓	✓	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST JC20314

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G3990

Print Analyst Name: Rebecca Krug

Analyst Signature: RK

Date: 5/17/16

Columns: ZBCLPI / ZBCLPII

Method 8081 , 608

Initial Cal. Method IPST3988

Injection Volume: 1.0 µl

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 161574-135	Pest ISTD	5 ppm
-79	PCM	10-250 ppm
-1688	Pest mix	25 ppb
-1687	↓	50
161933-09	IB	20 ↓
160863	Hexane (Fluor)	–
161574-29	chlordane std	10 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	MALS #	Dilution	IS	SU	Status (Data)	Comments
	1g123151	JC20016-4	93854	APG 8081	W	67				OK	
	152	OP93854-MS				68				OK	
	153	OP93854-MSD				69				OK	
	154	ddt				1				OK	
	155	CC3988-25	Pest			2				OK	
	156	CC3988-500	CHL			5				OK	
	157	IB				3				OK	
	158	OP93642-BSD13	93642	608 PPL	W	6				OK	
	159	-BSD13				7				OK	
	160	OP93506-MS1	93506	608 PPL	W	8				OK	
	161	-BS1				9				OK	
	162	-MS				10				OK	
	163	-MSD				11				OK	
	164	JC19676-1				12				OK	
	165	JC19996-1				13				OK	
	166	CC3988-50	Pest			4				OK	
	167	CC3988-500	CHL			5				OK	
	168	IB				3				OK	
	169	OP93772-MS1	93772	608 PPL	W	14				OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST JC20314

11.6.2 11

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G 3990

Print Analyst Name: Dhara Saporia

Date: 5/17/16

Analyst Signature:

Columns: 2BCLPI / 2BCLPII

Method 8081, 608

Initial Cal. Method IBST 3988

Injection Volume: 1.0 µL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 161874-115	Pest IBTD	5 ppm
-99	PCM	10-250 ppm
-1WA	Pest mix	25 ppb
-1WB	Pest mix	50
161933-09	IB	20
160563	Hexane (Fisher)	–

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 5/19/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	12123170	0893977-MB1	93977	608 PPL	W	15				OK	
	171	-BS1				16				OK	
	172	-BSD				17				OK	
	173	JC20365-1				18				OK	
R	174	JC19815-3	93772	608 PPL	W	19				OK	HAD TBA
	175	-4				20				OK	↓
	176	-6				21				OK	
	177	CC3988-25				2				OK	
	178	IB				3				OK	
	179	JC19815-5	93772	608 PPL	W	22				not OK using	ecc ↓ - need RR
	180	-7				23				not OK using	
	181	-8				24				not OK using	HAD TBA
	182	-9				25				not OK using	
	183	-10				26				not OK using	HAD TBA
	184	-11				27				not OK using	↓
	185	CC3988-50				4				not OK using	ddt/methoxy ↓ both
	186	IB				3				not OK using	

RK 5/18/16

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 JC20314

6-1763

LOGBOOK ID:

Pest/PCB Extraction Log - Aqueous

Date Started: 5-15-16 Time Started: 8:30a
Date Finished: 5-15-16 Time Finished: 10:30a

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other √
Continuous Liquid Liquid: SW846 3520C/CLP/other

BATCH # GC 93925	RACK# Pest 100
Extracted by:	
Concentrated by:	
Vialed by:	
Relinquished by:	MS
Accepted by:	
Supervisor Review:	5/15/16

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			DIH2O	1000	clear	10		/			
BS1				DIH2O	1000	clear	10		/			
~~BS1~~ MS				DIH2O	1000	clear	10		/			
MSD												
BS												
MS												
MSD												
1 JC20314-2	Pest	Y3		Clear	1000	clear	10		/			
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

1DIAT

Comments:

9

NB NOT IN LMS

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	3	65	NA	NA	NA
Buchi Chiller	B3	11	NA	NA	NA
Waterbath (70-80°C)	6	75	0.5	75	NA
Waterbath Chiller (GPM)	F2	1	—	—	~~NA~~ OK
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	OP161712 91	400	1.0

WITNESS SIGN: MS SPIKE SIGN: 84

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	OP161712 95B	280 µg	1.0
PCB			

WITNESS SIGN: MS SPIKE SIGN: 84

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	162661	Fisher	3/60
HEXANE	160863	Fisher	30

REAGENT	LOT #	BRAND
Sodium Sulfate	168420	Fisher
Glass Wool	02205-2	Lab
Filter Paper		
Copper	16171260	Aldrich
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

[redacted]

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: JC20314
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: JC20314-1 **Analyzed:** 16-MAY-16 by RK **Method:** SM2540 G-97
ClientID: RA9(5-6)

Wet Weight (Total)	28.25	g
Tare Weight	19.21	g
Dry Weight (Total)	26.78	g
Solids, Percent	83.7	%

Sample: JC20314-3 **Analyzed:** 16-MAY-16 by RK **Method:** SM2540 G-97
ClientID: BR4(4.5-5.5)

Wet Weight (Total)	32.17	g
Tare Weight	24.12	g
Dry Weight (Total)	31.34	g
Solids, Percent	89.7	%