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Automated Report

Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, PR

SM04.00.06

SGS Accutest Job Number: JC22613

Sampling Dates: 06/16/16 - 06/20/16

Report to:

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Total number of pages in report: **1048**

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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SGS Accutest

Sample Summary

Anderson, Mulholland & Associates

Job No: JC22613

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC22613-1	06/16/16	15:45	NR	06/21/16	AQ	Ground Water	MW-3
JC22613-2	06/17/16	11:10	NR	06/21/16	AQ	Ground Water	MW-5
JC22613-3	06/17/16	12:43	NR	06/21/16	AQ	Ground Water	MW-13
JC22613-4	06/17/16	15:05	NR	06/21/16	AQ	Ground Water	BR-4
JC22613-5	06/17/16	16:02	NR	06/21/16	AQ	Ground Water	MW-16
JC22613-6	06/17/16	18:34	NR	06/21/16	AQ	Ground Water	MW-9
JC22613-7	06/20/16	12:35	NR	06/21/16	AQ	Ground Water	MW-23S
JC22613-8	06/20/16	15:47	NR	06/21/16	AQ	Ground Water	MW-21S

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Anderson, Mulholland & Associates	**Job No**	JC22613
Site:	BMSMC, Building 5 Area, PR	**Report Date**	7/11/2016 5:41:30 PM

On 06/21/2016, 8 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS Accutest at a maximum corrected temperature of 3.9 C. Samples were intact and chemically preserved, unless noted below. A SGS Accutest Job Number of JC22613 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:** OP95018

- All samples were extracted within the recommended method holding time.
- Sample(s) JC22506-9MS, JC22506-9MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: AQ **Batch ID:** OP95059

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC22613-2MS, JC22613-2MSD were used as the QC samples indicated.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP95018A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC22506-8MS, JC22506-8MSD were used as the QC samples indicated.
- RPD(s) for MSD for 1,4-Dioxane are outside control limits for sample OP95018A-MSD. Analytical precision exceeds in-house control limits.

Matrix: AQ **Batch ID:** OP95059A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC22515-5MS, JC22515-5MSD were used as the QC samples indicated.
- OP95059A-BS12 for Terphenyl-d14: Outside of in house control limits.

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

Matrix: AQ **Batch ID:** GGH5333

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC22613-1MS, JC22613-1MSD were used as the QC samples indicated.
- Matrix Spike Duplicate Recovery(s) for Isobutyl Alcohol are outside control limits. Outside control limits due to matrix interference.

Extractables by GC By Method SW846 8081B

Matrix: AQ	**Batch ID:** OP95079

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC22613-7MS, JC22613-7MSD, OP95079-MSMSD were used as the QC samples indicated.
- OP95079-BS1 for gamma-Chlordane: Reported from 2nd signal. %D of check calibration on 1st signal exceed method criteria (20%) so using for confirmation only.

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: JC22613
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Collected: 06/16/16 thru 06/20/16

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Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC22613-1	**MW-3**					
Acenaphthene		0.50 J	1.1	0.21	ug/l	SW846 8270D
Fluorene		1.1	1.1	0.19	ug/l	SW846 8270D
1-Methylnaphthalene		35.9	1.1	0.29	ug/l	SW846 8270D
2-Methylnaphthalene		33.3	1.1	0.23	ug/l	SW846 8270D
Naphthalene		2.19	0.11	0.033	ug/l	SW846 8270D BY SIM
JC22613-2	**MW-5**					
Naphthalene		1.09	0.11	0.033	ug/l	SW846 8270D BY SIM
1,4-Dioxane		0.568	0.11	0.054	ug/l	SW846 8270D BY SIM
JC22613-3	**MW-13**					
4-Chloroaniline		1.8 J	5.5	0.37	ug/l	SW846 8270D
Fluoranthene		0.71 J	1.1	0.19	ug/l	SW846 8270D
Pyrene		0.50 J	1.1	0.24	ug/l	SW846 8270D
1,4-Dioxane		0.152	0.11	0.054	ug/l	SW846 8270D BY SIM
JC22613-4	**BR-4**					
1,4-Dioxane		1.49	0.10	0.049	ug/l	SW846 8270D BY SIM
JC22613-5	**MW-16**					
1,4-Dioxane		0.334	0.10	0.049	ug/l	SW846 8270D BY SIM
JC22613-6	**MW-9**					
1,4-Dioxane		0.398	0.10	0.049	ug/l	SW846 8270D BY SIM
JC22613-7	**MW-23S**					
No hits reported in this sample.						
JC22613-8	**MW-21S**					
1,4-Dioxane		0.646	0.11	0.054	ug/l	SW846 8270D BY SIM

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JC22613-1	**Date Sampled:**	06/16/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	M125545.D	1	06/24/16	SB	06/23/16	OP95018	EM5319
Run #2							

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

ABN TCL Special List

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

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

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JC22613-1	**Date Sampled:**	06/16/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.2	0.72	ug/l	
218-01-9	Chrysene	ND	1.1	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.28	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.45	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.41	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.1	0.61	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.1	0.53	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.2	0.56	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.6	0.24	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.55	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.26	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.29	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.24	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	1.8	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.19	ug/l	
86-73-7	Fluorene	1.1	1.1	0.19	ug/l	
118-74-1	Hexachlorobenzene	ND	1.1	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.55	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	3.1	ug/l	
67-72-1	Hexachloroethane	ND	2.2	0.43	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.37	ug/l	
78-59-1	Isophorone	ND	2.2	0.31	ug/l	
90-12-0	1-Methylnaphthalene	35.9	1.1	0.29	ug/l	
91-57-6	2-Methylnaphthalene	33.3	1.1	0.23	ug/l	
88-74-4	2-Nitroaniline	ND	5.6	0.31	ug/l	
99-09-2	3-Nitroaniline	ND	5.6	0.43	ug/l	
100-01-6	4-Nitroaniline	ND	5.6	0.49	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.71	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.53	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.25	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.19	ug/l	
129-00-0	Pyrene	ND	1.1	0.24	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.2	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		14-88%
4165-62-2	Phenol-d5	30%		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:	MW-3		
Lab Sample ID:	JC22613-1	**Date Sampled:**	06/16/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	97%		39-149%
4165-60-0	Nitrobenzene-d5	72%		32-128%
321-60-8	2-Fluorobiphenyl	74%		35-119%
1718-51-0	Terphenyl-d14	85%		10-126%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-3		
Lab Sample ID:	JC22613-1	**Date Sampled:**	06/16/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3M62544.D	1	06/26/16	AC	06/23/16	OP95018A	E3M2951
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	2.19	0.11	0.033	ug/l	
123-91-1	1,4-Dioxane	ND	0.11	0.054	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	67%		24-125%
321-60-8	2-Fluorobiphenyl	57%		19-127%
1718-51-0	Terphenyl-d14	81%		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:	MW-3		
Lab Sample ID:	JC22613-1	**Date Sampled:**	06/16/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	GH105632.D	1	06/23/16	XPL	n/a	n/a	GGH5333
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	78%		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:	MW-5		
Lab Sample ID:	JC22613-2	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3E84767.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716
Run #2							

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

ABN TCL Special List

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

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

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	JC22613-2	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.2	0.72	ug/l	
218-01-9	Chrysene	ND	1.1	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.28	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.45	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.41	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.1	0.61	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.1	0.53	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.2	0.56	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.6	0.24	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.55	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.26	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.29	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.24	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	1.8	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.19	ug/l	
86-73-7	Fluorene	ND	1.1	0.19	ug/l	
118-74-1	Hexachlorobenzene	ND	1.1	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.55	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	3.1	ug/l	
67-72-1	Hexachloroethane	ND	2.2	0.43	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.37	ug/l	
78-59-1	Isophorone	ND	2.2	0.31	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.1	0.29	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.23	ug/l	
88-74-4	2-Nitroaniline	ND	5.6	0.31	ug/l	
99-09-2	3-Nitroaniline	ND	5.6	0.43	ug/l	
100-01-6	4-Nitroaniline	ND	5.6	0.49	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.71	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.53	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.25	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.19	ug/l	
129-00-0	Pyrene	ND	1.1	0.24	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.2	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		14-88%
4165-62-2	Phenol-d5	40%		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:	MW-5		
Lab Sample ID:	JC22613-2	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	67%		39-149%
4165-60-0	Nitrobenzene-d5	94%		32-128%
321-60-8	2-Fluorobiphenyl	89%		35-119%
1718-51-0	Terphenyl-d14	100%		10-126%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-5		
Lab Sample ID:	JC22613-2	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3M62832.D	1	07/07/16	LK	06/24/16	OP95059A	E3M2967
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	1.09	0.11	0.033	ug/l	
123-91-1	1,4-Dioxane	0.568	0.11	0.054	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		24-125%
321-60-8	2-Fluorobiphenyl	66%		19-127%
1718-51-0	Terphenyl-d14	100%		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:	MW-5		
Lab Sample ID:	JC22613-2	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	GH105635.D	1	06/23/16	XPL	n/a	n/a	GGH5333
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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	JC22613-3	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3E84768.D	1	07/02/16	SB	06/24/16	OP95059	E3E3716
Run #2							

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

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.5	0.90	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.5	0.98	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.2	1.4	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.5	2.7	ug/l	
51-28-5	2,4-Dinitrophenol	ND	11	1.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.5	1.4	ug/l	
95-48-7	2-Methylphenol	ND	2.2	0.98	ug/l	
	3&4-Methylphenol	ND	2.2	0.97	ug/l	
88-75-5	2-Nitrophenol	ND	5.5	1.1	ug/l	
100-02-7	4-Nitrophenol	ND	11	1.3	ug/l	
87-86-5	Pentachlorophenol	ND	5.5	1.5	ug/l	
108-95-2	Phenol	ND	2.2	0.43	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.5	1.6	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.5	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.5	1.0	ug/l	
83-32-9	Acenaphthene	ND	1.1	0.21	ug/l	
208-96-8	Acenaphthylene	ND	1.1	0.15	ug/l	
98-86-2	Acetophenone	ND	2.2	0.23	ug/l	
120-12-7	Anthracene	ND	1.1	0.23	ug/l	
1912-24-9	Atrazine	ND	2.2	0.49	ug/l	
100-52-7	Benzaldehyde	ND	5.5	0.32	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.1	0.22	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.1	0.23	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.1	0.23	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.1	0.37	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.1	0.23	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.44	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.50	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.1	0.23	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.2	0.26	ug/l	
106-47-8	4-Chloroaniline	1.8	5.5	0.37	ug/l	J
86-74-8	Carbazole	ND	1.1	0.25	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:	MW-13		
Lab Sample ID:	JC22613-3	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.2	0.71	ug/l	
218-01-9	Chrysene	ND	1.1	0.19	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.31	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.27	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.44	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.40	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.1	0.61	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.1	0.52	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.2	0.56	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.36	ug/l	
132-64-9	Dibenzofuran	ND	5.5	0.24	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.55	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.26	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.29	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.24	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	1.8	ug/l	
206-44-0	Fluoranthene	0.71	1.1	0.19	ug/l	J
86-73-7	Fluorene	ND	1.1	0.19	ug/l	
118-74-1	Hexachlorobenzene	ND	1.1	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.54	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	3.1	ug/l	
67-72-1	Hexachloroethane	ND	2.2	0.43	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.36	ug/l	
78-59-1	Isophorone	ND	2.2	0.30	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.1	0.29	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.23	ug/l	
88-74-4	2-Nitroaniline	ND	5.5	0.30	ug/l	
99-09-2	3-Nitroaniline	ND	5.5	0.43	ug/l	
100-01-6	4-Nitroaniline	ND	5.5	0.48	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.71	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.53	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.5	0.24	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.19	ug/l	
129-00-0	Pyrene	0.50	1.1	0.24	ug/l	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.2	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		14-88%
4165-62-2	Phenol-d5	34%		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:	MW-13		
Lab Sample ID:	JC22613-3	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	58%		39-149%
4165-60-0	Nitrobenzene-d5	78%		32-128%
321-60-8	2-Fluorobiphenyl	77%		35-119%
1718-51-0	Terphenyl-d14	93%		10-126%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-13		
Lab Sample ID:	JC22613-3	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3M62833.D	1	07/07/16	LK	06/24/16	OP95059A	E3M2967
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.11	0.032	ug/l	
123-91-1	1,4-Dioxane	0.152	0.11	0.054	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		24-125%
321-60-8	2-Fluorobiphenyl	63%		19-127%
1718-51-0	Terphenyl-d14	94%		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:	MW-13		
Lab Sample ID:	JC22613-3	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	GH105636.D	1	06/23/16	XPL	n/a	n/a	GGH5333
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	107%		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:	BR-4		
Lab Sample ID:	JC22613-4	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3E84769.D	1	07/02/16	SB	06/24/16	OP95059	E3E3716
Run #2							

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

ABN TCL Special List

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

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

Report of Analysis

Client Sample ID:	BR-4		
Lab Sample ID:	JC22613-4	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	48%		14-88%
4165-62-2	Phenol-d5	31%		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:	BR-4		
Lab Sample ID:	JC22613-4	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	58%		39-149%
4165-60-0	Nitrobenzene-d5	80%		32-128%
321-60-8	2-Fluorobiphenyl	77%		35-119%
1718-51-0	Terphenyl-d14	80%		10-126%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	BR-4		
Lab Sample ID:	JC22613-4	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3M62834.D	1	07/07/16	LK	06/24/16	OP95059A	E3M2967
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	1.49	0.10	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		24-125%
321-60-8	2-Fluorobiphenyl	69%		19-127%
1718-51-0	Terphenyl-d14	78%		10-119%

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

SGS Accutest

Report of Analysis

Client Sample ID:	BR-4		
Lab Sample ID:	JC22613-4	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	GH105637.D	1	06/23/16	XPL	n/a	n/a	GGH5333
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	107%		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:	MW-16		
Lab Sample ID:	JC22613-5	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3E84770.D	1	07/02/16	SB	06/24/16	OP95059	E3E3716
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	0.83	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	0.90	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.5	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.1	1.3	ug/l	
95-48-7	2-Methylphenol	ND	2.0	0.90	ug/l	
	3&4-Methylphenol	ND	2.0	0.89	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	0.97	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	5.1	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.40	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.1	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.1	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	0.93	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	5.1	0.29	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.21	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.22	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	0.41	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	5.1	0.34	ug/l	
86-74-8	Carbazole	ND	1.0	0.23	ug/l	

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

Report of Analysis

Client Sample ID:	MW-16		
Lab Sample ID:	JC22613-5	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	0.66	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	0.41	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	0.56	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	5.1	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	0.24	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	0.50	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	0.34	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.27	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.1	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.1	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.1	0.44	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.65	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.49	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	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	46%		14-88%
4165-62-2	Phenol-d5	29%		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:	MW-16		
Lab Sample ID:	JC22613-5	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	60%		39-149%
4165-60-0	Nitrobenzene-d5	79%		32-128%
321-60-8	2-Fluorobiphenyl	82%		35-119%
1718-51-0	Terphenyl-d14	97%		10-126%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-16		
Lab Sample ID:	JC22613-5	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3M62835.D	1	07/07/16	LK	06/24/16	OP95059A	E3M2967
Run #2							

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.10	0.030	ug/l	
123-91-1	1,4-Dioxane	0.334	0.10	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	68%		24-125%
321-60-8	2-Fluorobiphenyl	68%		19-127%
1718-51-0	Terphenyl-d14	94%		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:	MW-16		
Lab Sample ID:	JC22613-5	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	GH105638.D	1	06/23/16	XPL	n/a	n/a	GGH5333
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	110%		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:	MW-9		
Lab Sample ID:	JC22613-6	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3E84771.D	1	07/02/16	SB	06/24/16	OP95059	E3E3716
Run #2							

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

ABN TCL Special List

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

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

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JC22613-6	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	52%		14-88%
4165-62-2	Phenol-d5	33%		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:	MW-9		
Lab Sample ID:	JC22613-6	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	61%		39-149%
4165-60-0	Nitrobenzene-d5	83%		32-128%
321-60-8	2-Fluorobiphenyl	81%		35-119%
1718-51-0	Terphenyl-d14	93%		10-126%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JC22613-6	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3M62836.D	1	07/07/16	LK	06/24/16	OP95059A	E3M2967
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	0.398	0.10	0.049	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	71%		24-125%
321-60-8	2-Fluorobiphenyl	72%		19-127%
1718-51-0	Terphenyl-d14	92%		10-119%

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-9		
Lab Sample ID:	JC22613-6	**Date Sampled:**	06/17/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	GH105639.D	1	06/23/16	XPL	n/a	n/a	GGH5333
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	101%		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:	MW-23S		
Lab Sample ID:	JC22613-7	**Date Sampled:**	06/20/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3E84772.D	1	07/02/16	SB	06/24/16	OP95059	E3E3716
Run #2							

	Initial Volume	Final Volume
Run #1	840 ml	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	6.0	0.98	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	6.0	1.1	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.4	1.5	ug/l	
105-67-9	2,4-Dimethylphenol	ND	6.0	2.9	ug/l	
51-28-5	2,4-Dinitrophenol	ND	12	1.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	6.0	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.4	1.1	ug/l	
	3&4-Methylphenol	ND	2.4	1.0	ug/l	
88-75-5	2-Nitrophenol	ND	6.0	1.1	ug/l	
100-02-7	4-Nitrophenol	ND	12	1.4	ug/l	
87-86-5	Pentachlorophenol	ND	6.0	1.6	ug/l	
108-95-2	Phenol	ND	2.4	0.47	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	6.0	1.7	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	6.0	1.6	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	6.0	1.1	ug/l	
83-32-9	Acenaphthene	ND	1.2	0.23	ug/l	
208-96-8	Acenaphthylene	ND	1.2	0.16	ug/l	
98-86-2	Acetophenone	ND	2.4	0.25	ug/l	
120-12-7	Anthracene	ND	1.2	0.25	ug/l	
1912-24-9	Atrazine	ND	2.4	0.53	ug/l	
100-52-7	Benzaldehyde	ND	6.0	0.34	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.2	0.24	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.2	0.25	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.2	0.24	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.2	0.41	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.2	0.24	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.4	0.48	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.4	0.54	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.2	0.25	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.4	0.28	ug/l	
106-47-8	4-Chloroaniline	ND	6.0	0.40	ug/l	
86-74-8	Carbazole	ND	1.2	0.27	ug/l	

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

Report of Analysis

Client Sample ID:	MW-23S		
Lab Sample ID:	JC22613-7	**Date Sampled:**	06/20/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	2.4	0.77	ug/l	
218-01-9	Chrysene	ND	1.2	0.21	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.4	0.33	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.4	0.30	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.4	0.48	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.4	0.44	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.2	0.66	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.2	0.57	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.4	0.60	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.2	0.39	ug/l	
132-64-9	Dibenzofuran	ND	6.0	0.26	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.4	0.59	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.4	0.28	ug/l	
84-66-2	Diethyl phthalate	ND	2.4	0.31	ug/l	
131-11-3	Dimethyl phthalate	ND	2.4	0.26	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.4	2.0	ug/l	
206-44-0	Fluoranthene	ND	1.2	0.20	ug/l	
86-73-7	Fluorene	ND	1.2	0.20	ug/l	
118-74-1	Hexachlorobenzene	ND	1.2	0.39	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.2	0.59	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	12	3.3	ug/l	
67-72-1	Hexachloroethane	ND	2.4	0.46	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.2	0.40	ug/l	
78-59-1	Isophorone	ND	2.4	0.33	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.2	0.31	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.2	0.25	ug/l	
88-74-4	2-Nitroaniline	ND	6.0	0.33	ug/l	
99-09-2	3-Nitroaniline	ND	6.0	0.46	ug/l	
100-01-6	4-Nitroaniline	ND	6.0	0.52	ug/l	
98-95-3	Nitrobenzene	ND	2.4	0.76	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.4	0.57	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	6.0	0.26	ug/l	
85-01-8	Phenanthrene	ND	1.2	0.21	ug/l	
129-00-0	Pyrene	ND	1.2	0.26	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.4	0.44	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	57%		14-88%
4165-62-2	Phenol-d5	36%		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:	MW-23S		
Lab Sample ID:	JC22613-7	**Date Sampled:**	06/20/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	59%		39-149%
4165-60-0	Nitrobenzene-d5	81%		32-128%
321-60-8	2-Fluorobiphenyl	84%		35-119%
1718-51-0	Terphenyl-d14	98%		10-126%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-23S		
Lab Sample ID:	JC22613-7	**Date Sampled:**	06/20/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3M62837.D	1	07/07/16	LK	06/24/16	OP95059A	E3M2967
Run #2							

	Initial Volume	Final Volume
Run #1	840 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.12	0.035	ug/l	
123-91-1	1,4-Dioxane	ND	0.12	0.058	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	71%		24-125%
321-60-8	2-Fluorobiphenyl	71%		19-127%
1718-51-0	Terphenyl-d14	94%		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:	MW-23S		
Lab Sample ID:	JC22613-7	**Date Sampled:**	06/20/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	GH105642.D	1	06/23/16	XPL	n/a	n/a	GGH5333
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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-23S		
Lab Sample ID:	JC22613-7	**Date Sampled:**	06/20/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	6G36640.D	1	06/27/16	DS	06/27/16	OP95079	G6G1047
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	76%		26-132%
877-09-8	Tetrachloro-m-xylene	77%		26-132%
2051-24-3	Decachlorobiphenyl	83%		10-118%
2051-24-3	Decachlorobiphenyl	91%		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:	MW-21S		
Lab Sample ID:	JC22613-8	**Date Sampled:**	06/20/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3E84773.D	1	07/02/16	SB	06/24/16	OP95059	E3E3716
Run #2							

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

ABN TCL Special List

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

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

Report of Analysis

Client Sample ID:	MW-21S		
Lab Sample ID:	JC22613-8	**Date Sampled:**	06/20/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		14-88%
4165-62-2	Phenol-d5	34%		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:	MW-21S		
Lab Sample ID:	JC22613-8	**Date Sampled:**	06/20/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	57%		39-149%
4165-60-0	Nitrobenzene-d5	79%		32-128%
321-60-8	2-Fluorobiphenyl	80%		35-119%
1718-51-0	Terphenyl-d14	87%		10-126%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	MW-21S		
Lab Sample ID:	JC22613-8	**Date Sampled:**	06/20/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	3M62838.D	1	07/07/16	LK	06/24/16	OP95059A	E3M2967
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.11	0.032	ug/l	
123-91-1	1,4-Dioxane	0.646	0.11	0.054	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	73%		24-125%
321-60-8	2-Fluorobiphenyl	73%		19-127%
1718-51-0	Terphenyl-d14	90%		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:	MW-21S		
Lab Sample ID:	JC22613-8	**Date Sampled:**	06/20/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	GH105643.D	1	06/23/16	XPL	n/a	n/a	GGH5333
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	99%		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:	MW-21S		
Lab Sample ID:	JC22613-8	**Date Sampled:**	06/20/16
Matrix:	AQ - Ground Water	**Date Received:**	06/21/16
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	6G36643.D	1	06/28/16	DS	06/27/16	OP95079	G6G1047
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.010	0.0062	ug/l	
319-84-6	alpha-BHC	ND	0.010	0.0061	ug/l	
319-85-7	beta-BHC	ND	0.010	0.0058	ug/l	
319-86-8	delta-BHC	ND	0.010	0.0047	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.010	0.0028	ug/l	
5103-71-9	alpha-Chlordane	ND	0.010	0.0047	ug/l	
5103-74-2	gamma-Chlordane	ND	0.010	0.0047	ug/l	
60-57-1	Dieldrin	ND	0.010	0.0037	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0039	ug/l	
72-55-9	4,4'-DDE	ND	0.010	0.0063	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0051	ug/l	
72-20-8	Endrin	ND	0.010	0.0051	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.010	0.0054	ug/l	
7421-93-4	Endrin aldehyde	ND	0.010	0.0052	ug/l	
53494-70-5	Endrin ketone	ND	0.010	0.0052	ug/l	
959-98-8	Endosulfan-I	ND	0.010	0.0051	ug/l	
33213-65-9	Endosulfan-II	ND	0.010	0.0044	ug/l	
76-44-8	Heptachlor	ND	0.010	0.0039	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.010	0.0067	ug/l	
72-43-5	Methoxychlor	ND	0.020	0.0058	ug/l	
8001-35-2	Toxaphene	ND	0.26	0.19	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	90%		26-132%
2051-24-3	Decachlorobiphenyl	88%		10-118%
2051-24-3	Decachlorobiphenyl	96%		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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

CHAIN OF CUSTODY

SGS ACCUTEST - NJ

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

PAGE 1 OF 1

SGS Accutest Quote # 809862883501

Bottle Order Control #

SGS Accutest Job # JC22613

Client / Reporting Information

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

Project Information

Project Name: BMS 2Q 2016 Groundwater
Street:
City / State: Humacao PR
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

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

Requested Analysis (see TEST CODE sheet)

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

Matrix Codes

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

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	SVOC- Method 8270D	LMA- Method 8015B	Pesticides- Method 8081B	1,4 Dioxane + Naphthalene Method 8270D SIM	LAB USE ONLY
1	MW-3		6/16/16	1545	NR	GW	5	3				2				X	X		X	E9
2	MW-5		6/17/16	1110	NR	GW	5	3				2				X	X		X	V461
3	MW-13		6/17/16	1243	NR	GW	5	3				2				X	X		X	
4	BR-4		6/17/16	1505	NR	GW	4	3				1				X	X		X	
5	MW-16		6/17/16	1602	NR	GW	5	3				2				X	X		X	
6	MW-9		6/17/16	1834	NR	GW	5	3				2				X	X		X	
7	MW-23S		6/20/16	1235	NR	GW	6	3				3				X	X	X	X	
8	MW-21S		6/20/16	1547	NR	GW	6	3				3				X	X	X	X	

Turnaround Time (Business days)

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

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date:

INITIAL ASESSMENT AM/B

LABEL VERIFICATION

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 to 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]	6/20/16 1500	1 Fed EX	2 FX	6-21-16 940	2 [signature]
Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
3		3	4		4
Relinquished by:	Date Time:	Received By:	Custody Seal # 49450	Preserved where applicable	On Ice
5		5			Cooler Temp. 2.1, 3

Intact
Not intact

JC22613: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC22613 **Client:** _____ **Project:** _____

Date / Time Received: 6/21/2016 9:40:00 AM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.1); Cooler 2: (3.0);

Cooler Temps (Corrected) °C: Cooler 1: (3.0); Cooler 2: (3.9);

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

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

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

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

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

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

Comments

5.1

5

JC22613: Chain of Custody

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Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC22613

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC22613-1 MW-3	Collected: 16-JUN-16 15:45 By: NR		Received: 21-JUN-16 By: AS			
JC22613-1	SW846-8015C (DAI)	23-JUN-16 15:06	XPL			D8015LMA
JC22613-1	SW846 8270D	24-JUN-16 05:29	SB	23-JUN-16	MP	AB8270SL
JC22613-1	SW846 8270D BY SIM	26-JUN-16 23:34	AC	23-JUN-16	MP	B8270SIM14DIOX,BSIM + NAP
JC22613-2 MW-5	Collected: 17-JUN-16 11:10 By: NR		Received: 21-JUN-16 By: AS			
JC22613-2	SW846-8015C (DAI)	23-JUN-16 15:53	XPL			D8015LMA
JC22613-2	SW846 8270D	01-JUL-16 23:39	SB	24-JUN-16	NG	AB8270SL
JC22613-2	SW846 8270D BY SIM	07-JUL-16 18:45	LK	24-JUN-16	NG	B8270SIM14DIOX,BSIM + NAP
JC22613-3 MW-13	Collected: 17-JUN-16 12:43 By: NR		Received: 21-JUN-16 By: AS			
JC22613-3	SW846-8015C (DAI)	23-JUN-16 16:09	XPL			D8015LMA
JC22613-3	SW846 8270D	02-JUL-16 00:06	SB	24-JUN-16	NG	AB8270SL
JC22613-3	SW846 8270D BY SIM	07-JUL-16 19:18	LK	24-JUN-16	NG	B8270SIM14DIOX,BSIM + NAP
JC22613-4 BR-4	Collected: 17-JUN-16 15:05 By: NR		Received: 21-JUN-16 By: AS			
JC22613-4	SW846-8015C (DAI)	23-JUN-16 16:25	XPL			D8015LMA
JC22613-4	SW846 8270D	02-JUL-16 00:33	SB	24-JUN-16	NG	AB8270SL
JC22613-4	SW846 8270D BY SIM	07-JUL-16 19:51	LK	24-JUN-16	NG	B8270SIM14DIOX,BSIM + NAP
JC22613-5 MW-16	Collected: 17-JUN-16 16:02 By: NR		Received: 21-JUN-16 By: AS			
JC22613-5	SW846-8015C (DAI)	23-JUN-16 16:41	XPL			D8015LMA
JC22613-5	SW846 8270D	02-JUL-16 01:00	SB	24-JUN-16	NG	AB8270SL
JC22613-5	SW846 8270D BY SIM	07-JUL-16 20:24	LK	24-JUN-16	NG	B8270SIM14DIOX,BSIM + NAP
JC22613-6 MW-9	Collected: 17-JUN-16 18:34 By: NR		Received: 21-JUN-16 By: AS			
JC22613-6	SW846-8015C (DAI)	23-JUN-16 16:56	XPL			D8015LMA
JC22613-6	SW846 8270D	02-JUL-16 01:28	SB	24-JUN-16	NG	AB8270SL

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC22613

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC22613-6	SW846 8270D BY SIM	07-JUL-16 20:57	LK	24-JUN-16	NG	B8270SIM14DIOX,BSIM + NAP
JC22613-7 MW-23S	Collected: 20-JUN-16 12:35 By: NR		Received: 21-JUN-16 By: AS			
JC22613-7	SW846-8015C (DAI)	23-JUN-16 17:44	XPL			D8015LMA
JC22613-7	SW846 8081B	27-JUN-16 23:32	DS	27-JUN-16	NG	P8081PESTTCL
JC22613-7	SW846 8270D	02-JUL-16 01:55	SB	24-JUN-16	NG	AB8270SL
JC22613-7	SW846 8270D BY SIM	07-JUL-16 21:30	LK	24-JUN-16	NG	B8270SIM14DIOX,BSIM + NAP
JC22613-8 MW-21S	Collected: 20-JUN-16 15:47 By: NR		Received: 21-JUN-16 By: AS			
JC22613-8	SW846-8015C (DAI)	23-JUN-16 17:59	XPL			D8015LMA
JC22613-8	SW846 8081B	28-JUN-16 00:21	DS	27-JUN-16	NG	P8081PESTTCL
JC22613-8	SW846 8270D	02-JUL-16 02:22	SB	24-JUN-16	NG	AB8270SL
JC22613-8	SW846 8270D BY SIM	07-JUL-16 22:03	LK	24-JUN-16	NG	B8270SIM14DIOX,BSIM + NAP

SGS Accutest Internal Chain of Custody

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 06/21/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC22613-1.1	Secured Storage	Brian Johnson	06/23/16 05:19	Retrieve from Storage
JC22613-1.1	Brian Johnson		06/23/16 13:14	Depleted
JC22613-1.1.1	Brian Johnson	Organics Prep	06/23/16 05:30	Extract from JC22613-1.1
JC22613-1.1.1	Organics Prep	Malay Parekh	06/23/16 14:36	Extract from JC22613-1.1
JC22613-1.1.1	Malay Parekh	Extract Storage	06/23/16 14:36	Return to Storage
JC22613-1.1.1	Extract Storage	Sean Block	06/23/16 23:43	Retrieve from Storage
JC22613-1.1.1	Sean Block	GCMSM	06/23/16 23:43	Load on Instrument
JC22613-1.1.1	GCMSM	Julius Johnson	06/24/16 23:37	Unload from Instrument
JC22613-1.1.1	Julius Johnson	Extract Freezer	06/24/16 23:37	Return to Storage
JC22613-1.1.1	Extract Freezer	Arielle Cocozza	06/26/16 17:13	Retrieve from Storage
JC22613-1.1.1	Arielle Cocozza	GCMS3M	06/26/16 17:13	Load on Instrument
JC22613-1.1.1	GCMS3M	Linsey Kirschmann	07/06/16 09:19	Unload from Instrument
JC22613-1.1.1	Linsey Kirschmann	Extract Freezer	07/06/16 09:19	Return to Storage
JC22613-1.3	Secured Storage	Xu Liu	06/23/16 13:32	Retrieve from Storage
JC22613-1.3	Xu Liu	Secured Storage	06/23/16 14:23	Return to Storage
JC22613-2.1	Secured Storage	Brian Johnson	06/24/16 04:33	Retrieve from Storage
JC22613-2.1	Brian Johnson		06/24/16 10:47	Depleted
JC22613-2.1.1	Brian Johnson	Organics Prep	06/24/16 05:32	Extract from JC22613-2.1
JC22613-2.1.1	Organics Prep	Nicholas Goydish	06/24/16 15:32	Extract from JC22613-2.1
JC22613-2.1.1	Nicholas Goydish	Extract Storage	06/24/16 15:32	Return to Storage
JC22613-2.1.1	Extract Storage	Sean Block	07/01/16 21:51	Retrieve from Storage
JC22613-2.1.1	Sean Block	GCMS3E	07/01/16 21:51	Load on Instrument
JC22613-2.1.1	GCMS3E	Ashley Noble	07/07/16 17:22	Unload from Instrument
JC22613-2.1.1	Ashley Noble	Extract Freezer	07/07/16 17:22	Return to Storage
JC22613-2.2	Secured Storage	Brian Johnson	06/24/16 06:25	Retrieve from Storage
JC22613-2.2	Brian Johnson		06/24/16 10:47	Depleted
JC22613-2.3	Secured Storage	Xu Liu	06/23/16 13:32	Retrieve from Storage
JC22613-2.3	Xu Liu	Secured Storage	06/23/16 14:23	Return to Storage
JC22613-3.2	Secured Storage	Brian Johnson	06/24/16 04:33	Retrieve from Storage
JC22613-3.2	Brian Johnson		06/24/16 10:47	Depleted
JC22613-3.2.1	Brian Johnson	Organics Prep	06/24/16 05:32	Extract from JC22613-3.2
JC22613-3.2.1	Organics Prep	Nicholas Goydish	06/24/16 15:32	Extract from JC22613-3.2
JC22613-3.2.1	Nicholas Goydish	Extract Storage	06/24/16 15:32	Return to Storage
JC22613-3.2.1	Extract Storage	Sean Block	07/01/16 21:51	Retrieve from Storage
JC22613-3.2.1	Sean Block	GCMS3E	07/01/16 21:51	Load on Instrument
JC22613-3.2.1	GCMS3E	Ashley Noble	07/07/16 17:22	Unload from Instrument

SGS Accutest Internal Chain of Custody

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 06/21/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC22613-3.2.1	Ashley Noble	Extract Freezer	07/07/16 17:22	Return to Storage
JC22613-3.3	Secured Storage	Xu Liu	06/23/16 13:32	Retrieve from Storage
JC22613-3.3	Xu Liu	Secured Storage	06/23/16 14:23	Return to Storage
JC22613-4.2	Secured Storage	Brian Johnson	06/24/16 04:33	Retrieve from Storage
JC22613-4.2	Brian Johnson		06/24/16 10:47	Depleted
JC22613-4.2.1	Brian Johnson	Organics Prep	06/24/16 05:32	Extract from JC22613-4.2
JC22613-4.2.1	Organics Prep	Nicholas Goydish	06/24/16 15:32	Extract from JC22613-4.2
JC22613-4.2.1	Nicholas Goydish	Extract Storage	06/24/16 15:32	Return to Storage
JC22613-4.2.1	Extract Storage	Sean Block	07/01/16 21:51	Retrieve from Storage
JC22613-4.2.1	Sean Block	GCMS3E	07/01/16 21:51	Load on Instrument
JC22613-4.2.1	GCMS3E	Ashley Noble	07/07/16 17:22	Unload from Instrument
JC22613-4.2.1	Ashley Noble	Extract Freezer	07/07/16 17:22	Return to Storage
JC22613-4.3	Secured Storage	Xu Liu	06/23/16 13:32	Retrieve from Storage
JC22613-4.3	Xu Liu	Secured Storage	06/23/16 14:23	Return to Storage
JC22613-5.1	Secured Storage	Dwayne Johnson	06/24/16 12:22	Retrieve from Storage
JC22613-5.1	Dwayne Johnson	Secured Staging Area	06/24/16 12:22	Return to Storage
JC22613-5.1	Secured Staging Area	Nicholas Goydish	06/24/16 12:34	Retrieve from Storage
JC22613-5.1	Nicholas Goydish		06/24/16 13:58	Depleted
JC22613-5.1.1	Nicholas Goydish	Organics Prep	06/24/16 12:34	Extract from JC22613-5.1
JC22613-5.1.1	Organics Prep	Nicholas Goydish	06/24/16 15:32	Extract from JC22613-5.1
JC22613-5.1.1	Nicholas Goydish	Extract Storage	06/24/16 15:32	Return to Storage
JC22613-5.1.1	Extract Storage	Sean Block	07/01/16 21:51	Retrieve from Storage
JC22613-5.1.1	Sean Block	GCMS3E	07/01/16 21:51	Load on Instrument
JC22613-5.1.1	GCMS3E	Ashley Noble	07/07/16 17:22	Unload from Instrument
JC22613-5.1.1	Ashley Noble	Extract Freezer	07/07/16 17:22	Return to Storage
JC22613-5.2	Secured Storage	Brian Johnson	06/24/16 04:33	Retrieve from Storage
JC22613-5.2	Brian Johnson		06/24/16 10:47	Depleted
JC22613-5.2.1	Brian Johnson	Organics Prep	06/24/16 05:32	Extract from JC22613-5.2
JC22613-5.2.1	Organics Prep	Nicholas Goydish	06/24/16 15:32	Extract from JC22613-5.2
JC22613-5.2.1	Nicholas Goydish	Extract Storage	06/24/16 15:32	Return to Storage
JC22613-5.3	Secured Storage	Xu Liu	06/23/16 13:32	Retrieve from Storage
JC22613-5.3	Xu Liu	Secured Storage	06/23/16 14:23	Return to Storage
JC22613-6.2	Secured Storage	Brian Johnson	06/24/16 04:33	Retrieve from Storage
JC22613-6.2	Brian Johnson		06/24/16 10:47	Depleted

SGS Accutest Internal Chain of Custody

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 06/21/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC22613-6.2.1	Brian Johnson	Organics Prep	06/24/16 05:32	Extract from JC22613-6.2
JC22613-6.2.1	Organics Prep	Nicholas Goydish	06/24/16 15:32	Extract from JC22613-6.2
JC22613-6.2.1	Nicholas Goydish	Extract Storage	06/24/16 15:32	Return to Storage
JC22613-6.2.1	Extract Storage	Sean Block	07/01/16 21:51	Retrieve from Storage
JC22613-6.2.1	Sean Block	GCMS3E	07/01/16 21:51	Load on Instrument
JC22613-6.2.1	GCMS3E	Ashley Noble	07/07/16 17:22	Unload from Instrument
JC22613-6.2.1	Ashley Noble	Extract Freezer	07/07/16 17:22	Return to Storage
JC22613-6.3	Secured Storage	Xu Liu	06/23/16 13:32	Retrieve from Storage
JC22613-6.3	Xu Liu	Secured Storage	06/23/16 14:23	Return to Storage
JC22613-7.1	Secured Storage	Sahara Feliciano	06/26/16 07:41	Retrieve from Storage
JC22613-7.1	Sahara Feliciano	Secured Staging Area	06/26/16 07:41	Return to Storage
JC22613-7.1	Secured Staging Area	Brian Johnson	06/27/16 04:24	Retrieve from Storage
JC22613-7.1	Brian Johnson	Nicholas Goydish	06/27/16 12:42	Custody Transfer
JC22613-7.1	Nicholas Goydish		06/27/16 14:51	Depleted
JC22613-7.1.1	Brian Johnson	Organics Prep	06/27/16 04:31	Extract from JC22613-7.1
JC22613-7.1.1	Organics Prep	Nicholas Goydish	06/27/16 15:52	Extract from JC22613-7.1
JC22613-7.1.1	Nicholas Goydish	Extract Storage	06/27/16 15:52	Return to Storage
JC22613-7.1.1	Extract Storage	Dhara Saparia	06/27/16 16:37	Retrieve from Storage
JC22613-7.1.1	Dhara Saparia	GC6G	06/27/16 16:37	Load on Instrument
JC22613-7.1.1	GC6G	Dhara Saparia	07/11/16 09:12	Unload from Instrument
JC22613-7.1.1	Dhara Saparia	Extract Freezer	07/11/16 09:12	Return to Storage
JC22613-7.2	Secured Storage	Sahara Feliciano	06/26/16 07:41	Retrieve from Storage
JC22613-7.2	Sahara Feliciano	Secured Staging Area	06/26/16 07:41	Return to Storage
JC22613-7.2	Secured Staging Area	Brian Johnson	06/27/16 04:24	Retrieve from Storage
JC22613-7.2	Brian Johnson	Nicholas Goydish	06/27/16 12:42	Custody Transfer
JC22613-7.2	Nicholas Goydish		06/27/16 14:51	Depleted
JC22613-7.2.1	Brian Johnson	Organics Prep	06/27/16 04:31	Extract from JC22613-7.2
JC22613-7.2.1	Organics Prep	Nicholas Goydish	06/27/16 15:52	Extract from JC22613-7.2
JC22613-7.2.1	Nicholas Goydish	Extract Storage	06/27/16 15:52	Return to Storage
JC22613-7.2.1	Extract Storage	Dhara Saparia	06/27/16 16:37	Retrieve from Storage
JC22613-7.2.1	Dhara Saparia	GC6G	06/27/16 16:37	Load on Instrument
JC22613-7.2.1	GC6G	Dhara Saparia	07/11/16 09:12	Unload from Instrument
JC22613-7.2.1	Dhara Saparia	Extract Freezer	07/11/16 09:12	Return to Storage
JC22613-7.3	Secured Storage	Brian Johnson	06/24/16 04:33	Retrieve from Storage
JC22613-7.3	Brian Johnson		06/24/16 10:47	Depleted
JC22613-7.3.1	Brian Johnson	Organics Prep	06/24/16 05:32	Extract from JC22613-7.3

SGS Accutest Internal Chain of Custody

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 06/21/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC22613-7.3.1	Organics Prep	Nicholas Goydish	06/24/16 15:32	Extract from JC22613-7.3
JC22613-7.3.1	Nicholas Goydish	Extract Storage	06/24/16 15:32	Return to Storage
JC22613-7.3.1	Extract Storage	Sean Block	07/01/16 21:51	Retrieve from Storage
JC22613-7.3.1	Sean Block	GCMS3E	07/01/16 21:51	Load on Instrument
JC22613-7.3.1	GCMS3E	Ashley Noble	07/07/16 17:22	Unload from Instrument
JC22613-7.3.1	Ashley Noble	Extract Freezer	07/07/16 17:22	Return to Storage
JC22613-7.5	Secured Storage	Xu Liu	06/23/16 13:32	Retrieve from Storage
JC22613-7.5	Xu Liu	Secured Storage	06/23/16 14:23	Return to Storage
JC22613-8.1	Secured Storage	Brian Johnson	06/24/16 04:33	Retrieve from Storage
JC22613-8.1	Brian Johnson		06/24/16 10:47	Depleted
JC22613-8.1.1	Brian Johnson	Organics Prep	06/24/16 05:32	Extract from JC22613-8.1
JC22613-8.1.1	Organics Prep	Nicholas Goydish	06/24/16 15:32	Extract from JC22613-8.1
JC22613-8.1.1	Nicholas Goydish	Extract Storage	06/24/16 15:32	Return to Storage
JC22613-8.1.1	Extract Storage	Sean Block	07/01/16 21:51	Retrieve from Storage
JC22613-8.1.1	Sean Block	GCMS3E	07/01/16 21:51	Load on Instrument
JC22613-8.1.1	GCMS3E	Ashley Noble	07/07/16 17:22	Unload from Instrument
JC22613-8.1.1	Ashley Noble	Extract Freezer	07/07/16 17:22	Return to Storage
JC22613-8.3	Secured Storage	Sahara Feliciano	06/26/16 07:41	Retrieve from Storage
JC22613-8.3	Sahara Feliciano	Secured Staging Area	06/26/16 07:41	Return to Storage
JC22613-8.3	Secured Staging Area	Brian Johnson	06/27/16 04:24	Retrieve from Storage
JC22613-8.3	Brian Johnson	Nicholas Goydish	06/27/16 12:42	Custody Transfer
JC22613-8.3	Nicholas Goydish		06/27/16 14:51	Depleted
JC22613-8.3.1	Brian Johnson	Organics Prep	06/27/16 04:31	Extract from JC22613-8.3
JC22613-8.3.1	Organics Prep	Nicholas Goydish	06/27/16 15:52	Extract from JC22613-8.3
JC22613-8.3.1	Nicholas Goydish	Extract Storage	06/27/16 15:52	Return to Storage
JC22613-8.3.1	Extract Storage	Dhara Saparia	06/27/16 16:37	Retrieve from Storage
JC22613-8.3.1	Dhara Saparia	GC6G	06/27/16 16:37	Load on Instrument
JC22613-8.3.1	GC6G	Dhara Saparia	07/11/16 09:12	Unload from Instrument
JC22613-8.3.1	Dhara Saparia	Extract Freezer	07/11/16 09:12	Return to Storage
JC22613-8.5	Secured Storage	Xu Liu	06/23/16 13:32	Retrieve from Storage
JC22613-8.5	Xu Liu	Secured Storage	06/23/16 14:23	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: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018-MB1	M125534.D	1	06/24/16	SB	06/23/16	OP95018	EM5319

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

JC22613-1

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: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018-MB1	M125534.D	1	06/24/16	SB	06/23/16	OP95018	EM5319

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

JC22613-1

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	40%	14-88%

Method Blank Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018-MB1	M125534.D	1	06/24/16	SB	06/23/16	OP95018	EM5319

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

JC22613-1

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	28%	10-110%
118-79-6	2,4,6-Tribromophenol	80%	39-149%
4165-60-0	Nitrobenzene-d5	65%	32-128%
321-60-8	2-Fluorobiphenyl	65%	35-119%
1718-51-0	Terphenyl-d14	86%	10-126%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.27	13	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95059-MB1	3E84763.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716

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

JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

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: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95059-MB1	3E84763.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716

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

JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

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	61%	14-88%

Method Blank Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95059-MB1	3E84763.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716

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

JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	38%	10-110%
118-79-6	2,4,6-Tribromophenol	64%	39-149%
4165-60-0	Nitrobenzene-d5	91%	32-128%
321-60-8	2-Fluorobiphenyl	88%	35-119%
1718-51-0	Terphenyl-d14	103%	10-126%

Method Blank Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018A-MB1	3M62532.D	1	06/26/16	AC	06/23/16	OP95018A	E3M2951

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

JC22613-1

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	49%	14-81%
4165-62-2	Phenol-d5	32%	11-54%
118-79-6	2,4,6-Tribromophenol	90%	35-145%
4165-60-0	Nitrobenzene-d5	70%	24-125%
321-60-8	2-Fluorobiphenyl	64%	19-127%
1718-51-0	Terphenyl-d14	95%	10-119%

Method Blank Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018A-MB1	2M85124.D	1	06/28/16	AN	06/23/16	OP95018A	E2M3754

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

JC22613-1

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	37%	14-81%
4165-62-2	Phenol-d5	27%	11-54%
118-79-6	2,4,6-Tribromophenol	70%	35-145%
4165-60-0	Nitrobenzene-d5	61%	24-125%
321-60-8	2-Fluorobiphenyl	63%	19-127%
1718-51-0	Terphenyl-d14	92%	10-119%
84-15-1	o-Terphenyl	0%	-%

Method Blank Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018A-MB1	4M66583.D	1	07/05/16	LK	06/23/16	OP95018A	E4M2995

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

JC22613-1

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	38%	14-81%
4165-62-2	Phenol-d5	27%	11-54%
118-79-6	2,4,6-Tribromophenol	101%	35-145%
4165-60-0	Nitrobenzene-d5	61%	24-125%
321-60-8	2-Fluorobiphenyl	48%	19-127%
1718-51-0	Terphenyl-d14	104%	10-119%

Method Blank Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95059A-MB1	4P17518.D	1	07/05/16	LK	06/24/16	OP95059A	E4P933

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

JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

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	92%	24-125%
321-60-8	2-Fluorobiphenyl	89%	19-127%
1718-51-0	Terphenyl-d14	129%*	10-119%

Method Blank Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95059A-MB1	3M62828.D	1	07/07/16	LK	06/24/16	OP95059A	E3M2967

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

JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

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	77%	24-125%
321-60-8	2-Fluorobiphenyl	68%	19-127%
1718-51-0	Terphenyl-d14	100%	10-119%

Blank Spike Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018-BS1	M125535.D	1	06/24/16	SB	06/23/16	OP95018	EM5319

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

JC22613-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	33.2	66	48-106
59-50-7	4-Chloro-3-methyl phenol	50	38.8	78	49-113
120-83-2	2,4-Dichlorophenol	50	40.7	81	49-111
105-67-9	2,4-Dimethylphenol	50	38.1	76	42-117
51-28-5	2,4-Dinitrophenol	100	97.0	97	37-132
534-52-1	4,6-Dinitro-o-cresol	50	43.0	86	49-119
95-48-7	2-Methylphenol	50	30.1	60	42-103
	3&4-Methylphenol	50	27.9	56	39-110
88-75-5	2-Nitrophenol	50	39.8	80	49-114
100-02-7	4-Nitrophenol	50	26.7	53	16-95
87-86-5	Pentachlorophenol	50	39.4	79	30-136
108-95-2	Phenol	50	16.7	33	10-110
58-90-2	2,3,4,6-Tetrachlorophenol	50	47.9	96	47-118
95-95-4	2,4,5-Trichlorophenol	50	43.1	86	55-116
88-06-2	2,4,6-Trichlorophenol	50	43.5	87	56-115
83-32-9	Acenaphthene	50	31.4	63	54-112
208-96-8	Acenaphthylene	50	32.0	64	49-99
98-86-2	Acetophenone	50	39.6	79	52-111
120-12-7	Anthracene	50	36.9	74	58-112
1912-24-9	Atrazine	50	56.4	113	62-134
100-52-7	Benzaldehyde	50	43.3	87	40-129
56-55-3	Benzo(a)anthracene	50	39.4	79	44-120
50-32-8	Benzo(a)pyrene	50	38.1	76	41-127
205-99-2	Benzo(b)fluoranthene	50	39.6	79	41-129
191-24-2	Benzo(g,h,i)perylene	50	35.9	72	34-128
207-08-9	Benzo(k)fluoranthene	50	39.1	78	42-122
101-55-3	4-Bromophenyl phenyl ether	50	38.4	77	54-121
85-68-7	Butyl benzyl phthalate	50	40.8	82	20-143
92-52-4	1,1'-Biphenyl	50	37.7	75	51-106
91-58-7	2-Chloronaphthalene	50	29.6	59	48-104
106-47-8	4-Chloroaniline	50	24.5	49	10-110
86-74-8	Carbazole	50	40.0	80	56-110
105-60-2	Caprolactam	50	14.9	30	10-110
218-01-9	Chrysene	50	36.9	74	45-125
111-91-1	bis(2-Chloroethoxy)methane	50	37.1	74	47-117
111-44-4	bis(2-Chloroethyl)ether	50	32.4	65	48-115

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018-BS1	M125535.D	1	06/24/16	SB	06/23/16	OP95018	EM5319

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

JC22613-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	50	30.0	60	44-112
7005-72-3	4-Chlorophenyl phenyl ether	50	35.6	71	50-117
121-14-2	2,4-Dinitrotoluene	50	43.2	86	57-122
606-20-2	2,6-Dinitrotoluene	50	45.1	90	58-122
91-94-1	3,3'-Dichlorobenzidine	100	59.9	60	10-110
53-70-3	Dibenzo(a,h)anthracene	50	37.5	75	36-130
132-64-9	Dibenzofuran	50	38.8	78	55-108
84-74-2	Di-n-butyl phthalate	50	41.4	83	45-123
117-84-0	Di-n-octyl phthalate	50	44.8	90	37-144
84-66-2	Diethyl phthalate	50	40.0	80	23-130
131-11-3	Dimethyl phthalate	50	39.9	80	10-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	41.0	82	36-138
206-44-0	Fluoranthene	50	40.5	81	58-116
86-73-7	Fluorene	50	34.9	70	57-113
118-74-1	Hexachlorobenzene	50	39.2	78	49-122
87-68-3	Hexachlorobutadiene	50	27.0	54	24-112
77-47-4	Hexachlorocyclopentadiene	100	51.6	52	14-119
67-72-1	Hexachloroethane	50	25.4	51	31-107
193-39-5	Indeno(1,2,3-cd)pyrene	50	37.5	75	34-128
78-59-1	Isophorone	50	37.3	75	52-119
90-12-0	1-Methylnaphthalene	50	37.4	75	46-103
91-57-6	2-Methylnaphthalene	50	34.4	69	45-107
88-74-4	2-Nitroaniline	50	41.8	84	51-127
99-09-2	3-Nitroaniline	50	31.3	63	10-110
100-01-6	4-Nitroaniline	50	38.8	78	50-112
98-95-3	Nitrobenzene	50	33.4	67	44-116
621-64-7	N-Nitroso-di-n-propylamine	50	34.3	69	49-117
86-30-6	N-Nitrosodiphenylamine	50	37.5	75	51-113
85-01-8	Phenanthrene	50	36.7	73	56-111
129-00-0	Pyrene	50	39.4	79	47-120
95-94-3	1,2,4,5-Tetrachlorobenzene	50	32.9	66	36-114

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018-BS1	M125535.D	1	06/24/16	SB	06/23/16	OP95018	EM5319

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

JC22613-1

CAS No.	Surrogate Recoveries	BSP	Limits
4165-62-2	Phenol-d5	35%	10-110%
118-79-6	2,4,6-Tribromophenol	94%	39-149%
4165-60-0	Nitrobenzene-d5	75%	32-128%
321-60-8	2-Fluorobiphenyl	77%	35-119%
1718-51-0	Terphenyl-d14	86%	10-126%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95059-BS1	3E84764.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716

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

JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	37.7	75	48-106
59-50-7	4-Chloro-3-methyl phenol	50	37.3	75	49-113
120-83-2	2,4-Dichlorophenol	50	39.1	78	49-111
105-67-9	2,4-Dimethylphenol	50	40.1	80	42-117
51-28-5	2,4-Dinitrophenol	100	89.6	90	37-132
534-52-1	4,6-Dinitro-o-cresol	50	46.5	93	49-119
95-48-7	2-Methylphenol	50	38.3	77	42-103
	3&4-Methylphenol	50	35.4	71	39-110
88-75-5	2-Nitrophenol	50	37.5	75	49-114
100-02-7	4-Nitrophenol	50	30.0	60	16-95
87-86-5	Pentachlorophenol	50	38.9	78	30-136
108-95-2	Phenol	50	21.0	42	10-110
58-90-2	2,3,4,6-Tetrachlorophenol	50	41.6	83	47-118
95-95-4	2,4,5-Trichlorophenol	50	41.5	83	55-116
88-06-2	2,4,6-Trichlorophenol	50	44.4	89	56-115
83-32-9	Acenaphthene	50	35.9	72	54-112
208-96-8	Acenaphthylene	50	34.4	69	49-99
98-86-2	Acetophenone	50	41.0	82	52-111
120-12-7	Anthracene	50	40.0	80	58-112
1912-24-9	Atrazine	50	46.2	92	62-134
100-52-7	Benzaldehyde	50	43.7	87	40-129
56-55-3	Benzo(a)anthracene	50	43.4	87	44-120
50-32-8	Benzo(a)pyrene	50	43.6	87	41-127
205-99-2	Benzo(b)fluoranthene	50	45.5	91	41-129
191-24-2	Benzo(g,h,i)perylene	50	42.6	85	34-128
207-08-9	Benzo(k)fluoranthene	50	46.3	93	42-122
101-55-3	4-Bromophenyl phenyl ether	50	41.1	82	54-121
85-68-7	Butyl benzyl phthalate	50	43.8	88	20-143
92-52-4	1,1'-Biphenyl	50	38.2	76	51-106
91-58-7	2-Chloronaphthalene	50	33.4	67	48-104
106-47-8	4-Chloroaniline	50	31.4	63	10-110
86-74-8	Carbazole	50	44.2	88	56-110
105-60-2	Caprolactam	50	11.7	23	10-110
218-01-9	Chrysene	50	42.5	85	45-125
111-91-1	bis(2-Chloroethoxy)methane	50	36.9	74	47-117
111-44-4	bis(2-Chloroethyl)ether	50	41.8	84	48-115

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95059-BS1	3E84764.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716

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

JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	50	33.9	68	44-112
7005-72-3	4-Chlorophenyl phenyl ether	50	37.0	74	50-117
121-14-2	2,4-Dinitrotoluene	50	47.6	95	57-122
606-20-2	2,6-Dinitrotoluene	50	46.0	92	58-122
91-94-1	3,3'-Dichlorobenzidine	100	62.1	62	10-110
53-70-3	Dibenzo(a,h)anthracene	50	42.2	84	36-130
132-64-9	Dibenzofuran	50	40.7	81	55-108
84-74-2	Di-n-butyl phthalate	50	43.1	86	45-123
117-84-0	Di-n-octyl phthalate	50	48.1	96	37-144
84-66-2	Diethyl phthalate	50	40.2	80	23-130
131-11-3	Dimethyl phthalate	50	42.3	85	10-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	42.1	84	36-138
206-44-0	Fluoranthene	50	45.4	91	58-116
86-73-7	Fluorene	50	38.2	76	57-113
118-74-1	Hexachlorobenzene	50	37.1	74	49-122
87-68-3	Hexachlorobutadiene	50	26.6	53	24-112
77-47-4	Hexachlorocyclopentadiene	100	30.8	31	14-119
67-72-1	Hexachloroethane	50	28.8	58	31-107
193-39-5	Indeno(1,2,3-cd)pyrene	50	44.7	89	34-128
78-59-1	Isophorone	50	38.4	77	52-119
90-12-0	1-Methylnaphthalene	50	34.5	69	46-103
91-57-6	2-Methylnaphthalene	50	34.7	69	45-107
88-74-4	2-Nitroaniline	50	44.7	89	51-127
99-09-2	3-Nitroaniline	50	38.1	76	10-110
100-01-6	4-Nitroaniline	50	41.2	82	50-112
98-95-3	Nitrobenzene	50	36.2	72	44-116
621-64-7	N-Nitroso-di-n-propylamine	50	41.3	83	49-117
86-30-6	N-Nitrosodiphenylamine	50	43.0	86	51-113
85-01-8	Phenanthrene	50	41.8	84	56-111
129-00-0	Pyrene	50	47.2	94	47-120
95-94-3	1,2,4,5-Tetrachlorobenzene	50	34.5	69	36-114

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	62%	14-88%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95059-BS1	3E84764.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716

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

JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

CAS No.	Surrogate Recoveries	BSP	Limits
4165-62-2	Phenol-d5	43%	10-110%
118-79-6	2,4,6-Tribromophenol	66%	39-149%
4165-60-0	Nitrobenzene-d5	83%	32-128%
321-60-8	2-Fluorobiphenyl	87%	35-119%
1718-51-0	Terphenyl-d14	93%	10-126%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018A-BS12	3M62533.D	1	06/26/16	AC	06/23/16	OP95018A	E3M2951

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

JC22613-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	1	0.693	69	40-119
123-91-1	1,4-Dioxane	1	0.437	44	20-160

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	46%	14-81%
4165-62-2	Phenol-d5	31%	11-54%
118-79-6	2,4,6-Tribromophenol	97%	35-145%
4165-60-0	Nitrobenzene-d5	74%	24-125%
321-60-8	2-Fluorobiphenyl	65%	19-127%
1718-51-0	Terphenyl-d14	93%	10-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018A-BS12	4M66584.D	1	07/05/16	LK	06/23/16	OP95018A	E4M2995

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

JC22613-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	1	0.577	58	40-119
123-91-1	1,4-Dioxane	1	0.394	39	20-160

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	37%	14-81%
4165-62-2	Phenol-d5	26%	11-54%
118-79-6	2,4,6-Tribromophenol	107%	35-145%
4165-60-0	Nitrobenzene-d5	65%	24-125%
321-60-8	2-Fluorobiphenyl	48%	19-127%
1718-51-0	Terphenyl-d14	108%	10-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95059A-BS12	4P17519.D	1	07/05/16	LK	06/24/16	OP95059A	E4P933

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

JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	1	0.656	66	40-119
123-91-1	1,4-Dioxane	1	0.322	32	20-160

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	90%	24-125%
321-60-8	2-Fluorobiphenyl	93%	19-127%
1718-51-0	Terphenyl-d14	123%* [a]	10-119%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95059A-BS12	3M62829.D	1	07/07/16	LK	06/24/16	OP95059A	E3M2967

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

JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	1	0.859	86	40-119
123-91-1	1,4-Dioxane	1	0.424	42	20-160

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	78%	24-125%
321-60-8	2-Fluorobiphenyl	72%	19-127%
1718-51-0	Terphenyl-d14	100%	10-119%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018-MS	M125536.D	1	06/24/16	SB	06/23/16	OP95018	EM5319
OP95018-MSD	M125537.D	1	06/24/16	SB	06/23/16	OP95018	EM5319
JC22506-9	M125542.D	1	06/24/16	SB	06/23/16	OP95018	EM5319

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

JC22613-1

CAS No.	Compound	JC22506-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		110	74.8	68	110	80.4	73	7	49-110/20
59-50-7	4-Chloro-3-methyl phenol	ND		110	84.8	77	110	83.6	76	1	44-121/18
120-83-2	2,4-Dichlorophenol	ND		110	90.3	82	110	94.0	86	4	42-120/19
105-67-9	2,4-Dimethylphenol	ND		110	90.6	82	110	92.1	84	2	33-132/23
51-28-5	2,4-Dinitrophenol	ND		220	235	107	220	224	102	5	21-145/26
534-52-1	4,6-Dinitro-o-cresol	ND		110	96.4	88	110	95.4	87	1	25-134/27
95-48-7	2-Methylphenol	ND		110	75.8	69	110	77.2	70	2	47-112/18
	3&4-Methylphenol	ND		110	70.9	65	110	74.5	68	5	44-113/19
88-75-5	2-Nitrophenol	ND		110	85.2	78	110	91.7	83	7	45-118/20
100-02-7	4-Nitrophenol	ND		110	101	92	110	94.9	86	6	23-144/28
87-86-5	Pentachlorophenol	ND		110	99.9	91	110	97.6	89	2	25-151/25
108-95-2	Phenol	ND		110	55.3	50	110	57.7	53	4	22-100/22
58-90-2	2,3,4,6-Tetrachlorophenol	ND		110	109	99	110	107	97	2	44-122/21
95-95-4	2,4,5-Trichlorophenol	ND		110	93.0	85	110	90.7	83	3	51-124/20
88-06-2	2,4,6-Trichlorophenol	ND		110	98.2	89	110	96.4	88	2	53-120/21
83-32-9	Acenaphthene	ND		110	79.9	73	110	79.1	72	1	52-120/23
208-96-8	Acenaphthylene	ND		110	79.2	72	110	79.6	72	1	50-101/22
98-86-2	Acetophenone	ND		110	84.7	77	110	91.4	83	8	31-141/23
120-12-7	Anthracene	ND		110	81.6	74	110	80.9	74	1	54-117/22
1912-24-9	Atrazine	ND		110	116	106	110	120	109	3	42-152/23
100-52-7	Benzaldehyde	ND		110	81.8	74	110	96.9	88	17	10-164/30
56-55-3	Benzo(a)anthracene	ND		110	84.0	76	110	83.3	76	1	40-123/24
50-32-8	Benzo(a)pyrene	ND		110	82.3	75	110	79.8	73	3	41-127/25
205-99-2	Benzo(b)fluoranthene	ND		110	85.0	77	110	83.5	76	2	39-127/27
191-24-2	Benzo(g,h,i)perylene	ND		110	77.8	71	110	72.9	66	7	34-128/28
207-08-9	Benzo(k)fluoranthene	ND		110	83.9	76	110	79.4	72	6	39-122/26
101-55-3	4-Bromophenyl phenyl ether	ND		110	94.1	86	110	90.4	82	4	51-124/23
85-68-7	Butyl benzyl phthalate	ND		110	85.5	78	110	86.8	79	2	21-146/28
92-52-4	1,1'-Biphenyl	ND		110	87.8	80	110	89.5	81	2	27-142/23
91-58-7	2-Chloronaphthalene	ND		110	78.1	71	110	79.5	72	2	51-109/23
106-47-8	4-Chloroaniline	0.84	J	110	46.2	41	110	54.2	49	16	10-110/55
86-74-8	Carbazole	ND		110	86.4	79	110	85.8	78	1	52-116/22
105-60-2	Caprolactam	ND		110	61.5	56	110	56.0	51	9	10-106/34
218-01-9	Chrysene	ND		110	79.3	72	110	78.0	71	2	41-128/24
111-91-1	bis(2-Chloroethoxy)methane	ND		110	77.7	71	110	84.5	77	8	46-120/24
111-44-4	bis(2-Chloroethyl)ether	ND		110	69.8	64	110	76.3	69	9	42-123/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018-MS	M125536.D	1	06/24/16	SB	06/23/16	OP95018	EM5319
OP95018-MSD	M125537.D	1	06/24/16	SB	06/23/16	OP95018	EM5319
JC22506-9	M125542.D	1	06/24/16	SB	06/23/16	OP95018	EM5319

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

JC22613-1

CAS No.	Compound	JC22506-9 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-60-1	bis(2-Chloroisopropyl)ether	ND		110	67.4	61	110	72.5	66	7	41-117/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		110	91.3	83	110	87.7	80	4	48-121/21
121-14-2	2,4-Dinitrotoluene	ND		110	98.1	89	110	92.8	84	6	54-123/27
606-20-2	2,6-Dinitrotoluene	ND		110	97.9	89	110	95.9	87	2	55-125/26
91-94-1	3,3'-Dichlorobenzidine	ND		220	68.3	31	220	96.7	44	34	10-107/47
53-70-3	Dibenzo(a,h)anthracene	ND		110	81.6	74	110	77.0	70	6	35-130/27
132-64-9	Dibenzofuran	ND		110	86.4	79	110	85.2	78	1	53-112/22
84-74-2	Di-n-butyl phthalate	ND		110	89.4	81	110	88.7	81	1	38-129/23
117-84-0	Di-n-octyl phthalate	ND		110	96.1	87	110	94.8	86	1	35-145/26
84-66-2	Diethyl phthalate	ND		110	89.8	82	110	87.4	80	3	16-136/30
131-11-3	Dimethyl phthalate	ND		110	88.6	81	110	87.3	79	1	10-143/39
117-81-7	bis(2-Ethylhexyl)phthalate	ND		110	88.2	80	110	88.9	81	1	34-141/28
206-44-0	Fluoranthene	ND		110	87.7	80	110	87.3	79	0	47-123/24
86-73-7	Fluorene	ND		110	84.3	77	110	82.8	75	2	56-117/22
118-74-1	Hexachlorobenzene	ND		110	90.6	82	110	88.0	80	3	46-125/24
87-68-3	Hexachlorobutadiene	ND		110	69.7	63	110	75.6	69	8	26-121/24
77-47-4	Hexachlorocyclopentadiene	ND		220	143	65	220	154	70	7	10-133/31
67-72-1	Hexachloroethane	ND		110	65.2	59	110	72.3	66	10	35-111/26
193-39-5	Indeno(1,2,3-cd)pyrene	ND		110	80.5	73	110	77.5	71	4	32-130/30
78-59-1	Isophorone	ND		110	79.5	72	110	86.5	79	8	47-126/23
90-12-0	1-Methylnaphthalene	ND		110	83.3	76	110	89.0	81	7	34-124/25
91-57-6	2-Methylnaphthalene	ND		110	75.9	69	110	79.3	72	4	34-123/24
88-74-4	2-Nitroaniline	ND		110	91.8	84	110	88.3	80	4	46-137/23
99-09-2	3-Nitroaniline	ND		110	66.4	60	110	63.3	58	5	10-110/50
100-01-6	4-Nitroaniline	ND		110	79.1	72	110	77.7	71	2	38-118/25
98-95-3	Nitrobenzene	ND		110	76.1	69	110	82.4	75	8	35-130/25
621-64-7	N-Nitroso-di-n-propylamine	ND		110	73.6	67	110	80.5	73	9	45-123/22
86-30-6	N-Nitrosodiphenylamine	ND		110	84.0	76	110	83.6	76	0	46-123/24
85-01-8	Phenanthrene	ND		110	82.1	75	110	81.8	74	0	48-121/23
129-00-0	Pyrene	ND		110	82.8	75	110	82.5	75	0	43-124/26
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		110	88.5	81	110	92.3	84	4	25-142/24

CAS No.	Surrogate Recoveries	MS	MSD	JC22506-9	Limits
367-12-4	2-Fluorophenol	65%	67%	43%	14-88%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018-MS	M125536.D	1	06/24/16	SB	06/23/16	OP95018	EM5319
OP95018-MSD	M125537.D	1	06/24/16	SB	06/23/16	OP95018	EM5319
JC22506-9	M125542.D	1	06/24/16	SB	06/23/16	OP95018	EM5319

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

JC22613-1

CAS No.	Surrogate Recoveries	MS	MSD	JC22506-9	Limits
4165-62-2	Phenol-d5	55%	55%	28%	10-110%
118-79-6	2,4,6-Tribromophenol	101%	100%	85%	39-149%
4165-60-0	Nitrobenzene-d5	76%	83%	74%	32-128%
321-60-8	2-Fluorobiphenyl	78%	80%	74%	35-119%
1718-51-0	Terphenyl-d14	84%	83%	69%	10-126%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95059-MS	3E84765.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716
OP95059-MSD	3E84766.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716
JC22613-2	3E84767.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716

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

JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

CAS No.	Compound	JC22613-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		100	80.4	80	100	82.8	83	3	49-110/20
59-50-7	4-Chloro-3-methyl phenol	ND		100	79.7	80	100	79.6	80	0	44-121/18
120-83-2	2,4-Dichlorophenol	ND		100	76.2	76	100	80.1	80	5	42-120/19
105-67-9	2,4-Dimethylphenol	ND		100	83.5	84	100	87.4	87	5	33-132/23
51-28-5	2,4-Dinitrophenol	ND		200	208	104	200	215	108	3	21-145/26
534-52-1	4,6-Dinitro-o-cresol	ND		100	98.9	99	100	104	104	5	25-134/27
95-48-7	2-Methylphenol	ND		100	86.1	86	100	90.7	91	5	47-112/18
	3&4-Methylphenol	ND		100	83.4	83	100	85.2	85	2	44-113/19
88-75-5	2-Nitrophenol	ND		100	76.5	77	100	78.4	78	2	45-118/20
100-02-7	4-Nitrophenol	ND		100	94.8	95	100	98.1	98	3	23-144/28
87-86-5	Pentachlorophenol	ND		100	80.1	80	100	83.7	84	4	25-151/25
108-95-2	Phenol	ND		100	65.3	65	100	66.4	66	2	22-100/22
58-90-2	2,3,4,6-Tetrachlorophenol	ND		100	83.7	84	100	85.1	85	2	44-122/21
95-95-4	2,4,5-Trichlorophenol	ND		100	82.4	82	100	85.3	85	3	51-124/20
88-06-2	2,4,6-Trichlorophenol	ND		100	85.7	86	100	89.4	89	4	53-120/21
83-32-9	Acenaphthene	ND		100	82.1	82	100	83.2	83	1	52-120/23
208-96-8	Acenaphthylene	ND		100	75.7	76	100	77.7	78	3	50-101/22
98-86-2	Acetophenone	ND		100	88.5	89	100	89.4	89	1	31-141/23
120-12-7	Anthracene	ND		100	82.0	82	100	84.7	85	3	54-117/22
1912-24-9	Atrazine	ND		100	96.1	96	100	97.4	97	1	42-152/23
100-52-7	Benzaldehyde	ND		100	85.0	85	100	86.2	86	1	10-164/30
56-55-3	Benzo(a)anthracene	ND		100	92.4	92	100	93.0	93	1	40-123/24
50-32-8	Benzo(a)pyrene	ND		100	88.9	89	100	92.4	92	4	41-127/25
205-99-2	Benzo(b)fluoranthene	ND		100	91.7	92	100	95.2	95	4	39-127/27
191-24-2	Benzo(g,h,i)perylene	ND		100	85.3	85	100	90.4	90	6	34-128/28
207-08-9	Benzo(k)fluoranthene	ND		100	94.3	94	100	97.9	98	4	39-122/26
101-55-3	4-Bromophenyl phenyl ether	ND		100	87.3	87	100	90.9	91	4	51-124/23
85-68-7	Butyl benzyl phthalate	ND		100	95.3	95	100	96.3	96	1	21-146/28
92-52-4	1,1'-Biphenyl	ND		100	83.3	83	100	86.0	86	3	27-142/23
91-58-7	2-Chloronaphthalene	ND		100	77.9	78	100	78.6	79	1	51-109/23
106-47-8	4-Chloroaniline	ND		100	58.4	58	100	55.2	55	6	10-110/55
86-74-8	Carbazole	ND		100	91.1	91	100	94.4	94	4	52-116/22
105-60-2	Caprolactam	ND		100	41.8	42	100	42.9	43	3	10-106/34
218-01-9	Chrysene	ND		100	88.7	89	100	88.9	89	0	41-128/24
111-91-1	bis(2-Chloroethoxy)methane	ND		100	75.1	75	100	79.8	80	6	46-120/24
111-44-4	bis(2-Chloroethyl)ether	ND		100	87.7	88	100	89.8	90	2	42-123/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95059-MS	3E84765.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716
OP95059-MSD	3E84766.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716
JC22613-2	3E84767.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716

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

JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

CAS No.	Compound	JC22613-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	75.5	76	100	74.2	74	2	41-117/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	80.4	80	100	84.3	84	5	48-121/21
121-14-2	2,4-Dinitrotoluene	ND		100	99.6	100	100	102	102	2	54-123/27
606-20-2	2,6-Dinitrotoluene	ND		100	94.8	95	100	96.0	96	1	55-125/26
91-94-1	3,3'-Dichlorobenzidine	ND		200	136	68	200	138	69	1	10-107/47
53-70-3	Dibenzo(a,h)anthracene	ND		100	87.4	87	100	89.7	90	3	35-130/27
132-64-9	Dibenzofuran	ND		100	84.8	85	100	87.9	88	4	53-112/22
84-74-2	Di-n-butyl phthalate	ND		100	91.1	91	100	94.1	94	3	38-129/23
117-84-0	Di-n-octyl phthalate	ND		100	101	101	100	104	104	3	35-145/26
84-66-2	Diethyl phthalate	ND		100	85.7	86	100	86.4	86	1	16-136/30
131-11-3	Dimethyl phthalate	ND		100	86.3	86	100	87.8	88	2	10-143/39
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	92.0	92	100	91.5	92	1	34-141/28
206-44-0	Fluoranthene	ND		100	94.8	95	100	98.4	98	4	47-123/24
86-73-7	Fluorene	ND		100	84.6	85	100	85.6	86	1	56-117/22
118-74-1	Hexachlorobenzene	ND		100	71.1	71	100	73.6	74	3	46-125/24
87-68-3	Hexachlorobutadiene	ND		100	58.5	59	100	56.2	56	4	26-121/24
77-47-4	Hexachlorocyclopentadiene	ND		200	80.7	40	200	86.1	43	6	10-133/31
67-72-1	Hexachloroethane	ND		100	66.7	67	100	62.6	63	6	35-111/26
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	90.7	91	100	93.4	93	3	32-130/30
78-59-1	Isophorone	ND		100	78.4	78	100	81.7	82	4	47-126/23
90-12-0	1-Methylnaphthalene	ND		100	73.9	74	100	76.8	77	4	34-124/25
91-57-6	2-Methylnaphthalene	ND		100	70.7	71	100	73.4	73	4	34-123/24
88-74-4	2-Nitroaniline	ND		100	97.3	97	100	102	102	5	46-137/23
99-09-2	3-Nitroaniline	ND		100	75.0	75	100	70.8	71	6	10-110/50
100-01-6	4-Nitroaniline	ND		100	85.6	86	100	87.7	88	2	38-118/25
98-95-3	Nitrobenzene	ND		100	76.3	76	100	78.9	79	3	35-130/25
621-64-7	N-Nitroso-di-n-propylamine	ND		100	88.0	88	100	88.5	89	1	45-123/22
86-30-6	N-Nitrosodiphenylamine	ND		100	92.2	92	100	93.9	94	2	46-123/24
85-01-8	Phenanthrene	ND		100	85.3	85	100	88.6	89	4	48-121/23
129-00-0	Pyrene	ND		100	101	101	100	100	100	1	43-124/26
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		100	82.1	82	100	84.5	85	3	25-142/24

CAS No.	Surrogate Recoveries	MS	MSD	JC22613-2	Limits
367-12-4	2-Fluorophenol	83%	83%	62%	14-88%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95059-MS	3E84765.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716
OP95059-MSD	3E84766.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716
JC22613-2	3E84767.D	1	07/01/16	SB	06/24/16	OP95059	E3E3716

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

JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

CAS No.	Surrogate Recoveries	MS	MSD	JC22613-2	Limits
4165-62-2	Phenol-d5	69%	70%	40%	10-110%
118-79-6	2,4,6-Tribromophenol	67%	71%	67%	39-149%
4165-60-0	Nitrobenzene-d5	86%	87%	94%	32-128%
321-60-8	2-Fluorobiphenyl	90%	92%	89%	35-119%
1718-51-0	Terphenyl-d14	95%	95%	100%	10-126%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95018A-MS	4M66585.D	1	07/05/16	LK	06/23/16	OP95018A	E4M2995
OP95018A-MSD	4M66586.D	1	07/05/16	LK	06/23/16	OP95018A	E4M2995
JC22506-8	4M66587.D	1	07/05/16	LK	06/23/16	OP95018A	E4M2995

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

JC22613-1

CAS No.	Compound	JC22506-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
91-20-3	Naphthalene	ND		2	1.32	66	2	1.16	58	13	23-140/36
123-91-1	1,4-Dioxane	0.640		2	1.72	54	2	1.25	31	32* [a]	20-160/30

CAS No.	Surrogate Recoveries	MS	MSD	JC22506-8	Limits
367-12-4	2-Fluorophenol	56%	57%	36%	14-81%
4165-62-2	Phenol-d5	48%	47%	25%	11-54%
118-79-6	2,4,6-Tribromophenol	115%	110%	88%	35-145%
4165-60-0	Nitrobenzene-d5	71%	62%	62%	24-125%
321-60-8	2-Fluorobiphenyl	55%	49%	52%	19-127%
1718-51-0	Terphenyl-d14	102%	90%	75%	10-119%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95059A-MS	3M62830.D	1	07/07/16	LK	06/24/16	OP95059A	E3M2967
OP95059A-MSD	3M62831.D	1	07/07/16	LK	06/24/16	OP95059A	E3M2967
JC22515-5	4P17520.D	1	07/05/16	LK	06/24/16	OP95059A	E4P933

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

JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

CAS No.	Compound	JC22515-5 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
91-20-3	Naphthalene	ND		2	1.63	82	2	1.50	75	8	23-140/36
123-91-1	1,4-Dioxane	ND		2	0.986	49	2	0.909	45	8	20-160/30

CAS No.	Surrogate Recoveries	MS	MSD	JC22515-5	Limits
4165-60-0	Nitrobenzene-d5	71%	68%	75%	24-125%
321-60-8	2-Fluorobiphenyl	75%	73%	82%	19-127%
1718-51-0	Terphenyl-d14	86%	72%	101%	10-119%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2M3720-DFTPP
Lab File ID: 2M84432.D
Instrument ID: GCMS2M
Injection Date: 06/07/16
Injection Time: 09:17

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	28076	45.0		Pass
68	Less than 2.0% of mass 69	578	0.93	(1.95) [a]	Pass
69	Mass 69 relative abundance	29659	47.6		Pass
70	Less than 2.0% of mass 69	163	0.26	(0.55) [a]	Pass
127	40.0 - 60.0% of mass 198	34590	55.5		Pass
197	Less than 1.0% of mass 198	231	0.37		Pass
198	Base peak, 100% relative abundance	62365	100.0		Pass
199	5.0 - 9.0% of mass 198	4366	7.00		Pass
275	10.0 - 30.0% of mass 198	15903	25.5		Pass
365	1.0 - 100.0% of mass 198	3000	4.81		Pass
441	Present, but less than mass 443	5772	9.26	(77.1) [b]	Pass
442	40.0 - 100.0% of mass 198	38906	62.4		Pass
443	17.0 - 23.0% of mass 442	7487	12.0	(19.2) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2M3720-IC3720	2M84433.D	06/07/16	09:32	00:15	Initial cal 2
E2M3720-IC3720	2M84434.D	06/07/16	09:59	00:42	Initial cal 1
E2M3720-IC3720	2M84435.D	06/07/16	10:26	01:09	Initial cal 100
E2M3720-IC3720	2M84436.D	06/07/16	10:52	01:35	Initial cal 80
E2M3720-ICC3720	2M84437.D	06/07/16	11:18	02:01	Initial cal 50
E2M3720-IC3720	2M84438.D	06/07/16	11:45	02:28	Initial cal 25
E2M3720-IC3720	2M84439.D	06/07/16	12:11	02:54	Initial cal 10
E2M3720-IC3720	2M84440.D	06/07/16	12:37	03:20	Initial cal 5
E2M3720-ICV3720	2M84441.D	06/07/16	13:04	03:47	Initial cal verification 50
E2M3720-ICV3720	2M84442.D	06/07/16	13:30	04:13	Initial cal verification 50
E2M3720-ICV3720	2M84443.D	06/07/16	13:56	04:39	Initial cal verification 50
E2M3720-ICV3720	2M84444.D	06/07/16	14:23	05:06	Initial cal verification 50
E2M3720-ICV3720	2M84446.D	06/07/16	15:15	05:58	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2M3754-DFTPP
Lab File ID: 2M85107.D
Instrument ID: GCMS2M
Injection Date: 06/28/16
Injection Time: 09:52

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	35314	47.2		Pass
68	Less than 2.0% of mass 69	552	0.74	(1.73) [a]	Pass
69	Mass 69 relative abundance	31975	42.7		Pass
70	Less than 2.0% of mass 69	261	0.35	(0.82) [a]	Pass
127	40.0 - 60.0% of mass 198	42834	57.3		Pass
197	Less than 1.0% of mass 198	740	0.99		Pass
198	Base peak, 100% relative abundance	74813	100.0		Pass
199	5.0 - 9.0% of mass 198	4542	6.07		Pass
275	10.0 - 30.0% of mass 198	20160	26.9		Pass
365	1.0 - 100.0% of mass 198	4586	6.13		Pass
441	Present, but less than mass 443	8383	11.2	(81.9) [b]	Pass
442	40.0 - 100.0% of mass 198	56266	75.2		Pass
443	17.0 - 23.0% of mass 442	10241	13.7	(18.2) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2M3754-CC3720	2M85108.D	06/28/16	10:09	00:17	Continuing cal 25
OP94952-MB2	2M85109.D	06/28/16	10:40	00:48	Method Blank
OP94952-LB13	2M85110.D	06/28/16	11:07	01:15	Leachate Blank
OP94952-LB17	2M85111.D	06/28/16	11:33	01:41	Leachate Blank
OP94952-BS2	2M85112.D	06/28/16	11:59	02:07	Blank Spike
ZZZZZZ	2M85115.D	06/28/16	13:19	03:27	(unrelated sample)
ZZZZZZ	2M85116.D	06/28/16	13:45	03:53	(unrelated sample)
ZZZZZZ	2M85117.D	06/28/16	14:54	05:02	(unrelated sample)
OP94859A-MB1	2M85121.D	06/28/16	16:14	06:22	Method Blank
ZZZZZZ	2M85122.D	06/28/16	16:41	06:49	(unrelated sample)
ZZZZZZ	2M85123.D	06/28/16	17:07	07:15	(unrelated sample)
OP95018A-MB1	2M85124.D	06/28/16	17:34	07:42	Method Blank
ZZZZZZ	2M85125.D	06/28/16	18:01	08:09	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3E3699-DFTPP
Lab File ID: 3E84385.D
Instrument ID: GCMS3E
Injection Date: 06/22/16
Injection Time: 09:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	19816	43.1		Pass
68	Less than 2.0% of mass 69	138	0.30	(0.67) [a]	Pass
69	Mass 69 relative abundance	20559	44.7		Pass
70	Less than 2.0% of mass 69	52	0.11	(0.25) [a]	Pass
127	40.0 - 60.0% of mass 198	27055	58.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	46000	100.0		Pass
199	5.0 - 9.0% of mass 198	3276	7.12		Pass
275	10.0 - 30.0% of mass 198	13103	28.5		Pass
365	1.0 - 100.0% of mass 198	2054	4.47		Pass
441	Present, but less than mass 443	5905	12.8	(83.4) [b]	Pass
442	40.0 - 100.0% of mass 198	36501	79.4		Pass
443	17.0 - 23.0% of mass 442	7084	15.4	(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
E3E3699-IC3699	3E84387.D	06/22/16	10:40	00:52	Initial cal 2
E3E3699-IC3699	3E84388.D	06/22/16	11:07	01:19	Initial cal 1
E3E3699-IC3699	3E84389.D	06/22/16	11:34	01:46	Initial cal 100
E3E3699-IC3699	3E84390.D	06/22/16	12:02	02:14	Initial cal 80
E3E3699-IC3699	3E84391.D	06/22/16	12:29	02:41	Initial cal 25
E3E3699-IC3699	3E84392.D	06/22/16	12:56	03:08	Initial cal 10
E3E3699-IC3699	3E84393.D	06/22/16	13:23	03:35	Initial cal 5
E3E3699-ICC3699	3E84394.D	06/22/16	13:50	04:02	Initial cal 50
E3E3699-ICV3699	3E84395.D	06/22/16	14:17	04:29	Initial cal verification 50
E3E3699-ICV3699	3E84396.D	06/22/16	14:44	04:56	Initial cal verification 50
E3E3699-ICV3699	3E84397.D	06/22/16	15:11	05:23	Initial cal verification 50
E3E3699-ICV3699	3E84398.D	06/22/16	15:39	05:51	Initial cal verification 50
E3E3699-ICV3699	3E84400.D	06/22/16	16:33	06:45	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3E3700-DFTPP
Lab File ID: 3E84407.D
Instrument ID: GCMS3E
Injection Date: 06/22/16
Injection Time: 18:13

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	13193	31.3		Pass
68	Less than 2.0% of mass 69	54	0.13	(0.36) [a]	Pass
69	Mass 69 relative abundance	15136	35.9		Pass
70	Less than 2.0% of mass 69	60	0.14	(0.40) [a]	Pass
127	40.0 - 60.0% of mass 198	21600	51.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	42130	100.0		Pass
199	5.0 - 9.0% of mass 198	2745	6.52		Pass
275	10.0 - 30.0% of mass 198	12241	29.1		Pass
365	1.0 - 100.0% of mass 198	1457	3.46		Pass
441	Present, but less than mass 443	5574	13.2	(90.4) [b]	Pass
442	40.0 - 100.0% of mass 198	32954	78.2		Pass
443	17.0 - 23.0% of mass 442	6168	14.6	(18.7) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3E3700-IC3700	3E84408A.D	06/22/16	18:28	00:15	Initial cal 100
E3E3700-IC3700	3E84409.D	06/22/16	18:55	00:42	Initial cal 80
E3E3700-ICC3700	3E84410.D	06/22/16	19:51	01:38	Initial cal 50
E3E3700-IC3700	3E84411.D	06/22/16	20:18	02:05	Initial cal 25
E3E3700-IC3700	3E84412.D	06/22/16	20:45	02:32	Initial cal 10
E3E3700-IC3700	3E84413.D	06/22/16	21:12	02:59	Initial cal 5
E3E3700-IC3700	3E84414.D	06/22/16	21:40	03:27	Initial cal 2
E3E3700-IC3700	3E84415.D	06/22/16	22:07	03:54	Initial cal 1
E3E3700-ICV3700	3E84416.D	06/22/16	22:34	04:21	Initial cal verification 50
E3E3700-ICV3700	3E84417A.D	06/22/16	23:01	04:48	Initial cal verification 50
E3E3700-ICV3699	3E84417.D	06/22/16	23:01	04:48	Initial cal verification 50
E3E3700-ICV3700	3E84419.D	06/22/16	23:55	05:42	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3E3716-DFTPP
Lab File ID: 3E84759.D
Instrument ID: GCMS3E
Injection Date: 07/01/16
Injection Time: 20:09

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22765	42.6		Pass
68	Less than 2.0% of mass 69	368	0.69	(1.53) [a]	Pass
69	Mass 69 relative abundance	24065	45.1		Pass
70	Less than 2.0% of mass 69	223	0.42	(0.93) [a]	Pass
127	40.0 - 60.0% of mass 198	29871	55.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	53392	100.0		Pass
199	5.0 - 9.0% of mass 198	3511	6.58		Pass
275	10.0 - 30.0% of mass 198	14227	26.6		Pass
365	1.0 - 100.0% of mass 198	1800	3.37		Pass
441	Present, but less than mass 443	4800	8.99	(80.9) [b]	Pass
442	40.0 - 100.0% of mass 198	30008	56.2		Pass
443	17.0 - 23.0% of mass 442	5933	11.1	(19.8) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3E3716-CC3699	3E84760.D	07/01/16	20:27	00:18	Continuing cal 25
E3E3716-CC3700	3E84761.D	07/01/16	20:55	00:46	Continuing cal 25
OP95059-MB1	3E84763.D	07/01/16	21:50	01:41	Method Blank
OP95059-BS1	3E84764.D	07/01/16	22:17	02:08	Blank Spike
OP95059-MS	3E84765.D	07/01/16	22:44	02:35	Matrix Spike
OP95059-MSD	3E84766.D	07/01/16	23:12	03:03	Matrix Spike Duplicate
JC22613-2	3E84767.D	07/01/16	23:39	03:30	MW-5
JC22613-3	3E84768.D	07/02/16	00:06	03:57	MW-13
JC22613-4	3E84769.D	07/02/16	00:33	04:24	BR-4
JC22613-5	3E84770.D	07/02/16	01:00	04:51	MW-16
JC22613-6	3E84771.D	07/02/16	01:28	05:19	MW-9
JC22613-7	3E84772.D	07/02/16	01:55	05:46	MW-23S
JC22613-8	3E84773.D	07/02/16	02:22	06:13	MW-21S
ZZZZZZ	3E84775.D	07/02/16	03:16	07:07	(unrelated sample)
JC23038-3A	3E84776.D	07/02/16	03:43	07:34	(used for QC only; not part of job JC22613)
JC23038-3A	3E84777.D	07/02/16	04:10	08:01	(used for QC only; not part of job JC22613)
ZZZZZZ	3E84778.D	07/02/16	04:37	08:28	(unrelated sample)
ZZZZZZ	3E84779.D	07/02/16	05:04	08:55	(unrelated sample)
JC23038-3A	3E84780.D	07/02/16	05:31	09:22	(used for QC only; not part of job JC22613)

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	E3E3716-DFTPP	**Injection Date:**	07/01/16
Lab File ID:	3E84759.D	**Injection Time:**	20:09
Instrument ID:	GCMS3E		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	3E84781.D	07/02/16	05:57	09:48	(unrelated sample)
ZZZZZZ	3E84782.D	07/02/16	06:24	10:15	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2942-DFTPP
Lab File ID: 3M62370.D
Instrument ID: GCMS3M
Injection Date: 06/20/16
Injection Time: 18:23

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	142639	39.9		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	150640	42.2		Pass
70	Less than 2.0% of mass 69	131	0.04	(0.09) [a]	Pass
127	40.0 - 60.0% of mass 198	172819	48.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	357376	100.0		Pass
199	5.0 - 9.0% of mass 198	24760	6.93		Pass
275	10.0 - 30.0% of mass 198	82808	23.2		Pass
365	1.0 - 100.0% of mass 198	10751	3.01		Pass
441	Present, but less than mass 443	56707	15.9	(81.1) [b]	Pass
442	40.0 - 100.0% of mass 198	352192	98.5		Pass
443	17.0 - 23.0% of mass 442	69907	19.6	(19.8) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3M2942-IC2942	3M62371.D	06/20/16	18:49	00:26	Initial cal 0.2
E3M2942-IC2942	3M62372.D	06/20/16	19:23	01:00	Initial cal 0.1
E3M2942-ICC2942	3M62373.D	06/20/16	19:56	01:33	Initial cal 1.0
E3M2942-IC2942	3M62374.D	06/20/16	20:30	02:07	Initial cal 0.5
E3M2942-IC2942	3M62376.D	06/20/16	21:36	03:13	Initial cal 0.02
E3M2942-IC2942	3M62377.D	06/20/16	22:10	03:47	Initial cal 0.01
E3M2942-IC2942	3M62378.D	06/20/16	22:43	04:20	Initial cal 5.0
E3M2942-IC2942	3M62379.D	06/20/16	23:16	04:53	Initial cal 2.5
E3M2942-IC2942	3M62380.D	06/20/16	23:50	05:27	Initial cal 0.05
E3M2942-ICV2942	3M62382.D	06/21/16	00:56	06:33	Initial cal verification 1.0

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2943-DFTPP
Lab File ID: 3M62383.D
Instrument ID: GCMS3M
Injection Date: 06/21/16
Injection Time: 09:06

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	139176	44.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	143977	45.7		Pass
70	Less than 2.0% of mass 69	932	0.30	(0.65) [a]	Pass
127	40.0 - 60.0% of mass 198	158565	50.3		Pass
197	Less than 1.0% of mass 198	1950	0.62		Pass
198	Base peak, 100% relative abundance	315368	100.0		Pass
199	5.0 - 9.0% of mass 198	21167	6.71		Pass
275	10.0 - 30.0% of mass 198	68458	21.7		Pass
365	1.0 - 100.0% of mass 198	9982	3.17		Pass
441	Present, but less than mass 443	40278	12.8	(86.4) [b]	Pass
442	40.0 - 100.0% of mass 198	257583	81.7		Pass
443	17.0 - 23.0% of mass 442	46645	14.8	(18.1) [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
E3M2943-ICV2942	3M62384.D	06/21/16	09:26	00:20	Initial cal verification 1

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2951-DFTPP
Lab File ID: 3M62530.D
Instrument ID: GCMS3M
Injection Date: 06/26/16
Injection Time: 15:56

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	130049	45.7		Pass
68	Less than 2.0% of mass 69	240	0.08	(0.19) [a]	Pass
69	Mass 69 relative abundance	126838	44.6		Pass
70	Less than 2.0% of mass 69	835	0.29	(0.66) [a]	Pass
127	40.0 - 60.0% of mass 198	143488	50.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	284509	100.0		Pass
199	5.0 - 9.0% of mass 198	19099	6.71		Pass
275	10.0 - 30.0% of mass 198	63839	22.4		Pass
365	1.0 - 100.0% of mass 198	7977	2.80		Pass
441	Present, but less than mass 443	35465	12.5	(74.8) [b]	Pass
442	40.0 - 100.0% of mass 198	237733	83.6		Pass
443	17.0 - 23.0% of mass 442	47402	16.7	(19.9) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3M2951-CC2942	3M62531.D	06/26/16	16:13	00:17	Continuing cal 1.0
OP95018A-MB1	3M62532.D	06/26/16	16:58	01:02	Method Blank
OP95018A-BS12	3M62533.D	06/26/16	17:31	01:35	Blank Spike
ZZZZZZ	3M62534.D	06/26/16	18:04	02:08	(unrelated sample)
ZZZZZZ	3M62535.D	06/26/16	18:37	02:41	(unrelated sample)
ZZZZZZ	3M62536.D	06/26/16	19:10	03:14	(unrelated sample)
ZZZZZZ	3M62537.D	06/26/16	19:44	03:48	(unrelated sample)
ZZZZZZ	3M62538.D	06/26/16	20:17	04:21	(unrelated sample)
ZZZZZZ	3M62539.D	06/26/16	20:50	04:54	(unrelated sample)
ZZZZZZ	3M62540.D	06/26/16	21:23	05:27	(unrelated sample)
ZZZZZZ	3M62541.D	06/26/16	21:56	06:00	(unrelated sample)
ZZZZZZ	3M62542.D	06/26/16	22:29	06:33	(unrelated sample)
ZZZZZZ	3M62543.D	06/26/16	23:01	07:05	(unrelated sample)
JC22613-1	3M62544.D	06/26/16	23:34	07:38	MW-3

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2967-DFTPP
Lab File ID: 3M62826.D
Instrument ID: GCMS3M
Injection Date: 07/07/16
Injection Time: 15:41

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	198883	42.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	205131	43.8		Pass
70	Less than 2.0% of mass 69	1229	0.26	(0.60) [a]	Pass
127	40.0 - 60.0% of mass 198	227128	48.5		Pass
197	Less than 1.0% of mass 198	1379	0.29		Pass
198	Base peak, 100% relative abundance	467840	100.0		Pass
199	5.0 - 9.0% of mass 198	30091	6.43		Pass
275	10.0 - 30.0% of mass 198	106109	22.7		Pass
365	1.0 - 100.0% of mass 198	15460	3.30		Pass
441	Present, but less than mass 443	71271	15.2	(92.4) [b]	Pass
442	40.0 - 100.0% of mass 198	420664	89.9		Pass
443	17.0 - 23.0% of mass 442	77173	16.5	(18.3) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3M2967-CC2942	3M62827.D	07/07/16	15:55	00:14	Continuing cal 1
OP95059A-MB1	3M62828.D	07/07/16	16:32	00:51	Method Blank
OP95059A-BS12	3M62829.D	07/07/16	17:05	01:24	Blank Spike
OP95059A-MS	3M62830.D	07/07/16	17:39	01:58	Matrix Spike
OP95059A-MSD	3M62831.D	07/07/16	18:12	02:31	Matrix Spike Duplicate
JC22613-2	3M62832.D	07/07/16	18:45	03:04	MW-5
JC22613-3	3M62833.D	07/07/16	19:18	03:37	MW-13
JC22613-4	3M62834.D	07/07/16	19:51	04:10	BR-4
JC22613-5	3M62835.D	07/07/16	20:24	04:43	MW-16
JC22613-6	3M62836.D	07/07/16	20:57	05:16	MW-9
JC22613-7	3M62837.D	07/07/16	21:30	05:49	MW-23S
JC22613-8	3M62838.D	07/07/16	22:03	06:22	MW-21S
ZZZZZZ	3M62839.D	07/07/16	22:37	06:56	(unrelated sample)
ZZZZZZ	3M62840.D	07/07/16	23:09	07:28	(unrelated sample)
ZZZZZZ	3M62841.D	07/07/16	23:42	08:01	(unrelated sample)
ZZZZZZ	3M62842.D	07/08/16	00:15	08:34	(unrelated sample)
ZZZZZZ	3M62843.D	07/08/16	00:48	09:07	(unrelated sample)
ZZZZZZ	3M62844.D	07/08/16	01:21	09:40	(unrelated sample)
ZZZZZZ	3M62845.D	07/08/16	01:54	10:13	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	E3M2967-DFTPP	**Injection Date:**	07/07/16
Lab File ID:	3M62826.D	**Injection Time:**	15:41
Instrument ID:	GCMS3M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	3M62846.D	07/08/16	02:26	10:45	(unrelated sample)
ZZZZZZ	3M62847.D	07/08/16	02:59	11:18	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2974-DFTPP
Lab File ID: 4M66179.D
Instrument ID: GCMS4M
Injection Date: 06/20/16
Injection Time: 22:06

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	58020	41.7		Pass
68	Less than 2.0% of mass 69	561	0.40	(0.91) [a]	Pass
69	Mass 69 relative abundance	61706	44.3		Pass
70	Less than 2.0% of mass 69	274	0.20	(0.44) [a]	Pass
127	40.0 - 60.0% of mass 198	69656	50.0		Pass
197	Less than 1.0% of mass 198	387	0.28		Pass
198	Base peak, 100% relative abundance	139197	100.0		Pass
199	5.0 - 9.0% of mass 198	9146	6.57		Pass
275	10.0 - 30.0% of mass 198	28704	20.6		Pass
365	1.0 - 100.0% of mass 198	3401	2.44		Pass
441	Present, but less than mass 443	15333	11.0	(76.6) [b]	Pass
442	40.0 - 100.0% of mass 198	101275	72.8		Pass
443	17.0 - 23.0% of mass 442	20015	14.4	(19.8) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M2974-IC2974	4M66181.D	06/20/16	23:01	00:55	Initial cal 0.1
E4M2974-IC2974	4M66182.D	06/20/16	23:31	01:25	Initial cal 0.2
E4M2974-IC2974	4M66183.D	06/21/16	00:01	01:55	Initial cal 0.5
E4M2974-ICC2974	4M66184.D	06/21/16	00:31	02:25	Initial cal 1.0
E4M2974-IC2974	4M66185.D	06/21/16	01:01	02:55	Initial cal 0.05
E4M2974-IC2974	4M66186.D	06/21/16	01:31	03:25	Initial cal 0.02
E4M2974-IC2974	4M66187.D	06/21/16	02:01	03:55	Initial cal 0.01
E4M2974-IC2974	4M66188.D	06/21/16	02:31	04:25	Initial cal 5.0
E4M2974-IC2974	4M66189.D	06/21/16	03:01	04:55	Initial cal 2.5
E4M2974-ICV2974	4M66190.D	06/21/16	03:30	05:24	Initial cal verification 1.0
E4M2974-ICV2974	4M66191.D	06/21/16	04:00	05:54	Initial cal verification 1.0

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2995-DFTPP
Lab File ID: 4M66576.D
Instrument ID: GCMS4M
Injection Date: 07/05/16
Injection Time: 09:58

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	45180	40.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	52997	47.5		Pass
70	Less than 2.0% of mass 69	355	0.32	(0.67) [a]	Pass
127	40.0 - 60.0% of mass 198	55376	49.7		Pass
197	Less than 1.0% of mass 198	237	0.21		Pass
198	Base peak, 100% relative abundance	111456	100.0		Pass
199	5.0 - 9.0% of mass 198	7452	6.69		Pass
275	10.0 - 30.0% of mass 198	25649	23.0		Pass
365	1.0 - 100.0% of mass 198	3219	2.89		Pass
441	Present, but less than mass 443	14893	13.4	(77.6) [b]	Pass
442	40.0 - 100.0% of mass 198	93435	83.8		Pass
443	17.0 - 23.0% of mass 442	19202	17.2	(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
E4M2995-CC2974	4M66577.D	07/05/16	10:11	00:13	Continuing cal .5
OP95069A-MB1	4M66578.D	07/05/16	10:47	00:49	Method Blank
OP95069A-BS12	4M66579.D	07/05/16	11:20	01:22	Blank Spike
ZZZZZZ	4M66580.D	07/05/16	11:52	01:54	(unrelated sample)
OP95069A-MS	4M66581.D	07/05/16	12:24	02:26	Matrix Spike
OP95069A-MSD	4M66582.D	07/05/16	12:56	02:58	Matrix Spike Duplicate
OP95018A-MB1	4M66583.D	07/05/16	13:28	03:30	Method Blank
OP95018A-BS12	4M66584.D	07/05/16	14:00	04:02	Blank Spike
JC22506-16	4M66591.D	07/05/16	14:32	04:34	(used for QC only; not part of job JC22613)
OP95018A-MS	4M66585.D	07/05/16	15:04	05:06	Matrix Spike
OP95018A-MSD	4M66586.D	07/05/16	15:37	05:39	Matrix Spike Duplicate
JC22506-8	4M66587.D	07/05/16	16:09	06:11	(used for QC only; not part of job JC22613)
ZZZZZZ	4M66588.D	07/05/16	16:42	06:44	(unrelated sample)
ZZZZZZ	4M66589.D	07/05/16	17:15	07:17	(unrelated sample)
ZZZZZZ	4M66590.D	07/05/16	17:47	07:49	(unrelated sample)
OP95136A-MB1	4M66592.D	07/05/16	18:20	08:22	Method Blank
ZZZZZZ	4M66593.D	07/05/16	18:52	08:54	(unrelated sample)
ZZZZZZ	4M66594.D	07/05/16	19:24	09:26	(unrelated sample)
ZZZZZZ	4M66595.D	07/05/16	19:57	09:59	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	E4M2995-DFTPP	**Injection Date:**	07/05/16
Lab File ID:	4M66576.D	**Injection Time:**	09:58
Instrument ID:	GCMS4M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4M66596.D	07/05/16	20:28	10:30	(unrelated sample)
ZZZZZZ	4M66597.D	07/05/16	20:59	11:01	(unrelated sample)
ZZZZZZ	4M66598.D	07/05/16	21:29	11:31	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4P887-DFTPP
Lab File ID: 4P16668.D
Instrument ID: GCMS4P
Injection Date: 06/06/16
Injection Time: 09:57

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	65770	46.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	75046	52.9		Pass
70	Less than 2.0% of mass 69	350	0.25	(0.47) [a]	Pass
127	40.0 - 60.0% of mass 198	74929	52.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	141872	100.0		Pass
199	5.0 - 9.0% of mass 198	9305	6.56		Pass
275	10.0 - 30.0% of mass 198	26127	18.4		Pass
365	1.0 - 100.0% of mass 198	2425	1.71		Pass
441	Present, but less than mass 443	12236	8.62	(83.1) [b]	Pass
442	40.0 - 100.0% of mass 198	79101	55.8		Pass
443	17.0 - 23.0% of mass 442	14730	10.4	(18.6) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4P887-IC887	4P16669.D	06/06/16	10:09	00:12	Initial cal .5
E4P887-ICC887	4P16670.D	06/06/16	10:50	00:53	Initial cal 1
E4P887-IC887	4P16671.D	06/06/16	11:20	01:23	Initial cal .2
E4P887-IC887	4P16672.D	06/06/16	11:50	01:53	Initial cal .1
E4P887-IC887	4P16673.D	06/06/16	12:19	02:22	Initial cal .05
E4P887-IC887	4P16674.D	06/06/16	12:49	02:52	Initial cal .02
E4P887-IC887	4P16675.D	06/06/16	13:19	03:22	Initial cal .01
E4P887-IC887	4P16676.D	06/06/16	13:49	03:52	Initial cal 5
E4P887-IC887	4P16677.D	06/06/16	14:19	04:22	Initial cal 2.5
E4P887-ICV887	4P16678.D	06/06/16	14:49	04:52	Initial cal verification 1
E4P887-ICV887	4P16679.D	06/06/16	15:19	05:22	Initial cal verification 1

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4P933-DFTPP
Lab File ID: 4P17516.D
Instrument ID: GCMS4P
Injection Date: 07/05/16
Injection Time: 15:33

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	63527	42.0		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	71115	47.1		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	75743	50.1		Pass
197	Less than 1.0% of mass 198	1280	0.85		Pass
198	Base peak, 100% relative abundance	151143	100.0		Pass
199	5.0 - 9.0% of mass 198	10509	6.95		Pass
275	10.0 - 30.0% of mass 198	34261	22.7		Pass
365	1.0 - 100.0% of mass 198	3013	1.99		Pass
441	Present, but less than mass 443	8045	5.32	(36.8) [b]	Pass
442	40.0 - 100.0% of mass 198	113034	74.8		Pass
443	17.0 - 23.0% of mass 442	21880	14.5	(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
E4P933-CC887	4P17517.D	07/05/16	15:45	00:12	Continuing cal .5
OP95059A-MB1	4P17518.D	07/05/16	16:15	00:42	Method Blank
OP95059A-BS12	4P17519.D	07/05/16	16:45	01:12	Blank Spike
JC22515-5	4P17520.D	07/05/16	17:16	01:43	(used for QC only; not part of job JC22613)
ZZZZZZ	4P17521.D	07/05/16	17:46	02:13	(unrelated sample)
ZZZZZZ	4P17522.D	07/05/16	18:17	02:44	(unrelated sample)
ZZZZZZ	4P17523.D	07/05/16	18:47	03:14	(unrelated sample)
ZZZZZZ	4P17524.D	07/05/16	19:18	03:45	(unrelated sample)
ZZZZZZ	4P17525.D	07/05/16	19:48	04:15	(unrelated sample)
ZZZZZZ	4P17526.D	07/05/16	20:18	04:45	(unrelated sample)
ZZZZZZ	4P17527.D	07/05/16	20:49	05:16	(unrelated sample)
ZZZZZZ	4P17528.D	07/05/16	21:19	05:46	(unrelated sample)
ZZZZZZ	4P17529.D	07/05/16	21:50	06:17	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5307-DFTPP
Lab File ID: M125261.D
Instrument ID: GCMSM
Injection Date: 06/16/16
Injection Time: 12:28

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	86768	35.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	107379	44.1		Pass
70	Less than 2.0% of mass 69	937	0.38	(0.87) [a]	Pass
127	40.0 - 60.0% of mass 198	116545	47.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	243434	100.0		Pass
199	5.0 - 9.0% of mass 198	16038	6.59		Pass
275	10.0 - 30.0% of mass 198	56832	23.3		Pass
365	1.0 - 100.0% of mass 198	5769	2.37		Pass
441	Present, but less than mass 443	20436	8.39	(74.3) [b]	Pass
442	40.0 - 100.0% of mass 198	143365	58.9		Pass
443	17.0 - 23.0% of mass 442	27519	11.3	(19.2) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM5307-IC5307	M125262.D	06/16/16	12:56	00:28	Initial cal 2
EM5307-IC5307	M125263.D	06/16/16	13:25	00:57	Initial cal 1
EM5307-IC5307	M125264.D	06/16/16	13:54	01:26	Initial cal 100
EM5307-IC5307	M125265.D	06/16/16	14:23	01:55	Initial cal 80
EM5307-ICC5307	M125266.D	06/16/16	14:51	02:23	Initial cal 50
EM5307-IC5307	M125267.D	06/16/16	15:21	02:53	Initial cal 25
EM5307-IC5307	M125268.D	06/16/16	15:49	03:21	Initial cal 10
EM5307-IC5307	M125269.D	06/16/16	16:18	03:50	Initial cal 5

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5308-DFTPP
Lab File ID: M125270.D
Instrument ID: GCMSM
Injection Date: 06/16/16
Injection Time: 17:01

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	100016	37.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	127904	47.6		Pass
70	Less than 2.0% of mass 69	633	0.24	(0.49) [a]	Pass
127	40.0 - 60.0% of mass 198	138621	51.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	268738	100.0		Pass
199	5.0 - 9.0% of mass 198	19323	7.19		Pass
275	10.0 - 30.0% of mass 198	56652	21.1		Pass
365	1.0 - 100.0% of mass 198	6675	2.48		Pass
441	Present, but less than mass 443	20921	7.78	(87.0) [b]	Pass
442	40.0 - 100.0% of mass 198	141453	52.6		Pass
443	17.0 - 23.0% of mass 442	24057	8.95	(17.0) [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
EM5308-IC5308	M125271.D	06/16/16	17:34	00:33	Initial cal 100
EM5308-IC5308	M125272.D	06/16/16	18:03	01:02	Initial cal 80
EM5308-ICC5308	M125273.D	06/16/16	18:31	01:30	Initial cal 50
EM5308-IC5308	M125274.D	06/16/16	19:00	01:59	Initial cal 25
EM5308-IC5308	M125275.D	06/16/16	19:29	02:28	Initial cal 10
EM5308-IC5308	M125276.D	06/16/16	19:58	02:57	Initial cal 5
EM5308-IC5308	M125277.D	06/16/16	20:27	03:26	Initial cal 2
EM5308-IC5308	M125278.D	06/16/16	20:56	03:55	Initial cal 1
EM5308-ICV5307	M125280.D	06/16/16	21:54	04:53	Initial cal verification 50
EM5308-ICV5307	M125281.D	06/16/16	22:23	05:22	Initial cal verification 50
EM5308-ICV5308	M125281A.D	06/16/16	22:23	05:22	Initial cal verification 50
EM5308-ICV5307	M125282.D	06/16/16	22:51	05:50	Initial cal verification 50
EM5308-ICV5308	M125282A.D	06/16/16	22:51	05:50	Initial cal verification 50
EM5308-ICV5307	M125283.D	06/16/16	23:20	06:19	Initial cal verification 50
EM5308-ICV5307	M125284.D	06/16/16	23:49	06:48	Initial cal verification 50
EM5308-ICV5308	M125285.D	06/17/16	00:18	07:17	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5310-DFTPP
Lab File ID: M125313.D
Instrument ID: GCMSM
Injection Date: 06/19/16
Injection Time: 07:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	132663	36.2		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	161863	44.2		Pass
70	Less than 2.0% of mass 69	964	0.26	(0.60) [a]	Pass
127	40.0 - 60.0% of mass 198	182271	49.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	366592	100.0		Pass
199	5.0 - 9.0% of mass 198	24856	6.78		Pass
275	10.0 - 30.0% of mass 198	79949	21.8		Pass
365	1.0 - 100.0% of mass 198	7748	2.11		Pass
441	Present, but less than mass 443	27910	7.61	(70.4) [b]	Pass
442	40.0 - 100.0% of mass 198	191608	52.3		Pass
443	17.0 - 23.0% of mass 442	39663	10.8	(20.7) [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
EM5310-ICV5307	M125314.D	06/19/16	08:09	00:16	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5319-DFTPP
Lab File ID: M125528.D
Instrument ID: GCMSM
Injection Date: 06/23/16
Injection Time: 21:32

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	61309	34.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	77459	43.4		Pass
70	Less than 2.0% of mass 69	306	0.17	(0.40) [a]	Pass
127	40.0 - 60.0% of mass 198	83642	46.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	178632	100.0		Pass
199	5.0 - 9.0% of mass 198	10521	5.89		Pass
275	10.0 - 30.0% of mass 198	42805	24.0		Pass
365	1.0 - 100.0% of mass 198	4922	2.76		Pass
441	Present, but less than mass 443	17575	9.84	(75.8) [b]	Pass
442	40.0 - 100.0% of mass 198	118057	66.1		Pass
443	17.0 - 23.0% of mass 442	23195	13.0	(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
EM5319-CC5307	M125529.D	06/23/16	21:46	00:14	Continuing cal 50
EM5319-CC5308	M125530.D	06/23/16	22:15	00:43	Continuing cal 50
OP94990-MB1	M125532.D	06/23/16	23:13	01:41	Method Blank
OP94990-BS1	M125533.D	06/23/16	23:42	02:10	Blank Spike
OP95018-MB1	M125534.D	06/24/16	00:11	02:39	Method Blank
OP95018-BS1	M125535.D	06/24/16	00:40	03:08	Blank Spike
OP95018-MS	M125536.D	06/24/16	01:09	03:37	Matrix Spike
OP95018-MSD	M125537.D	06/24/16	01:38	04:06	Matrix Spike Duplicate
ZZZZZZ	M125538.D	06/24/16	02:07	04:35	(unrelated sample)
ZZZZZZ	M125539.D	06/24/16	02:36	05:04	(unrelated sample)
ZZZZZZ	M125540.D	06/24/16	03:05	05:33	(unrelated sample)
ZZZZZZ	M125541.D	06/24/16	03:34	06:02	(unrelated sample)
JC22506-9	M125542.D	06/24/16	04:02	06:30	(used for QC only; not part of job JC22613)
ZZZZZZ	M125543.D	06/24/16	04:31	06:59	(unrelated sample)
ZZZZZZ	M125544.D	06/24/16	05:00	07:28	(unrelated sample)
JC22613-1	M125545.D	06/24/16	05:29	07:57	MW-3
JC22591-32	M125546.D	06/24/16	05:58	08:26	(used for QC only; not part of job JC22613)
OP94990-MS	M125547.D	06/24/16	06:26	08:54	Matrix Spike
OP94990-MSD	M125548.D	06/24/16	06:55	09:23	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	EM5319-DFTPP	**Injection Date:**	06/23/16
Lab File ID:	M125528.D	**Injection Time:**	21:32
Instrument ID:	GCMSM		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	M125550.D	06/24/16	07:24	09:52	(unrelated sample)
ZZZZZZ	M125551.D	06/24/16	07:52	10:20	(unrelated sample)
ZZZZZZ	M125552.D	06/24/16	08:21	10:49	(unrelated sample)
ZZZZZZ	M125549.D	06/24/16	08:50	11:18	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E2M3754-CC3720	**Injection Date:**	06/28/16
Lab File ID:	2M85108.D	**Injection Time:**	10:09
Instrument ID:	GCMS2M	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	130661	4.84	561803	5.96	357030	8.07	599514	10.28	410015	14.50	270750	16.64
Upper Limit [a]	261322	5.34	1123606	6.46	714060	8.57	1199028	10.78	820030	15.00	541500	17.14
Lower Limit [b]	65331	4.34	280902	5.46	178515	7.57	299757	9.78	205008	14.00	135375	16.14

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP94952-MB2	167904	4.84	667794	5.96	378251	8.07	648095	10.28	511200	14.50	362106	16.64
OP94952-LB13	152682	4.84	620859	5.96	364893	8.07	596771	10.28	467130	14.49	336525	16.64
OP94952-LB17	143285	4.84	585365	5.96	343107	8.07	574552	10.28	470719	14.49	355089	16.63
OP94952-BS2	162868	4.84	693997	5.96	348300	8.07	552609	10.28	468294	14.50	310334	16.63
ZZZZZZ	134577	4.84	512132	5.96	277536	8.07	448839	10.28	404601	14.49	328973	16.63
ZZZZZZ	121876	4.84	464925	5.96	246571	8.07	392379	10.28	365199	14.49	298321	16.63
ZZZZZZ	133050	4.84	517007	5.96	294345	8.07	498173	10.28	445888	14.50	372561	16.64
OP94859A-MB1	167504	4.84	670188	5.95	391089	8.07	656014	10.28	576775	14.50	451194	16.63
ZZZZZZ	151138	4.84	600768	5.96	359243	8.07	597435	10.28	476933	14.49	384014	16.63
ZZZZZZ	141095	4.84	564285	5.96	328052	8.07	555923	10.28	444089	14.49	334534	16.63
OP95018A-MB1	154107	4.84	616420	5.95	356928	8.07	602153	10.28	510314	14.49	433431	16.63
ZZZZZZ	147729	4.84	608213	5.95	356426	8.07	609499	10.28	494521	14.49	416203	16.63

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: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3E3716-CC3699	**Injection Date:**	07/01/16
Lab File ID:	3E84760.D	**Injection Time:**	20:27
Instrument ID:	GCMS3E	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	119665	5.01	450142	6.17	255605	8.32	402846	10.55	395345	14.78	299420	16.94
Upper Limit [a]	239330	5.51	900284	6.67	511210	8.82	805692	11.05	790690	15.28	598840	17.44
Lower Limit [b]	59833	4.51	225071	5.67	127803	7.82	201423	10.05	197673	14.28	149710	16.44

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP95059-MB1	88756	5.01	336116	6.16	207833	8.31	346706	10.54	344796	14.77	302910	16.93
OP95059-BS1	86789	5.01	358660	6.17	175457	8.32	267746	10.54	262579	14.77	202281	16.93
OP95059-MS	82514	5.01	351805	6.17	165897	8.32	253695	10.54	240424	14.77	192510	16.93
OP95059-MSD	80361	5.01	338762	6.17	158634	8.32	241494	10.54	235802	14.77	185845	16.93
JC22613-2	84779	5.01	321947	6.16	198120	8.32	321810	10.53	319888	14.77	273162	16.93
JC22613-3	94409	5.01	362734	6.16	224078	8.32	371892	10.53	365946	14.77	322747	16.93
JC22613-4	89819	5.01	347056	6.16	210655	8.31	351154	10.53	352437	14.77	302736	16.93
JC22613-5	98570	5.01	375253	6.16	229142	8.31	384098	10.53	379686	14.77	334798	16.93
JC22613-6	92472	5.01	348443	6.16	213728	8.31	357736	10.53	361431	14.77	313724	16.93
JC22613-7	92737	5.01	353304	6.16	214872	8.31	362804	10.53	359286	14.77	316758	16.93
JC22613-8	95919	5.01	363229	6.16	224819	8.31	373894	10.53	375874	14.77	330538	16.93
ZZZZZZ	94484	5.01	375605	6.16	230165	8.31	387836	10.53	383031	14.77	328596	16.93
JC23038-3A	94311	5.01	366362	6.16	227325	8.31	378176	10.53	384759	14.77	325257	16.93
JC23038-3A	94231	5.01	341515	6.18	182895	8.32	298815	10.54	248681	14.77	208384	16.93
ZZZZZZ	83793	5.01	292860	6.18	151327	8.32	249325	10.54	190335*	14.77	152024	16.93
ZZZZZZ	87702	5.01	352276	6.16	213049	8.31	344728	10.54	254586	14.77	173377	16.93
JC23038-3A	85461	5.01	302480	6.18	141265	8.32	232429	10.54	171886*	14.78	138984*	16.94
ZZZZZZ	79211	5.02	271504	6.19	130265	8.32	217218	10.54	150399*	14.78	115198*	16.94
ZZZZZZ	98915	5.01	381266	6.17	211806	8.32	301760	10.55	139061*	14.79	86538*	16.96

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: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3M2951-CC2942	**Injection Date:**	06/26/16
Lab File ID:	3M62531.D	**Injection Time:**	16:13
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	549903	10.76	760000	13.76	1104631	17.96	828824	22.55
Upper Limit [a]	1099806	11.26	1520000	14.26	2209262	18.46	1657648	23.05
Lower Limit [b]	274952	10.26	380000	13.26	552316	17.46	414412	22.05

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP95018A-MB1	422784	10.76	617041	13.76	884316	17.96	661467	22.55
OP95018A-BS12	459349	10.76	653165	13.76	940846	17.96	714876	22.55
ZZZZZZ	424706	10.76	605231	13.76	903528	17.96	665732	22.55
ZZZZZZ	440561	10.76	617528	13.76	917513	17.96	675967	22.55
ZZZZZZ	432617	10.76	609299	13.76	925081	17.96	677562	22.55
ZZZZZZ	429055	10.76	596341	13.76	900277	17.96	667582	22.55
ZZZZZZ	436240	10.76	627173	13.76	918170	17.96	655219	22.55
ZZZZZZ	396459	10.76	561497	13.76	833094	17.96	599743	22.55
ZZZZZZ	431196	10.76	617553	13.76	931762	17.96	661364	22.55
ZZZZZZ	436400	10.76	624783	13.76	964261	17.96	702672	22.55
ZZZZZZ	420891	10.76	600202	13.76	912129	17.96	677061	22.55
ZZZZZZ	425334	10.76	612064	13.76	905175	17.96	679506	22.55
JC22613-1	499059	10.76	758375	13.76	1000077	17.97	731597	22.55

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: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3M2967-CC2942	**Injection Date:**	07/07/16
Lab File ID:	3M62827.D	**Injection Time:**	15:55
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	701185	10.70	1020160	13.69	1759504	17.90	1534828	22.49
Upper Limit [a]	1402370	11.20	2040320	14.19	3519008	18.40	3069656	22.99
Lower Limit [b]	350593	10.20	510080	13.19	879752	17.40	767414	21.99

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP95059A-MB1	758005	10.68	1132179	13.69	1846316	17.90	1594848	22.49
OP95059A-BS12	713899	10.68	1056387	13.69	1695331	17.90	1457927	22.49
OP95059A-MS	709881	10.70	1002026	13.69	1662681	17.90	1440434	22.49
OP95059A-MSD	735365	10.68	1041203	13.69	1685335	17.90	1459930	22.49
JC22613-2	804313	10.68	1166943	13.69	1841577	17.90	1513498	22.49
JC22613-3	832431	10.68	1219881	13.69	1948286	17.90	1611336	22.49
JC22613-4	788543	10.68	1112918	13.69	1810150	17.90	1478730	22.49
JC22613-5	762243	10.70	1101530	13.69	1714820	17.90	1389063	22.49
JC22613-6	760558	10.68	1079967	13.69	1690294	17.90	1428392	22.49
JC22613-7	794424	10.68	1116755	13.69	1733902	17.90	1472150	22.49
JC22613-8	718886	10.68	1076465	13.69	1615254	17.90	1405321	22.49
ZZZZZZ	735568	10.68	1049336	13.69	1587655	17.90	1388671	22.49
ZZZZZZ	669936	10.68	969966	13.69	1481588	17.90	1272576	22.49
ZZZZZZ	594349	10.68	815360	13.69	1330004	17.90	1155712	22.49
ZZZZZZ	559529	10.68	784454	13.69	1201627	17.92	1066176	22.49
ZZZZZZ	573558	10.68	774015	13.69	1225571	17.90	1116880	22.49
ZZZZZZ	575015	10.68	781019	13.69	1248167	17.90	1066139	22.49
ZZZZZZ	588555	10.68	822386	13.69	1276397	17.90	1110972	22.49
ZZZZZZ	607729	10.68	885226	13.69	1360842	17.90	1148720	22.49
ZZZZZZ	532054	10.68	755472	13.69	1230199	17.90	1049862	22.49

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: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4M2995-CC2974	**Injection Date:**	07/05/16
Lab File ID:	4M66577.D	**Injection Time:**	10:11
Instrument ID:	GCMS4M	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	63959	9.71	71109	12.70	165691	16.88	140017	21.47
Upper Limit [a]	127918	10.21	142218	13.20	331382	17.38	280034	21.97
Lower Limit [b]	31980	9.21	35555	12.20	82846	16.38	70009	20.97

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP95069A-MB1	64933	9.71	74441	12.70	170916	16.88	137585	21.47
OP95069A-BS12	54995	9.71	61290	12.70	138469	16.88	113051	21.47
ZZZZZZ	85241	9.71	109481	12.70	237947	16.88	171364	21.47
OP95069A-MS	57959	9.71	64743	12.70	144507	16.88	109376	21.47
OP95069A-MSD	54079	9.71	58783	12.70	137791	16.88	100854	21.47
OP95018A-MB1	54066	9.71	61812	12.70	141725	16.88	118746	21.47
OP95018A-BS12	57449	9.71	63901	12.70	143490	16.88	122212	21.47
JC22506-16	54648	9.71	64760	12.70	140505	16.88	109457	21.47
OP95018A-MS	56626	9.71	67085	12.70	141952	16.88	112553	21.47
OP95018A-MSD	60324	9.71	71538	12.70	152138	16.90	130217	21.49
JC22506-8	57495	9.71	76036	12.70	149927	16.90	123627	21.49
ZZZZZZ	49938	9.71	73091	12.72	152695	16.90	124906	21.49
ZZZZZZ	41975	9.71	60706	12.72	123905	16.90	104732	21.49
ZZZZZZ	53289	9.71	68813	12.70	149233	16.90	124977	21.49
OP95136A-MB1	54470	9.71	74870	12.70	161751	16.90	132412	21.49
ZZZZZZ	53191	9.71	74543	12.70	162494	16.90	129071	21.49
ZZZZZZ	43942	9.71	59219	12.70	128467	16.90	105212	21.49
ZZZZZZ	52845	9.71	70215	12.70	153227	16.90	126028	21.49
ZZZZZZ	41338	9.74	103756	12.72	113480	16.90	96450	21.50
ZZZZZZ	39976	9.71	53346	12.70	109845	16.90	93369	21.49
ZZZZZZ	46510	9.71	58965	12.70	119263	16.90	102898	21.49

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: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4P933-CC887	**Injection Date:**	07/05/16
Lab File ID:	4P17517.D	**Injection Time:**	15:45
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	201849	7.52	286403	10.46	403713	14.67	301985	19.32
Upper Limit [a]	403698	8.02	572806	10.96	807426	15.17	603970	19.82
Lower Limit [b]	100925	7.02	143202	9.96	201857	14.17	150993	18.82

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP95059A-MB1	155730	7.52	223909	10.46	304254	14.67	225454	19.32
OP95059A-BS12	119002	7.52	162301	10.46	222966	14.67	163489	19.32
JC22515-5	124883	7.52	166878	10.46	247337	14.67	178548	19.32
ZZZZZZ	128831	7.52	171126	10.46	259913	14.67	193754	19.32
ZZZZZZ	121895	7.52	188201	10.46	256289	14.68	192133	19.32
ZZZZZZ	138331	7.52	182906	10.46	271391	14.67	202252	19.32
ZZZZZZ	135843	7.52	181087	10.46	268257	14.67	198360	19.31
ZZZZZZ	135666	7.52	181135	10.46	274397	14.67	202809	19.32
ZZZZZZ	140408	7.52	205544	10.46	281672	14.67	207681	19.32
ZZZZZZ	126154	7.52	160551	10.46	250543	14.67	188486	19.31
ZZZZZZ	126174	7.52	156759	10.46	252451	14.67	184648	19.32
ZZZZZZ	131305	7.52	159841	10.46	243788	14.67	182727	19.32

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

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

Semivolatile Internal Standard Area Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EM5319-CC5307	**Injection Date:**	06/23/16
Lab File ID:	M125529.D	**Injection Time:**	21:46
Instrument ID:	GCMSM	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	407003	4.81	1459269	5.97	942853	8.35	1710772	11.00	1732447	16.18	1685112	18.81
Upper Limit [a]	814006	5.31	2918538	6.47	1885706	8.85	3421544	11.50	3464894	16.68	3370224	19.31
Lower Limit [b]	203502	4.31	729635	5.47	471427	7.85	855386	10.50	866224	15.68	842556	18.31

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
OP94990-MB1	405048	4.80	1462480	5.97	945231	8.35	1731618	10.99	1763684	16.17	1588138	18.80
OP94990-BS1	388548	4.80	1387383	5.97	874092	8.35	1602538	10.99	1612812	16.17	1480565	18.80
OP95018-MB1	434981	4.80	1555960	5.96	992623	8.34	1816174	10.99	1845066	16.17	1665495	18.80
OP95018-BS1	437099	4.81	1531331	5.96	989280	8.35	1778007	10.99	1807767	16.18	1777799	18.80
OP95018-MS	434425	4.80	1530014	5.97	964571	8.35	1763962	10.99	1841572	16.17	1776706	18.80
OP95018-MSD	431878	4.80	1504502	5.97	963632	8.35	1735849	10.99	1800457	16.18	1771700	18.80
ZZZZZZ	459452	4.80	1653661	5.96	1057462	8.34	1921903	10.98	1989477	16.17	1799628	18.80
ZZZZZZ	426242	4.81	1476142	5.96	913970	8.35	1600887	10.98	1749638	16.17	1695395	18.79
ZZZZZZ	463138	4.81	1652595	5.96	1054034	8.35	1944705	10.98	1980930	16.17	1812171	18.79
ZZZZZZ	466685	4.80	1613215	5.96	1017503	8.35	1866467	10.98	1859477	16.16	1684948	18.79
JC22506-9	506423	4.81	1762225	5.96	1095492	8.35	2061122	10.99	2118137	16.17	1964452	18.80
ZZZZZZ	469007	4.80	1632687	5.96	1019265	8.34	1954512	10.98	2036386	16.17	1841264	18.80
ZZZZZZ	486936	4.81	1743345	5.96	1123218	8.35	2041955	10.99	2074524	16.17	1887179	18.79
JC22613-1	477317	4.80	1656557	5.96	1049719	8.34	1951333	10.99	1999271	16.17	1870779	18.80
JC22591-32	394594	4.80	1169878	5.98	663073	8.37	1005590	11.03	1187526	16.19	1294084	18.80
OP94990-MS	370790	4.80	1143342	5.98	648688	8.37	979278	11.03	1180258	16.19	1271227	18.80
OP94990-MSD	343572	4.80	1046968	5.98	598489	8.37	914748	11.03	1105862	16.19	1174691	18.80
ZZZZZZ	371392	4.80	1273573	5.97	838945	8.35	1552816	10.99	1574960	16.18	1463275	18.81
ZZZZZZ	363430	4.80	1290198	5.96	816843	8.34	1475436	10.98	1432880	16.17	1351477	18.79
ZZZZZZ	377419	4.80	1373140	5.96	865437	8.34	1565766	10.98	1598322	16.16	1410474	18.79
ZZZZZZ	401184	4.80	1439249	5.97	896168	8.34	1619336	10.98	1452065	16.17	1325097	18.79

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: JC22613
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
JC22613-1	M125545.D	45	30	97	72	74	85
JC22613-2	3E84767.D	62	40	67	94	89	100
JC22613-3	3E84768.D	52	34	58	78	77	93
JC22613-4	3E84769.D	48	31	58	80	77	80
JC22613-5	3E84770.D	46	29	60	79	82	97
JC22613-6	3E84771.D	52	33	61	83	81	93
JC22613-7	3E84772.D	57	36	59	81	84	98
JC22613-8	3E84773.D	53	34	57	79	80	87
OP95018-BS1	M125535.D	48	35	94	75	77	86
OP95018-MB1	M125534.D	40	28	80	65	65	86
OP95018-MS	M125536.D	65	55	101	76	78	84
OP95018-MSD	M125537.D	67	55	100	83	80	83
OP95059-BS1	3E84764.D	62	43	66	83	87	93
OP95059-MB1	3E84763.D	61	38	64	91	88	103
OP95059-MS	3E84765.D	83	69	67	86	90	95
OP95059-MSD	3E84766.D	83	70	71	87	92	95

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: JC22613
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
JC22613-1	3M62544.D	67	57	81
JC22613-2	3M62832.D	76	66	100
JC22613-3	3M62833.D	68	63	94
JC22613-4	3M62834.D	66	69	78
JC22613-5	3M62835.D	68	68	94
JC22613-6	3M62836.D	71	72	92
JC22613-7	3M62837.D	71	71	94
JC22613-8	3M62838.D	73	73	90
OP95018A-BS12	3M62533.D	74	65	93
OP95018A-BS12	4M66584.D	65	48	108
OP95018A-MB1	3M62532.D	70	64	95
OP95018A-MB1	2M85124.D	61	63	92
OP95018A-MB1	4M66583.D	61	48	104
OP95018A-MS	4M66585.D	71	55	102
OP95018A-MSD	4M66586.D	62	49	90
OP95059A-BS12	4P17519.D	90	93	123* [a]
OP95059A-BS12	3M62829.D	78	72	100
OP95059A-MB1	4P17518.D	92	89	129*
OP95059A-MB1	3M62828.D	77	68	100
OP95059A-MS	3M62830.D	71	75	86
OP95059A-MSD	3M62831.D	68	73	72

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

(a) Outside of in house control limits.

Initial Calibration Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3720-ICC3720
Lab FileID: 2M84437.D

Response Factor Report MS

Method : C:\MSDCHEM\1\METHODS\M2M3720.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Wed Jun 08 14:38:41 2016
Response via : Initial Calibration

Calibration Files
2 =2m84433.D 5 =2m84440.D 25 =2m84438.D 80 =2m84436.D
100 =2m84435.D 50 =2m84437.D 1 =2m84434.D 10 =2m84439.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d					ISTD					
2) 1,4-Dioxane	0.662	0.544	0.500	0.505	0.501	0.500	0.529	0.479	0.527	10.96
3) Pyridine									0.000#	-1.00
4) N-Nitrosodim									0.000#	-1.00
5) 2-Fluorophen	1.397	1.461	1.394	1.422	1.415	1.420	1.390	1.429	1.416	1.64
6) Indene	2.923	2.872	2.514	2.386	2.299	2.511	3.007	2.741	2.656	9.96
7) Cumene	4.222	4.104	3.760	3.640	3.585	3.731	4.200	3.936	3.897	6.52
8) Phenol-d5	1.955	1.925	1.740	1.641	1.613	1.735	1.902	1.827	1.792	7.25
9) Phenol	2.329	2.402	2.165	2.062	2.022	2.141	2.296	2.277	2.212	6.10
10) Aniline	2.395	2.397	2.152	1.962	1.909	2.079	2.335	2.336	2.196	8.97
11) bis(2-Chloro	1.568	1.631	1.452	1.454	1.416	1.482	1.806	1.561	1.546	8.25
12) 2-Chlorophen	1.625	1.610	1.398	1.283	1.238	1.384	1.706	1.497	1.468	11.55
13) Decane	1.818	1.762	1.520	1.215		1.388		1.684	1.564	14.92
14) 1,3-Dichloro	1.785	1.747	1.575	1.540	1.535	1.580	1.819	1.656	1.655	6.92
15) 1,4-Dichloro	1.803	1.740	1.605	1.556	1.552	1.596	1.686	1.672	1.651	5.45
16) Benzyl alcoh	1.037	1.040	0.996	0.924	0.877	0.978	1.021	1.050	0.990	6.22
17) 1,2-Dichloro	1.685	1.635	1.492	1.421	1.407	1.505	1.723	1.569	1.555	7.61
18) Acetophenone	2.336	2.354	2.098	1.972	1.908	2.088	2.328	2.267	2.169	8.09
19) 2-Methylphen	1.552	1.558	1.397	1.373	1.364	1.385	1.443	1.477	1.443	5.43
20) 2,2'-oxybis(	2.213	2.187	1.898	1.647	1.579	1.819	2.229	2.109	1.960	13.32
21) 3&4-Methylph	1.662	1.597	1.501	1.489	1.468	1.514	1.634	1.583	1.556	4.67
22) n-Nitroso-di	1.348	1.282	1.144	1.064	1.029	1.131	1.336	1.282	1.202	10.39
23) Hexachloroet	0.550	0.564	0.499	0.508	0.507	0.513	0.528	0.523	0.524	4.35
24) I Naphthalene-d8					ISTD					
25) Nitrobenzene	0.435	0.455	0.426	0.411	0.407	0.428	0.519	0.450	0.441	8.03
26) Nitrobenzene	0.475	0.466	0.452	0.434	0.418	0.440	0.476	0.466	0.453	4.68
27) Quinoline	0.778	0.746	0.713	0.708	0.697	0.714		0.738	0.728	3.84
28) Isophorone	0.820	0.824	0.760	0.732	0.710	0.746	0.822	0.796	0.776	5.82
29) 2-Nitropheno	0.219	0.216	0.204	0.189	0.182	0.201	0.204	0.209	0.203	6.17
30) 2,4-Dimethyl	0.390	0.407	0.380	0.378	0.371	0.384	0.433	0.401	0.393	5.16
31) Benzoic acid		0.144	0.223	0.256	0.258	0.247		0.195	0.220	20.18
----- Quadratic regression ----- Coefficient = 0.9999										
Response Ratio = -0.01519 + 0.25083 *A + 0.00575 *A^2										
32) bis(2-Chloro	0.466	0.457	0.437	0.412	0.400	0.418	0.481	0.452	0.440	6.46
33) 2,4-Dichloro	0.303	0.307	0.292	0.286	0.279	0.293	0.325	0.306	0.299	4.84
34) 2,6-Dichloro	0.305	0.303	0.284	0.279	0.269	0.286	0.318	0.302	0.293	5.53
35) 1,3,5-Trichl	0.365	0.363	0.333	0.318	0.307	0.331	0.376	0.348	0.343	7.11
36) 1,2,4-Trichl	0.348	0.328	0.325	0.312	0.306	0.318	0.368	0.336	0.330	6.19
37) 1,2,3-Trichl	0.331	0.330	0.312	0.304	0.301	0.310	0.356	0.326	0.321	5.62
38) Naphthalene	1.180	1.150	1.069	1.024	0.990	1.054	1.239	1.135	1.105	7.67
39) 4-Chloroanil	0.459	0.454	0.425	0.398	0.379	0.414	0.441	0.450	0.427	6.74
40) 2,3-Dichloro	0.411	0.385	0.354	0.344	0.338	0.355		0.371	0.365	6.97
41) Caprolactam	0.177	0.186	0.176	0.175	0.172	0.174		0.187	0.178	3.22
42) Hexachlorobu	0.188	0.187	0.172	0.170	0.169	0.171	0.215	0.180	0.181	8.50
43) 4-Chloro-3-m	0.371	0.364	0.344	0.342	0.334	0.347	0.362	0.363	0.353	3.76

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44) 2-Methylnaph 0.674 0.633 0.598 0.574 0.556 0.586 0.682 0.617 0.615   7.44
45) 1-Methylnaph 0.708 0.660 0.631 0.599 0.580 0.610 0.696 0.669 0.644   7.19
46) Dimethylnaph 0.722 0.669 0.647 0.624 0.606 0.637       0.679 0.655   5.92

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy       0.036 0.132 0.215 0.215 0.182       0.073 0.142  52.92
         ----- Quadratic regression -----                Coefficient =  0.9978
              Response Ratio = -0.05448 + 0.18280 *A + 0.00932 *A^2

49) 2,4,6-Trichl 0.386 0.368 0.362 0.354 0.354 0.357 0.405 0.363 0.369   4.90
50) 2,4,5-Trichl 0.390 0.370 0.371 0.369 0.365 0.369 0.414 0.383 0.379   4.37
51) 2-Fluorobiph 1.367 1.350 1.258 1.211 1.199 1.220 1.413 1.297 1.289   6.24
52) 2-Chloronaph 1.209 1.197 1.132 1.102 1.076 1.106 1.292 1.170 1.161   6.12
53) Biphenyl     1.643 1.608 1.513 1.469 1.439 1.477 1.719 1.562 1.554   6.26
54) 2-Nitroanili 0.470 0.474 0.462 0.441 0.434 0.443 0.518 0.463 0.463   5.71
55) Dimethylphth 1.391 1.359 1.293 1.250 1.241 1.254 1.414 1.329 1.316   5.09
56) Acenaphthyle 2.072 1.978 1.901 1.856 1.813 1.863 2.106 1.934 1.940   5.41
57) 2,6-Dinitrot 0.290 0.302 0.298 0.297 0.297 0.293 0.316 0.302 0.300   2.62
58) 3-Nitroanili 0.326 0.348 0.345 0.349 0.343 0.351 0.348 0.361 0.346   2.80
59) Acenaphthene 1.240 1.252 1.147 1.131 1.102 1.128 1.335 1.186 1.190   6.68
60) 2,4-Dinitrop 0.036 0.034 0.098 0.146 0.151 0.128       0.069 0.094  52.25
         ----- Quadratic regression -----                Coefficient =  0.9990
              Response Ratio = -0.01925 + 0.11290 *A + 0.00864 *A^2

61) 4-Nitropheno 0.133 0.118 0.161 0.180 0.181 0.173 0.140 0.152 0.155  14.93
62) Dibenzofuran 1.776 1.657 1.598 1.554 1.513 1.568 1.838 1.632 1.642   6.84
63) 2,4-Dinitrot 0.432 0.419 0.406 0.410 0.402 0.414 0.433 0.411 0.416   2.73
64) 2,3,4,6-Tetr 0.237 0.217 0.231 0.240 0.243 0.234 0.238 0.217 0.232   4.30
65) Diethylphtha 1.426 1.400 1.333 1.309 1.283 1.316 1.555 1.387 1.376   6.37
66) Fluorene     1.384 1.374 1.310 1.246 1.206 1.283 1.450 1.362 1.327   6.07
67) 4-Chlorophen 0.640 0.629 0.605 0.587 0.569 0.603 0.662 0.640 0.617   5.01
68) 4-Nitroanili 0.365 0.363 0.351 0.356 0.349 0.353 0.343 0.365 0.356   2.31

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro-       0.088 0.115 0.136 0.137 0.127       0.099 0.117  17.04
         ----- Quadratic regression -----                Coefficient =  0.9997
              Response Ratio = -0.00645 + 0.12488 *A + 0.00621 *A^2

71) n-Nitrosodip 0.555 0.534 0.508 0.507 0.501 0.512 0.569 0.525 0.526   4.71
72) 1,2-Diphenyl 0.931 0.960 0.925 0.900 0.883 0.909 0.933 0.956 0.924   2.87
73) 2,4,6-Tribro 0.115 0.109 0.108 0.113 0.115 0.110 0.106 0.111 0.111   2.81
74) 4-Bromopheny 0.221 0.217 0.209 0.213 0.210 0.210 0.235 0.216 0.217   3.97
75) Hexachlorobe 0.253 0.262 0.243 0.250 0.246 0.246 0.266 0.254 0.252   3.18
76) Pentachlorop 0.043 0.033 0.061 0.087 0.091 0.075       0.045 0.062  36.48
         ----- Quadratic regression -----                Coefficient =  0.9993
              Response Ratio = -0.00774 + 0.06404 *A + 0.00580 *A^2

77) Phenanthrene 1.230 1.183 1.115 1.108 1.087 1.117 1.293 1.152 1.161   6.11
78) Anthracene   1.247 1.205 1.128 1.128 1.104 1.121 1.260 1.174 1.171   5.14
79) Carbazole    1.113 1.097 1.021 1.028 1.022 1.030 1.187 1.048 1.068   5.57
80) Di-n-butylph 1.477 1.363 1.335 1.336 1.315 1.338 1.457 1.357 1.372   4.40
81) Fluoranthene 1.255 1.170 1.141 1.158 1.139 1.158 1.243 1.164 1.179   3.82
82) Octadecane   0.614 0.603 0.554 0.516 0.497 0.538 0.609 0.587 0.565   7.97

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.458 1.339 1.286 1.343 1.370 1.307 1.475 1.347 1.366   4.93
85) Terphenyl-d1 0.964 0.882 0.857 0.914 0.918 0.887 1.015 0.887 0.915   5.61
86) Butylbenzylp 0.747 0.666 0.636 0.664 0.667 0.650 0.723 0.660 0.677   5.60
87) Benzo[a]anth 1.349 1.260 1.185 1.203 1.190 1.181 1.493 1.238 1.262   8.62
88) 3,3'-Dichlor 0.451 0.491 0.473 0.485 0.481 0.476 0.506 0.483 0.481   3.30
```

Initial Calibration Summary

Job Number: JC22613 **Sample:** E2M3720-ICC3720
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M84437.D
Project: BMSMC, Building 5 Area, PR

```
 89) Chrysene     1.245 1.192 1.122 1.116 1.111 1.116 1.330 1.183 1.177   6.64
 90) bis(2-Ethylh 0.997 0.912 0.842 0.779 0.760 0.823 1.038 0.920 0.884  11.32

 91) I   Perylene-d12          ----------------ISTD---------------------
 92) Di-n-octylph 1.706 2.168 1.737 1.657 1.655 1.649 1.881 2.105 1.820  11.54
 93) Benzo[b]fluo 1.367 1.419 1.206 1.316 1.337 1.272 1.455 1.333 1.338   5.88
 94) Benzo[k]fluo 1.232 1.277 1.139 1.226 1.175 1.139 1.281 1.257 1.216   4.78
 95) Benzo[a]pyre 1.139 1.071 1.025 1.106 1.101 1.071 1.228 1.088 1.104   5.43
 96) Indeno[1,2,3 1.378 1.219 1.245 1.353 1.354 1.283 1.403 1.253 1.311   5.29
 97) Dibenz(a,h)a 1.046 0.949 0.915 1.008 1.005 0.966 1.032 0.922 0.980   5.05
 98) Dibenz[a,h]a 1.152 1.071 1.072 1.190 1.198 1.113 1.195 1.047 1.130   5.49
 99) 7,12-Dimethy 0.568 0.628 0.549 0.600 0.601 0.568 0.561 0.619 0.587   4.97
100) Benzo[g,h,i] 1.173 1.060 1.064 1.140 1.134 1.092 1.197 1.100 1.120   4.44
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M2M3720.M         Wed Jun 08 14:38:55 2016
```

6.7.1

6

Initial Calibration Verification

Job Number: JC22613 **Sample:** E2M3720-ICV3720
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M84441.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3720\2m84441.D          Vial: 10
Acq On    :  7 Jun 2016   1:04 pm                    Operator: ashleyn
Sample    : icv3720-50                               Inst    : MS
Misc      : op94122,e2m3720                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3720.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Wed Jun 08 14:38:41 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	119	0.00	4.91
9	t	Phenol	2.212	1.777	19.7	99	0.00	4.67
12	t	2-Chlorophenol	1.468	1.321	10.0	114	0.00	4.76
19	t	2-Methylphenol	1.443	1.302	9.8	112	-0.01	5.13
21	t	3&4-Methylphenol	1.556	1.358	12.7	107	0.00	5.26
24	I	Naphthalene-d8	1.000	1.000	0.0	113	0.00	6.05
29	t	2-Nitrophenol	0.203	0.197	3.0	110	0.00	5.68
30	t	2,4-Dimethylphenol	0.393	0.383	2.5	112	0.00	5.72
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	50.000	48.184	3.6	108	0.00	5.86
		----------	AvgRF	CCRF	% Dev	----------		
33	t	2,4-Dichlorophenol	0.299	0.273	8.7	105	0.00	5.93
34	t	2,6-Dichlorophenol	0.293	0.270	7.8	106	0.00	6.14
43	t	4-Chloro-3-methylphenol	0.353	0.311	11.9	101	-0.02	6.68
47	I	Acenaphthene-d10	1.000	1.000	0.0	107	0.00	8.18
49	t	2,4,6-Trichlorophenol	0.369	0.349	5.4	104	-0.01	7.19
50	t	2,4,5-Trichlorophenol	0.379	0.342	9.8	99	-0.01	7.25
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	50.014	0.0	90	0.00	8.33
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.155	0.158	-1.9	97	-0.01	8.48
64		2,3,4,6-Tetrachlorophenol	0.232	0.237	-2.2	108	0.00	8.68
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00	10.40
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	47.353	5.3	96	0.00	9.10
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	51.395	-2.8	92	0.00	10.14

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

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2M3720-ICV3720
Lab FileID: 2M84441.D

2m84348a.D M2M3720.M Wed Jun 08 14:44:08 2016

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3720-ICV3720
Lab FileID: 2M84442.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e2m3720\2m84442.D Vial: 11
Acq On : 7 Jun 2016 1:30 pm Operator: ashleyn
Sample : icv3720-50 Inst : MS
Misc : op94122,e2m3720 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2M3720.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Tue Jun 07 15:05:19 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	4.91
10		Aniline	2.196	2.301	-4.8	119	0.00	4.66
16	t	Benzyl alcohol	0.990	0.996	-0.6	110	0.00	5.03
24	I	Naphthalene-d8	1.000	1.000	0.0	109	0.00	6.05
39	t	4-Chloroaniline	0.427	0.401	6.1	105	0.00	6.14
44	t	2-Methylnaphthalene	0.615	0.566	8.0	105	0.00	6.83
47	I	Acenaphthene-d10	1.000	1.000	0.0	105	0.00	8.18
54	t	2-Nitroaniline	0.463	0.407	12.1	96	0.00	7.59
58	t	3-Nitroaniline	0.346	0.316	8.7	95	0.00	8.16
62	t	Dibenzofuran	1.642	1.559	5.1	105	0.00	8.47
68	t	4-Nitroaniline	0.356	0.315	11.5	94	-0.01	9.05
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00	10.40
79	t	Carbazole	1.068	0.986	7.7	98	0.00	10.80

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m84437.D M2M3720.M Tue Jun 07 15:29:15 2016

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3720-ICV3720
Lab FileID: 2M84443.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3720\2m84443.D          Vial: 12
Acq On    :  7 Jun 2016   1:56 pm                     Operator: ashleyn
Sample    : icv3720-50                                Inst    : MS
Misc      : op94122,e2m3720                           Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3720.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Tue Jun 07 15:05:19 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	4.91
5	S	2-Fluorophenol	1.416	1.468	-3.7	105	0.00	3.94
8	S	Phenol-d5	1.792	1.860	-3.8	109	0.00	4.66
24	I	Naphthalene-d8	1.000	1.000	0.0	102	0.00	6.05
25	S	Nitrobenzene-d5	0.441	0.426	3.4	102	0.00	5.38
47	I	Acenaphthene-d10	1.000	1.000	0.0	98	0.00	8.18
51	S	2-Fluorobiphenyl	1.289	1.319	-2.3	106	0.00	7.28
69	I	Phenanthrene-d10	1.000	1.000	0.0	96	0.00	10.40
73	S	2,4,6-Tribromophenol	0.111	0.123	-10.8	108	0.00	9.34
83	I	Chrysene-d12	1.000	1.000	0.0	91	-0.01	14.61
85	S	Terphenyl-d14	0.915	0.954	-4.3	97	0.00	12.96

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 2m84437.D  M2M3720.M        Tue Jun 07 15:29:16 2016
```

Initial Calibration Verification

Job Number: JC22613 **Sample:** E2M3720-ICV3720
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M84444.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e2m3720\2m84444.D Vial: 13
Acq On : 7 Jun 2016 2:23 pm Operator: ashleyn
Sample : icv3720-50 Inst : MS
Misc : op94122,e2m3720 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2M3720.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Tue Jun 07 15:05:19 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	129	0.00	4.91
11	t	bis(2-Chloroethyl)ether	1.546	1.449	6.3	127	0.00	4.70
14	t	1,3-Dichlorobenzene	1.655	1.513	8.6	124	0.00	4.87
15	t	1,4-Dichlorobenzene	1.651	1.530	7.3	124	0.00	4.93
17	t	1,2-Dichlorobenzene	1.555	1.423	8.5	122	0.00	5.05
20	t	2,2'-oxybis(1-Chloropropa	1.960	1.643	16.2	117	0.00	5.12
22	t	n-Nitroso-di-n-propylamin	1.202	1.079	10.2	123	0.00	5.24
23	t	Hexachloroethane	0.524	0.512	2.3	129	0.00	5.33
24	I	Naphthalene-d8	1.000	1.000	0.0	124	0.00	6.05
26	t	Nitrobenzene	0.453	0.420	7.3	118	0.00	5.40
28	t	Isophorone	0.776	0.736	5.2	122	0.00	5.60
32	t	bis(2-Chloroethoxy)methan	0.440	0.403	8.4	119	0.00	5.80
36	t	1,2,4-Trichlorobenzene	0.330	0.312	5.5	122	0.00	5.99
38	t	Naphthalene	1.105	1.048	5.2	123	0.00	6.08
42	t	Hexachlorobutadiene	0.181	0.175	3.3	127	0.00	6.18
47	I	Acenaphthene-d10	1.000	1.000	0.0	120	0.00	8.18
52	t	2-Chloronaphthalene	1.161	1.077	7.2	116	0.00	7.44
55	t	Dimethylphthalate	1.316	1.188	9.7	113	0.00	7.83
56	t	Acenaphthylene	1.940	1.690	12.9	108	0.00	7.99
57	t	2,6-Dinitrotoluene	0.300	0.276	8.0	113	0.00	7.92
59	t	Acenaphthene	1.190	1.103	7.3	117	0.00	8.23
63	t	2,4-Dinitrotoluene	0.416	0.356	14.4	103	0.00	8.50
65	t	Diethylphthalate	1.376	1.201	12.7	109	0.00	8.84
66	t	Fluorene	1.327	1.198	9.7	112	0.00	8.98
67	t	4-Chlorophenyl-phenylethe	0.617	0.572	7.3	113	0.00	8.98
69	I	Phenanthrene-d10	1.000	1.000	0.0	115	0.00	10.40
71	t	n-Nitrosodiphenylamine	0.526	0.485	7.8	109	0.00	9.17
72	t	1,2-Diphenylhydrazine	0.924	0.856	7.4	108	0.00	9.22
74	t	4-Bromophenyl-phenylether	0.217	0.203	6.5	111	0.00	9.72
75	t	Hexachlorobenzene	0.252	0.234	7.1	109	0.00	9.80
77	t	Phenanthrene	1.161	1.071	7.8	110	0.00	10.44
78	t	Anthracene	1.171	1.035	11.6	106	0.00	10.52
80	t	Di-n-butylphthalate	1.372	1.255	8.5	108	0.00	11.38
81	t	Fluoranthene	1.179	1.085	8.0	108	0.00	12.32
83	I	Chrysene-d12	1.000	1.000	0.0	110	0.00	14.62
84	t	Pyrene	1.366	1.294	5.3	109	0.00	12.67
86	t	Butylbenzylphthalate	0.677	0.604	10.8	102	0.00	13.78

Initial Calibration Verification

Job Number: JC22613 **Sample:** E2M3720-ICV3720
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M84444.D
Project: BMSMC, Building 5 Area, PR

87	t	Benzo[a]anthracene	1.262	1.133	10.2	106	0.00	14.60
89	t	Chrysene	1.177	1.032	12.3	102	0.00	14.66
90	t	bis(2-Ethylhexyl)phthalat	0.884	0.799	9.6	107	0.00	14.73
91	I	Perylene-d12	1.000	1.000	0.0	98	0.00	16.76
92	t	Di-n-octylphthalate	1.820	1.858	-2.1	111	0.00	15.72
93	t	Benzo[b]fluoranthene	1.338	1.266	5.4	98	-0.01	16.23
94	t	Benzo[k]fluoranthene	1.216	1.262	-3.8	109	-0.01	16.27
95	t	Benzo[a]pyrene	1.104	1.045	5.3	96	0.00	16.68
96	t	Indeno[1,2,3-cd]pyrene	1.311	1.261	3.8	97	0.00	18.52
98	t	Dibenz[a,h]anthracene	1.130	1.084	4.1	96	-0.01	18.55
100	t	Benzo[g,h,i]perylene	1.120	1.067	4.7	96	-0.01	19.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m84437.D M2M3720.M Tue Jun 07 15:29:17 2016

6.7.5

6

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3720-ICV3720
Lab FileID: 2M84446.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3720\2m84446.D          Vial: 15
Acq On    :  7 Jun 2016   3:15 pm                    Operator: ashleyn
Sample    : icv3720-50                               Inst    : MS
Misc      : op94122,e2m3720                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3720.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Tue Jun 07 15:05:19 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I	Chrysene-d12	1.000	1.000	0.0	108	-0.01	14.61
88 t	3,3'-Dichlorobenzidine	0.481	0.444	7.7	101	0.00	14.60

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m84437.D M2M3720.M Tue Jun 07 15:51:59 2016

Initial Calibration Verification

Job Number: JC22613 **Sample:** E2M3721-ICV3720
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M84450.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3721\2m84450.D          Vial: 2
Acq On    :  7 Jun 2016   5:25 pm                    Operator: ashleyn
Sample    : icv3720-50                               Inst    : MS
Misc      : op94122,e2m3721                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3720.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Tue Jun 07 16:18:16 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	112	0.00	4.91
2	t	1,4-Dioxane	0.527	0.534	-1.3	120	0.00	2.49
6	t	Indene	2.656	2.529	4.8	113	0.00	5.11
7	t	Cumene	3.897	3.486	10.5	105	0.00	4.29
13	t	Decane	1.564	1.400	10.5	113	0.00	4.76
18	t	Acetophenone	2.169	1.949	10.1	104	-0.01	5.24
24	I	Naphthalene-d8	1.000	1.000	0.0	123	-0.01	6.04
27	t	Quinoline	0.728	0.573	21.3	99	-0.02	6.42
40	t	2,3-Dichloroaniline	0.365	0.265	27.4	92	-0.01	7.18
41	t	Caprolactam	0.178	0.136	23.6	96	-0.04	6.49
45	t	1-Methylnaphthalene	0.644	0.497	22.8	100	0.00	6.95
46	t	Dimethylnaphthalene	0.655	0.503	23.2	97	0.00	7.61
47	I	Acenaphthene-d10	1.000	1.000	0.0	102	-0.01	8.17
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	50.000	48.154	3.7	80	0.00	7.00
		----------	AvgRF	CCRF	% Dev	----------		
53	t	Biphenyl	1.554	1.426	8.2	98	-0.01	7.40
69	I	Phenanthrene-d10	1.000	1.000	0.0	100	-0.02	10.39
82	t	Octadecane	0.565	0.506	10.4	94	0.00	10.29
91	I	Perylene-d12	1.000	1.000	0.0	85	-0.02	16.75
99	t	7,12-Dimethylbenz(a)anthr	0.587	0.496	15.5	74	-0.02	16.20

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m84348a.D M2M3720.M Wed Jun 08 09:04:50 2016

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E2M3754-CC3720
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M85108.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E2M3754\2m85108.D          Vial: 2
Acq On    : 28 Jun 2016  10:09 am                    Operator: ashleyn
Sample    : cc3720-25                                Inst    : MS
Misc      : op94766,e2m3754                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3720.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Jun 27 16:37:24 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	65	-0.05	4.84
2	t	1,4-Dioxane	0.527	0.512	2.8	67	-0.07	2.40
5	S	2-Fluorophenol	1.416	1.264	10.7	59	-0.04	3.89
6	t	Indene	2.656	2.711	-2.1	70	-0.05	5.04
7	t	Cumene	3.897	3.958	-1.6	68	-0.06	4.22
8	S	Phenol-d5	1.792	1.764	1.6	66	-0.04	4.60
9	t	Phenol	2.212	2.238	-1.2	67	-0.04	4.61
10		Aniline	2.196	2.028	7.7	61	-0.04	4.60
11	t	bis(2-Chloroethyl)ether	1.546	1.586	-2.6	71	-0.05	4.63
12	t	2-Chlorophenol	1.468	1.568	-6.8	73	-0.05	4.69
13	t	Decane	1.564	1.536	1.8	66	-0.05	4.68
14	t	1,3-Dichlorobenzene	1.655	1.641	0.8	68	-0.05	4.79
15	t	1,4-Dichlorobenzene	1.651	1.707	-3.4	69	-0.05	4.85
16	t	Benzyl alcohol	0.990	1.022	-3.2	67	-0.04	4.96
17	t	1,2-Dichlorobenzene	1.555	1.585	-1.9	69	-0.05	4.97
18	t	Acetophenone	2.169	2.273	-4.8	70	-0.05	5.17
19	t	2-Methylphenol	1.443	1.437	0.4	67	-0.05	5.07
20	t	2,2'-oxybis(1-Chloropropa	1.960	1.812	7.6	62	-0.05	5.04
21	t	3&4-Methylphenol	1.556	1.509	3.0	65	-0.04	5.20
22	t	n-Nitroso-di-n-propylamin	1.202	1.145	4.7	65	-0.06	5.16
23	t	Hexachloroethane	0.524	0.572	-9.2	75	-0.06	5.24
24	I	Naphthalene-d8	1.000	1.000	0.0	72	-0.05	5.96
25	S	Nitrobenzene-d5	0.441	0.393	10.9	66	-0.04	5.30
26	t	Nitrobenzene	0.453	0.409	9.7	65	-0.04	5.32
27	t	Quinoline	0.728	0.678	6.9	68	-0.06	6.34
28	t	Isophorone	0.776	0.689	11.2	65	-0.05	5.52
29	t	2-Nitrophenol	0.203	0.209	-3.0	73	-0.05	5.60
30	t	2,4-Dimethylphenol	0.393	0.406	-3.3	77	-0.04	5.65
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	25.000	26.019	-4.1	78	-0.05	5.77
		----------	AvgRF	CCRF	% Dev	----------		
32	t	bis(2-Chloroethoxy)methan	0.440	0.398	9.5	65	-0.05	5.71
33	t	2,4-Dichlorophenol	0.299	0.293	2.0	72	-0.03	5.86
34	t	2,6-Dichlorophenol	0.293	0.289	1.4	73	-0.05	6.06
35		1,3,5-Trichlorobenzene	0.343	0.341	0.6	73	-0.05	5.60
36	t	1,2,4-Trichlorobenzene	0.330	0.307	7.0	68	-0.05	5.90
37		1,2,3-Trichlorobenzene	0.321	0.314	2.2	72	-0.06	6.13
38	t	Naphthalene	1.105	1.049	5.1	71	-0.05	5.98
39	t	4-Chloroaniline	0.427	0.392	8.2	66	-0.05	6.05

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E2M3754-CC3720
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M85108.D
Project: BMSMC, Building 5 Area, PR

40	t	2,3-Dichloroaniline	0.365	0.347	4.9	70	-0.05	7.09
41	t	Caprolactam	0.178	0.158	11.2	64	-0.05	6.44
42	t	Hexachlorobutadiene	0.181	0.177	2.2	74	-0.06	6.08
43	t	4-Chloro-3-methylphenol	0.353	0.341	3.4	71	-0.04	6.61
44	t	2-Methylnaphthalene	0.615	0.592	3.7	71	-0.06	6.73
45	t	1-Methylnaphthalene	0.644	0.629	2.3	72	-0.06	6.85
46	t	Dimethylnaphthalene	0.655	0.632	3.5	70	-0.06	7.50
47	I	Acenaphthene-d10	1.000	1.000	0.0	79	-0.06	8.07
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	50.000	30.209	39.6#	43	-0.07	6.90
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.369	0.337	8.7	74	-0.05	7.10
50	t	2,4,5-Trichlorophenol	0.379	0.317	16.4	68	-0.04	7.17
51	S	2-Fluorobiphenyl	1.289	1.101	14.6	70	-0.06	7.17
52	t	2-Chloronaphthalene	1.161	1.016	12.5	71	-0.06	7.33
53	t	Biphenyl	1.554	1.353	12.9	71	-0.06	7.30
54	t	2-Nitroaniline	0.463	0.369	20.3#	63	-0.05	7.50
55	t	Dimethylphthalate	1.316	1.103	16.2	68	-0.06	7.71
56	t	Acenaphthylene	1.940	1.648	15.1	69	-0.06	7.88
57	t	2,6-Dinitrotoluene	0.300	0.247	17.7	66	-0.05	7.82
58	t	3-Nitroaniline	0.346	0.290	16.2	67	-0.04	8.07
59	t	Acenaphthene	1.190	1.023	14.0	71	-0.06	8.11
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	34.290	31.4#	54	-0.08	8.25
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.155	0.122	21.3#	60	-0.07	8.45
62	t	Dibenzofuran	1.642	1.404	14.5	70	-0.06	8.36
63	t	2,4-Dinitrotoluene	0.416	0.344	17.3	67	-0.05	8.40
64		2,3,4,6-Tetrachlorophenol	0.232	0.217	6.5	75	-0.05	8.57
65	t	Diethylphthalate	1.376	1.216	11.6	72	-0.07	8.72
66	t	Fluorene	1.327	1.165	12.2	71	-0.06	8.86
67	t	4-Chlorophenyl-phenylethe	0.617	0.538	12.8	71	-0.06	8.86
68	t	4-Nitroaniline	0.356	0.275	22.8#	62	-0.04	8.96
69	I	Phenanthrene-d10	1.000	1.000	0.0	78	-0.07	10.28
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	19.610	21.6#	61	-0.05	9.01
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.526	0.449	14.6	69	-0.08	9.06
72	t	1,2-Diphenylhydrazine	0.924	0.808	12.6	68	-0.08	9.10
73	S	2,4,6-Tribromophenol	0.111	0.091	18.0	66	-0.07	9.23
74	t	4-Bromophenyl-phenylether	0.217	0.189	12.9	71	-0.08	9.60
75	t	Hexachlorobenzene	0.252	0.215	14.7	69	-0.07	9.68
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	44.680	10.6	73	-0.06	10.03
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.161	0.956	17.7	67	-0.07	10.31
78	t	Anthracene	1.171	0.984	16.0	68	-0.07	10.39
79	t	Carbazole	1.068	0.888	16.9	68	-0.06	10.69
80	t	Di-n-butylphthalate	1.372	1.131	17.6	66	-0.07	11.26
81	t	Fluoranthene	1.179	0.925	21.5#	63	-0.06	12.20

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E2M3754-CC3720
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M85108.D
Project: BMSMC, Building 5 Area, PR

82	t	Octadecane	0.565	0.446	21.1#	63	-0.08	10.16
83	I	Chrysene-d12	1.000	1.000	0.0	57	-0.07	14.50
84	t	Pyrene	1.366	1.369	-0.2	61	-0.08	12.55
85	S	Terphenyl-d14	0.915	0.881	3.7	59	-0.09	12.83
86	t	Butylbenzylphthalate	0.677	0.721	-6.5	65	-0.08	13.65
87	t	Benzo[a]anthracene	1.262	1.231	2.5	60	-0.07	14.48
88	t	3,3'-Dichlorobenzidine	0.481	0.451	6.2	55	-0.07	14.47
89	t	Chrysene	1.177	1.107	5.9	57	-0.07	14.54
90	t	bis(2-Ethylhexyl)phthalat	0.884	0.902	-2.0	62	-0.09	14.59
91	I	Perylene-d12	1.000	1.000	0.0	54	-0.08	16.64
92	t	Di-n-octylphthalate	1.820	2.090	-14.8	65	-0.09	15.59
93	t	Benzo[b]fluoranthene	1.338	1.307	2.3	58	-0.08	16.11
94	t	Benzo[k]fluoranthene	1.216	1.184	2.6	56	-0.08	16.14
95	t	Benzo[a]pyrene	1.104	1.109	-0.5	58	-0.08	16.56
96	t	Indeno[1,2,3-cd]pyrene	1.311	1.209	7.8	52	-0.11	18.36
97	t	Dibenz(a,h)acridine	0.980	0.877	10.5	51	-0.11	17.94
98	t	Dibenz[a,h]anthracene	1.130	1.040	8.0	52	-0.13	18.37
99	t	7,12-Dimethylbenz(a)anthr	0.587	0.644	-9.7	63	-0.09	16.07
100	t	Benzo[g,h,i]perylene	1.120	0.990	11.6	50	-0.14	18.84

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m84353a.D M2M3720.M Tue Jun 28 14:57:51 2016

6.7.8

6

Initial Calibration Summary

Job Number: JC22613 **Sample:** E3E3699-ICC3699
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E84394.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MS3E

Method : C:\msdchem\1\METHODS\M3E3699.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 10:08:02 2016
Last Update : Thu Jun 23 10:08:02 2016
Response via : Initial Calibration

Calibration Files
2 =3E84387.D 5 =3E84393.D 25 =3E84391.D 80 =3E84390.D
100 =3E84389.D 50 =3E84394.D 1 =3E84388.D 10 =3E84392.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d					ISTD					
2) 1,4-Dioxane	0.606	0.546	0.513	0.530	0.498	0.507	0.524	0.513	0.530	6.46
3) Pyridine	1.362	1.362	1.330	1.400	1.290	1.275	1.377	1.357	1.344	3.21
4) N-Nitrosodim	0.850	0.783	0.749	0.789	0.733	0.728	0.782	0.758	0.771	5.08
5) 2-Fluorophen	1.239	1.204	1.212	1.289	1.230	1.203	1.298	1.241	1.240	2.94
6) Indene	2.559	2.471	2.364	2.556	2.412	2.388	2.448	2.455	2.457	2.93
7) Cumene	3.220	3.141	3.073	3.287	3.062	3.030	3.344	3.078	3.154	3.69
8) Phenol-d5	1.592	1.480	1.459	1.564	1.489	1.431	1.549	1.490	1.507	3.70
9) Phenol	1.875	1.738	1.708	1.853	1.776	1.703	1.738	1.795	1.773	3.62
10) Aniline	1.966	1.985	1.726	1.775	1.682	1.606	2.350	1.822	1.864	12.65
11) bis(2-Chloro	1.282	1.228	1.167	1.247	1.173	1.178	1.362	1.192	1.229	5.46
12) 2-Chlorophen	1.451	1.490	1.405	1.530	1.489	1.451	1.452	1.443	1.464	2.59
13) Decane	1.301	1.250	1.241	1.259	1.158	1.156	1.287	1.202	1.232	4.45
14) 1,3-Dichloro	1.753	1.636	1.562	1.675	1.627	1.544	1.700	1.627	1.641	4.19
15) 1,4-Dichloro	1.722	1.688	1.623	1.720	1.647	1.627	1.899	1.638	1.695	5.38
16) Benzyl alcoh	0.863	0.828	0.836	0.887	0.854	0.829	0.952	0.852	0.863	4.76
17) 1,2-Dichloro	1.612	1.547	1.506	1.575	1.538	1.506	1.651	1.531	1.558	3.29
18) Acetophenone	1.867	1.805	1.789	1.932	1.850	1.781	1.842	1.767	1.829	2.98
19) 2-Methylphen	1.166	1.224	1.187	1.253	1.201	1.157	1.284	1.194	1.208	3.59
20) 2,2'-oxybis(	0.501	0.479	0.482	0.507	0.486	0.466	0.525	0.482	0.491	3.80
21) 3&4-Methylph	1.321	1.271	1.282	1.386	1.326	1.260	1.323	1.290	1.307	3.08
22) n-Nitroso-di	0.846	0.817	0.806	0.864	0.801	0.779	0.766	0.807	0.811	3.97
23) Hexachloroet	0.548	0.518	0.503	0.502	0.482	0.492	0.537	0.493	0.509	4.52
24) I Naphthalene-d8					ISTD					
25) Nitrobenzene	0.309	0.297	0.305	0.320	0.313	0.295	0.299	0.303	0.305	2.80
26) Nitrobenzene	0.329	0.312	0.326	0.338	0.328	0.311	0.316	0.321	0.323	2.90
27) Quinoline		0.719	0.703	0.698	0.697	0.687		0.712	0.703	1.62
28) Isophorone	0.554	0.558	0.554	0.582	0.573	0.545	0.586	0.566	0.565	2.58
29) 2-Nitropheno	0.193	0.190	0.198	0.215	0.212	0.203	0.190	0.198	0.200	4.76
30) 2,4-Dimethyl	0.300	0.286	0.278	0.318	0.321	0.292	0.286	0.276	0.295	5.78
31) Benzoic acid			0.210	0.248	0.246	0.229		0.190	0.224	11.07
32) bis(2-Chloro	0.348	0.361	0.362	0.375	0.373	0.358	0.383	0.362	0.365	3.05
33) 2,4-Dichloro	0.306	0.290	0.290	0.300	0.308	0.299	0.285	0.297	0.297	2.71
34) 2,6-Dichloro	0.305	0.293	0.279	0.290	0.294	0.290	0.311	0.282	0.293	3.70
35) 1,3,5-Trichl	0.322	0.361	0.335	0.353	0.369	0.346	0.342	0.344	0.347	4.25
36) 1,2,4-Trichl	0.325	0.321	0.316	0.321	0.328	0.325	0.322	0.320	0.322	1.13
37) 1,2,3-Trichl	0.323	0.322	0.311	0.297	0.307	0.306	0.332	0.316	0.314	3.62
38) Naphthalene	1.109	1.088	1.061	1.101	1.081	1.062	1.151	1.081	1.092	2.68
39) 4-Chloroanil	0.412	0.439	0.420	0.428	0.427	0.418	0.434	0.425	0.425	2.04
40) 2,3-Dichloro	0.371	0.362	0.345	0.346	0.347	0.348	0.352	0.362	0.354	2.69
41) Caprolactam	0.146	0.138	0.135	0.141	0.137	0.128	0.157	0.134	0.139	6.42
42) Hexachlorobu	0.162	0.168	0.154	0.154	0.156	0.157	0.166	0.161	0.160	3.33
43) 4-Chloro-3-m	0.276	0.274	0.263	0.269	0.270	0.259	0.262	0.266	0.267	2.21
44) 2-Methylnaph	0.633	0.612	0.609	0.630	0.630	0.605	0.647	0.600	0.621	2.67
45) 1-Methylnaph	0.648	0.640	0.628	0.647	0.649	0.627	0.675	0.636	0.644	2.39

Initial Calibration Summary

Job Number: JC22613 **Sample:** E3E3699-ICC3699
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E84394.D
Project: BMSMC, Building 5 Area, PR

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46) Dimethylnaph 0.644 0.639 0.613 0.611 0.587 0.607 0.675 0.648 0.628   4.51

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.252 0.293 0.327 0.368 0.387 0.362       0.303 0.328  14.64
49) 2,4,6-Trichl 0.359 0.356 0.360 0.387 0.389 0.380 0.368 0.359 0.370   3.62
50) 2,4,5-Trichl 0.370 0.381 0.370 0.383 0.391 0.393 0.385 0.372 0.381   2.41
51) 2-Fluorobiph 1.396 1.305 1.261 1.304 1.313 1.308 1.397 1.299 1.323   3.64
52) 2-Chloronaph 1.157 1.192 1.103 1.115 1.127 1.143 1.103 1.133 1.134   2.64
53) Biphenyl     1.579 1.544 1.510 1.596 1.602 1.548 1.624 1.548 1.569   2.41
54) 2-Nitroanili 0.253 0.248 0.273 0.293 0.293 0.268 0.244 0.260 0.267   7.08
55) Dimethylphth 1.275 1.267 1.213 1.249 1.234 1.235 1.256 1.239 1.246   1.61
56) Acenaphthyle 1.983 1.881 1.882 1.968 1.931 1.935 1.960 1.918 1.932   1.95
57) 2,6-Dinitrot 0.239 0.267 0.279 0.294 0.290 0.287 0.257 0.278 0.274   6.83
58) 3-Nitroanili 0.291 0.320 0.327 0.348 0.346 0.332 0.287 0.318 0.321   7.08
59) Acenaphthene 1.260 1.237 1.178 1.246 1.252 1.217 1.307 1.190 1.236   3.33
60) 2,4-Dinitrop 0.049 0.087 0.131 0.163 0.163 0.156       0.102 0.122  36.13
            ---- Quadratic regression ----  Coefficient =  0.9991
              Response Ratio = -0.02063 + 0.15652 *A + 0.00229 *A^2

61) 4-Nitropheno 0.102 0.110 0.117 0.128 0.129 0.122 0.092 0.111 0.114  11.26
62) Dibenzofuran 1.647 1.659 1.570 1.609 1.598 1.585 1.698 1.614 1.623   2.62
63) 2,4-Dinitrot 0.304 0.335 0.364 0.395       0.390 0.266 0.351 0.344  13.53
64) 2,3,4,6-Tetr 0.256 0.286 0.295 0.307 0.305 0.314 0.253 0.286 0.288   7.90
65) Diethylphtha 1.256 1.205 1.175 1.215 1.203 1.189 1.234 1.184 1.208   2.23
66) Fluorene     1.377 1.343 1.292 1.358 1.355 1.332 1.387 1.307 1.344   2.43
67) 4-Chlorophen 0.614 0.638 0.610 0.621 0.629 0.626 0.706 0.635 0.635   4.79
68) 4-Nitroanili 0.319 0.311 0.337 0.338 0.326 0.351 0.318 0.339 0.330   4.12

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro-       0.085 0.117 0.143 0.142 0.137       0.103 0.121  19.52
            ---- Quadratic regression ----  Coefficient =  0.9993
              Response Ratio = -0.00992 + 0.14090 *A + 0.00264 *A^2

71) n-Nitrosodip 0.553 0.513 0.511 0.544 0.540 0.523 0.545 0.511 0.530   3.27
72) 1,2-Diphenyl 0.644 0.637 0.643 0.739 0.719 0.664 0.630 0.645 0.665   6.16
73) 2,4,6-Tribro 0.127 0.124 0.128 0.138 0.137 0.138 0.119 0.125 0.129   5.59
74) 4-Bromopheny 0.217 0.209 0.205 0.218 0.222 0.217 0.208 0.208 0.213   2.98
75) Hexachlorobe 0.261 0.263 0.251 0.258 0.259 0.269 0.263 0.257 0.260   1.98
76) Pentachlorop 0.054 0.092 0.135 0.166 0.168 0.162       0.114 0.127  34.01
            ---- Quadratic regression ----  Coefficient =  0.9994
              Response Ratio = -0.01833 + 0.15784 *A + 0.00296 *A^2

77) Phenanthrene 1.144 1.122 1.083 1.123 1.100 1.088 1.170 1.093 1.115   2.73
78) Anthracene   1.162 1.121 1.072 1.123 1.100 1.089 1.179 1.097 1.118   3.28
79) Carbazole    1.053 1.052 1.015 1.079 1.059 1.025 1.037 1.030 1.044   2.00
80) Di-n-butylph 1.244 1.186 1.232 1.385 1.366 1.281 1.241 1.222 1.270   5.57
81) Fluoranthene 1.113 1.136 1.114 1.260 1.256 1.179 1.149 1.109 1.164   5.34
82) Octadecane   0.398 0.390 0.424 0.490 0.475 0.428 0.401 0.406 0.426   8.69

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.236 1.183 1.154 1.239 1.209 1.158 1.246 1.187 1.201   3.05
85) Terphenyl-d1 0.846 0.832 0.811 0.852 0.847 0.827 0.871 0.851 0.842   2.18
86) Butylbenzylp 0.558 0.517 0.520 0.582 0.576 0.526 0.553 0.522 0.544   4.86
87) Butyl steara                                                0.000# -1.00
88) Benzo[a]anth 1.244 1.138 1.086 1.161 1.150 1.109 1.318 1.135 1.168   6.54
89) 3,3'-Dichlor 0.459 0.460 0.473 0.509 0.506 0.470 0.450 0.472 0.475   4.56
90) Chrysene     1.118 1.093 1.023 1.031 0.996 0.994 1.161 1.066 1.060   5.68
91) bis(2-Ethylh 0.797 0.728 0.733 0.769 0.734 0.708 0.817 0.737 0.753   4.99

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

Initial Calibration Summary

Job Number: JC22613 **Sample:** E3E3699-ICC3699
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E84394.D
Project: BMSMC, Building 5 Area, PR

93)	Di-n-octylph	1.430	1.315	1.381	1.692	1.748	1.425	1.440	1.308	1.467	11.21
94)	Benzo[b]fluo	1.253	1.222	1.301	1.489	1.520	1.387	1.322	1.260	1.344	8.27
95)	Benzo[k]fluo	1.244	1.196	1.127	1.173	1.131	1.108	1.280	1.133	1.174	5.25
96)	Benzo[a]pyre	1.122	1.082	1.049	1.126	1.120	1.052	1.193	1.062	1.101	4.47
97)	Indeno[1,2,3	1.149	1.062	1.078	1.227	1.268	1.146	1.242	1.064	1.155	7.22
98)	Dibenz(a,h)a	1.045	1.025	0.991	1.113	1.154	1.042	1.103	1.004	1.060	5.43
99)	Dibenz[a,h]a	1.158	1.172	1.094	1.163	1.168	1.115	1.236	1.113	1.152	3.90
100)	7,12-Dimethy	0.496	0.505	0.587	0.698	0.719	0.634		0.545	0.598	14.90
101)	Benzo[g,h,i]	1.104	1.107	1.041	1.132	1.120	1.068	1.158	1.058	1.098	3.63

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

M3E3699.M Thu Jun 23 10:48:41 2016 MS3E

Initial Calibration Verification

Job Number: JC22613 **Sample:** E3E3699-ICV3699
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E84395.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3699\3E84395.D Vial: 10
Acq On : 22 Jun 2016 2:17 pm Operator: ashleyn
Sample : icv3699-50 Inst : MS3E
Misc : op94901,e3e3699 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3699.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 15:07:09 2016
Last Update : Wed Jun 22 15:07:09 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	89	0.00	5.11
9	t	Phenol	1.773	1.498	15.5	78	0.00	4.83
12	t	2-Chlorophenol	1.464	1.380	5.7	84	0.00	4.95
19	t	2-Methylphenol	1.208	1.145	5.2	88	0.00	5.31
21	t	3&4-Methylphenol	1.307	1.231	5.8	87	0.00	5.44
24	I	Naphthalene-d8	1.000	1.000	0.0	87	0.00	6.28
29	t	2-Nitrophenol	0.200	0.200	0.0	86	0.00	5.90
30	t	2,4-Dimethylphenol	0.295	0.312	-5.8	93	0.00	5.92
31	t	Benzoic acid	0.224	0.203	9.4	78	-0.01	6.03
33	t	2,4-Dichlorophenol	0.297	0.297	0.0	87	0.00	6.13
34	t	2,6-Dichlorophenol	0.293	0.293	0.0	88	0.00	6.36
43	t	4-Chloro-3-methylphenol	0.267	0.253	5.2	85	-0.01	6.88
47	I	Acenaphthene-d10	1.000	1.000	0.0	90	0.00	8.45
49	t	2,4,6-Trichlorophenol	0.370	0.365	1.4	87	0.00	7.43
50	t	2,4,5-Trichlorophenol	0.381	0.363	4.7	83	-0.01	7.47
		----------	True	Calc.	% Drift		----------	
60	t	2,4-Dinitrophenol	50.000	44.799	10.4	72	-0.01	8.53
		----------	AvgRF	CCRF	% Dev		----------	
61	t	4-Nitrophenol	0.114	0.108	5.3	80	-0.01	8.64
64		2,3,4,6-Tetrachlorophenol	0.288	0.299	-3.8	86	0.00	8.93
69	I	Phenanthrene-d10	1.000	1.000	0.0	88	0.00	10.67
		----------	True	Calc.	% Drift		----------	
70	t	4,6-Dinitro-2-methylpheno	50.000	46.097	7.8	80	-0.01	9.33
		----------	True	Calc.	% Drift		----------	
76	t	Pentachlorophenol	50.000	47.564	4.9	76	0.00	10.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E84394.D M3E3699.M Wed Jun 22 15:15:31 2016 MS3E

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3699-ICV3699
Lab FileID: 3E84396.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3699\3E84396.D Vial: 11
Acq On : 22 Jun 2016 2:44 pm Operator: ashleyn
Sample : icv3699-50 Inst : MS3E
Misc : op94901,e3e3699 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3699.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 15:07:09 2016
Last Update : Wed Jun 22 15:07:09 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	5.11
3	t	Pyridine	1.344	1.327	1.3	103	0.09	3.09
10		Aniline	1.864	2.127	-14.1	131	0.00	4.85
16	t	Benzyl alcohol	0.863	0.954	-10.5	114	0.00	5.22
24	I	Naphthalene-d8	1.000	1.000	0.0	118	0.00	6.28
39	t	4-Chloroaniline	0.425	0.401	5.6	113	0.00	6.35
44	t	2-Methylnaphthalene	0.621	0.568	8.5	110	0.00	7.08
47	I	Acenaphthene-d10	1.000	1.000	0.0	134	0.00	8.45
54	t	2-Nitroaniline	0.267	0.214	19.9	107	0.00	7.82
58	t	3-Nitroaniline	0.321	0.281	12.5	113	0.00	8.39
62	t	Dibenzofuran	1.623	1.442	11.2	122	0.00	8.74
68	t	4-Nitroaniline	0.330	0.280	15.2	107	-0.01	9.28
69	I	Phenanthrene-d10	1.000	1.000	0.0	138	0.00	10.67
79	t	Carbazole	1.044	0.890	14.8	120	0.00	11.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E84394.D M3E3699.M Wed Jun 22 15:15:33 2016 MS3E

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3699-ICV3699
Lab FileID: 3E84397.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3699\3E84397.D Vial: 12
Acq On : 22 Jun 2016 3:11 pm Operator: ashleyn
Sample : icv3699-50 Inst : MS3E
Misc : op94901,e3e3699 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3699.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 16:35:28 2016
Last Update : Wed Jun 22 16:35:28 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	0.00	5.11
5	S	2-Fluorophenol	1.240	1.238	0.2	93	0.00	4.11
8	S	Phenol-d5	1.507	1.391	7.7	88	0.00	4.82
24	I	Naphthalene-d8	1.000	1.000	0.0	91	0.00	6.28
25	S	Nitrobenzene-d5	0.305	0.283	7.2	87	0.00	5.58
47	I	Acenaphthene-d10	1.000	1.000	0.0	91	0.00	8.45
51	S	2-Fluorobiphenyl	1.323	1.351	-2.1	94	0.00	7.53
69	I	Phenanthrene-d10	1.000	1.000	0.0	89	0.00	10.67
73	S	2,4,6-Tribromophenol	0.129	0.122	5.4	79	0.00	9.60
83	I	Chrysene-d12	1.000	1.000	0.0	79	-0.01	14.90
85	S	Terphenyl-d14	0.842	0.918	-9.0	87	0.00	13.24

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E84394.D M3E3699.M Wed Jun 22 16:41:26 2016 MS3E

Initial Calibration Verification

Job Number: JC22613 **Sample:** E3E3699-ICV3699
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E84398.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3699\3E84398.D Vial: 13
Acq On : 22 Jun 2016 3:39 pm Operator: ashleyn
Sample : icv3699-50 Inst : MS3E
Misc : op94901,e3e3699 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3699.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 16:35:28 2016
Last Update : Wed Jun 22 16:35:28 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00	5.12
4	t	N-Nitrosodimethylamine	0.771	0.652	15.4	89	0.01	2.97
11	t	bis(2-Chloroethyl)ether	1.229	1.143	7.0	96	0.00	4.89
14	t	1,3-Dichlorobenzene	1.641	1.483	9.6	95	0.00	5.07
15	t	1,4-Dichlorobenzene	1.695	1.556	8.2	95	0.00	5.13
17	t	1,2-Dichlorobenzene	1.558	1.411	9.4	93	0.00	5.26
20	t	2,2'-oxybis(1-Chloropropa	0.491	0.413	15.9	88	0.00	5.32
22	t	n-Nitroso-di-n-propylamin	0.811	0.656	19.1	83	0.00	5.44
23	t	Hexachloroethane	0.509	0.477	6.3	96	0.00	5.55
24	I	Naphthalene-d8	1.000	1.000	0.0	98	0.00	6.28
26	t	Nitrobenzene	0.323	0.269	16.7	85	0.00	5.60
28	t	Isophorone	0.565	0.523	7.4	94	0.00	5.81
32	t	bis(2-Chloroethoxy)methan	0.365	0.337	7.7	92	0.00	6.01
36	t	1,2,4-Trichlorobenzene	0.322	0.313	2.8	94	0.00	6.22
38	t	Naphthalene	1.092	0.991	9.2	91	0.00	6.30
42	t	Hexachlorobutadiene	0.160	0.155	3.1	97	0.00	6.43
47	I	Acenaphthene-d10	1.000	1.000	0.0	99	0.00	8.45
48	t	Hexachlorocyclopentadiene	0.328	0.278	15.2	76	0.00	7.28
52	t	2-Chloronaphthalene	1.134	1.071	5.6	93	0.00	7.69
55	t	Dimethylphthalate	1.246	1.092	12.4	87	0.00	8.07
56	t	Acenaphthylene	1.932	1.700	12.0	87	0.00	8.25
57	t	2,6-Dinitrotoluene	0.274	0.243	11.3	84	0.00	8.15
59	t	Acenaphthene	1.236	1.112	10.0	90	0.00	8.50
63	t	2,4-Dinitrotoluene	0.344	0.277	19.5	70	0.00	8.72
65	t	Diethylphthalate	1.208	1.037	14.2	86	0.00	9.10
66	t	Fluorene	1.344	1.193	11.2	88	0.00	9.25
67	t	4-Chlorophenyl-phenylethe	0.635	0.579	8.8	91	0.00	9.25
69	I	Phenanthrene-d10	1.000	1.000	0.0	97	0.00	10.67
71	t	n-Nitrosodiphenylamine	0.530	0.465	12.3	86	0.00	9.43
72	t	1,2-Diphenylhydrazine	0.665	0.561	15.6	82	0.00	9.49
74	t	4-Bromophenyl-phenylether	0.213	0.209	1.9	94	0.00	9.99
75	t	Hexachlorobenzene	0.260	0.243	6.5	88	0.00	10.09
77	t	Phenanthrene	1.115	0.986	11.6	88	0.00	10.71
78	t	Anthracene	1.118	0.961	14.0	86	0.00	10.79
80	t	Di-n-butylphthalate	1.270	1.081	14.9	82	0.00	11.66
81	t	Fluoranthene	1.164	0.984	15.5	81	0.00	12.60
83	I	Chrysene-d12	1.000	1.000	0.0	86	0.00	14.90

Initial Calibration Verification

Job Number: JC22613 **Sample:** E3E3699-ICV3699
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E84398.D
Project: BMSMC, Building 5 Area, PR

84	t	Pyrene	1.201	1.096	8.7	81	0.00	12.96
86	t	Butylbenzylphthalate	0.544	0.472	13.2	77	0.00	14.06
88	t	Benzo[a]anthracene	1.168	1.015	13.1	78	0.00	14.89
90	t	Chrysene	1.060	0.908	14.3	78	0.00	14.95
91	t	bis(2-Ethylhexyl)phthalat	0.753	0.653	13.3	79	0.00	15.02
92	I	Perylene-d12	1.000	1.000	0.0	88	0.00	17.08
93	t	Di-n-octylphthalate	1.467	1.212	17.4	74	0.00	16.01
94	t	Benzo[b]fluoranthene	1.344	1.083	19.4	68	-0.01	16.51
95	t	Benzo[k]fluoranthene	1.174	1.038	11.6	82	-0.01	16.55
96	t	Benzo[a]pyrene	1.101	0.953	13.4	79	0.00	16.98
97	t	Indeno[1,2,3-cd]pyrene	1.155	1.034	10.5	79	-0.01	18.92
99	t	Dibenz[a,h]anthracene	1.152	0.987	14.3	78	-0.01	18.96
101	t	Benzo[g,h,i]perylene	1.098	0.943	14.1	77	-0.02	19.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E84394.D M3E3699.M Wed Jun 22 16:41:28 2016 MS3E

6.7.13

6

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3699-ICV3699
Lab FileID: 3E84400.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3699\3E84400.D Vial: 15
Acq On : 22 Jun 2016 4:33 pm Operator: ashleyn
Sample : icv3699-50 Inst : MS3E
Misc : op94901,e3e3699 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3699.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 16:35:28 2016
Last Update : Wed Jun 22 16:35:28 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I	Chrysene-d12	1.000	1.000	0.0	114	-0.01	14.90
89 t	3,3'-Dichlorobenzidine	0.475	0.429	9.7	105	0.00	14.87

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E84394.D M3E3699.M Wed Jun 22 16:57:32 2016 MS3E

Initial Calibration Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3700-ICC3700
Lab FileID: 3E84410.D

```
                          Response Factor Report  MS3E

  Method       : C:\msdchem\1\METHODS\M3E3700.M (RTE Integrator)
  Title        : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:24:46 2016
  Last Update  : Thu Jun 23 08:24:46 2016
  Response via : Initial Calibration

  Calibration Files
  2   =3E84414.D  5   =3E84413.D  25  =3E84411.D  80  =3E84409.D
  100 =3E84408a.D  50  =3E84410.D  1   =3E84415.D  10  =3E84412.D

   Compound          2     5     25    80    100   50    1     10    Avg %RSD
  ---------------------------------------------------------------------------
102)     1,4-Dichlorobenzene-d ----------------ISTD---------------------
103) Benzaldehyde 0.981 0.997 0.932 0.760       0.977 1.024 0.882 0.936   9.67

104)     Acenaphthene-d10a     ----------------ISTD---------------------
105) 1,2,4,5-Tetr 0.565 0.563 0.506 0.531 0.544 0.522 0.546 0.489 0.533   4.99

106)     Phenanthrene-d10a     ----------------ISTD---------------------
107) Atrazine     0.108 0.111 0.102 0.117 0.113 0.111 0.122 0.102 0.111   6.25
108) o-Terphenyl  0.574 0.597 0.535 0.600 0.609 0.567 0.590 0.559 0.579   4.28
109) 1-Chloroocta 0.234 0.250 0.228 0.256 0.248 0.243 0.254 0.219 0.241   5.47

110) I   Chrysene-d12a         ----------------ISTD---------------------
111) benzidine    0.360 0.375 0.346 0.425 0.474 0.431 0.392 0.423 0.403  10.55

112) I   Naphthalene-d8a       ----------------ISTD---------------------
113) Hydroquinone 0.250 0.283 0.316 0.325 0.326 0.341       0.262 0.300  11.75

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

           M3E3699.M         Thu Jun 23 08:24:58 2016   MS3E
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Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3700-ICV3700
Lab FileID: 3E84416.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3700\3E84416.D Vial: 10
Acq On : 22 Jun 2016 10:34 pm Operator: seanb1
Sample : icv3700-50 Inst : MS3E
Misc : op94901,e3e3700 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3699.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:24:46 2016
Last Update : Thu Jun 23 08:24:46 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
104	Acenaphthene-d10a	1.000	1.000	0.0	111	0.00	8.45
105	1,2,4,5-Tetrachlorobenzen	0.533	0.554	-3.9	118	0.00	7.29
110 I	Chrysene-d12a	1.000	1.000	0.0	99	0.00	14.90
111 T	benzidine	0.403	0.337	16.4	78	0.00	12.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E84410A.D M3E3699.M Thu Jun 23 08:32:51 2016 MS3E

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3700-ICV3700
Lab FileID: 3E84417A.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3E3700\3E84417a.D         Vial: 11
Acq On    : 22 Jun 2016  11:01 pm                     Operator: seanb1
Sample    : icv3700-50                                Inst    : MS3E
Misc      : op94901,e3e3700                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\msdchem\1\METHODS\M3E3699.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 10:08:02 2016
Last Update  : Thu Jun 23 10:08:02 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	112	0.00	5.11
103	Benzaldehyde	0.936	1.190	-27.1	136	0.00	4.76
106	Phenanthrene-d10a	1.000	1.000	0.0	95	0.00	10.67
107	Atrazine	0.111	0.094	15.3	80	0.00	10.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E84410A.D M3E3699.M Thu Jun 23 10:11:03 2016 MS3E

Initial Calibration Verification

Job Number: JC22613 **Sample:** E3E3700-ICV3699
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E84417.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3700\3E84417.D Vial: 11
Acq On : 22 Jun 2016 11:01 pm Operator: seanb1
Sample : icv3699-50 Inst : MS3E
Misc : op94901,e3e3700 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3699.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 10:08:02 2016
Last Update : Thu Jun 23 10:08:02 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	0.00	5.11
2	t	1,4-Dioxane	0.530	0.561	-5.8	102	0.01	2.70
6	t	Indene	2.457	2.628	-7.0	101	0.00	5.33
7	t	Cumene	3.154	3.360	-6.5	102	0.00	4.50
13	t	Decane	1.232	1.269	-3.0	101	0.00	4.97
18	t	Acetophenone	1.829	1.753	4.2	90	0.00	5.44
24	I	Naphthalene-d8	1.000	1.000	0.0	105	0.00	6.28
27	t	Quinoline	0.703	0.482	31.4#	74	-0.02	6.66
40	t	2,3-Dichloroaniline	0.354	0.243	31.4#	74	0.00	7.42
41	t	Caprolactam	0.139	0.107	23.0	88	-0.04	6.71
45	t	1-Methylnaphthalene	0.644	0.575	10.7	97	0.00	7.20
46	t	Dimethylnaphthalene	0.628	0.580	7.6	101	0.00	7.87
47	I	Acenaphthene-d10	1.000	1.000	0.0	92	0.00	8.45
53	t	Biphenyl	1.569	1.706	-8.7	101	0.00	7.66
69	I	Phenanthrene-d10	1.000	1.000	0.0	91	-0.01	10.67
82	t	Octadecane	0.426	0.435	-2.1	93	0.00	10.58
92	I	Perylene-d12	1.000	1.000	0.0	78	-0.01	17.07
100	t	7,12-Dimethylbenz(a)anthr	0.598	0.754	-26.1	93	-0.02	16.50

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E84410A.D M3E3699.M Thu Jun 23 10:11:02 2016 MS3E

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3700-ICV3700
Lab FileID: 3E84419.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3E3700\3E84419.D          Vial: 13
Acq On    : 22 Jun 2016  11:55 pm                     Operator: seanb1
Sample    : icv3700-50                                Inst    : MS3E
Misc      : op94901,e3e3700                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\msdchem\1\METHODS\M3E3699.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:37:12 2016
Last Update  : Thu Jun 23 08:37:12 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	104	0.00	6.28
113 T	Hydroquinone	0.300	0.298	0.7	91	0.00	6.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E84410A.D M3E3699.M Thu Jun 23 08:42:35 2016 MS3E

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E3E3716-CC3699
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E84760.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3716\3E84760.D Vial: 2
Acq On : 1 Jul 2016 8:27 pm Operator: seanb1
Sample : cc3699-25 Inst : MS3E
Misc : op95221,e3e3716 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3699.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:46:23 2016
Last Update : Sun Jul 03 17:46:23 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	124	-0.03	5.01
2	t	1,4-Dioxane	0.530	0.504	4.9	122	-0.06	2.59
3	t	Pyridine	1.344	1.235	8.1	115	-0.04	2.92
4	t	N-Nitrosodimethylamine	0.771	0.742	3.8	122	-0.04	2.88
5	S	2-Fluorophenol	1.240	1.149	7.3	117	-0.02	4.03
6	t	Indene	2.457	2.388	2.8	125	-0.02	5.23
7	t	Cumene	3.154	3.011	4.5	121	-0.03	4.40
8	S	Phenol-d5	1.507	1.419	5.8	120	-0.01	4.74
9	t	Phenol	1.773	1.790	-1.0	130	-0.01	4.75
10		Aniline	1.864	1.895	-1.7	136	-0.02	4.76
11	t	bis(2-Chloroethyl)ether	1.229	1.149	6.5	122	-0.02	4.80
12	t	2-Chlorophenol	1.464	1.451	0.9	128	-0.02	4.86
13	t	Decane	1.232	1.103	10.5	110	-0.02	4.88
14	t	1,3-Dichlorobenzene	1.641	1.497	8.8	118	-0.03	4.97
15	t	1,4-Dichlorobenzene	1.695	1.544	8.9	118	-0.02	5.03
16	t	Benzyl alcohol	0.863	0.833	3.5	123	-0.02	5.13
17	t	1,2-Dichlorobenzene	1.558	1.449	7.0	119	-0.02	5.16
18	t	Acetophenone	1.829	1.783	2.5	123	-0.02	5.35
19	t	2-Methylphenol	1.208	1.192	1.3	124	-0.01	5.22
20	t	2,2'-oxybis(1-Chloropropa	0.491	0.460	6.3	118	-0.02	5.23
21	t	3&4-Methylphenol	1.307	1.292	1.1	125	0.00	5.35
22	t	n-Nitroso-di-n-propylamin	0.811	0.787	3.0	121	-0.02	5.34
23	t	Hexachloroethane	0.509	0.492	3.3	121	-0.03	5.44
24	I	Naphthalene-d8	1.000	1.000	0.0	123	-0.10	6.17
25	S	Nitrobenzene-d5	0.305	0.307	-0.7	124	-0.10	5.48
26	t	Nitrobenzene	0.323	0.316	2.2	119	-0.10	5.50
27	t	Quinoline	0.703	0.681	3.1	119	-0.11	6.55
28	t	Isophorone	0.565	0.551	2.5	122	-0.10	5.71
29	t	2-Nitrophenol	0.200	0.215	-7.5	134	-0.10	5.79
30	t	2,4-Dimethylphenol	0.295	0.324	-9.8	144	-0.09	5.82
31	t	Benzoic acid	0.224	0.224	0.0	132	-0.10	5.93
32	t	bis(2-Chloroethoxy)methan	0.365	0.343	6.0	117	-0.10	5.90
33	t	2,4-Dichlorophenol	0.297	0.315	-6.1	134	-0.10	6.03
34	t	2,6-Dichlorophenol	0.293	0.303	-3.4	134	-0.10	6.26
35		1,3,5-Trichlorobenzene	0.347	0.331	4.6	122	-0.10	5.80
36	t	1,2,4-Trichlorobenzene	0.322	0.309	4.0	121	-0.10	6.11
37		1,2,3-Trichlorobenzene	0.314	0.301	4.1	119	-0.11	6.34
38	t	Naphthalene	1.092	1.021	6.5	119	-0.11	6.19
39	t	4-Chloroaniline	0.425	0.423	0.5	124	-0.10	6.24
40	t	2,3-Dichloroaniline	0.354	0.348	1.7	124	-0.11	7.30
41	t	Caprolactam	0.139	0.126	9.4	115	-0.11	6.62

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E3E3716-CC3699
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E84760.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.160	0.159	0.6	127	-0.11	6.31
43	t	4-Chloro-3-methylphenol	0.267	0.274	-2.6	128	-0.10	6.78
44	t	2-Methylnaphthalene	0.621	0.576	7.2	117	-0.11	6.96
45	t	1-Methylnaphthalene	0.644	0.605	6.1	119	-0.11	7.08
46	t	Dimethylnaphthalene	0.628	0.596	5.1	120	-0.11	7.75
47	I	Acenaphthene-d10	1.000	1.000	0.0	125	-0.11	8.32
48	t	Hexachlorocyclopentadiene	0.328	0.192	41.5#	73	-0.11	7.15
49	t	2,4,6-Trichlorophenol	0.370	0.370	0.0	128	-0.10	7.31
50	t	2,4,5-Trichlorophenol	0.381	0.370	2.9	125	-0.10	7.37
51	S	2-Fluorobiphenyl	1.323	1.221	7.7	121	-0.11	7.41
52	t	2-Chloronaphthalene	1.134	1.054	7.1	119	-0.11	7.57
53	t	Biphenyl	1.569	1.405	10.5	116	-0.11	7.54
54	t	2-Nitroaniline	0.267	0.252	5.6	115	-0.10	7.70
55	t	Dimethylphthalate	1.246	1.175	5.7	121	-0.11	7.95
56	t	Acenaphthylene	1.932	1.728	10.6	115	-0.11	8.12
57	t	2,6-Dinitrotoluene	0.274	0.281	-2.6	126	-0.10	8.03
58	t	3-Nitroaniline	0.321	0.319	0.6	121	-0.10	8.27
59	t	Acenaphthene	1.236	1.096	11.3	116	-0.11	8.37
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	47.995	4.0	130	-0.09	8.43
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.114	0.128	-12.3	137	-0.07	8.56
62	t	Dibenzofuran	1.623	1.472	9.3	117	-0.11	8.61
63	t	2,4-Dinitrotoluene	0.344	0.383	-11.3	131	-0.10	8.61
64		2,3,4,6-Tetrachlorophenol	0.288	0.284	1.4	120	-0.10	8.81
65	t	Diethylphthalate	1.208	1.076	10.9	114	-0.12	8.96
66	t	Fluorene	1.344	1.204	10.4	116	-0.11	9.12
67	t	4-Chlorophenyl-phenylethe	0.635	0.570	10.2	117	-0.12	9.12
68	t	4-Nitroaniline	0.330	0.303	8.2	112	-0.10	9.16
69	I	Phenanthrene-d10	1.000	1.000	0.0	119	-0.11	10.55
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	26.332	-5.3	136	-0.09	9.22
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.530	0.505	4.7	117	-0.11	9.30
72	t	1,2-Diphenylhydrazine	0.665	0.623	6.3	115	-0.11	9.36
73	S	2,4,6-Tribromophenol	0.129	0.083	35.7#	77	-0.10	9.48
74	t	4-Bromophenyl-phenylether	0.213	0.203	4.7	117	-0.11	9.86
75	t	Hexachlorobenzene	0.260	0.211	18.8	100	-0.10	9.96
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	44.258	11.5	112	-0.10	10.28
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.115	0.996	10.7	109	-0.11	10.58
78	t	Anthracene	1.118	1.004	10.2	111	-0.11	10.66
79	t	Carbazole	1.044	0.967	7.4	113	-0.11	10.92
80	t	Di-n-butylphthalate	1.270	1.149	9.5	111	-0.11	11.52
81	t	Fluoranthene	1.164	1.102	5.3	117	-0.10	12.47
82	t	Octadecane	0.426	0.409	4.0	114	-0.11	10.44
83	I	Chrysene-d12	1.000	1.000	0.0	115	-0.10	14.78
84	t	Pyrene	1.201	1.178	1.9	117	-0.11	12.82
85	S	Terphenyl-d14	0.842	0.748	11.2	106	-0.11	13.11
86	t	Butylbenzylphthalate	0.544	0.512	5.9	113	-0.11	13.93

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E3E3716-CC3699
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E84760.D
Project: BMSMC, Building 5 Area, PR

87		Butyl stearate		----------NA----------				
88	t	Benzo[a]anthracene	1.168	1.079	7.6	114	-0.10	14.76
89	t	3,3'-Dichlorobenzidine	0.475	0.415	12.6	101	-0.10	14.74
90	t	Chrysene	1.060	0.968	8.7	109	-0.11	14.81
91	t	bis(2-Ethylhexyl)phthalat	0.753	0.684	9.2	107	-0.11	14.88
92	I	Perylene-d12	1.000	1.000	0.0	96	-0.11	16.94
93	t	Di-n-octylphthalate	1.467	1.583	-7.9	110	-0.11	15.87
94	t	Benzo[b]fluoranthene	1.344	1.306	2.8	96	-0.10	16.39
95	t	Benzo[k]fluoranthene	1.174	1.179	-0.4	100	-0.11	16.42
96	t	Benzo[a]pyrene	1.101	1.094	0.6	100	-0.11	16.85
97	t	Indeno[1,2,3-cd]pyrene	1.155	1.088	5.8	96	-0.16	18.74
98	t	Dibenz(a,h)acridine	1.060	0.962	9.2	93	-0.15	18.31
99	t	Dibenz[a,h]anthracene	1.152	1.012	12.2	88	-0.17	18.77
100	t	7,12-Dimethylbenz(a)anthr	0.598	0.656	-9.7	107	-0.11	16.38
101	t	Benzo[g,h,i]perylene	1.098	0.969	11.7	89	-0.18	19.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E84411A.D M3E3699.M Sun Jul 03 17:48:04 2016 MS3E

6.7.20
6

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E3E3716-CC3700
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E84761.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3716\3E84761.D Vial: 3
Acq On : 1 Jul 2016 8:55 pm Operator: seanb1
Sample : cc3700-25 Inst : MS3E
Misc : op95221,e3e3716 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3699.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:46:23 2016
Last Update : Sun Jul 03 17:46:23 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	124	-0.09	5.01
103	Benzaldehyde	0.936	0.876	6.4	117	-0.08	4.67
104	Acenaphthene-d10a	1.000	1.000	0.0	132	-0.11	8.32
105	1,2,4,5-Tetrachlorobenzen	0.533	0.493	7.5	129	-0.11	7.16
106	Phenanthrene-d10a	1.000	1.000	0.0	132	-0.11	10.54
107	Atrazine	0.111	0.104	6.3	134	-0.11	10.14
108 I	Chrysene-d12a	1.000	1.000	0.0	131	-0.11	14.77
109 T	benzidine	0.403	0.531	-31.8#	201#	-0.12	12.70
110 I	Naphthalene-d8a	1.000	1.000	0.0	125	-0.10	6.16
111 T	Hydroquinone	0.300	0.331	-10.3	131	-0.08	6.60

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E84411A.D M3E3699.M Sun Jul 03 17:48:06 2016 MS3E

Initial Calibration Summary

Job Number: JC22613 **Sample:** E3M2942-ICC2942
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M62373.D
Project: BMSMC, Building 5 Area, PR

```
                        Response Factor Report  MS3M

Method       : C:\MSDCHEM\1\METHODS\M3M2942SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Tue Jun 21 08:25:24 2016
Response via : Initial Calibration

Calibration Files
2.5 =3m62379.D   1.0 =3m62373.D   0.5 =3m62374.D   0.2 =3m62371.D
0.1 =3m62372.D   0.05=3m62380.D   0.02=3m62376.D   0.01=3m62377.D
5   =3m62378.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
          0.239 0.244 0.252 0.266 0.236                    0.249        0.247    4.44
3)  2-Fluorophenol
          0.592 0.631 0.661 0.697 0.627 0.607              0.570        0.627    6.79
4)  Phenol-d5
          0.925 0.994 1.062 1.112 0.997 0.952              0.900        0.992    7.57
5)  Phenol
          1.049 1.111 1.181 1.208 1.087 1.045 1.041        1.012        1.092    6.47
6)  bis(2-Chloroethyl)ether
          0.806 0.833 0.879 0.912 0.822 0.772 0.801 0.791 0.795        0.824    5.48
7)  Nitrobenzene-d5
          0.899 0.829 0.864 0.851 0.738 0.769              0.730        0.811    8.17
8)  Nitrobenzene
          0.923 0.956 0.976 0.982 0.867 0.850 0.767 0.733 0.924        0.886   10.12
9)  Naphthalene
          2.334 2.410 2.530 2.600 2.292 2.245 2.340 2.242 2.355        2.372    5.18
10)  Hexachlorobutadiene
          0.340 0.366 0.383 0.404 0.361 0.340 0.350 0.342 0.335        0.358    6.54
11)  2-Methylnaphthalene
          1.199 1.210 1.259 1.395 1.123 1.272              1.182        1.234    7.02
12)  1-Methylnaphthalene
          1.413 1.450 1.533 1.515 1.360 1.375 1.425 1.387 1.428        1.432    4.15
13)  Hexachlorocyclopentadiene
          0.282 0.252 0.243 0.240 0.188                    0.299        0.251   15.26

14) I   Fluorene-d10          ----------------ISTD---------------------
15)  2-Fluorobiphenyl
          1.189 1.326 1.408 1.277 1.173 1.182 1.154 1.088              1.225    8.53
16)  Acenaphthylene
          1.601 1.724 1.693 1.560 1.321 1.235 1.226        1.612        1.497   13.61
17)  Acenaphthene
          1.026 1.132 1.164 1.039 0.879 0.836 0.835 0.819 1.015        0.972   13.65
18)  4,6-dinitro-2-methylphenol
          0.085 0.053 0.041 0.031 0.019                    0.117        0.058   63.58
           ---- Quadratic regression ----  Coefficient =  0.9997
             Response Ratio = -0.00894 + 0.05424 *A + 0.01025 *A^2

19)  Fluorene
          1.058 1.239 1.295 1.176 1.020 0.963 0.973        1.036        1.095   11.43
20)  2,4,6-Tribromophenol
          0.138 0.131 0.125 0.106                          0.146        0.129   11.88

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

Initial Calibration Summary

Job Number: JC22613 **Sample:** E3M2942-ICC2942
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M62373.D
Project: BMSMC, Building 5 Area, PR

```
22)  Hexachlorobenzene
           0.202 0.229 0.237 0.207 0.182 0.192 0.185 0.194 0.198        0.203    9.29
23)  Pentachlorophenol
           0.089 0.081 0.062 0.057 0.031 0.031             0.102        0.065   42.80
            ---- Quadratic regression ----  Coefficient =  0.9998
              Response Ratio = -0.00610 + 0.07890 *A + 0.00384 *A^2

24)  Phenanthrene
           1.030 1.172 1.189 1.032 0.879 0.829             1.001        1.019   13.20
25)  Anthracene
           0.997 1.053 1.043 0.902 0.728                   1.003        0.954   12.88
26)  Fluoranthene
           1.111 1.264 1.285 1.174 1.145 1.197             1.096        1.182    6.12
27)  Pyrene
           1.110 1.221 1.180 1.119 0.969 0.865             1.127        1.085   11.48
28)  Terphenyl-d14
           0.622 0.664 0.689 0.627 0.538                   0.474        0.602   13.46
29)  Benzo[a]anthracene
           0.798 0.921 0.871 0.896 0.708 0.431             0.851        0.782   21.77
            ---- Quadratic regression ----  Coefficient =  0.9988
              Response Ratio = 0.00485 + 0.79013 *A + 0.04339 *A^2

30)  Chrysene
           0.943 1.021 1.073 0.962 0.945 0.849             0.944        0.963    7.26

31) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
32)  Benzo[b]fluoranthene
           1.100 1.462 1.311 1.419 1.072                   1.214        1.263   12.87
33)  Benzo[k]fluoranthene
           1.235 1.489 1.546 1.342 1.244                   1.264        1.353    9.89
34)  Benzo[a]pyrene
           1.062 1.378 1.258 1.346 1.279 1.660                          1.330   14.71
35)  Indeno[1,2,3-cd]pyrene
           1.044 1.245 1.148 1.169 0.866                   1.137        1.101   11.98
36)  Dibenz[a,h]anthracene
           0.827 0.995 0.929 0.945 0.686                   0.916        0.883   12.57
37)  Benzo[g,h,i]perylene
           0.937 1.123 1.090 1.069 0.854                   0.999        1.012   10.14
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M3M2942SIM.M        Tue Jun 21 11:55:19 2016   RPT1
```

6.7.22

6

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3M2942-ICV2942
Lab FileID: 3M62382.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2942\3m62382.D          Vial: 13
Acq On    : 21 Jun 2016  12:56 am                    Operator: ashleyd
Sample    : icv2942-1.0                              Inst    : MS3M
Misc      : op94419a,e3m2942                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2942SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Tue Jun 21 08:25:24 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	103	0.00	10.89
5	Phenol	1.092	0.934	14.5	87	0.00	6.37
14 I	Fluorene-d10	1.000	1.000	0.0	94	0.00	13.89
	----------	True	Calc.	% Drift	----------		
18 t	4,6-dinitro-2-methylpheno	5.000	4.454	10.9	90	-0.02	14.08
21 I	Fluoranthene-d10	1.000	1.000	0.0	92	0.00	18.08
	----------	True	Calc.	% Drift	----------		
23 t	Pentachlorophenol	5.000	4.220	15.6	74	-0.02	15.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m62373.D M3M2942SIM.M Tue Jun 21 11:57:09 2016 RPT1

Initial Calibration Verification

Job Number: JC22613 **Sample:** E3M2943-ICV2942
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M62384.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2943\3m62384.D          Vial: 2
Acq On    : 21 Jun 2016   9:26 am                    Operator: linseyk
Sample    : icv2942-1                                Inst    : MS3M
Misc      : op94419a,e3m2943                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2942SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Tue Jun 21 08:25:24 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	126	-0.02	10.87
2	t	1,4-dioxane	0.247	0.260	-5.3	135	0.00	2.51
6	t	bis(2-Chloroethyl)ether	0.824	0.841	-2.1	127	-0.01	6.50
8	t	Nitrobenzene	0.886	0.755	14.8	100	0.00	7.99
9	t	Naphthalene	2.372	2.432	-2.5	127	-0.02	9.36
10	t	Hexachlorobutadiene	0.358	0.331	7.5	114	0.00	9.68
11	t	2-Methylnaphthalene	1.234	1.312	-6.3	137	-0.02	10.74
14	I	Fluorene-d10	1.000	1.000	0.0	118	-0.02	13.88
16	t	Acenaphthylene	1.497	1.716	-14.6	117	-0.02	12.53
17	t	Acenaphthene	0.972	1.133	-16.6	118	-0.02	12.88
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	1.095	1.198	-9.4	114	0.00	13.93
21	I	Fluoranthene-d10	1.000	1.000	0.0	107	0.00	18.08
22	t	Hexachlorobenzene	0.203	0.239	-17.7	112	-0.02	15.05
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	1.019	1.182	-16.0	108	-0.02	15.84
25	t	Anthracene	0.954	1.078	-13.0	110	-0.02	15.95
26	t	Fluoranthene	1.182	1.246	-5.4	106	-0.02	18.09
27	t	Pyrene	1.085	1.299	-19.7	114	0.00	18.50
		----------	True	Calc.	% Drift	----------		
29	t	Benzo[a]anthracene	1.000	1.297	-29.7	124	0.00	20.58
		----------	AvgRF	CCRF	% Dev	----------		
30	t	Chrysene	0.963	1.035	-7.5	109	-0.02	20.63
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	108	-0.02	22.66
32	t	Benzo[b]fluoranthene	1.263	1.401	-10.9	103	0.00	22.25
33	t	Benzo[k]fluoranthene	1.353	1.395	-3.1	101	0.00	22.28
34	t	Benzo[a]pyrene	1.330	1.400	-5.3	110	0.00	22.70
35	t	Indeno[1,2,3-cd]pyrene	1.101	1.389	-26.2	120	0.00	24.26
36	t	Dibenz[a,h]anthracene	0.883	1.088	-23.2	118	0.00	24.30
37	t	Benzo[g,h,i]perylene	1.012	1.219	-20.5	117	0.00	24.67

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 3m62373.D  M3M2942SIM.M       Tue Jun 21 12:01:55 2016   RPT1
```

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E3M2951-CC2942
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M62531.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e3m2951\3m62531.D          Vial: 2
Acq On    : 26 Jun 2016   4:13 pm                    Operator: ariellec
Sample    : cc2942-1.0                               Inst    : MS3M
Misc      : op94697a,e3m2951                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2942SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Jun 27 10:40:58 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	98	-0.10	10.76
2	t	1,4-dioxane	0.247	0.250	-1.2	101	0.02	2.42
3	S	2-Fluorophenol	0.627	0.665	-6.1	103	-0.08	4.68
4	S	Phenol-d5	0.992	1.035	-4.3	102	-0.08	6.26
5		Phenol	1.092	1.155	-5.8	102	-0.07	6.28
6	t	bis(2-Chloroethyl)ether	0.824	0.866	-5.1	102	0.00	6.41
7	S	Nitrobenzene-d5	0.811	0.856	-5.5	101	-0.12	7.84
8	t	Nitrobenzene	0.886	1.041	-17.5	107	-0.10	7.88
9	t	Naphthalene	2.372	2.529	-6.6	103	-0.11	9.25
10	t	Hexachlorobutadiene	0.358	0.348	2.8	93	-0.09	9.57
11	t	2-Methylnaphthalene	1.234	1.224	0.8	99	-0.10	10.64
12	t	1-Methylnaphthalene	1.432	1.457	-1.7	99	-0.10	10.82
13		Hexachlorocyclopentadiene	0.251	0.249	0.8	97	-0.10	10.99
14	I	Fluorene-d10	1.000	1.000	0.0	103	-0.13	13.76
15	S	2-Fluorobiphenyl	1.225	1.266	-3.3	98	-0.12	11.42
16	t	Acenaphthylene	1.497	1.697	-13.4	101	-0.14	12.40
17	t	Acenaphthene	0.972	1.095	-12.7	100	-0.12	12.77
		----------	True	Calc.	% Drift	----------		
18	t	4,6-dinitro-2-methylpheno	5.000	4.925	1.5	113	-0.13	13.97
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	1.095	1.134	-3.6	94	-0.11	13.82
20	S	2,4,6-Tribromophenol	0.129	0.155	-20.2#	122	-0.11	14.31
21	I	Fluoranthene-d10	1.000	1.000	0.0	97	0.00	17.96
22	t	Hexachlorobenzene	0.203	0.223	-9.9	95	-0.04	14.93
		----------	True	Calc.	% Drift	----------		
23	t	Pentachlorophenol	5.000	5.424	-8.5	104	-0.03	15.34
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	1.019	1.143	-12.2	95	-0.01	15.73
25	t	Anthracene	0.954	1.112	-16.6	103	-0.03	15.82
26	t	Fluoranthene	1.182	1.238	-4.7	95	0.00	17.99
27	t	Pyrene	1.085	1.223	-12.7	97	0.00	18.37
28	S	Terphenyl-d14	0.602	0.680	-13.0	100	0.02	18.76
		----------	True	Calc.	% Drift	----------		
29	t	Benzo[a]anthracene	1.000	1.209	-20.9#	105	0.02	20.46

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E3M2951-CC2942
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M62531.D
Project: BMSMC, Building 5 Area, PR

			AvgRF	CCRF	% Dev			
30	t	Chrysene	0.963	1.048	-8.8	100	0.02	20.52
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	104	0.00	22.55
32	t	Benzo[b]fluoranthene	1.263	1.555	-23.1#	111	0.02	22.13
33	t	Benzo[k]fluoranthene	1.353	0.891	34.1#	62	-0.02	22.17
34	t	Benzo[a]pyrene	1.330	1.239	6.8	94	0.00	22.58
35	t	Indeno[1,2,3-cd]pyrene	1.101	1.265	-14.9	106	-0.03	24.11
36	t	Dibenz[a,h]anthracene	0.883	1.046	-18.5	109	-0.03	24.15
37	t	Benzo[g,h,i]perylene	1.012	1.142	-12.8	106	-0.05	24.50

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m62373.D M3M2942SIM.M Mon Jun 27 12:46:16 2016 RPT1

6.7.25
6

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E3M2967-CC2942
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M62827.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2967\3m62827.D          Vial: 2
Acq On    :  7 Jul 2016   3:55 pm                    Operator: linseyk
Sample    : cc2942-1                                 Inst    : MS3M
Misc      : op95335a,e3m2967                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2942SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Jul 06 09:00:12 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	125	-0.06	10.70
2	t	1,4-dioxane	0.247	0.205	17.0	105	0.00	2.36
3	S	2-Fluorophenol	0.627	0.538	14.2	107	-0.05	4.66
4	S	Phenol-d5	0.992	0.813	18.0	102	-0.02	6.26
5		Phenol	1.092	0.888	18.7	100	-0.01	6.28
6	t	bis(2-Chloroethyl)ether	0.824	0.661	19.8	99	-0.02	6.35
7	S	Nitrobenzene-d5	0.811	0.713	12.1	108	-0.10	7.78
8	t	Nitrobenzene	0.886	0.802	9.5	105	-0.08	7.82
9	t	Naphthalene	2.372	2.284	3.7	118	-0.08	9.19
10	t	Hexachlorobutadiene	0.358	0.369	-3.1	126	-0.08	9.50
11	t	2-Methylnaphthalene	1.234	1.162	5.8	120	-0.06	10.58
12	t	1-Methylnaphthalene	1.432	1.322	7.7	114	-0.06	10.76
13		Hexachlorocyclopentadiene	0.251	0.334	-33.1#	166	-0.06	10.93
14	I	Fluorene-d10	1.000	1.000	0.0	138	-0.04	13.69
15	S	2-Fluorobiphenyl	1.225	1.148	6.3	120	-0.04	11.36
16	t	Acenaphthylene	1.497	1.570	-4.9	126	-0.05	12.34
17	t	Acenaphthene	0.972	1.017	-4.6	124	-0.03	12.71
		----------	True	Calc.	% Drift	----------		
18	t	4,6-dinitro-2-methylpheno	5.000	8.966	-79.3#	339	-0.02	13.91
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	1.095	1.151	-5.1	128	-0.02	13.74
20	S	2,4,6-Tribromophenol	0.129	0.151	-17.1	160	0.00	14.25
21	I	Fluoranthene-d10	1.000	1.000	0.0	155	-0.02	17.90
22	t	Hexachlorobenzene	0.203	0.198	2.5	134	-0.08	14.86
		----------	True	Calc.	% Drift	----------		
23	t	Pentachlorophenol	5.000	3.199	36.0#	91	-0.06	15.29
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	1.019	0.971	4.7	128	-0.05	15.66
25	t	Anthracene	0.954	0.932	2.3	137	-0.07	15.76
26	t	Fluoranthene	1.182	1.092	7.6	134	-0.02	17.93
27	t	Pyrene	1.085	1.141	-5.2	145	-0.02	18.32
28	S	Terphenyl-d14	0.602	0.601	0.2	140	-0.01	18.69
		----------	True	Calc.	% Drift	----------		
29	t	Benzo[a]anthracene	1.000	1.239	-23.9#	171	0.00	20.41

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E3M2967-CC2942
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M62827.D
Project: BMSMC, Building 5 Area, PR

			AvgRF	CCRF	% Dev			
30	t	Chrysene	0.963	0.999	-3.7	151	0.00	20.47
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	193	-0.01	22.49
32	t	Benzo[b]fluoranthene	1.263	1.466	-16.1	193	0.00	22.07
33	t	Benzo[k]fluoranthene	1.353	0.971	28.2#	126	-0.09	22.11
34	t	Benzo[a]pyrene	1.330	1.174	11.7	164	-0.02	22.53
35	t	Indeno[1,2,3-cd]pyrene	1.101	1.291	-17.3	200	-0.02	24.05
36	t	Dibenz[a,h]anthracene	0.883	1.047	-18.6	203#	-0.02	24.09
37	t	Benzo[g,h,i]perylene	1.012	1.165	-15.1	200	-0.04	24.43

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m62373.D M3M2942SIM.M Fri Jul 08 10:04:18 2016 RPT1

Initial Calibration Summary

Job Number: JC22613 **Sample:** E4M2974-ICC2974
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M66184.D
Project: BMSMC, Building 5 Area, PR

```
                    Response Factor Report  GCMS4M

Method       : C:\MSDCHEM\1\METHODS\M4M2974SIM.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5 15m x .25mm x .50um
Last Update  : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration

Calibration Files
0.05=4m66185.D   .2  =4m66182.D   2.5 =4m66189.D   .02 =4m66186.D
.1  =4m66181.D   1   =4m66184.D   .01 =4m66187.D   .5  =4m66183.D
5   =4m66188.D       =                =                =

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

1) I   1-Methylnaphthalene-d ----------------ISTD---------------------
2)  2-Fluorophenol
          0.655 0.695 0.646 0.586 0.607 0.642       0.670 0.598        0.637    5.91
3)  Phenol-d5
          1.018 1.114 0.989 0.929 0.956 1.031       1.068 0.937        1.005    6.50
4)  Phenol
          1.140 1.198 1.089 0.994 1.027 1.093       1.127 1.034        1.088    6.19
5)  bis(2-Chloroethyl)ether
          0.684 0.859 0.826 0.599 0.773 0.805       0.817 0.778        0.768   11.11
6)  Nitrobenzene-d5
          0.918 0.983 0.873 0.856 0.836 0.895       0.923 0.868        0.894    5.23
7)  Naphthalene
          2.780 3.002 2.831 2.771 2.541 2.828 2.788 2.883 2.701        2.792    4.51
8)  Hexachlorobutadiene
          0.495 0.514 0.471 0.488 0.435 0.471       0.484 0.451        0.476    5.27
9)  2-Methylnaphthalene
                1.591 1.232       1.385 1.222       1.319 1.189        1.323   11.31
10)  Hexachlorocyclopentadiene
                0.026 0.151       0.011 0.083       0.049 0.198        0.086   85.53
            ---- Quadratic regression ----  Coefficient =  0.9988
              Response Ratio = -0.01112 + 0.10494 *A + 0.03937 *A^2

11)  2-Fluorobiphenyl
          1.656 1.805 1.430 1.586 1.462 1.618       1.713              1.610    8.24

12) I   Fluorene-d10          ----------------ISTD---------------------
13)  Acenaphthylene
          1.001 1.108 1.086 1.038 0.966 1.182 0.988 1.196 0.979        1.060    8.22
14)  Acenaphthene
          0.641 0.697 0.677 0.634 0.584 0.748 0.612 0.745 0.583        0.658    9.56
15)  Dibenzofuran
                1.321 0.969       0.963 1.106       1.163 0.898        1.070   14.72
16)  Fluorene
          1.172 1.240 1.185 1.114 1.050 1.335 1.083 1.359 1.104        1.183    9.28
17)  2,4,6-Tribromophenol
          0.165 0.192 0.180       0.162 0.208       0.211              0.186   11.30
18)  Hexachlorobenzene
          0.381 0.407 0.362 0.493 0.349 0.417 0.380 0.435 0.331        0.395   12.50
19)  Pentachlorophenol
          0.125 0.141 0.163       0.117 0.167       0.147 0.159        0.146   13.33
20)  Phenanthrene
          1.533 1.691 1.598 1.528 1.445 1.792 1.546 1.832 1.419        1.598    9.08
21)  Anthracene
          1.461 1.485 1.490 1.395 1.357 1.619 1.442 1.633 1.365        1.472    6.78
```

Initial Calibration Summary

Job Number: JC22613 **Sample:** E4M2974-ICC2974
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M66184.D
Project: BMSMC, Building 5 Area, PR

```
22) I   Fluoranthene-d10      ----------------ISTD---------------------
23)  Fluoranthene
           1.141 1.180 1.088       1.122 1.273       1.306 1.072        1.169    7.71
24)  Pyrene
           1.021 1.132 1.094       1.103 1.242       1.276 1.104        1.139    7.86
25)  Terphenyl-d14
           0.536 0.607 0.547 0.531 0.575 0.635       0.656 0.432        0.565   12.51
26)  Benzo[a]anthracene
           0.890 1.003 0.879       1.050 1.051       1.102 0.941        0.988    8.74
27)  Chrysene
           1.003 1.032 0.911       1.127 1.065       1.122 0.931        1.027    8.31

28) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
29)  Benzo[b]fluoranthene
                 1.344 1.310       1.310 1.485       1.483              1.386    6.49
30)  Benzo[k]fluoranthene
           1.346 1.356 1.245       1.385 1.428       1.484 1.160        1.343    8.16
31)  Benzo[a]pyrene
           1.201 1.292 1.173       1.355 1.362       1.295 1.108        1.255    7.68
32)  Indeno[1,2,3-cd]pyrene
           1.382 1.507 1.406       1.385 1.605       1.620 1.361        1.467    7.50
33)  Dibenz[a,h]anthracene
           1.149 1.240 1.168       1.162 1.333       1.347 1.119        1.217    7.55
34)  Benzo[g,h,i]perylene
           1.225 1.301 1.232       1.217 1.386       1.402 1.181        1.278    6.81

35) I   1-Methylnaphthalene-d ----------------ISTD---------------------
36)  1,4-Dioxane
                 0.381 0.259       0.429 0.268       0.310 0.257        0.317   22.78
             ---- Quadratic regression ----  Coefficient =  0.9999
               Response Ratio = 0.00606 + 0.24609 *A + 0.00500 *A^2

37)  1-Methylnaphthalene
           1.212 1.203 1.203 1.258 1.101 1.126 1.405 1.167 1.109        1.198    7.83

38) I   Fluorene-d10a         ----------------ISTD---------------------
39)  4,6-dinitro-2-methylphenol
           0.082 0.107 0.196       0.066 0.171       0.125 0.159        0.129   36.99
            ---- Quadratic regression ----  Coefficient =  0.9967
              Response Ratio = -0.03186 + 0.23063 *A + -0.01051 *A^2

40)  1,2-Diphenylhydrazine
                 1.121 1.182       0.863 1.265       1.239 0.962        1.105   14.50
41)  n-nitrosodiphenylamine
                 0.774 0.860       0.640 0.901       0.858 0.674        0.785   13.70
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M4M2974SIM.M        Tue Jun 21 08:26:11 2016   MANAGER
```

Initial Calibration Verification

Job Number: JC22613 **Sample:** E4M2974-ICV2974
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M66190.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2974\4m66190.D          Vial: 11
Acq On    : 21 Jun 2016   3:30 am                    Operator: ashleyd
Sample    : icv2974-1.0                              Inst    : GCMS4M
Misc      : op94799a,e4m2974                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4M2974SIM.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5 15m x .25mm x .50um
Last Update  : Tue Jun 21 08:02:51 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	124	0.00	9.79
5	t	bis(2-Chloroethyl)ether	0.768	0.741	3.5	114	0.00	5.61
7	t	Naphthalene	2.792	2.651	5.1	116	0.00	8.31
8	t	Hexachlorobutadiene	0.476	0.453	4.8	119	-0.02	8.58
9	t	2-Methylnaphthalene	1.323	1.060	19.9	108	0.00	9.67
		----------	True	Calc.	% Drift	----------		
10	t	Hexachlorocyclopentadiene	2.000	1.812	9.4	88	0.00	10.00
		----------	AvgRF	CCRF	% Dev	----------		
12	I	Fluorene-d10	1.000	1.000	0.0	132	0.00	12.76
13	t	Acenaphthylene	1.060	0.997	5.9	111	0.00	11.41
14	t	Acenaphthene	0.658	0.645	2.0	114	0.00	11.76
15	t	Dibenzofuran	1.070	0.934	12.7	112	0.00	12.14
16	t	Fluorene	1.183	1.079	8.8	107	0.00	12.81
18	t	Hexachlorobenzene	0.395	0.345	12.7	109	0.00	13.91
20	t	Phenanthrene	1.598	1.479	7.4	109	0.00	14.72
21	t	Anthracene	1.472	1.264	14.1	103	-0.02	14.81
22	I	Fluoranthene-d10	1.000	1.000	0.0	131	0.00	16.94
23	t	Fluoranthene	1.169	0.997	14.7	103	0.00	16.98
24	t	Pyrene	1.139	0.991	13.0	105	0.00	17.37
26	t	Benzo[a]anthracene	0.988	0.800	19.0	100	0.00	19.46
27	t	Chrysene	1.027	0.815	20.6	101	0.00	19.52
28	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	115	0.00	21.53
29	t	Benzo[b]fluoranthene	1.386	1.185	14.5	91	0.00	21.12
30	t	Benzo[k]fluoranthene	1.343	1.205	10.3	97	0.00	21.16
31	t	Benzo[a]pyrene	1.255	1.149	8.4	97	0.00	21.57
32	t	Indeno[1,2,3-cd]pyrene	1.467	1.354	7.7	97	0.00	23.12
33	t	Dibenz[a,h]anthracene	1.217	1.098	9.8	94	0.00	23.16
34	t	Benzo[g,h,i]perylene	1.278	1.155	9.6	95	0.00	23.52
35	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	124	0.00	9.79
		----------	True	Calc.	% Drift	----------		
36	t	1,4-Dioxane	1.000	0.821	17.9	105	0.00	2.30
38	I	Fluorene-d10a	1.000	1.000	0.0	132	0.00	12.76
		----------	AvgRF	CCRF	% Dev	----------		
40	t	1,2-Diphenylhydrazine	1.105	0.966	12.6	101	0.00	13.17

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4M2974-ICV2974
Lab FileID: 4M66190.D

```
41 t   n-nitrosodiphenylamine      0.785   0.691     12.0  101   0.00   13.12
-------------------------------------------------------------------------------
-------------------------------------------------------------------------------

   (#) = Out of Range               SPCC's out = 0  CCC's out = 0
    4m66184.D  M4M2974SIM.M       Tue Jun 21 14:09:39 2016   MANAGER
```

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4M2974-ICV2974
Lab FileID: 4M66191.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2974\4m66191.D          Vial: 12
Acq On    : 21 Jun 2016   4:00 am                    Operator: ashleyd
Sample    : icv2974-1.0                              Inst    : GCMS4M
Misc      : op94799a,e4m2974                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4M2974SIM.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5 15m x .25mm x .50um
Last Update  : Tue Jun 21 08:02:51 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	93	0.00	9.79
4	t	Phenol	1.088	1.118	-2.8	95	0.00	5.51
12	I	Fluorene-d10	1.000	1.000	0.0	89	0.00	12.76
19	t	Pentachlorophenol	0.146	0.165	-13.0	87	0.00	14.34
38	I	Fluorene-d10a	1.000	1.000	0.0	89	0.00	12.76
		----------	True	Calc.	% Drift		----------	
39	t	4,6-dinitro-2-methylpheno	5.000	4.844	3.1	96	0.00	13.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m66184.D M4M2974SIM.M Tue Jun 21 08:27:37 2016 MANAGER

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E4M2995-CC2974
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M66577.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2995\4m66577.D          Vial: 2
Acq On    :  5 Jul 2016  10:11 am                    Operator: linseyk
Sample    : cc2974-.5                                Inst    : GCMS4M
Misc      : op94994a,e4m2995                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4M2974SIM.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5 15m x .25mm x .50um
Last Update  : Tue Jun 21 08:02:51 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	131	-0.07	9.71
2	S	2-Fluorophenol	0.637	0.509	20.1#	100	0.00	4.09
3	S	Phenol-d5	1.005	0.826	17.8	101	0.04	5.52
4	t	Phenol	1.088	0.904	16.9	105	0.03	5.54
5	t	bis(2-Chloroethyl)ether	0.768	0.717	6.6	115	-0.06	5.55
6	S	Nitrobenzene-d5	0.894	0.761	14.9	108	-0.06	6.91
7	t	Naphthalene	2.792	2.271	18.7	103	-0.06	8.25
8	t	Hexachlorobutadiene	0.476	0.402	15.5	109	-0.08	8.52
9	t	2-Methylnaphthalene	1.323	1.152	12.9	114	-0.07	9.60
		----------	True	Calc.	% Drift	----------		
10	t	Hexachlorocyclopentadiene	1.000	0.943	5.7	169	-0.10	9.91
		----------	AvgRF	CCRF	% Dev	----------		
11	S	2-Fluorobiphenyl	1.610	1.230	23.6#	94	-0.07	10.36
12	I	Fluorene-d10	1.000	1.000	0.0	89	-0.07	12.70
13	t	Acenaphthylene	1.060	1.446	-36.4#	107	-0.05	11.36
14	t	Acenaphthene	0.658	0.944	-43.5#	113	-0.07	11.70
15	t	Dibenzofuran	1.070	1.308	-22.2#	100	-0.07	12.07
16	t	Fluorene	1.183	1.527	-29.1#	100	-0.07	12.74
17	S	2,4,6-Tribromophenol	0.186	0.222	-19.4	93	-0.05	13.27
18	t	Hexachlorobenzene	0.395	0.522	-32.2#	107	-0.08	13.83
19	t	Pentachlorophenol	0.146	0.160	-9.6	97	-0.02	14.32
20	t	Phenanthrene	1.598	2.097	-31.2#	102	-0.06	14.66
21	t	Anthracene	1.472	2.088	-41.8#	114	-0.08	14.75
22	I	Fluoranthene-d10	1.000	1.000	0.0	136	-0.06	16.88
23	t	Fluoranthene	1.169	0.994	15.0	104	-0.06	16.92
24	t	Pyrene	1.139	1.032	9.4	110	-0.08	17.29
25	S	Terphenyl-d14	0.565	0.532	5.8	111	-0.08	17.67
26	t	Benzo[a]anthracene	0.988	0.970	1.8	120	-0.04	19.38
27	t	Chrysene	1.027	0.920	10.4	112	-0.06	19.44
28	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	137	-0.05	21.47
29	t	Benzo[b]fluoranthene	1.386	1.411	-1.8	131	-0.05	21.05
30	t	Benzo[k]fluoranthene	1.343	1.078	19.7	100	-0.05	21.09
31	t	Benzo[a]pyrene	1.255	1.171	6.7	124	-0.12	21.50
32	t	Indeno[1,2,3-cd]pyrene	1.467	1.457	0.7	124	-0.14	23.04
33	t	Dibenz[a,h]anthracene	1.217	1.236	-1.6	126	-0.14	23.07
34	t	Benzo[g,h,i]perylene	1.278	1.274	0.3	125	-0.15	23.43

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E4M2995-CC2974
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M66577.D
Project: BMSMC, Building 5 Area, PR

35	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	131	-0.07	9.71
		----------	True	Calc.	% Drift	----------		
36	t	1,4-Dioxane	0.500	0.537	-7.4	133	-0.07	2.25
		----------	AvgRF	CCRF	% Dev	----------		
37	t	1-Methylnaphthalene	1.198	0.969	19.1	109	-0.05	9.79
38	I	Fluorene-d10a	1.000	1.000	0.0	89	-0.07	12.70
		----------	True	Calc.	% Drift	----------		
39	t	4,6-dinitro-2-methylpheno	2.500	2.498	0.1	123	-0.05	12.96
		----------	AvgRF	CCRF	% Dev	----------		
40	t	1,2-Diphenylhydrazine	1.105	1.473	-33.3#	106	-0.10	13.10
41	t	n-nitrosodiphenylamine	0.785	0.973	-23.9#	101	0.00	13.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m66183.D M4M2974SIM.M Tue Jul 05 15:30:10 2016 MANAGER

6.7.30

6

Initial Calibration Summary

Job Number: JC22613 **Sample:** E4P887-ICC887
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4P16670.D
Project: BMSMC, Building 5 Area, PR

```
                        Response Factor Report  MS4P

Method       : C:\MSDCHEM\1\METHODS\M4P887SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Jun 06 15:07:18 2016
Response via : Initial Calibration

Calibration Files
2.5 =4p16677.D   1.0 =4p16670.D   0.5 =4p16669.D   0.2 =4p16671.D
0.1 =4p16672.D   0.05=4p16673.D   0.02=4p16674.D   0.01=4p16675.D
5   =4p16676.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
          0.298 0.309 0.376 0.300 0.293 0.280             0.318        0.311   10.02
3)  2-Fluorophenol
          0.457 0.573 0.582 0.624 0.582 0.560 0.533       0.472        0.548   10.51
4)  Phenol-d5
          0.815 1.018 1.121 1.108 0.962 0.852 0.791       0.736        0.925   15.99
5)  Phenol
          0.852 1.125 1.146 1.146 1.046 0.945 0.923       1.052        1.029   10.84
6)  bis(2-Chloroethyl)ether
          0.717 0.798 0.896 0.769 0.747 0.684 0.996 0.751 0.704        0.785   12.84
7)  Nitrobenzene-d5
          0.570 0.743 0.730 0.693 0.680 0.608 0.684       0.694        0.675    8.64
8)  Naphthalene
          2.446 2.679 2.910 2.907 2.591 2.528 2.515       2.546        2.640    6.76
9)  Hexachlorobutadiene
          0.364 0.463 0.474 0.448 0.437 0.431 0.512 0.534 0.408        0.452   11.41
10)  2-Methylnaphthalene
          1.359 1.244 1.416 1.554 1.320 1.597             1.372        1.409    8.97
11)  1-Methylnaphthalene
          1.552 1.607 1.836 1.951 1.733 1.774 1.878       1.645        1.747    7.96
12)  Hexachlorocyclopentadiene
          0.275 0.377 0.325 0.203 0.156 0.099             0.361        0.257   41.65
           ---- Quadratic regression ----  Coefficient =  0.9933
             Response Ratio = 0.00784 + 0.23620 *A + 0.04776 *A^2


13) I   Fluorene-d10          ----------------ISTD---------------------
14)  2-Fluorobiphenyl
          0.966 0.743 1.097 1.305 1.095 1.206 1.107                    1.074   16.73
15)  Acenaphthylene
          1.745 1.238 1.687 1.760 1.428 1.543             1.442        1.549   12.48
16)  Acenaphthene
          0.841 0.880 0.946 0.902 0.809 0.812 0.809 0.814 0.729        0.838    7.58
17)  Dibenzofuran
          1.634 1.126 1.491 1.925 1.271                   1.244        1.449   20.49
18)  Fluorene
          0.958 1.042 1.097 1.084 1.060 1.152 1.017       0.855        1.033    8.92
19)  4,6-dinitro-2-methylphenol
          0.102 0.069 0.060 0.041 0.024                   0.105        0.067   48.46
           ---- Quadratic regression ----  Coefficient =  0.9978
             Response Ratio = -0.01925 + 0.09877 *A + 0.00160 *A^2

20)  n-nitrosodiphenylamine
```

Initial Calibration Summary

Job Number: JC22613 **Sample:** E4P887-ICC887
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4P16670.D
Project: BMSMC, Building 5 Area, PR

```
          0.762 0.485 0.681 0.647 0.541 0.605 0.569       0.583        0.609   14.22
21)  1,2-Diphenylhydrazine
          1.177 0.924 1.077 0.994                         1.021        1.039    9.13
22)  2,4,6-Tribromophenol
          0.121 0.098 0.124 0.115                         0.094        0.111   12.41

23)     Fluoranthene-d10      ----------------ISTD---------------------
24)  Hexachlorobenzene
          0.231 0.239 0.249 0.243 0.221 0.221 0.245 0.241 0.220        0.234    4.96
25)  Pentachlorophenol
          0.093 0.097 0.088 0.063 0.041 0.041             0.106        0.075   35.83
           ---- Quadratic regression ----  Coefficient =  0.9994
             Response Ratio = -0.00213 + 0.08526 *A + 0.00337 *A^2

26)  Phenanthrene
          1.107 1.225 1.237 1.133 1.000 0.951 1.052 0.984 1.078        1.085    9.33
27)  Anthracene
          1.119 1.130 1.141 0.984 0.828                   1.114        1.053   11.80
28)  Fluoranthene
          1.216 1.270 1.312 1.257 1.202 1.197 1.374       1.189        1.252    5.19
29)  Pyrene
          1.228 1.283 1.311 1.186 1.020 0.994 1.012       1.173        1.151   10.98
30)  Terphenyl-d14
          0.503 0.574 0.576 0.576 0.503 0.477 0.460 0.420 0.421        0.501   12.60
31)  Benzo[a]anthracene
          0.837 0.949 0.971 0.797 0.654 0.632             0.873        0.816   16.30
32)  Chrysene
          1.031 1.085 1.114 1.021 0.866 0.804             0.999        0.989   11.46

33) I   Benzo(a)pyrene-d12    ----------------ISTD---------------------
34)  Benzo[b]fluoranthene
          1.398 1.482 1.598 1.353 1.233                   1.437        1.417    8.66
35)  Benzo[k]fluoranthene
          1.249 1.325 1.320 1.240 0.998                   1.221        1.226    9.76
36)  Benzo[a]pyrene
          1.232 1.272 1.402 1.319 1.332 1.185             1.224        1.281    5.85
37)  Indeno[1,2,3-cd]pyrene
          1.337 1.511 1.597 1.458 1.314                   1.322        1.423    8.24
38)  Dibenz[a,h]anthracene
          1.101 1.235 1.304 1.181 0.994                   1.103        1.153    9.55
39)  Benzo[g,h,i]perylene
          1.238 1.330 1.404 1.352 1.220                   1.217        1.294    6.12
-----------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

         M4P887SIM.M        Mon Jun 06 15:50:33 2016
```

6.7.31

6

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4P887-ICV887
Lab FileID: 4P16678.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4P887\4p16678.D          Vial: 11
Acq On    :  6 Jun 2016   2:49 pm                   Operator: linseyk
Sample    : icv887-1                                Inst    : MS4P
Misc      : op94376a,e4p887                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4P887SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Jun 06 15:07:18 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	122	0.00	7.76
5	Phenol	1.029	0.716	30.4#	78	0.00	3.77
	----------	AvgRF	CCRF	% Dev	----------		
13 I	Fluorene-d10	1.000	1.000	0.0	69	0.00	10.71
	----------	True	Calc.	% Drift	----------		
19	4,6-dinitro-2-methylpheno	5.000	4.314	13.7	71	0.00	10.96
23	Fluoranthene-d10	1.000	1.000	0.0	94	0.00	14.90
	----------	True	Calc.	% Drift	----------		
25 t	Pentachlorophenol	5.000	4.100	18.0	69	0.00	12.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p16670.D M4P887SIM.M Mon Jun 06 15:50:11 2016

Initial Calibration Verification

Job Number: JC22613 **Sample:** E4P887-ICV887
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4P16679.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4P887\4p16679.D          Vial: 12
Acq On    :  6 Jun 2016   3:19 pm                   Operator: linseyk
Sample    : icv887-1                                Inst    : MS4P
Misc      : op94376a,e4p887                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4P887SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Jun 06 15:07:18 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	7.76
2	t	1,4-Dioxane	0.311	0.251	19.3	120	0.01	1.43
6	t	bis(2-Chloroethyl)ether	0.785	0.798	-1.7	148	0.00	3.85
8	t	Naphthalene	2.640	2.666	-1.0	147	0.00	6.34
9	t	Hexachlorobutadiene	0.452	0.370	18.1	118	0.00	6.65
10	t	2-Methylnaphthalene	1.409	1.356	3.8	161	0.00	7.65
		----------	AvgRF	CCRF	% Dev	----------		
13	I	Fluorene-d10	1.000	1.000	0.0	85	0.00	10.71
15	t	Acenaphthylene	1.549	1.887	-21.8	130	0.00	9.37
16	t	Acenaphthene	0.838	1.047	-24.9	102	0.00	9.73
17		Dibenzofuran	1.449	1.885	-30.1#	143	0.00	10.08
18	t	Fluorene	1.033	1.084	-4.9	89	0.00	10.76
		----------	AvgRF	CCRF	% Dev	----------		
20		n-nitrosodiphenylamine	0.609	0.804	-32.0#	142	0.00	11.08
21		1,2-Diphenylhydrazine	1.039	1.218	-17.2	112	0.00	11.13
23		Fluoranthene-d10	1.000	1.000	0.0	104	0.00	14.91
24	t	Hexachlorobenzene	0.234	0.262	-12.0	114	0.00	11.84
		----------	AvgRF	CCRF	% Dev	----------		
26	t	Phenanthrene	1.085	1.328	-22.4	113	-0.01	12.62
27	t	Anthracene	1.053	1.138	-8.1	105	-0.01	12.72
28	t	Fluoranthene	1.252	1.298	-3.7	107	0.00	14.94
29	t	Pyrene	1.151	1.229	-6.8	100	0.00	15.34
31	t	Benzo[a]anthracene	0.816	0.999	-22.4	110	0.00	17.45
32	t	Chrysene	0.989	1.121	-13.3	108	0.00	17.51
33	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	84	0.00	19.53
34	t	Benzo[b]fluoranthene	1.417	1.243	12.3	70	0.00	19.11
35	t	Benzo[k]fluoranthene	1.226	1.486	-21.2	94	0.00	19.15
36	t	Benzo[a]pyrene	1.281	1.304	-1.8	86	0.00	19.55
37	t	Indeno[1,2,3-cd]pyrene	1.423	1.389	2.4	77	0.00	20.97
38	t	Dibenz[a,h]anthracene	1.153	1.131	1.9	77	0.00	21.02
39	t	Benzo[g,h,i]perylene	1.294	1.325	-2.4	83	0.00	21.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p16670.D M4P887SIM.M Mon Jun 06 15:50:13 2016

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E4P933-CC887
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4P17517.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4P933\4p17517.D          Vial: 2
Acq On    :  5 Jul 2016   3:45 pm                   Operator: linseyk
Sample    : cc887-.5                                Inst    : MS4P
Misc      : op94634a,e4p933                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4P887SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Tue Jul 05 23:05:15 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	131	0.00	7.52
2	t	1,4-Dioxane	0.311	0.247	20.6#	86	-0.06	1.32
3	S	2-Fluorophenol	0.548	0.431	21.4#	97	-0.11	2.47
4	S	Phenol-d5	0.925	0.687	25.7#	80	-0.06	3.58
5		Phenol	1.029	0.747	27.4#	85	-0.06	3.60
6	t	bis(2-Chloroethyl)ether	0.785	0.710	9.6	104	-0.02	3.67
7	S	Nitrobenzene-d5	0.675	0.643	4.7	116	-0.05	4.86
8	t	Naphthalene	2.640	1.881	28.8#	85	-0.03	6.12
9	t	Hexachlorobutadiene	0.452	0.355	21.5#	98	-0.04	6.40
10	t	2-Methylnaphthalene		----------NA----------				
11	t	1-Methylnaphthalene	1.747	1.269	27.4#	91	0.00	7.59
		----------	True	Calc.	% Drift	----------		
12		Hexachlorocyclopentadiene	1.000	0.337	66.3#	45	-0.02	7.75
		----------	AvgRF	CCRF	% Dev	----------		
13	I	Fluorene-d10	1.000	1.000	0.0	106	0.00	10.46
14	S	2-Fluorobiphenyl	1.074	1.084	-0.9	105	-0.04	8.19
15	t	Acenaphthylene	1.549	1.184	23.6#	74	0.00	9.13
16	t	Acenaphthene	0.838	0.882	-5.3	99	-0.04	9.47
17		Dibenzofuran	1.449	1.263	12.8	90	0.00	9.84
18	t	Fluorene	1.033	0.944	8.6	91	0.00	10.51
		----------	True	Calc.	% Drift	----------		
19		4,6-dinitro-2-methylpheno	2.500	2.653	-6.1	132	0.03	10.73
		----------	AvgRF	CCRF	% Dev	----------		
20		n-nitrosodiphenylamine	0.609	0.587	3.6	91	0.03	10.86
21		1,2-Diphenylhydrazine	1.039	0.732	29.5#	72	0.01	10.88
22	S	2,4,6-Tribromophenol	0.111	0.102	8.1	87	0.02	10.99
23		Fluoranthene-d10	1.000	1.000	0.0	115	0.00	14.67
24	t	Hexachlorobenzene	0.234	0.211	9.8	97	-0.04	11.60
		----------	True	Calc.	% Drift	----------		
25	t	Pentachlorophenol	2.500	2.593	-3.7	114	-0.02	12.05
		----------	AvgRF	CCRF	% Dev	----------		
26	t	Phenanthrene	1.085	0.951	12.4	88	0.00	12.38
27	t	Anthracene	1.053	0.898	14.7	90	-0.05	12.48
28	t	Fluoranthene	1.252	1.120	10.5	98	0.00	14.70

Continuing Calibration Summary

Job Number: JC22613 **Sample:** E4P933-CC887
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4P17517.D
Project: BMSMC, Building 5 Area, PR

29	t	Pyrene	1.151	1.055	8.3	93	0.00	15.10
30	S	Terphenyl-d14	0.501	0.547	-9.2	109	0.01	15.53
31	t	Benzo[a]anthracene	0.816	0.782	4.2	93	0.00	17.25
32	t	Chrysene	0.989	1.026	-3.7	106	0.00	17.29
33	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	120	0.00	19.32
34	t	Benzo[b]fluoranthene	1.417	1.271	10.3	96	-0.01	18.90
35	t	Benzo[k]fluoranthene	1.226	1.202	2.0	110	-0.02	18.94
36	t	Benzo[a]pyrene	1.281	1.200	6.3	103	-0.02	19.34
37	t	Indeno[1,2,3-cd]pyrene	1.423	1.348	5.3	102	0.00	20.77
38	t	Dibenz[a,h]anthracene	1.153	1.090	5.5	101	-0.02	20.81
39	t	Benzo[g,h,i]perylene	1.294	1.242	4.0	107	-0.01	21.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4p16669.D M4P887SIM.M Tue Jul 05 23:17:28 2016

6.7.34

6

Initial Calibration Summary

Job Number: JC22613 **Sample:** EM5307-ICC5307
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M125266.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report Instrument #1

Method : C:\MSDCHEM\1\METHODS\MM5307.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Mon Jun 20 09:51:54 2016
Response via : Initial Calibration

Calibration Files
2 =M125262.D 5 =M125269.D 100 =M125264.D 50 =M125266.D
1 =M125263.D 10 =M125268.D 80 =M125265.D 25 =M125267.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
1) I 1,4-Dichlorobenzene-d					ISTD					
2) 1,4-Dioxane	0.713	0.654	0.525	0.582	0.709	0.554	0.538	0.581	0.607	12.34
3) Pyridine	1.215	1.410	1.317	1.439	1.115	1.294	1.319	1.403	1.314	8.26
4) N-Nitrosodim	0.697	0.660	0.629	0.687	0.746	0.600	0.631	0.658	0.664	6.91
5) 2-Fluorophen	1.265	1.293	1.207	1.287	1.324	1.231	1.241	1.284	1.266	3.00
6) Indene	2.503	2.574	1.669	2.148	2.702	2.219	1.834	2.294	2.243	15.96
7) Cumene	3.373	3.426	2.319	2.998	3.528	2.987	2.617	3.178	3.053	13.66
8) Phenol-d5	1.592	1.804	1.463	1.651	1.705	1.557	1.549	1.635	1.620	6.47
9) Phenol	1.877	1.956	1.478	1.814	1.889	1.709	1.590	1.846	1.770	9.30
10) Aniline	2.047	2.045	1.340	1.827	2.029	1.757	1.414	1.948	1.801	15.68
11) bis(2-Chloro	1.300	1.361	1.026	1.193	1.528	1.163	1.092	1.235	1.237	12.85
12) 2-Chlorophen	1.558	1.554	1.145	1.365	1.598	1.345	1.231	1.438	1.404	11.66
13) Decane	1.404	1.423	0.939	1.180	1.427	1.204	1.024	1.259	1.232	14.95
14) 1,3-Dichloro	1.764	1.811	1.265	1.537	1.804	1.556	1.383	1.592	1.589	12.53
15) 1,4-Dichloro	1.703	1.665	1.216	1.493	1.761	1.462	1.335	1.537	1.522	12.25
16) Benzyl alcoh	0.829	0.899	0.769	0.877	0.866	0.791	0.813	0.883	0.841	5.63
17) 1,2-Dichloro	1.664	1.663	1.108	1.374	1.735	1.447	1.211	1.459	1.458	15.39
18) Acetophenone	1.882	1.910	1.231	1.583	1.921	1.665	1.349	1.725	1.658	15.65
19) 2-Methylphen	1.284	1.363	0.999	1.223	1.255	1.166	1.074	1.258	1.203	9.84
20) 2,2'-oxybis(	0.471	0.484	0.346	0.405	0.477	0.420	0.364	0.431	0.425	12.19
21) 3&4-Methylph	1.321	1.410	1.034	1.286	1.479	1.243	1.116	1.328	1.277	11.44
22) n-Nitroso-di	0.915	1.003	0.703	0.849	0.985	0.882	0.750	0.911	0.875	12.00
23) Hexachloroet	0.638	0.613	0.476	0.560	0.638	0.566	0.508	0.578	0.572	10.19
24) I Naphthalene-d8					ISTD					
25) Nitrobenzene	0.391	0.404	0.336	0.362	0.401	0.355	0.338	0.370	0.370	7.21
26) Nitrobenzene	0.388	0.411	0.319	0.362	0.416	0.357	0.329	0.377	0.370	9.51
27) Quinoline	0.853	0.861	0.698	0.786	0.869	0.741	0.702	0.813	0.791	8.84
28) Isophorone	0.663	0.728	0.575	0.671	0.771	0.641	0.591	0.696	0.667	9.87
29) 2-Nitropheno	0.211	0.210	0.186	0.211	0.196	0.198	0.192	0.223	0.203	5.98
30) 2,4-Dimethyl	0.355	0.315	0.291	0.325	0.324	0.282	0.293	0.338	0.315	7.99
31) Benzoic acid									0.000#	-1.00
32) bis(2-Chloro	0.420	0.436	0.334	0.385	0.432	0.384	0.347	0.401	0.392	9.58
33) 2,4-Dichloro	0.349	0.352	0.279	0.328	0.351	0.314	0.298	0.345	0.327	8.46
34) 2,6-Dichloro	0.355	0.347	0.257	0.308	0.343	0.294	0.268	0.319	0.311	11.77
35) 1,3,5-Trichl	0.458	0.440	0.285	0.349	0.480	0.382	0.305	0.385	0.386	18.33
36) 1,2,4-Trichl	0.435	0.429	0.296	0.353	0.451	0.382	0.315	0.378	0.380	14.93
37) 1,2,3-Trichl	0.427	0.411	0.277	0.338	0.442	0.350	0.295	0.355	0.362	16.72
38) Naphthalene	1.222	1.207	0.828	1.032	1.296	1.058	0.914	1.088	1.080	14.72
39) 4-Chloroanil	0.514	0.517	0.360	0.459	0.528	0.444	0.379	0.475	0.459	13.69
40) 2,3-Dichloro	0.459	0.463	0.326	0.398	0.492	0.395	0.344	0.422	0.412	14.11
41) Caprolactam	0.134	0.151	0.149	0.157	0.140	0.138	0.147	0.153	0.146	5.55
42) Hexachlorobu	0.236	0.224	0.160	0.190	0.234	0.194	0.168	0.201	0.201	14.31
43) 4-Chloro-3-m	0.336	0.324	0.273	0.312	0.333	0.294	0.280	0.318	0.309	7.69
44) 2-Methylnaph	0.736	0.738	0.520	0.631	0.781	0.659	0.554	0.673	0.661	13.81
45) 1-Methylnaph	0.889	0.884	0.628	0.757	0.947	0.768	0.664	0.798	0.792	14.10

Initial Calibration Summary

Job Number: JC22613 **Sample:** EM5307-ICC5307
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M125266.D
Project: BMSMC, Building 5 Area, PR

```
46) Dimethylnaph 0.811 0.780 0.563 0.688 0.853 0.701 0.597 0.732 0.715  14.04

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.299 0.354 0.292 0.363 0.292 0.331 0.316 0.379 0.328  10.32
49) 2,4,6-Trichl 0.415 0.394 0.318 0.377 0.428 0.354 0.333 0.386 0.376  10.24
50) 2,4,5-Trichl 0.451 0.445 0.384 0.425 0.410 0.392 0.396 0.436 0.417   6.09
51) 2-Fluorobiph 1.536 1.570 1.101 1.323 1.674 1.348 1.193 1.401 1.393  13.92
52) 2-Chloronaph 1.320 1.351 0.922 1.112 1.464 1.160 0.981 1.174 1.186  15.64
53) Biphenyl     1.778 1.753 1.204 1.502 1.860 1.500 1.315 1.581 1.562  14.69
54) 2-Nitroanili 0.289 0.325 0.302 0.321 0.262 0.285 0.299 0.325 0.301   7.39
55) Dimethylphth 1.460 1.505 1.144 1.318 1.661 1.312 1.198 1.371 1.371  12.25
56) Acenaphthyle 2.088 2.195 1.545 1.897 2.204 1.896 1.674 1.981 1.935  12.18
57) 2,6-Dinitrot 0.271 0.308 0.287 0.319 0.258 0.282 0.294 0.317 0.292   7.47
58) 3-Nitroanili 0.301 0.350 0.341 0.373 0.285 0.330 0.344 0.372 0.337   9.26
59) Acenaphthene 1.316 1.324 0.977 1.150 1.451 1.179 1.040 1.214 1.206  12.91
60) 2,4-Dinitrop 0.037 0.051 0.203 0.187       0.080 0.200 0.151 0.130  55.51
            ---- Quadratic regression ----  Coefficient =  0.9988
              Response Ratio = -0.03472 + 0.18355 *A + 0.00555 *A^2

61) 4-Nitropheno 0.121 0.124 0.166 0.164       0.128 0.164 0.154 0.146  14.29
62) Dibenzofuran 1.918 1.959 1.294 1.594 2.024 1.688 1.402 1.696 1.697  15.52
63) 2,4-Dinitrot 0.384 0.434 0.333 0.398 0.350 0.393 0.356 0.416 0.383   9.01
64) 2,3,4,6-Tetr 0.283 0.302 0.323 0.353 0.256 0.287 0.332 0.341 0.310  10.75
65) Diethylphtha 1.417 1.429 1.097 1.288 1.401 1.240 1.148 1.331 1.294   9.66
66) Fluorene     1.556 1.607 1.161 1.377 1.683 1.390 1.245 1.453 1.434  12.45
67) 4-Chlorophen 0.777 0.783 0.553 0.651 0.833 0.660 0.586 0.689 0.691  14.34
68) 4-Nitroanili 0.293 0.354 0.345 0.359 0.289 0.326 0.340 0.359 0.333   8.46

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro- 0.049 0.047 0.170 0.155       0.076 0.168 0.132 0.114  48.45
            ---- Quadratic regression ----  Coefficient =  0.9991
              Response Ratio = -0.01273 + 0.15145 *A + 0.01001 *A^2

71) n-Nitrosodip 0.567 0.624 0.515 0.565 0.647 0.541 0.540 0.579 0.572   7.73
72) 1,2-Diphenyl 0.654 0.732 0.631 0.690 0.657 0.636 0.658 0.709 0.671   5.30
73) 2,4,6-Tribro 0.107 0.113 0.121 0.125 0.106 0.112 0.127 0.122 0.116   7.01
74) 4-Bromopheny 0.251 0.257 0.212 0.240 0.268 0.222 0.224 0.239 0.239   7.95
75) Hexachlorobe 0.293 0.287 0.231 0.258 0.323 0.257 0.243 0.268 0.270  10.97
76) Pentachlorop 0.027 0.044 0.155 0.160       0.072 0.163 0.126 0.107  54.34
            ---- Quadratic regression ----  Coefficient =  0.9969
              Response Ratio = -0.03632 + 0.17752 *A + -0.00252 *A^2

77) Phenanthrene 1.250 1.266 0.983 1.127 1.337 1.135 1.051 1.171 1.165  10.03
78) Anthracene   1.197 1.312 0.997 1.162 1.310 1.150 1.079 1.205 1.177   9.09
79) Carbazole    1.178 1.214 0.977 1.135 1.223 1.091 1.043 1.168 1.129   7.63
80) Di-n-butylph 1.250 1.337 1.109 1.321 1.248 1.214 1.219 1.335 1.254   6.17
81) Fluoranthene 1.410 1.494 1.161 1.351 1.434 1.322 1.249 1.382 1.350   7.88
82) Octadecane   0.388 0.414 0.361 0.405 0.425 0.367 0.380 0.410 0.394   5.93

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.427 1.543 1.322 1.393 1.519 1.337 1.356 1.405 1.413   5.74
85) Terphenyl-d1 0.940 1.014 0.900 0.941 1.001 0.885 0.919 0.939 0.942   4.77
86) Butylbenzylp 0.518 0.551 0.613 0.617 0.482 0.517 0.609 0.587 0.562   9.25
87) Benzo[a]anth 1.308 1.327 1.201 1.235 1.369 1.149 1.214 1.228 1.254   5.86
88) 3,3'-Dichlor 0.403 0.428 0.444 0.467 0.396 0.397 0.452 0.458 0.431   6.68
89) Chrysene     1.306 1.326 1.182 1.226 1.401 1.161 1.208 1.226 1.254   6.53
90) bis(2-Ethylh 0.669 0.751 0.792 0.821 0.670 0.695 0.807 0.787 0.749   8.33

91) I   Perylene-d12          ----------------ISTD---------------------
92) Di-n-octylph 1.140 1.292 1.086 1.316 1.195 1.231 1.199 1.343 1.225   7.24
```

Initial Calibration Summary

Job Number: JC22613 **Sample:** EM5307-ICC5307
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M125266.D
Project: BMSMC, Building 5 Area, PR

93)	Benzo[b]fluo	1.430	1.479	1.069	1.167	1.448	1.266	1.079	1.286	1.278	12.83
94)	Benzo[k]fluo	1.325	1.398	0.903	1.149	1.461	1.237	1.044	1.215	1.217	15.14
95)	Benzo[a]pyre	1.279	1.306	0.951	1.108	1.279	1.144	1.009	1.168	1.155	11.28
96)	Indeno[1,2,3	1.152	1.213	1.022	1.106	1.191	1.086	1.048	1.119	1.117	5.93
97)	Dibenz(a,h)a	1.047	1.108	0.899	1.015	1.059	0.990	0.948	1.055	1.015	6.66
98)	Dibenz[a,h]a	1.217	1.276	1.013	1.168	1.213	1.145	1.090	1.214	1.167	7.14
99)	7,12-Dimethy	0.564	0.459	0.439	0.541	0.456	0.440	0.469	0.565	0.492	11.26
100)	Benzo[g,h,i]	1.295	1.370	1.060	1.173	1.317	1.167	1.118	1.220	1.215	8.72

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

MM5307.M Mon Jun 20 10:15:19 2016 MSM

6.7.35

6

Initial Calibration Summary

Job Number: JC22613 **Sample:** EM5308-ICC5308
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M125273.D
Project: BMSMC, Building 5 Area, PR

```
                          Response Factor Report  Instrument #1

  Method       : C:\MSDCHEM\1\METHODS\MM5307.M (RTE Integrator)
  Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
  Last Update  : Mon Jun 20 09:51:54 2016
  Response via : Initial Calibration

  Calibration Files
  2   =M125277.D  5   =M125276.D  100 =M125271.D  50  =M125273.D
  1   =M125278.D  10  =M125275.D  80  =M125272.D  25  =M125274.D

   Compound         2     5     100   50    1     10    80    25    Avg %RSD
  ---------------------------------------------------------------------------
101) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
102) Benzaldehyde 0.850 0.853       0.873       1.000 0.735 0.926 0.873  10.12

103) I   Acenaphthene-d10a     ----------------ISTD---------------------
104) 1,2,4,5-Tetr 0.567 0.570 0.482 0.523 0.547 0.593 0.492 0.544 0.540   7.15
105) Atrazine     0.170 0.162 0.178 0.190 0.127 0.192 0.182 0.193 0.174  12.64

106) I   Chrysene-d12a         ----------------ISTD---------------------
107) Benzidine          0.470 0.394 0.563       0.630 0.457 0.631 0.524  18.81
108) 1-chloroocta 0.170 0.203 0.217 0.228 0.154 0.238 0.216 0.231 0.207  14.53

109) I   Phenanthrene-d10a     ----------------ISTD---------------------
110) o-terphenyl  0.524 0.532 0.459 0.522 0.520 0.596 0.475 0.531 0.520   7.89

111) I   Naphthalene-d8a       ----------------ISTD---------------------
112) Hydroquinone       0.214 0.325 0.335       0.293 0.324 0.323 0.302  15.04
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MM5307.M          Mon Jun 20 10:16:17 2016   MSM
```

Initial Calibration Verification

Job Number: JC22613 **Sample:** EM5308-ICV5307
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M125280.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5308\M125280.D          Vial: 11
Acq On    : 16 Jun 2016   9:54 pm                   Operator: juliusj
Sample    : icv5307-50                              Inst    : Instrument #1
Misc      : op94571,em5308                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5307.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Mon Jun 20 09:51:54 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	120	0.00	4.88
3	t	Pyridine	1.314	1.358	-3.3	113	0.05	2.83
10	t	Aniline	1.801	2.136	-18.6	141	0.00	4.62
16	t	Benzyl alcohol	0.841	0.913	-8.6	125	0.00	4.99
24	I	Naphthalene-d8	1.000	1.000	0.0	128	0.00	6.05
39	t	4-Chloroaniline	0.459	0.442	3.7	123	0.00	6.13
44	t	2-Methylnaphthalene	0.661	0.575	13.0	117	0.00	6.90
47	I	Acenaphthene-d10	1.000	1.000	0.0	126	0.00	8.45
54	t	2-Nitroaniline	0.301	0.302	-0.3	118	0.00	7.74
58	t	3-Nitroaniline	0.337	0.347	-3.0	117	0.00	8.39
		----------	AvgRF	CCRF	% Dev	----------		
62	t	Dibenzofuran	1.697	1.641	3.3	130	0.00	8.80
68	t	4-Nitroaniline	0.333	0.345	-3.6	121	0.01	9.44
69	I	Phenanthrene-d10	1.000	1.000	0.0	139	0.00	11.10
		----------	AvgRF	CCRF	% Dev	----------		
79	t	Carbazole	1.129	1.012	10.4	124	0.00	11.58
83	I	Chrysene-d12	1.000	1.000	0.0	140	0.00	16.28
91	I	Perylene-d12	1.000	1.000	0.0	117	0.00	18.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Copy of M125266.D MM5307.M Mon Jun 20 09:57:28 2016 MSM

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5308-ICV5308
Lab FileID: M125281A.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5308\M125281a.D          Vial: 12
Acq On    : 16 Jun 2016  10:23 pm                    Operator: juliusj
Sample    : icv5308-50                               Inst    : Instrument #1
Misc      : op94571,em5308                           Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5307.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Fri Jun 17 17:40:20 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.
101 I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	109	0.00	4.88
103 I	Acenaphthene-d10a	1.000	1.000	0.0	108	0.00	8.45
104 I	1,2,4,5-Tetrachlorobenzen	0.540	0.559	-3.5	115	0.00	7.14
106 I	Chrysene-d12a	1.000	1.000	0.0	88	0.00	16.29
107 t	Benzidine	0.524	0.539	-2.9	85	0.00	13.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M125273a.D MM5307.M Mon Jun 20 09:07:58 2016 MSM

Initial Calibration Verification

Job Number: JC22613 **Sample:** EM5308-ICV5307
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M125281.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5308\M125281.D          Vial: 12
Acq On    : 16 Jun 2016  10:23 pm                   Operator: juliusj
Sample    : icv5307-50                              Inst    : Instrument #1
Misc      : op94571,em5308                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5307.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Mon Jun 20 09:51:54 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	124	0.00	4.88
4	t	N-Nitrosodimethylamine	0.664	0.593	10.7	107	0.00	2.74
11	t	bis(2-Chloroethyl)ether	1.237	1.265	-2.3	131	0.00	4.66
14	t	1,3-Dichlorobenzene	1.589	1.517	4.5	122	0.00	4.84
15	t	1,4-Dichlorobenzene	1.522	1.442	5.3	119	0.00	4.89
17	t	1,2-Dichlorobenzene	1.458	1.455	0.2	131	0.00	5.02
20	t	2,2'-oxybis(1-Chloropropa	0.425	0.410	3.5	125	0.00	5.10
22	t	n-Nitroso-di-n-propylamin	0.875	0.847	3.2	123	0.00	5.20
23	t	Hexachloroethane	0.572	0.559	2.3	123	0.00	5.31
24	I	Naphthalene-d8	1.000	1.000	0.0	120	0.00	6.05
26	t	Nitrobenzene	0.370	0.338	8.6	112	0.00	5.36
28	t	Isophorone	0.667	0.640	4.0	114	0.00	5.57
32	t	bis(2-Chloroethoxy)methan	0.392	0.396	-1.0	124	0.00	5.78
36	t	1,2,4-Trichlorobenzene	0.380	0.361	5.0	123	0.00	5.99
38	t	Naphthalene	1.080	0.993	8.1	116	0.00	6.07
42	t	Hexachlorobutadiene	0.201	0.197	2.0	124	0.00	6.22
47	I	Acenaphthene-d10	1.000	1.000	0.0	122	0.00	8.45
48	t	Hexachlorocyclopentadiene	0.328	0.292	11.0	98	0.00	7.13
52	t	2-Chloronaphthalene	1.186	1.144	3.5	126	0.00	7.58
55	t	Dimethylphthalate	1.371	1.226	10.6	114	0.00	8.05
56	t	Acenaphthylene	1.935	1.697	12.3	109	0.00	8.22
57	t	2,6-Dinitrotoluene	0.292	0.273	6.5	105	0.00	8.13
59	t	Acenaphthene	1.206	1.069	11.4	114	0.00	8.51
		----------	AvgRF	CCRF	% Dev	----------		
63	t	2,4-Dinitrotoluene	0.383	0.361	5.7	111	0.00	8.79
65	t	Diethylphthalate	1.294	1.147	11.4	109	0.00	9.25
66	t	Fluorene	1.434	1.258	12.3	112	0.00	9.39
67	t	4-Chlorophenyl-phenylethe	0.691	0.625	9.6	118	0.00	9.42
69	I	Phenanthrene-d10	1.000	1.000	0.0	124	0.00	11.10
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.572	0.492	14.0	108	0.00	9.63
72	t	1,2-Diphenylhydrazine	0.671	0.581	13.4	105	0.00	9.70
74	t	4-Bromophenyl-phenylether	0.239	0.220	7.9	114	0.00	10.31
75	t	Hexachlorobenzene	0.270	0.233	13.7	112	0.00	10.40
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.165	0.987	15.3	109	0.00	11.14

Initial Calibration Verification

Job Number: JC22613 **Sample:** EM5308-ICV5307
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M125281.D
Project: BMSMC, Building 5 Area, PR

78	t	Anthracene	1.177	0.992	15.7	106	0.00	11.24
80	t	Di-n-butylphthalate	1.254	1.121	10.6	105	0.00	12.39
81	t	Fluoranthene	1.350	1.153	14.6	106	0.00	13.45
83	I	Chrysene-d12	1.000	1.000	0.0	105	0.00	16.29
84	t	Pyrene	1.413	1.398	1.1	106	0.00	13.87
86	t	Butylbenzylphthalate	0.562	0.582	-3.6	99	0.00	15.34
87	t	Benzo[a]anthracene	1.254	1.201	4.2	102	0.00	16.27
89	t	Chrysene	1.254	1.164	7.2	100	0.01	16.34
90	t	bis(2-Ethylhexyl)phthalat	0.749	0.768	-2.5	99	0.00	16.55
91	I	Perylene-d12	1.000	1.000	0.0	101	0.00	18.90
92	t	Di-n-octylphthalate	1.225	1.263	-3.1	97	0.00	17.78
93	t	Benzo[b]fluoranthene	1.278	1.126	11.9	98	0.01	18.26
94	t	Benzo[k]fluoranthene	1.217	1.149	5.6	101	0.01	18.31
95	t	Benzo[a]pyrene	1.155	1.075	6.9	98	0.01	18.81
96	t	Indeno[1,2,3-cd]pyrene	1.117	1.028	8.0	94	0.02	20.69
98	t	Dibenz[a,h]anthracene	1.167	1.075	7.9	93	0.02	20.74
100	t	Benzo[g,h,i]perylene	1.215	1.069	12.0	92	0.02	21.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Copy of M125266.D MM5307.M Mon Jun 20 09:57:31 2016 MSM

6.7.39

6

Initial Calibration Verification

Job Number: JC22613 **Sample:** EM5308-ICV5308
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M125282A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5308\M125282a.D          Vial: 13
Acq On    : 16 Jun 2016  10:51 pm                    Operator: juliusj
Sample    : icv5308-50                               Inst    : Instrument #1
Misc      : op94571,em5308                           Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5307.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Fri Jun 17 17:40:20 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.
101	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	123	0.00	4.88
102	t	Benzaldehyde	0.873	1.001	-14.7	141	0.00	4.54
103	I	Acenaphthene-d10a	1.000	1.000	0.0	118	0.00	8.45
105	t	Atrazine	0.174	0.197	-13.2	123	0.00	10.68
106	I	Chrysene-d12a	1.000	1.000	0.0	113	0.00	16.28
109	I	Phenanthrene-d10a	1.000	1.000	0.0	105	0.00	11.10
111	I	Naphthalene-d8a	1.000	1.000	0.0	123	0.00	6.05

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M125273a.D MM5307.M Mon Jun 20 09:08:02 2016 MSM

Initial Calibration Verification

Job Number: JC22613 **Sample:** EM5308-ICV5307
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M125282.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5308\M125282.D          Vial: 13
Acq On    : 16 Jun 2016  10:51 pm                   Operator: juliusj
Sample    : icv5307-50                              Inst    : Instrument #1
Misc      : op94571,em5308                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5307.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Mon Jun 20 09:51:54 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	139	0.00	4.88
2	t	1,4-Dioxane	0.607	0.502	17.3	120	0.00	2.46
6	t	Indene	2.243	2.192	2.3	142	0.00	5.09
7	t	Cumene	3.053	2.668	12.6	124	0.00	4.27
13	t	Decane	1.232	1.063	13.7	126	0.00	4.75
18	t	Acetophenone	1.658	1.556	6.2	137	0.00	5.20
24	I	Naphthalene-d8	1.000	1.000	0.0	138	0.00	6.05
27	t	Quinoline	0.791	0.672	15.0	118	0.00	6.45
40	t	2,3-Dichloroaniline	0.412	0.337	18.2	117	0.00	7.29
41	t	Caprolactam	0.146	0.126	13.7	111	0.00	6.51
45	t	1-Methylnaphthalene	0.792	0.670	15.4	122	0.00	7.04
46	t	Dimethylnaphthalene	0.715	0.615	14.0	124	0.00	7.80
47	I	Acenaphthene-d10	1.000	1.000	0.0	134	0.00	8.45
53	t	Biphenyl	1.562	1.387	11.2	124	0.00	7.56
		----------	AvgRF	CCRF	% Dev	----------		
69	I	Phenanthrene-d10	1.000	1.000	0.0	124	0.00	11.10
		----------	AvgRF	CCRF	% Dev	----------		
82	t	Octadecane	0.394	0.384	2.5	117	0.00	11.08
83	I	Chrysene-d12	1.000	1.000	0.0	136	0.00	16.28
91	I	Perylene-d12	1.000	1.000	0.0	109	0.00	18.90
99	t	7,12-Dimethylbenz(a)anthr	0.492	0.457	7.1	92	0.00	18.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Copy of M125266.D MM5307.M Mon Jun 20 09:57:33 2016 MSM

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5308-ICV5307
Lab FileID: M125283.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5308\M125283.D          Vial: 14
Acq On    : 16 Jun 2016  11:20 pm                   Operator: juliusj
Sample    : icv5307-50                              Inst    : Instrument #1
Misc      : op94571,em5308                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5307.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Mon Jun 20 09:51:54 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	150	0.00	4.88
5	S	2-Fluorophenol	1.266	1.132	10.6	132	0.00	3.88
8	S	Phenol-d5	1.620	1.391	14.1	127	0.00	4.59
24	I	Naphthalene-d8	1.000	1.000	0.0	144	0.00	6.05
25	S	Nitrobenzene-d5	0.370	0.327	11.6	130	0.00	5.34
47	I	Acenaphthene-d10	1.000	1.000	0.0	142	0.00	8.45
51	S	2-Fluorobiphenyl	1.393	1.248	10.4	134	0.00	7.41
		----------	AvgRF	CCRF	% Dev	----------		
69	I	Phenanthrene-d10	1.000	1.000	0.0	145	0.00	11.10
		----------	AvgRF	CCRF	% Dev	----------		
73	S	2,4,6-Tribromophenol	0.116	0.095	18.1	109	0.00	9.81
		----------	AvgRF	CCRF	% Dev	----------		
83	I	Chrysene-d12	1.000	1.000	0.0	142	0.00	16.28
85	S	Terphenyl-d14	0.942	0.762	19.1	115	0.00	14.28
91	I	Perylene-d12	1.000	1.000	0.0	119	0.00	18.90

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Copy of M125266.D MM5307.M Mon Jun 20 09:57:35 2016 MSM

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5308-ICV5307
Lab FileID: M125284.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5308\M125284.D          Vial: 15
Acq On    : 16 Jun 2016  11:49 pm                   Operator: juliusj
Sample    : icv5307-50                              Inst    : Instrument #1
Misc      : op94571,em5308                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5307.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Mon Jun 20 09:51:54 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83	I	Chrysene-d12	1.000	1.000	0.0	129	0.00	16.28
88	t	3,3'-Dichlorobenzidine	0.431	0.385	10.7	106	0.00	16.29

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Copy of M125266.D MM5307.M Mon Jun 20 09:57:37 2016 MSM

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5308-ICV5308
Lab FileID: M125285.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5308\M125285.D          Vial: 16
Acq On    : 17 Jun 2016  12:18 am                   Operator: juliusj
Sample    : icv5308-50                              Inst    : Instrument #1
Misc      : op94571,em5308                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5307.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Fri Jun 17 17:40:20 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.
111 I	Naphthalene-d8a	1.000	1.000	0.0	113	0.00	6.05
112	Hydroquinone	0.302	0.344	-13.9	116	-0.01	6.50

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M125273a.D MM5307.M Mon Jun 20 09:08:08 2016 MSM

Initial Calibration Verification

Job Number: JC22613 **Sample:** EM5310-ICV5307
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M125314.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5310\M125314.D          Vial: 2
Acq On    : 19 Jun 2016   8:09 am                   Operator: kristis
Sample    : icv5307-50                              Inst    : Instrument #1
Misc      : op94571,em5310,1000,,,1,1               Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5307.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Mon Jun 20 09:51:54 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	139	0.00	4.87
9	t	Phenol	1.770	1.578	10.8	121	0.00	4.60
12	t	2-Chlorophenol	1.404	1.317	6.2	134	0.00	4.71
19	t	2-Methylphenol	1.203	1.150	4.4	131	0.00	5.07
21	t	3&4-Methylphenol	1.277	1.206	5.6	131	0.00	5.20
24	I	Naphthalene-d8	1.000	1.000	0.0	129	-0.01	6.04
29	t	2-Nitrophenol	0.203	0.219	-7.9	134	0.00	5.65
30	t	2,4-Dimethylphenol	0.315	0.328	-4.1	130	0.00	5.69
33	t	2,4-Dichlorophenol	0.327	0.326	0.3	128	0.00	5.90
34	t	2,6-Dichlorophenol	0.311	0.307	1.3	129	0.00	6.13
43	t	4-Chloro-3-methylphenol	0.309	0.290	6.1	120	0.00	6.70
47	I	Acenaphthene-d10	1.000	1.000	0.0	127	0.00	8.45
49	t	2,4,6-Trichlorophenol	0.376	0.393	-4.5	132	-0.01	7.29
50	t	2,4,5-Trichlorophenol	0.417	0.383	8.2	114	0.00	7.35
		----------	True	Calc.	% Drift		----------	
60	t	2,4-Dinitrophenol	50.000	41.344	17.3	88	-0.01	8.56
		----------	AvgRF	CCRF	% Dev		----------	
61	t	4-Nitrophenol	0.146	0.137	6.2	106	0.01	8.72
64	t	2,3,4,6-Tetrachlorophenol	0.310	0.320	-3.2	115	0.00	9.02
69	I	Phenanthrene-d10	1.000	1.000	0.0	123	-0.01	11.09
		----------	True	Calc.	% Drift		----------	
70	t	4,6-Dinitro-2-methylpheno	50.000	45.682	8.6	110	-0.02	9.49
		----------	True	Calc.	% Drift		----------	
76	t	Pentachlorophenol	50.000	42.907	14.2	92	-0.01	10.77
		----------	AvgRF	CCRF	% Dev		----------	
83	I	Chrysene-d12	1.000	1.000	0.0	118	-0.02	16.26
91	I	Perylene-d12	1.000	1.000	0.0	96	-0.01	18.89

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 Copy of M125266.D MM5307.M          Mon Jun 20 09:57:05 2016   MSM
```

Continuing Calibration Summary

Job Number: JC22613 **Sample:** EM5319-CC5307
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M125529.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5319\M125529.D          Vial: 2
Acq On    : 23 Jun 2016   9:46 pm                   Operator: seanb1
Sample    : cc5307-50                               Inst    : Instrument #1
Misc      : op94571,em5319                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5307.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Thu Jun 23 17:14:12 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	59	0.00	4.81
2	t	1,4-Dioxane	0.607	0.456	24.9#	46#	-0.05	2.37
3	t	Pyridine	1.314	1.191	9.4	49#	-0.05	2.69
4	t	N-Nitrosodimethylamine	0.664	0.631	5.0	54	-0.04	2.66
5	S	2-Fluorophenol	1.266	1.145	9.6	53	0.00	3.83
6	t	Indene	2.243	2.100	6.4	58	0.00	5.02
7	t	Cumene	3.053	2.798	8.4	55	0.00	4.20
8	S	Phenol-d5	1.620	1.491	8.0	54	0.02	4.55
9	t	Phenol	1.770	1.580	10.7	52	0.03	4.56
10	t	Aniline	1.801	1.608	10.7	52	0.00	4.56
11	t	bis(2-Chloroethyl)ether	1.237	1.060	14.3	53	0.00	4.60
12	t	2-Chlorophenol	1.404	1.315	6.3	57	0.00	4.65
13	t	Decane	1.232	1.105	10.3	56	0.00	4.68
14	t	1,3-Dichlorobenzene	1.589	1.505	5.3	58	0.00	4.77
15	t	1,4-Dichlorobenzene	1.522	1.473	3.2	58	0.00	4.82
16	t	Benzyl alcohol	0.841	0.591	29.7#	40#	0.01	4.93
17	t	1,2-Dichlorobenzene	1.458	1.384	5.1	60	0.00	4.95
18	t	Acetophenone	1.658	1.615	2.6	60	0.00	5.13
19	t	2-Methylphenol	1.203	1.202	0.1	58	-0.01	5.02
20	t	2,2'-oxybis(1-Chloropropa	0.425	0.382	10.1	56	0.00	5.02
21	t	3&4-Methylphenol	1.277	1.186	7.1	55	0.00	5.15
22	t	n-Nitroso-di-n-propylamin	0.875	0.855	2.3	60	0.00	5.14
23	t	Hexachloroethane	0.572	0.607	-6.1	64	0.00	5.23
24	I	Naphthalene-d8	1.000	1.000	0.0	58	0.00	5.97
25	S	Nitrobenzene-d5	0.370	0.348	5.9	55	0.00	5.27
26	t	Nitrobenzene	0.370	0.352	4.9	56	0.00	5.29
27	t	Quinoline	0.791	0.755	4.6	55	0.01	6.37
28	t	Isophorone	0.667	0.633	5.1	54	0.00	5.50
29	t	2-Nitrophenol	0.203	0.218	-7.4	60	0.00	5.58
30	t	2,4-Dimethylphenol	0.315	0.321	-1.9	57	0.02	5.63
32	t	bis(2-Chloroethoxy)methan	0.392	0.359	8.4	54	0.00	5.71
33	t	2,4-Dichlorophenol	0.327	0.344	-5.2	60	0.02	5.83
34	t	2,6-Dichlorophenol	0.311	0.319	-2.6	60	0.01	6.06
35	t	1,3,5-Trichlorobenzene	0.386	0.387	-0.3	64	0.00	5.59
36	t	1,2,4-Trichlorobenzene	0.380	0.373	1.8	61	0.00	5.91
37	t	1,2,3-Trichlorobenzene	0.362	0.364	-0.6	62	0.00	6.15
38	t	Naphthalene	1.080	0.999	7.5	56	0.00	5.99
39	t	4-Chloroaniline	0.459	0.429	6.5	54	0.03	6.05
40	t	2,3-Dichloroaniline	0.412	0.419	-1.7	61	0.02	7.20
41	t	Caprolactam	0.146	0.148	-1.4	54	-0.02	6.46
42	t	Hexachlorobutadiene	0.201	0.213	-6.0	64	0.00	6.13

Continuing Calibration Summary

Job Number: JC22613 **Sample:** EM5319-CC5307
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M125529.D
Project: BMSMC, Building 5 Area, PR

43	t	4-Chloro-3-methylphenol	0.309	0.304	1.6	56	0.05	6.65
44	t	2-Methylnaphthalene	0.661	0.627	5.1	57	0.01	6.82
45	t	1-Methylnaphthalene	0.792	0.750	5.3	57	0.00	6.94
46	t	Dimethylnaphthalene	0.715	0.701	2.0	59	0.02	7.70
47	I	Acenaphthene-d10	1.000	1.000	0.0	60	0.00	8.35
48	t	Hexachlorocyclopentadiene	0.328	0.387	-18.0	64	-0.01	7.04
49	t	2,4,6-Trichlorophenol	0.376	0.410	-9.0	66	0.00	7.22
50	t	2,4,5-Trichlorophenol	0.417	0.463	-11.0	66	0.01	7.28
51	S	2-Fluorobiphenyl	1.393	1.292	7.3	59	0.00	7.32
52	t	2-Chloronaphthalene	1.186	1.110	6.4	60	0.00	7.49
53	t	Biphenyl	1.562	1.464	6.3	59	0.00	7.47
54	t	2-Nitroaniline	0.301	0.311	-3.3	58	0.00	7.65
55	t	Dimethylphthalate	1.371	1.331	2.9	61	0.00	7.95
56	t	Acenaphthylene	1.935	1.836	5.1	58	0.00	8.12
57	t	2,6-Dinitrotoluene	0.292	0.327	-12.0	62	0.00	8.03
58	t	3-Nitroaniline	0.337	0.333	1.2	54	0.01	8.31
59	t	Acenaphthene	1.206	1.092	9.5	57	0.00	8.41
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	110.189	-10.2	66	0.01	8.49
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.146	0.162	-11.0	59	0.06	8.66
62	t	Dibenzofuran	1.697	1.606	5.4	61	0.00	8.70
63	t	2,4-Dinitrotoluene	0.383	0.414	-8.1	63	0.02	8.71
64	t	2,3,4,6-Tetrachlorophenol	0.310	0.385	-24.2#	66	0.01	8.93
65	t	Diethylphthalate	1.294	1.293	0.1	60	0.00	9.16
66	t	Fluorene	1.434	1.363	5.0	60	0.01	9.29
67	t	4-Chlorophenyl-phenylethe	0.691	0.684	1.0	63	0.01	9.32
68	t	4-Nitroaniline	0.333	0.328	1.5	55	0.04	9.36
69	I	Phenanthrene-d10	1.000	1.000	0.0	63	0.00	11.00
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	53.615	-7.2	68	0.00	9.42
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.572	0.530	7.3	59	0.00	9.53
72	t	1,2-Diphenylhydrazine	0.671	0.614	8.5	56	0.00	9.60
73	S	2,4,6-Tribromophenol	0.116	0.126	-8.6	64	0.00	9.72
74	t	4-Bromophenyl-phenylether	0.239	0.238	0.4	63	0.00	10.20
75	t	Hexachlorobenzene	0.270	0.264	2.2	65	0.00	10.29
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	100.000	103.456	-3.5	64	0.00	10.69
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.165	1.062	8.8	60	0.00	11.04
78	t	Anthracene	1.177	1.107	5.9	60	0.00	11.14
79	t	Carbazole	1.129	1.069	5.3	60	0.02	11.48
80	t	Di-n-butylphthalate	1.254	1.266	-1.0	61	0.01	12.28
81	t	Fluoranthene	1.350	1.297	3.9	61	0.03	13.34
82	t	Octadecane	0.394	0.378	4.1	59	0.00	10.98
83	I	Chrysene-d12	1.000	1.000	0.0	65	0.00	16.18
84	t	Pyrene	1.413	1.319	6.7	61	-0.01	13.77
85	S	Terphenyl-d14	0.942	0.911	3.3	63	0.02	14.18
86	t	Butylbenzylphthalate	0.562	0.566	-0.7	59	0.00	15.23
87	t	Benzo[a]anthracene	1.254	1.199	4.4	63	0.01	16.17

Continuing Calibration Summary

Job Number: JC22613 **Sample:** EM5319-CC5307
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M125529.D
Project: BMSMC, Building 5 Area, PR

88	t	3,3'-Dichlorobenzidine	0.431	0.467	-8.4	65	0.01	16.19
89	t	Chrysene	1.254	1.159	7.6	61	0.02	16.24
90	t	bis(2-Ethylhexyl)phthalat	0.749	0.776	-3.6	61	0.05	16.45
91	I	Perylene-d12	1.000	1.000	0.0	57	0.01	18.81
92	t	Di-n-octylphthalate	1.225	1.358	-10.9	59	0.00	17.67
93	t	Benzo[b]fluoranthene	1.278	1.233	3.5	60	0.02	18.17
94	t	Benzo[k]fluoranthene	1.217	1.129	7.2	56	0.02	18.22
95	t	Benzo[a]pyrene	1.155	1.112	3.7	57	0.02	18.72
96	t	Indeno[1,2,3-cd]pyrene	1.117	1.093	2.1	57	0.02	20.58
97	t	Dibenz(a,h)acridine	1.015	1.004	1.1	57	0.02	20.20
98	t	Dibenz[a,h]anthracene	1.167	1.151	1.4	56	0.01	20.63
99	t	7,12-Dimethylbenz(a)anthr	0.492	0.562	-14.2	60	0.02	18.18
100	t	Benzo[g,h,i]perylene	1.215	1.143	5.9	56	0.02	21.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Copy of M125266.D MM5307.M Fri Jun 24 11:44:49 2016 MSM

6.7.46

6

Continuing Calibration Summary

Job Number: JC22613 **Sample:** EM5319-CC5308
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M125530.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5319\M125530.D          Vial: 3
Acq On    : 23 Jun 2016  10:15 pm                   Operator: seanb1
Sample    : cc5308-50                               Inst    : Instrument #1
Misc      : op94571,em5319                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5307.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Thu Jun 23 17:14:12 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.
101	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	61	0.00	4.81
102	t	Benzaldehyde	0.873	0.808	7.4	57	0.00	4.47
103	I	Acenaphthene-d10a	1.000	1.000	0.0	63	0.00	8.35
104	I	1,2,4,5-Tetrachlorobenzen	0.540	0.588	-8.9	71	-0.01	7.04
105	t	Atrazine	0.174	0.216	-24.1#	72	0.03	10.59
106	I	Chrysene-d12a	1.000	1.000	0.0	67	0.00	16.18
107	t	Benzidine	0.524	0.559	-6.7	66	-0.01	13.68
108	I	Naphthalene-d8a	1.000	1.000	0.0	61	0.00	5.97
109		Hydroquinone	0.302	0.361	-19.5	66	0.04	6.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Copy of M125266.D MM5307.M Fri Jun 24 11:44:52 2016 MSM

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125545.D
Acq On : 24 Jun 2016 5:29 am
Operator : seanb1
Sample : jc22613-1
Misc : op95018,em5319,900
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 24 15:26:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.803	152	477317	40.00 ppm	0.00
24) Naphthalene-d8	5.962	136	1656557	40.00 ppm	0.00
47) Acenaphthene-d10	8.344	164	1049719	40.00 ppm	-0.01
69) Phenanthrene-d10	10.988	188	1951333	40.00 ppm	-0.01
83) Chrysene-d12	16.169	240	1999271	40.00 ppm	-0.01
91) Perylene-d12	18.797	264	1870779	40.00 ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.803	152	477317	40.00 ppm	0.00
103) Acenaphthene-d10a	8.344	164	1049719	40.00 ppm	-0.01
106) Chrysene-d12a	16.169	240	1999271	40.00 ppm	-0.01
108) Naphthalene-d8a	5.962	136	1656557	40.00 ppm	0.00
110) Chrysene-d12b	16.169	240	1999271	40.00 ppm	-0.01
System Monitoring Compounds					
5) 2-Fluorophenol	3.836	112	338965	22.43 ppm	0.00
Spiked Amount 50.000			Recovery	= 44.86%	
8) Phenol-d5	4.552	99	292526	15.14 ppm	0.02
Spiked Amount 50.000			Recovery	= 30.28%	
25) Nitrobenzene-d5	5.263	82	551221	36.01 ppm	0.00
Spiked Amount 50.000			Recovery	= 72.02%	
51) 2-Fluorobiphenyl	7.313	172	1352123	36.98 ppm	-0.02
Spiked Amount 50.000			Recovery	= 73.96%	
73) 2,4,6-Tribromophenol	9.717	330	274441	48.30 ppm	-0.01
Spiked Amount 50.000			Recovery	= 96.60%	
85) Terphenyl-d14	14.166	244	1992565	42.30 ppm	0.00
Spiked Amount 50.000			Recovery	= 84.60%	
Target Compounds					Qvalue
38) Naphthalene	5.989	128	80475	1.80 ppm	68
44) 2-Methylnaphthalene	6.811	141	821328	29.99 ppm	99
45) 1-Methylnaphthalene	6.940	142	1058125	32.27 ppm	97
59) Acenaphthene	8.398	153	14221	0.45 ppm	95
66) Fluorene	9.279	166	38777	1.03 ppm	95

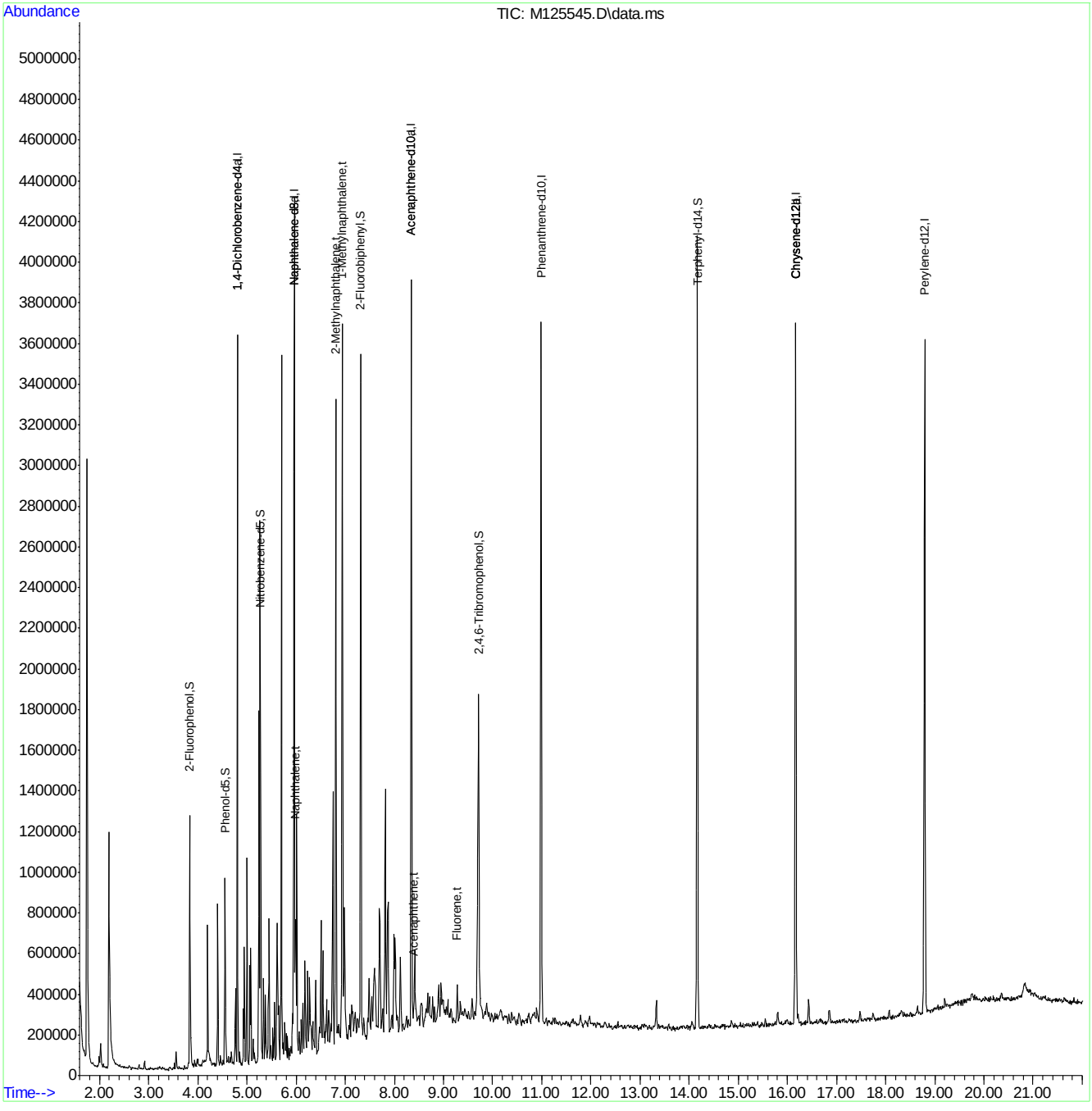
(#) = qualifier out of range (m) = manual integration (+) = signals summed

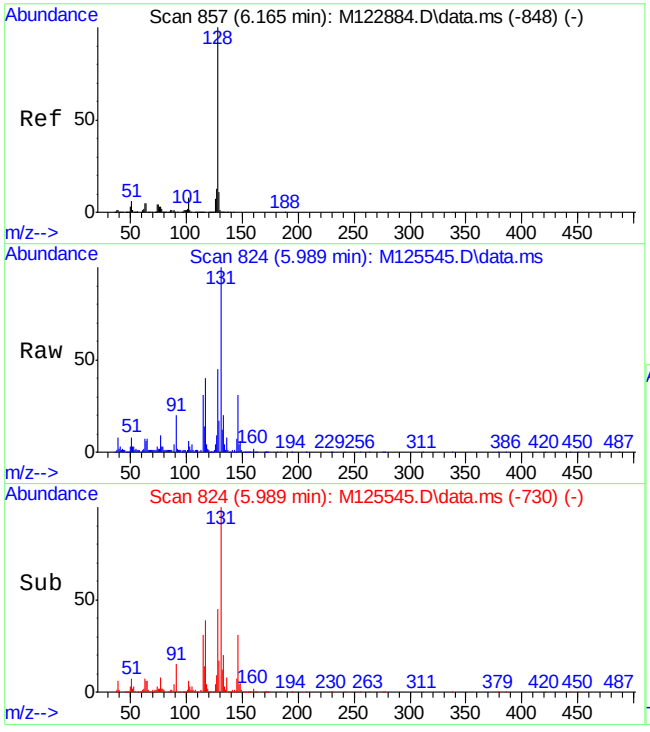
SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125545.D
Acq On : 24 Jun 2016 5:29 am
Operator : seanb1
Sample : jc22613-1
Misc : op95018,em5319,900
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 24 15:26:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

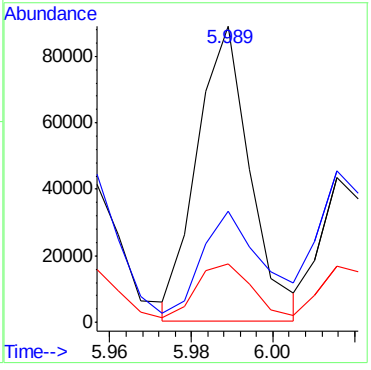


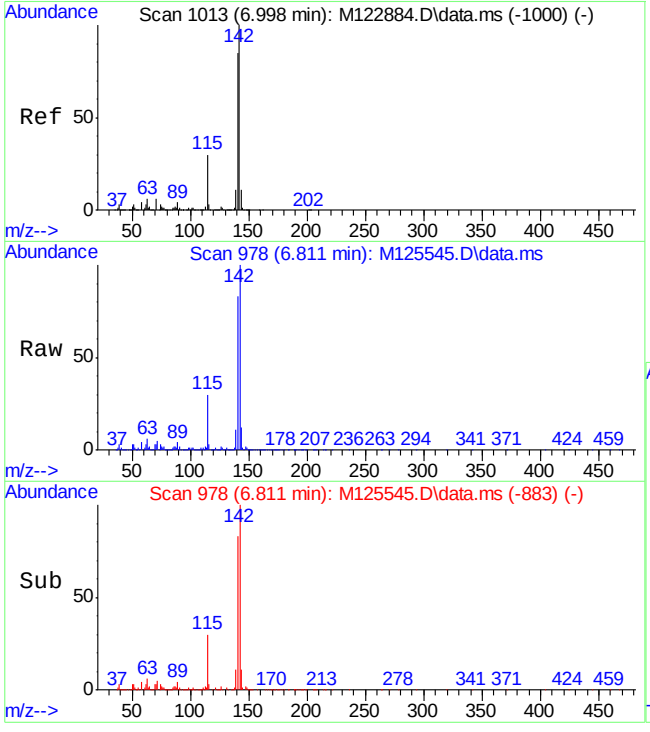


#38
Naphthalene
Concen: 1.80 ppm
RT: 5.989 min Scan# 824
Delta R.T. 0.000 min
Lab File: M125545.D
Acq: 24 Jun 2016 5:29 am

Tgt Ion:128 Resp: 80475

Ion	Ratio	Lower	Upper
128	100		
129	31.9	0.0	41.3
127	19.6	0.0	43.8

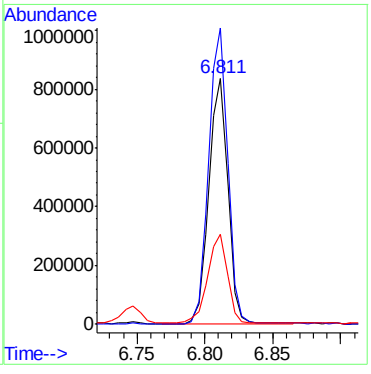




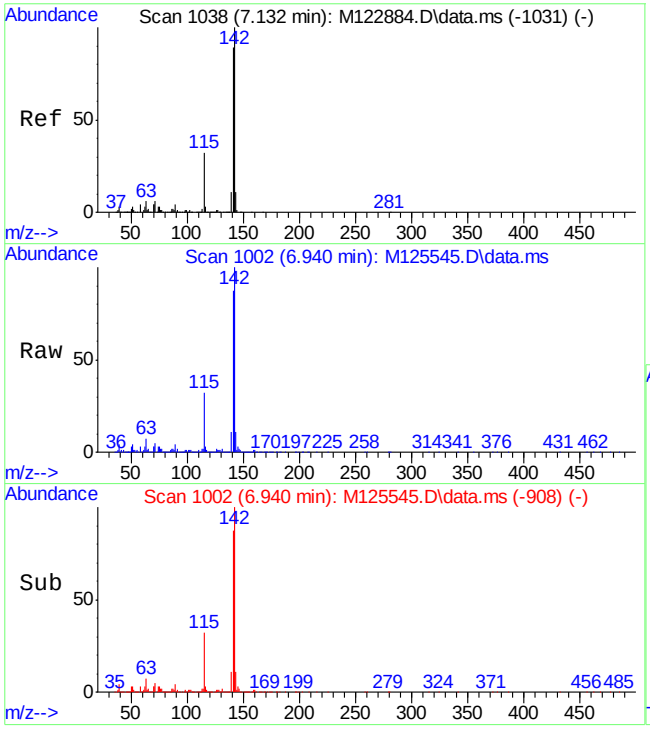
#44
2-Methylnaphthalene
Concen: 29.99 ppm
RT: 6.811 min Scan# 978
Delta R.T. 0.007 min
Lab File: M125545.D
Acq: 24 Jun 2016 5:29 am

Tgt Ion:141 Resp: 821328

Ion	Ratio	Lower	Upper
141	100		
142	120.5	91.5	151.5
115	36.2	4.6	64.6



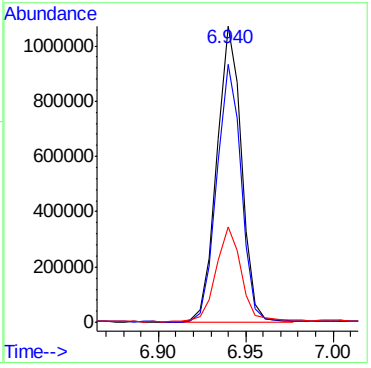
SGS ACCUTEST JC22613

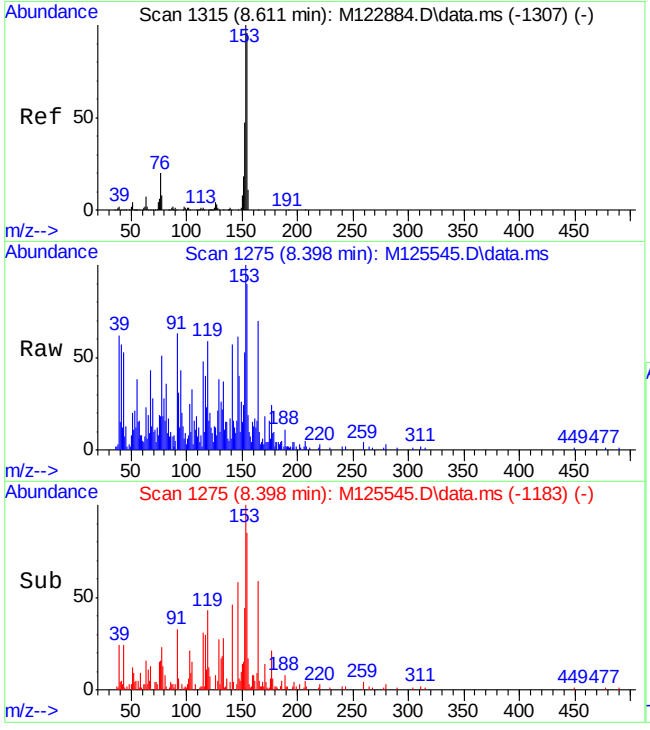


#45
1-Methylnaphthalene
Concen: 32.27 ppm
RT: 6.940 min Scan# 1002
Delta R.T. 0.003 min
Lab File: M125545.D
Acq: 24 Jun 2016 5:29 am

Tgt Ion:142 Resp: 1058125

Ion	Ratio	Lower	Upper
142	100		
141	87.2	55.2	115.2
115	32.0	0.0	60.0

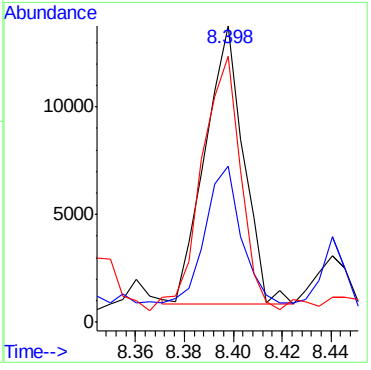


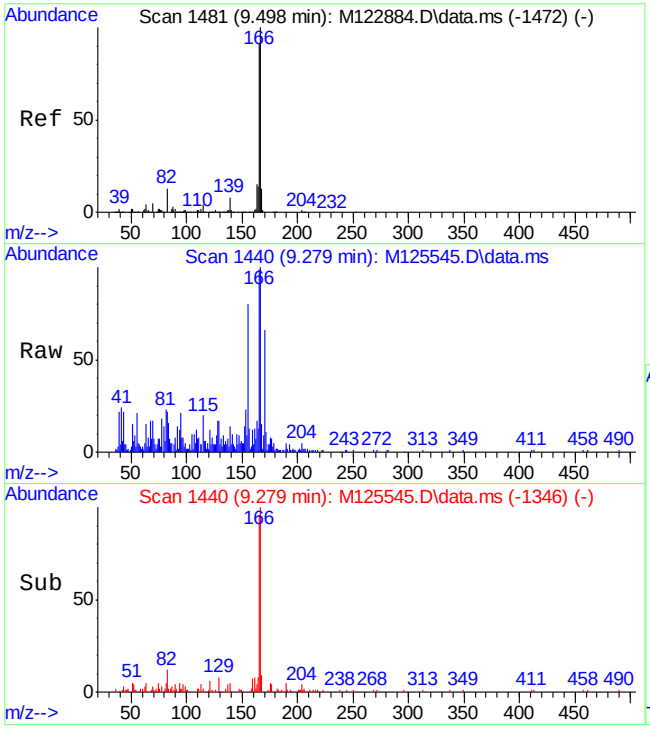


#59
Acenaphthene
Concen: 0.45 ppm
RT: 8.398 min Scan# 1275
Delta R.T. -0.010 min
Lab File: M125545.D
Acq: 24 Jun 2016 5:29 am

Tgt Ion:153 Resp: 14221

Ion	Ratio	Lower	Upper
153	100		
152	49.6	17.2	77.2
154	87.8	62.6	122.6

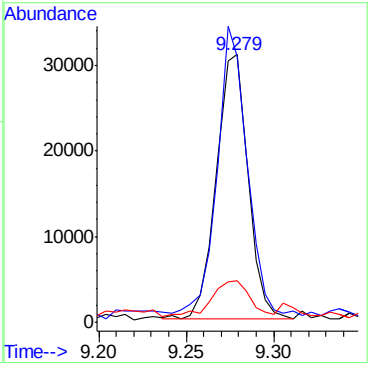




#66
Fluorene
Concen: 1.03 ppm
RT: 9.279 min Scan# 1440
Delta R.T. 0.000 min
Lab File: M125545.D
Acq: 24 Jun 2016 5:29 am

Tgt Ion:166 Resp: 38777

Ion	Ratio	Lower	Upper
166	100		
165	96.9	61.8	121.8
167	11.8	0.0	43.7



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84767.D
Acq On : 1 Jul 2016 11:39 pm
Operator : seanb1
Sample : jc22613-2
Misc : op95059,e3e3716,900
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 03 17:41:52 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.014	152	84779	40.00	ppm	-0.03
24) Naphthalene-d8	6.164	136	321947	40.00	ppm	-0.11
47) Acenaphthene-d10	8.320	164	198120	40.00	ppm	-0.11
69) Phenanthrene-d10	10.534	188	321810	40.00	ppm	-0.12
83) Chrysene-d12	14.765	240	319888	40.00	ppm	-0.11
92) Perylene-d12	16.926	264	273162	40.00	ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	5.014	152	84779	40.00	ppm	-0.09
104) Acenaphthene-d10a	8.320	164	198120	40.00	ppm	-0.11
106) Phenanthrene-d10a	10.534	188	321810	40.00	ppm	-0.12
108) Chrysene-d12a	14.765	240	319888	40.00	ppm	-0.11
110) Naphthalene-d8a	6.164	136	321947	40.00	ppm	-0.10
System Monitoring Compounds						
5) 2-Fluorophenol	4.030	112	81254	30.93	ppm	-0.01
Spiked Amount 50.000			Recovery = 61.86%			
8) Phenol-d5	4.742	99	63921	20.02	ppm	0.00
Spiked Amount 50.000			Recovery = 40.04%			
25) Nitrobenzene-d5	5.480	82	114819	46.76	ppm	-0.10
Spiked Amount 50.000			Recovery = 93.52%			
51) 2-Fluorobiphenyl	7.405	172	293093	44.73	ppm	-0.11
Spiked Amount 50.000			Recovery = 89.46%			
73) 2,4,6-Tribromophenol	9.475	330	34973	33.58	ppm	-0.11
Spiked Amount 50.000			Recovery = 67.16%			
85) Terphenyl-d14	13.107	244	336140	49.91	ppm	-0.11
Spiked Amount 50.000			Recovery = 99.82%			
Target Compounds						Qvalue
30) 2,4-Dimethylphenol	5.838	107	2376	1.00	ppm	87
38) Naphthalene	6.186	128	9747	1.11	ppm	95

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

7.1.2

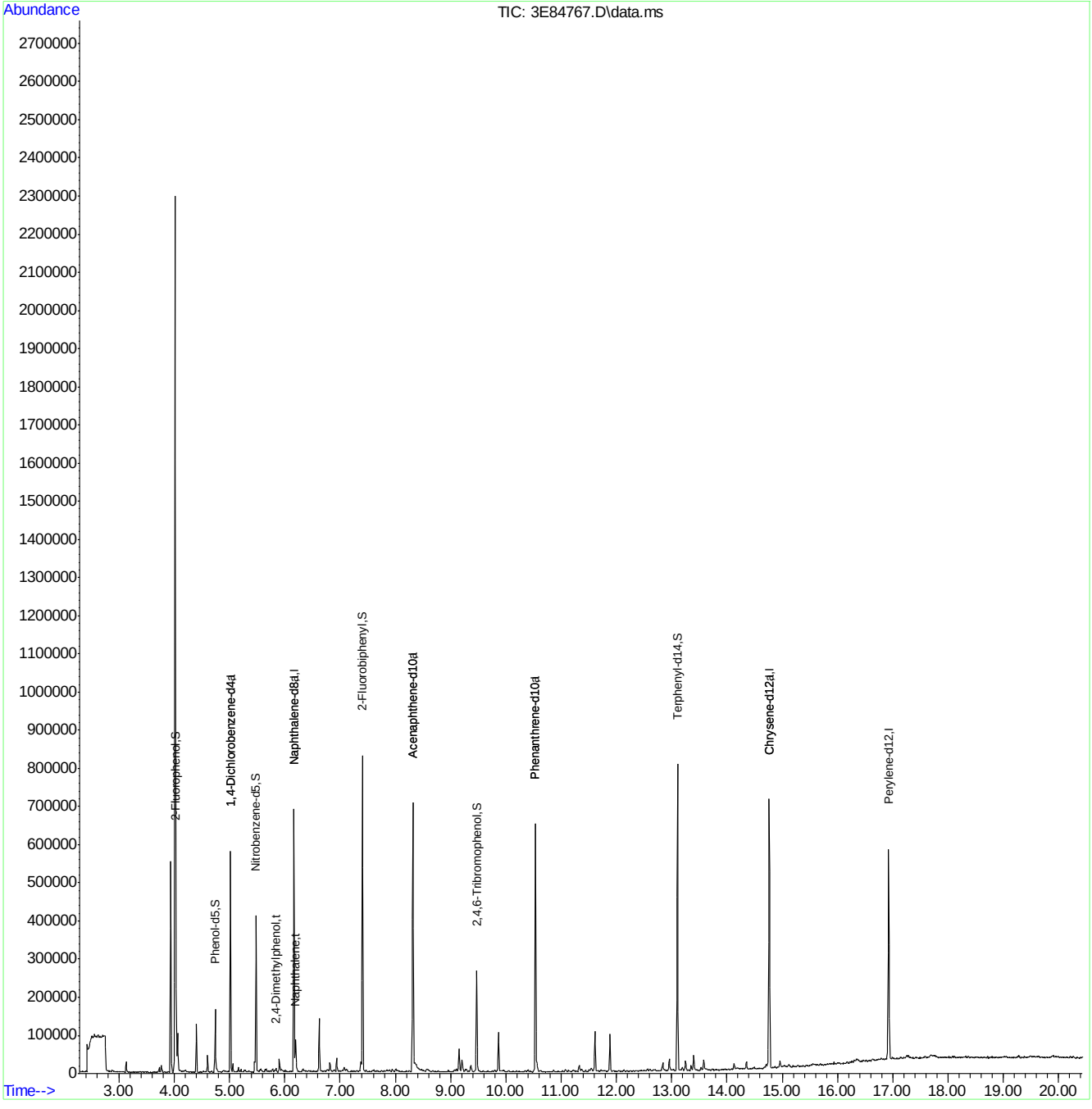
7

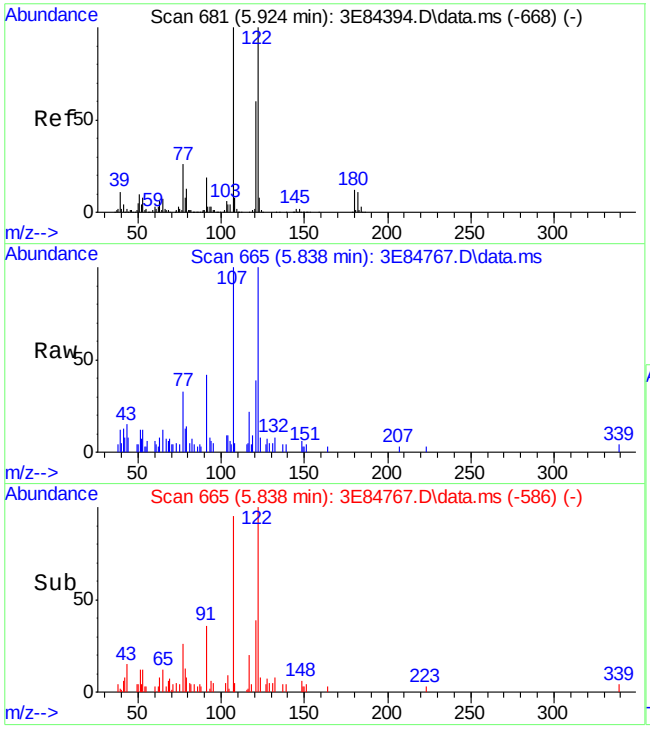
SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84767.D
Acq On : 1 Jul 2016 11:39 pm
Operator : seanb1
Sample : jc22613-2
Misc : op95059,e3e3716,900
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 03 17:41:52 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration

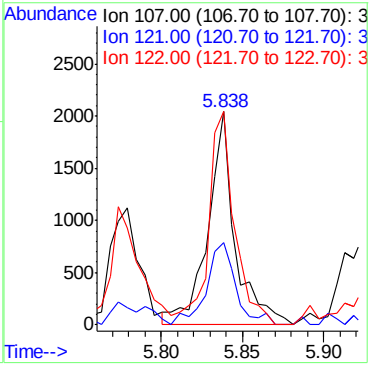


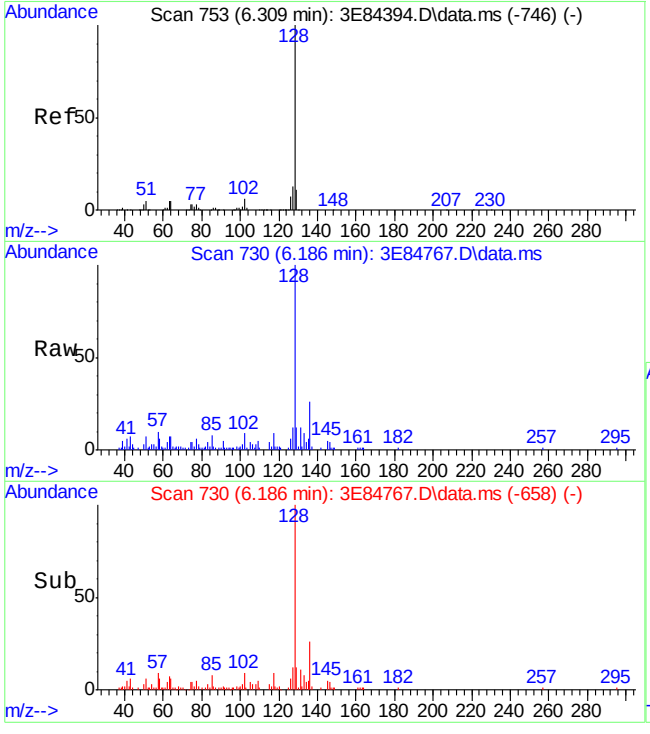


#30
2,4-Dimethylphenol
Concen: 1.00 ppm
RT: 5.838 min Scan# 665
Delta R.T. -0.075 min
Lab File: 3E84767.D
Acq: 1 Jul 2016 11:39 pm

Tgt Ion:107 Resp: 2376

Ion	Ratio	Lower	Upper
107	100		
121	38.5	29.6	89.6
122	98.5	65.7	125.7

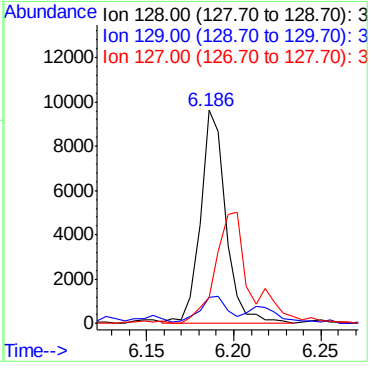




#38
Naphthalene
Concen: 1.11 ppm
RT: 6.186 min Scan# 730
Delta R.T. -0.112 min
Lab File: 3E84767.D
Acq: 1 Jul 2016 11:39 pm

Tgt Ion:128 Resp: 9747

Ion	Ratio	Lower	Upper
128	100		
129	10.7	0.0	40.8
127	10.0	0.0	43.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84768.D
Acq On : 2 Jul 2016 12:06 am
Operator : seanb1
Sample : jc22613-3
Misc : op95059,e3e3716,910
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 03 17:42:39 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration

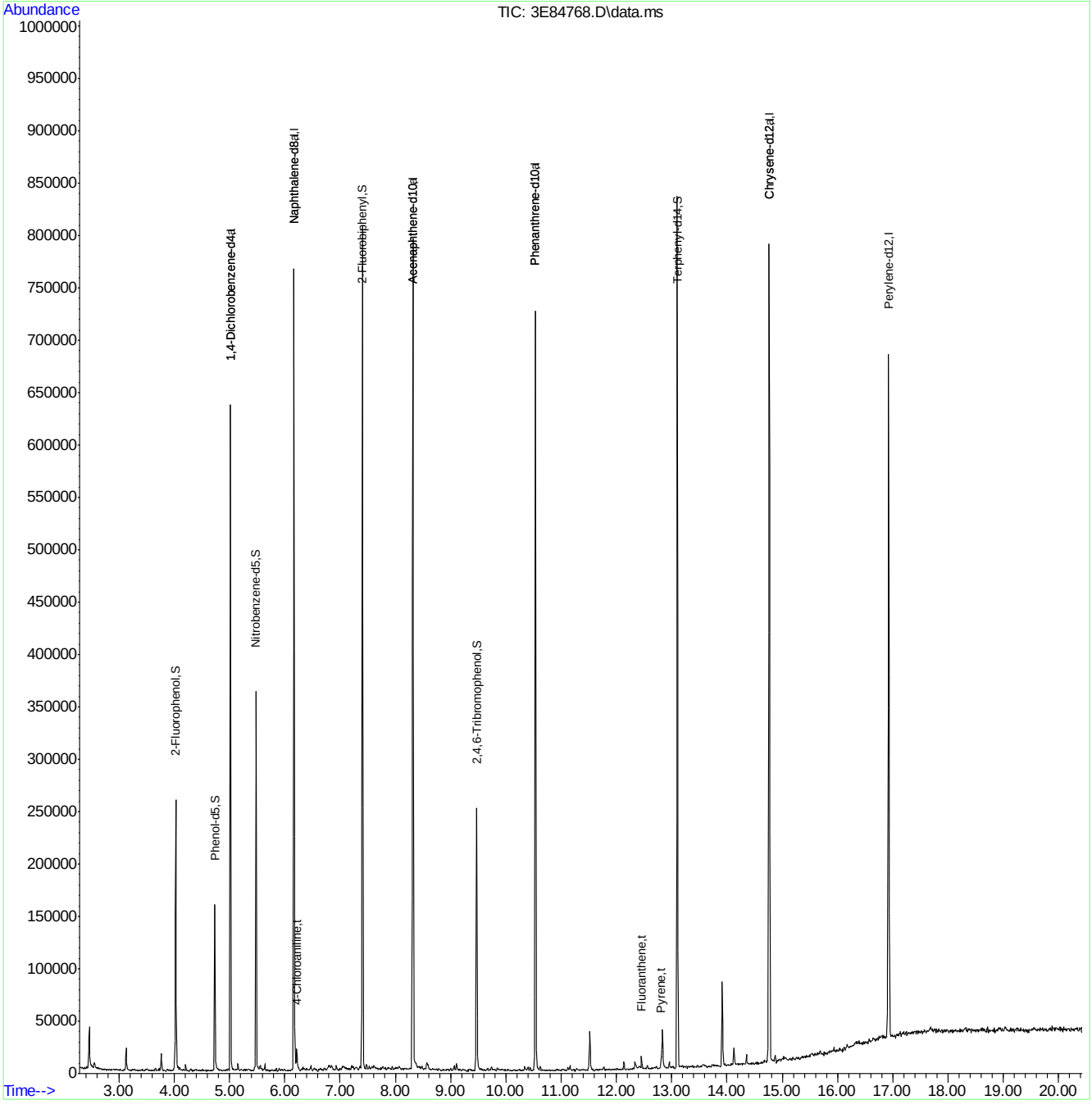
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.015	152	94409	40.00 ppm	-0.03
24) Naphthalene-d8	6.165	136	362734	40.00 ppm	-0.11
47) Acenaphthene-d10	8.320	164	224078	40.00 ppm	-0.11
69) Phenanthrene-d10	10.535	188	371892	40.00 ppm	-0.12
83) Chrysene-d12	14.765	240	365946	40.00 ppm	-0.11
92) Perylene-d12	16.926	264	322747	40.00 ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	5.015	152	94409	40.00 ppm	-0.09
104) Acenaphthene-d10a	8.320	164	224078	40.00 ppm	-0.11
106) Phenanthrene-d10a	10.535	188	371892	40.00 ppm	-0.12
108) Chrysene-d12a	14.765	240	365946	40.00 ppm	-0.11
110) Naphthalene-d8a	6.165	136	362734	40.00 ppm	-0.10
System Monitoring Compounds					
5) 2-Fluorophenol	4.025	112	76044	25.99 ppm	-0.02
Spiked Amount 50.000			Recovery	= 51.98%	
8) Phenol-d5	4.737	99	60539	17.02 ppm	-0.01
Spiked Amount 50.000			Recovery	= 34.04%	
25) Nitrobenzene-d5	5.480	82	107840	38.98 ppm	-0.10
Spiked Amount 50.000			Recovery	= 77.96%	
51) 2-Fluorobiphenyl	7.406	172	285442	38.51 ppm	-0.11
Spiked Amount 50.000			Recovery	= 77.02%	
73) 2,4,6-Tribromophenol	9.475	330	34679	28.82 ppm	-0.11
Spiked Amount 50.000			Recovery	= 57.64%	
85) Terphenyl-d14	13.102	244	359955	46.72 ppm	-0.12
Spiked Amount 50.000			Recovery	= 93.44%	
Target Compounds					Qvalue
39) 4-Chloroaniline	6.218	127	6375	1.65 ppm	93
81) Fluoranthene	12.460	202	7025	0.65 ppm	94
84) Pyrene	12.808	202	5000	0.45 ppm	96

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

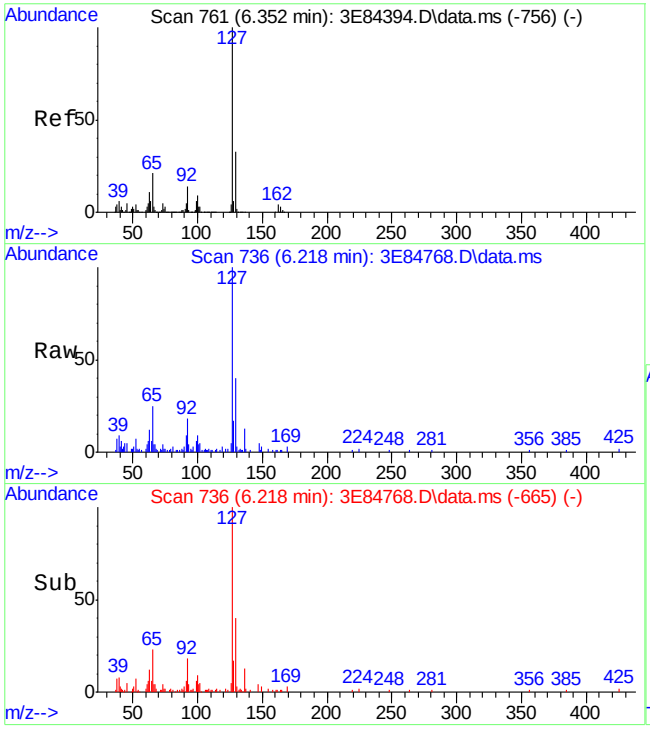
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84768.D
Acq On : 2 Jul 2016 12:06 am
Operator : seanb1
Sample : jc22613-3
Misc : op95059,e3e3716,910
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 03 17:42:39 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration



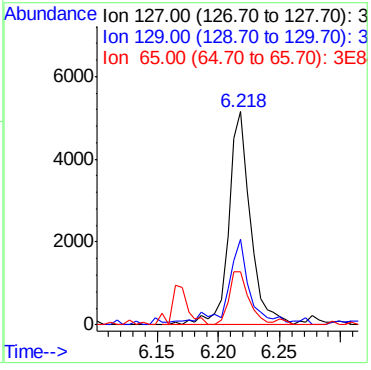
M3E3699.M Sun Jul 03 17:42:44 2016 MS3E

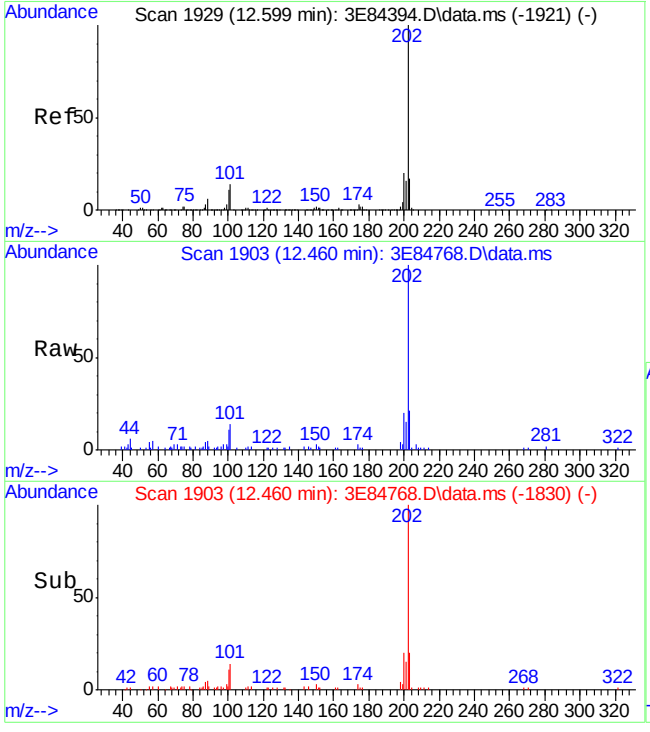


#39
4-Chloroaniline
Concen: 1.65 ppm
RT: 6.218 min Scan# 736
Delta R.T. -0.123 min
Lab File: 3E84768.D
Acq: 2 Jul 2016 12:06 am

Tgt Ion:127 Resp: 6375

Ion	Ratio	Lower	Upper
127	100		
129	38.4	2.9	62.9
65	22.2	0.0	51.4

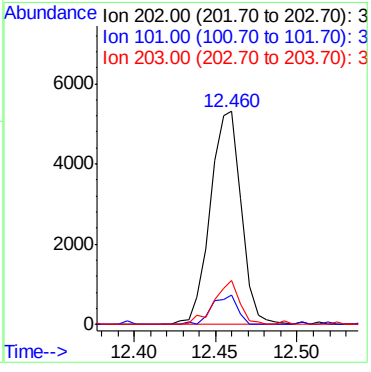


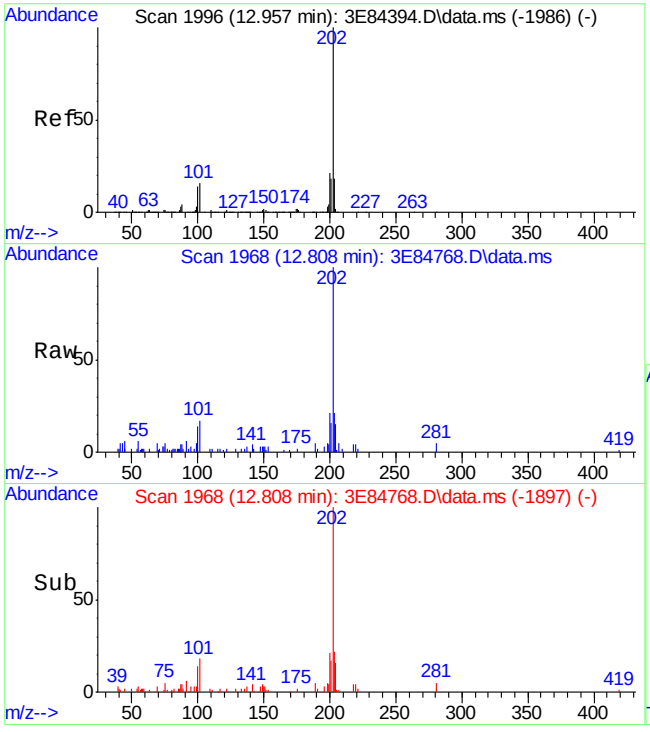


#81
Fluoranthene
Concen: 0.65 ppm
RT: 12.460 min Scan# 1903
Delta R.T. -0.107 min
Lab File: 3E84768.D
Acq: 2 Jul 2016 12:06 am

Tgt Ion:202 Resp: 7025

Ion	Ratio	Lower	Upper
202	100		
101	13.9	0.0	44.5
203	20.8	0.0	46.9

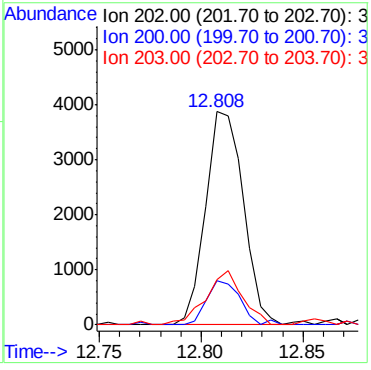




#84
Pyrene
Concen: 0.45 ppm
RT: 12.808 min Scan# 1968
Delta R.T. -0.122 min
Lab File: 3E84768.D
Acq: 2 Jul 2016 12:06 am

Tgt Ion:202 Resp: 5000

Ion	Ratio	Lower	Upper
202	100		
200	21.1	0.0	50.6
203	21.4	0.0	48.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84769.D
Acq On : 2 Jul 2016 12:33 am
Operator : seanb1
Sample : jc22613-4
Misc : op95059,e3e3716,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 03 17:43:22 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration

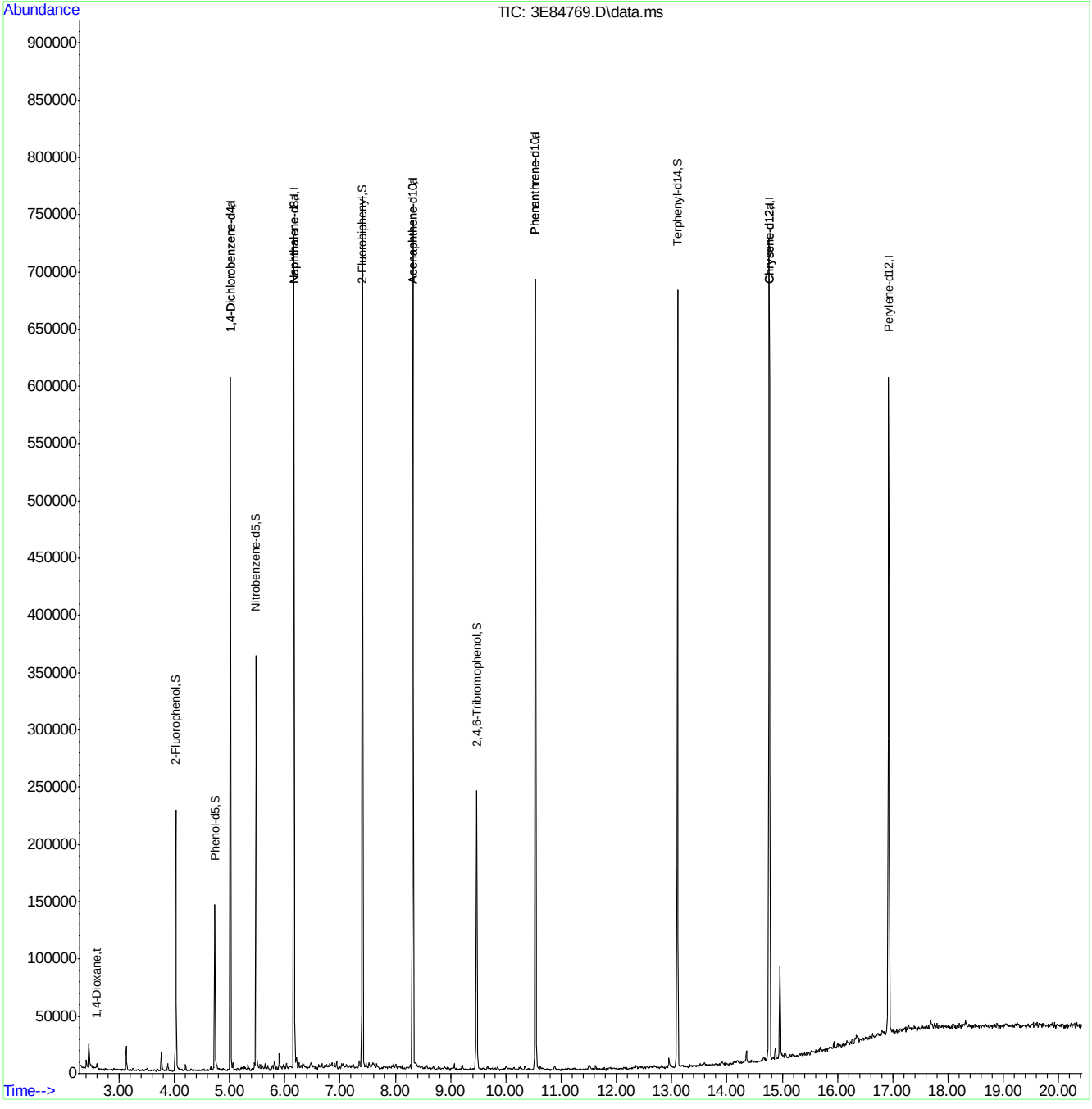
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.015	152	89819	40.00	ppm	-0.03
24) Naphthalene-d8	6.165	136	347056	40.00	ppm	-0.11
47) Acenaphthene-d10	8.315	164	210655	40.00	ppm	-0.12
69) Phenanthrene-d10	10.534	188	351154	40.00	ppm	-0.12
83) Chrysene-d12	14.765	240	352437	40.00	ppm	-0.11
92) Perylene-d12	16.931	264	302736	40.00	ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	5.015	152	89819	40.00	ppm	-0.09
104) Acenaphthene-d10a	8.315	164	210655	40.00	ppm	-0.12
106) Phenanthrene-d10a	10.534	188	351154	40.00	ppm	-0.12
108) Chrysene-d12a	14.765	240	352437	40.00	ppm	-0.11
110) Naphthalene-d8a	6.165	136	347056	40.00	ppm	-0.10
System Monitoring Compounds						
5) 2-Fluorophenol	4.025	112	67039	24.09	ppm	-0.02
Spiked Amount 50.000			Recovery = 48.18%			
8) Phenol-d5	4.736	99	53281	15.75	ppm	-0.01
Spiked Amount 50.000			Recovery = 31.50%			
25) Nitrobenzene-d5	5.480	82	106112	40.09	ppm	-0.10
Spiked Amount 50.000			Recovery = 80.18%			
51) 2-Fluorobiphenyl	7.405	172	267588	38.41	ppm	-0.11
Spiked Amount 50.000			Recovery = 76.82%			
73) 2,4,6-Tribromophenol	9.475	330	33109	29.14	ppm	-0.11
Spiked Amount 50.000			Recovery = 58.28%			
85) Terphenyl-d14	13.107	244	295685	39.85	ppm	-0.11
Spiked Amount 50.000			Recovery = 79.70%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.602	88	2258	1.90	ppm	95

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

Quantitation Report (QT Reviewed)

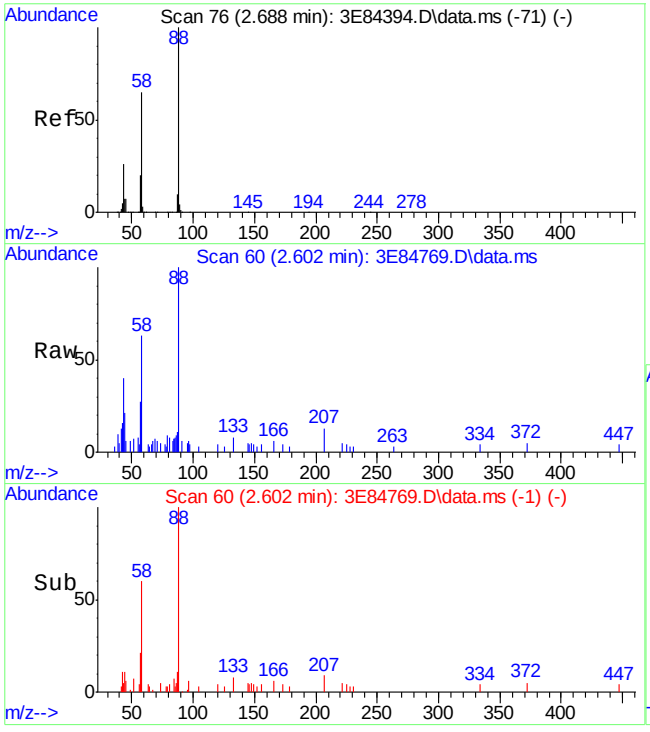
Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84769.D
Acq On : 2 Jul 2016 12:33 am
Operator : seanb1
Sample : jc22613-4
Misc : op95059,e3e3716,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 03 17:43:22 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration



M3E3699.M Sun Jul 03 17:43:25 2016 MS3E

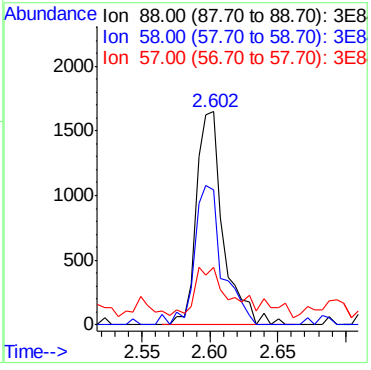
Page: 2



#2
1,4-Dioxane
Concen: 1.90 ppm
RT: 2.602 min Scan# 60
Delta R.T. -0.046 min
Lab File: 3E84769.D
Acq: 2 Jul 2016 12:33 am

Tgt Ion: 88 Resp: 2258

Ion	Ratio	Lower	Upper
88	100		
58	60.7	34.5	94.5
57	22.2	0.0	50.4



7.1.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84770.D
Acq On : 2 Jul 2016 1:00 am
Operator : seanb1
Sample : jc22613-5
Misc : op95059,e3e3716,990
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 03 17:44:18 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.015	152	98570	40.00 ppm	-0.03
24) Naphthalene-d8	6.165	136	375253	40.00 ppm	-0.11
47) Acenaphthene-d10	8.315	164	229142	40.00 ppm	-0.12
69) Phenanthrene-d10	10.534	188	384098	40.00 ppm	-0.12
83) Chrysene-d12	14.765	240	379686	40.00 ppm	-0.11
92) Perylene-d12	16.926	264	334798	40.00 ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	5.015	152	98570	40.00 ppm	-0.09
104) Acenaphthene-d10a	8.315	164	229142	40.00 ppm	-0.12
106) Phenanthrene-d10a	10.534	188	384098	40.00 ppm	-0.12
108) Chrysene-d12a	14.765	240	379686	40.00 ppm	-0.11
110) Naphthalene-d8a	6.165	136	375253	40.00 ppm	-0.10

System Monitoring Compounds					
5) 2-Fluorophenol	4.025	112	70761	23.17 ppm	-0.02
Spiked Amount 50.000			Recovery = 46.34%		
8) Phenol-d5	4.737	99	54417	14.66 ppm	-0.01
Spiked Amount 50.000			Recovery = 29.32%		
25) Nitrobenzene-d5	5.480	82	113396	39.62 ppm	-0.10
Spiked Amount 50.000			Recovery = 79.24%		
51) 2-Fluorobiphenyl	7.405	172	310584	40.98 ppm	-0.11
Spiked Amount 50.000			Recovery = 81.96%		
73) 2,4,6-Tribromophenol	9.475	330	37392	30.08 ppm	-0.11
Spiked Amount 50.000			Recovery = 60.16%		
85) Terphenyl-d14	13.107	244	389337	48.70 ppm	-0.11
Spiked Amount 50.000			Recovery = 97.40%		

Target Compounds Qvalue

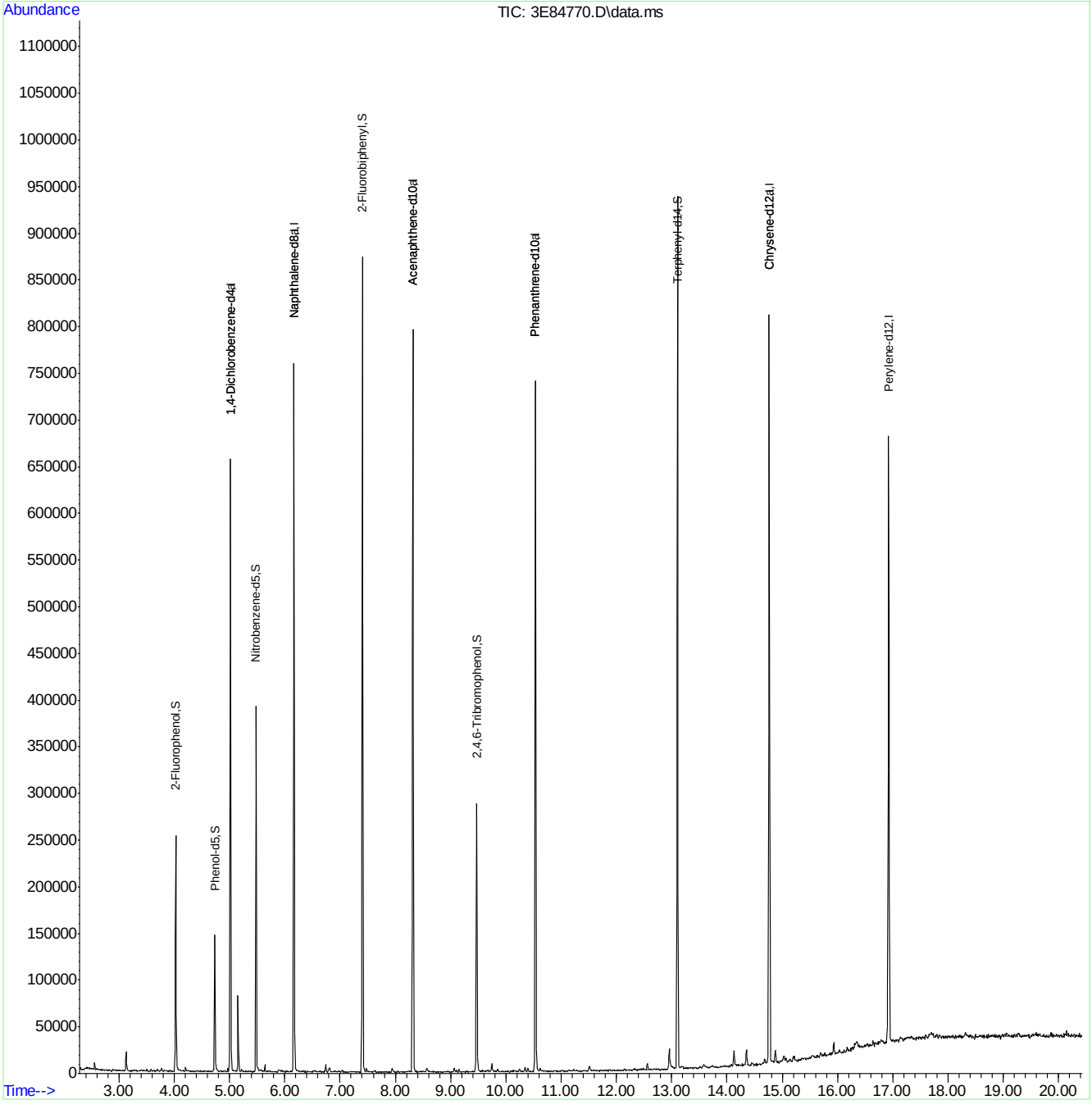
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84770.D
Acq On : 2 Jul 2016 1:00 am
Operator : seanb1
Sample : jc22613-5
Misc : op95059,e3e3716,990
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 03 17:44:18 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration



M3E3699.M Sun Jul 03 17:44:22 2016 MS3E

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84771.D
Acq On : 2 Jul 2016 1:28 am
Operator : seanb1
Sample : jc22613-6
Misc : op95059,e3e3716,1000
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 06 16:26:02 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.015	152	92472	40.00 ppm	-0.03
24) Naphthalene-d8	6.165	136	348443	40.00 ppm	-0.11
47) Acenaphthene-d10	8.315	164	213728	40.00 ppm	-0.12
69) Phenanthrene-d10	10.534	188	357736	40.00 ppm	-0.12
83) Chrysene-d12	14.765	240	361431	40.00 ppm	-0.11
92) Perylene-d12	16.926	264	313724	40.00 ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	5.015	152	92472	40.00 ppm	-0.09
104) Acenaphthene-d10a	8.315	164	213728	40.00 ppm	-0.12
106) Phenanthrene-d10a	10.534	188	357736	40.00 ppm	-0.12
108) Chrysene-d12a	14.765	240	361431	40.00 ppm	-0.11
110) Naphthalene-d8a	6.165	136	348443	40.00 ppm	-0.10

System Monitoring Compounds					
5) 2-Fluorophenol	4.025	112	74257	25.91 ppm	-0.02
Spiked Amount 50.000			Recovery	= 51.82%	
8) Phenol-d5	4.737	99	57310	16.45 ppm	-0.01
Spiked Amount 50.000			Recovery	= 32.90%	
25) Nitrobenzene-d5	5.480	82	109732	41.29 ppm	-0.10
Spiked Amount 50.000			Recovery	= 82.58%	
51) 2-Fluorobiphenyl	7.405	172	287502	40.67 ppm	-0.11
Spiked Amount 50.000			Recovery	= 81.34%	
73) 2,4,6-Tribromophenol	9.475	330	35257	30.46 ppm	-0.11
Spiked Amount 50.000			Recovery	= 60.92%	
85) Terphenyl-d14	13.102	244	352355	46.30 ppm	-0.12
Spiked Amount 50.000			Recovery	= 92.60%	

Target Compounds	Qvalue

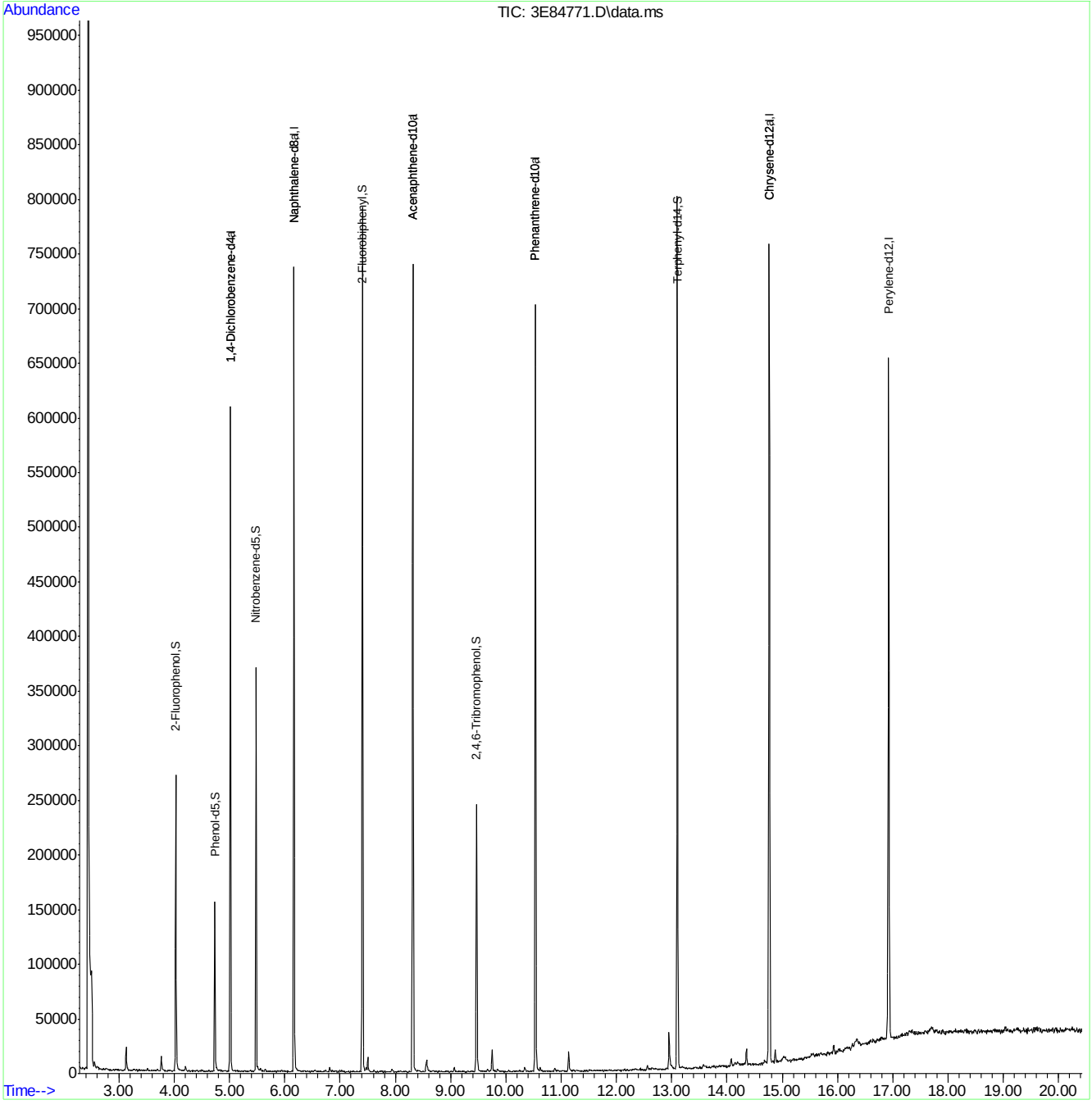
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84771.D
Acq On : 2 Jul 2016 1:28 am
Operator : seanb1
Sample : jc22613-6
Misc : op95059,e3e3716,1000
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 06 16:26:02 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration



M3E3699.M Wed Jul 06 16:26:06 2016 MS3E

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84772.D
Acq On : 2 Jul 2016 1:55 am
Operator : seanb1
Sample : jc22613-7
Misc : op95059,e3e3716,840
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 06 16:26:15 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.015	152	92737	40.00	ppm	-0.03
24) Naphthalene-d8	6.165	136	353304	40.00	ppm	-0.11
47) Acenaphthene-d10	8.315	164	214872	40.00	ppm	-0.12
69) Phenanthrene-d10	10.534	188	362804	40.00	ppm	-0.12
83) Chrysene-d12	14.765	240	359286	40.00	ppm	-0.11
92) Perylene-d12	16.926	264	316758	40.00	ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	5.015	152	92737	40.00	ppm	-0.09
104) Acenaphthene-d10a	8.315	164	214872	40.00	ppm	-0.12
106) Phenanthrene-d10a	10.534	188	362804	40.00	ppm	-0.12
108) Chrysene-d12a	14.765	240	359286	40.00	ppm	-0.11
110) Naphthalene-d8a	6.165	136	353304	40.00	ppm	-0.10

System Monitoring Compounds						
5) 2-Fluorophenol	4.025	112	81406	28.33	ppm	-0.02
Spiked Amount 50.000			Recovery = 56.66%			
8) Phenol-d5	4.736	99	63151	18.08	ppm	-0.01
Spiked Amount 50.000			Recovery = 36.16%			
25) Nitrobenzene-d5	5.480	82	109623	40.68	ppm	-0.10
Spiked Amount 50.000			Recovery = 81.36%			
51) 2-Fluorobiphenyl	7.405	172	298942	42.06	ppm	-0.11
Spiked Amount 50.000			Recovery = 84.12%			
73) 2,4,6-Tribromophenol	9.475	330	34549	29.43	ppm	-0.11
Spiked Amount 50.000			Recovery = 58.86%			
85) Terphenyl-d14	13.102	244	371576	49.12	ppm	-0.12
Spiked Amount 50.000			Recovery = 98.24%			

Target Compounds Qvalue

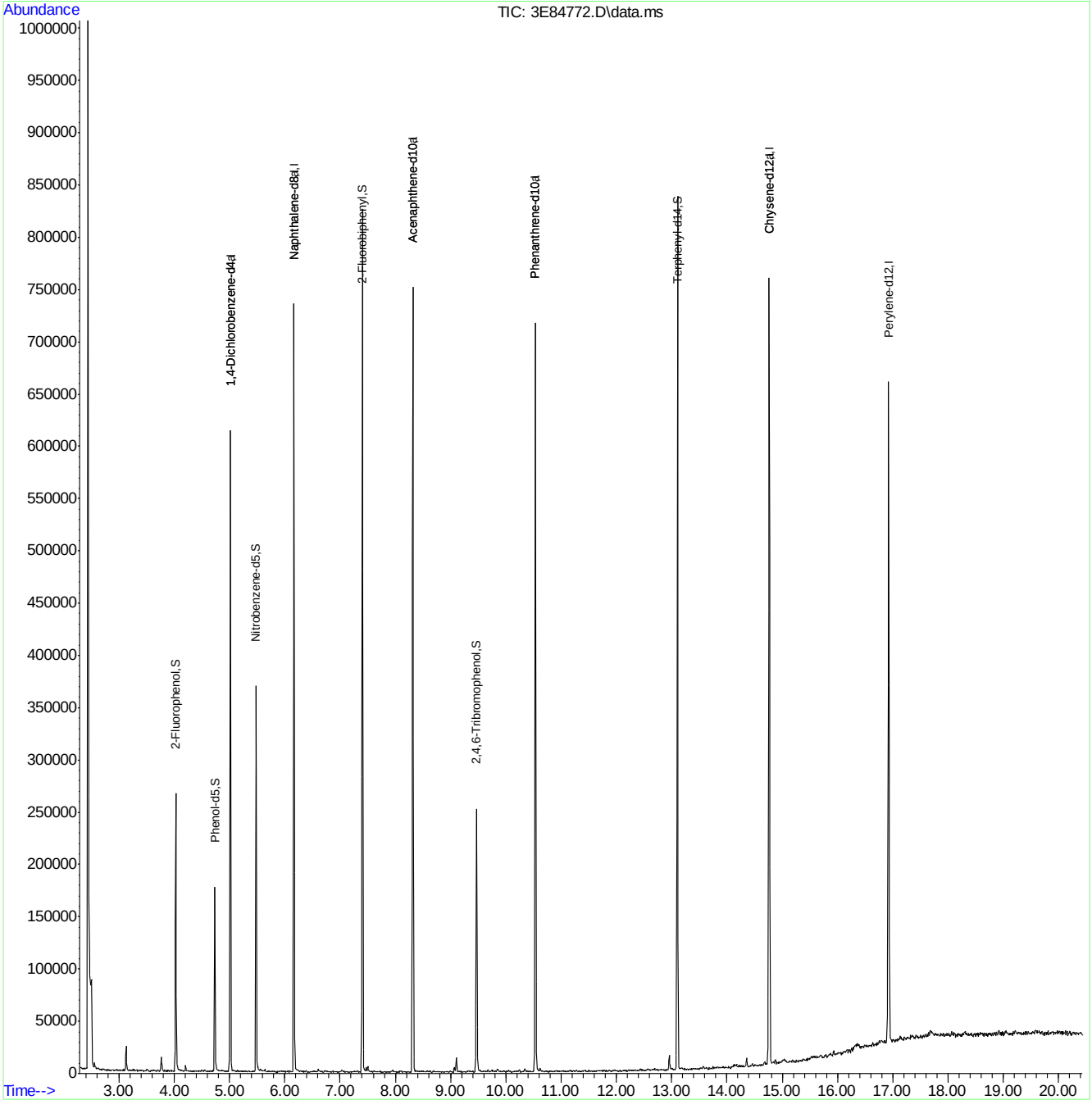
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84772.D
Acq On : 2 Jul 2016 1:55 am
Operator : seanb1
Sample : jc22613-7
Misc : op95059,e3e3716,840
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jul 06 16:26:15 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration



M3E3699.M Wed Jul 06 16:32:03 2016 MS3E

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84773.D
Acq On : 2 Jul 2016 2:22 am
Operator : seanb1
Sample : jc22613-8
Misc : op95059,e3e3716,910
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 03 17:47:18 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:35:42 2016
QLast Update : Sun Jul 03 17:46:23 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.015	152	95919	40.00 ppm	-0.03
24) Naphthalene-d8	6.165	136	363229	40.00 ppm	-0.11
47) Acenaphthene-d10	8.315	164	224819	40.00 ppm	-0.12
69) Phenanthrene-d10	10.534	188	373894	40.00 ppm	-0.12
83) Chrysene-d12	14.765	240	375874	40.00 ppm	-0.11
92) Perylene-d12	16.926	264	330538	40.00 ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	5.015	152	95919	40.00 ppm	-0.09
104) Acenaphthene-d10a	8.315	164	224819	40.00 ppm	-0.12
106) Phenanthrene-d10a	10.534	188	373894	40.00 ppm	-0.12
108) Chrysene-d12a	14.765	240	375874	40.00 ppm	-0.11
110) Naphthalene-d8a	6.165	136	363229	40.00 ppm	-0.10

System Monitoring Compounds					
5) 2-Fluorophenol	4.025	112	79374	26.70 ppm	-0.02
Spiked Amount 50.000			Recovery	= 53.40%	
8) Phenol-d5	4.736	99	61946	17.14 ppm	-0.01
Spiked Amount 50.000			Recovery	= 34.28%	
25) Nitrobenzene-d5	5.480	82	109157	39.40 ppm	-0.10
Spiked Amount 50.000			Recovery	= 78.80%	
51) 2-Fluorobiphenyl	7.405	172	295905	39.79 ppm	-0.11
Spiked Amount 50.000			Recovery	= 79.58%	
73) 2,4,6-Tribromophenol	9.475	330	34341	28.38 ppm	-0.11
Spiked Amount 50.000			Recovery	= 56.76%	
85) Terphenyl-d14	13.102	244	345842	43.70 ppm	-0.12
Spiked Amount 50.000			Recovery	= 87.40%	

Target Compounds	Qvalue

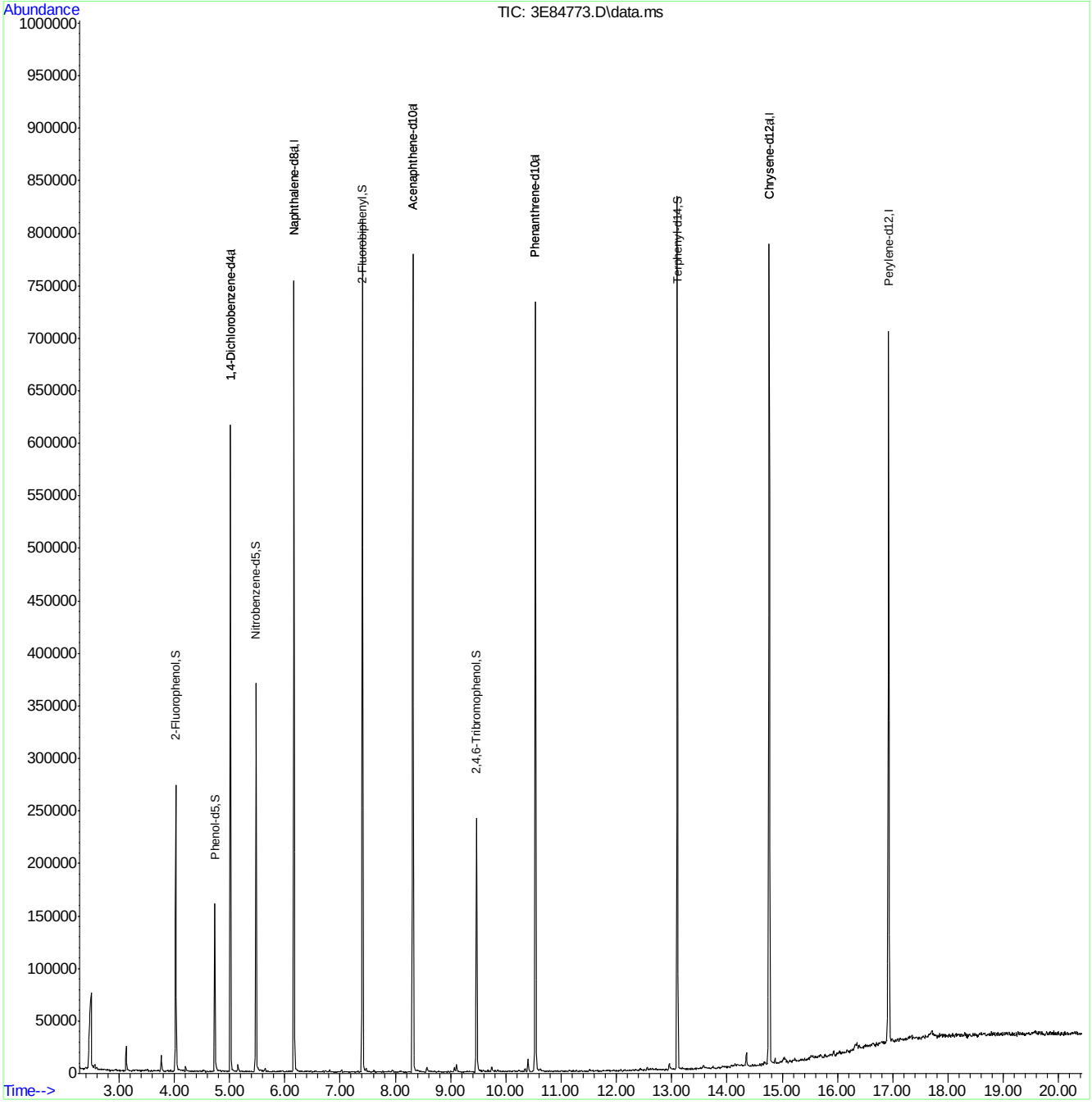
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84773.D
Acq On : 2 Jul 2016 2:22 am
Operator : seanb1
Sample : jc22613-8
Misc : op95059,e3e3716,910
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jul 03 17:47:18 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:35:42 2016
QLast Update : Sun Jul 03 17:46:23 2016
Response via : Initial Calibration



M3E3699.M Sun Jul 03 17:47:23 2016 MS3E

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e3m2951\
Data File : 3m62544.D
Acq On : 26 Jun 2016 11:34 pm
Operator : ariellec
Sample : jc22613-1
Misc : op95018a,e3m2951,900
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 27 12:00:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 27 10:40:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.763	150	499059	4.00 ppm	-0.10
14) Fluorene-d10	13.762	176	758375	4.00 ppm	-0.13
21) Fluoranthene-d10	17.971	212	1000077	4.00 ppm	0.02
31) Benzo(a)pyrene-d12	22.546	264	731597	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	4.677	112	1754450	22.44 ppm	-0.08
Spiked Amount 50.000			Recovery	= 44.88%	
4) Phenol-d5	6.273	99	1851683	14.96 ppm	-0.07
Spiked Amount 50.000			Recovery	= 29.92%	
7) Nitrobenzene-d5	7.858	82	3398650	33.57 ppm	-0.10
Spiked Amount 50.000			Recovery	= 67.14%	
15) 2-Fluorobiphenyl	11.419	172	6620711	28.52 ppm	-0.12
Spiked Amount 50.000			Recovery	= 57.04%	
20) 2,4,6-Tribromophenol	14.309	330	1037811	42.35 ppm	-0.11
Spiked Amount 50.000			Recovery	= 84.70%	
28) Terphenyl-d14	18.759	244	6114441	40.60 ppm	0.02
Spiked Amount 50.000			Recovery	= 81.20%	
Target Compounds					Qvalue
9) Naphthalene	9.251	128	581965	1.97 ppm	57
17) Acenaphthene	12.774	153	79679	0.43 ppm	84
19) Fluorene	13.819	166	189773	0.91 ppm	93
24) Phenanthrene	15.730	178	54062	0.21 ppm	99

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

7.1.9

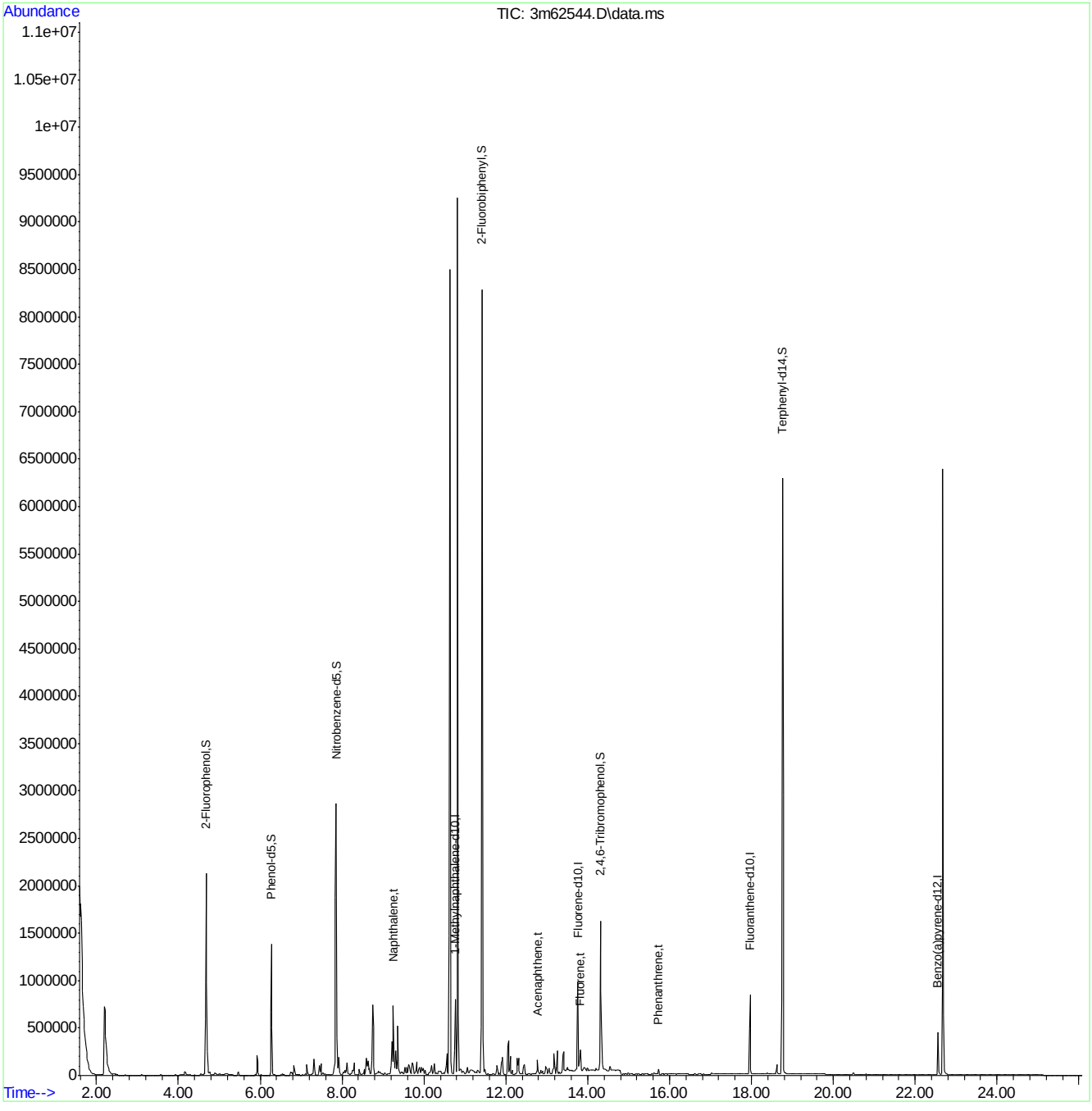
7

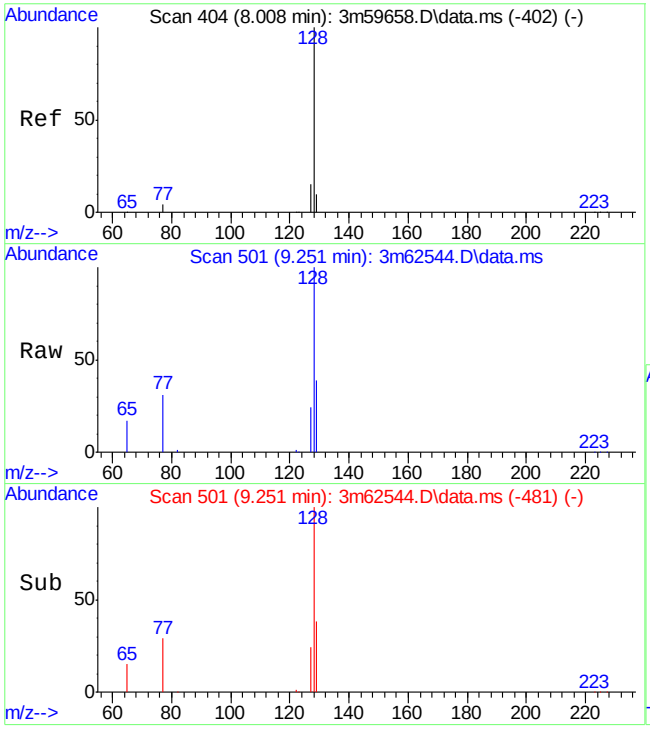
SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e3m2951\
Data File : 3m62544.D
Acq On : 26 Jun 2016 11:34 pm
Operator : ariellec
Sample : jc22613-1
Misc : op95018a,e3m2951,900
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 27 12:00:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 27 10:40:58 2016
Response via : Initial Calibration

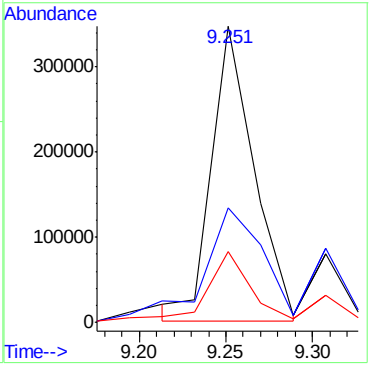


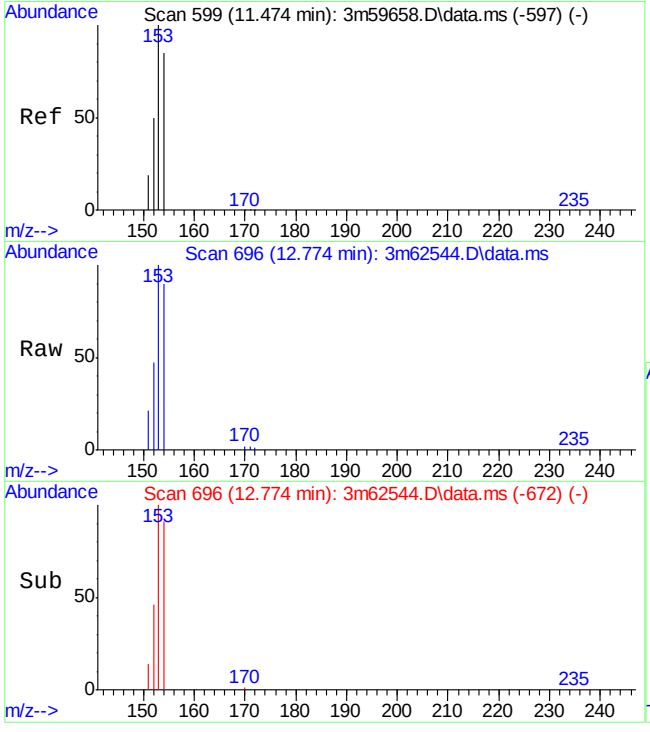


#9
Naphthalene
Concen: 1.97 ppm
RT: 9.251 min Scan# 501
Delta R.T. -0.114 min
Lab File: 3m62544.D
Acq: 26 Jun 2016 11:34 pm

Tgt Ion:128 Resp: 581965

Ion	Ratio	Lower	Upper
128	100		
129	35.3	0.0	40.1
127	23.4	0.0	43.4

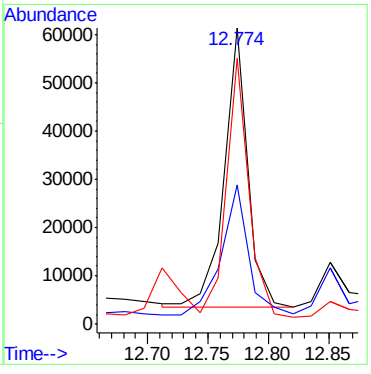




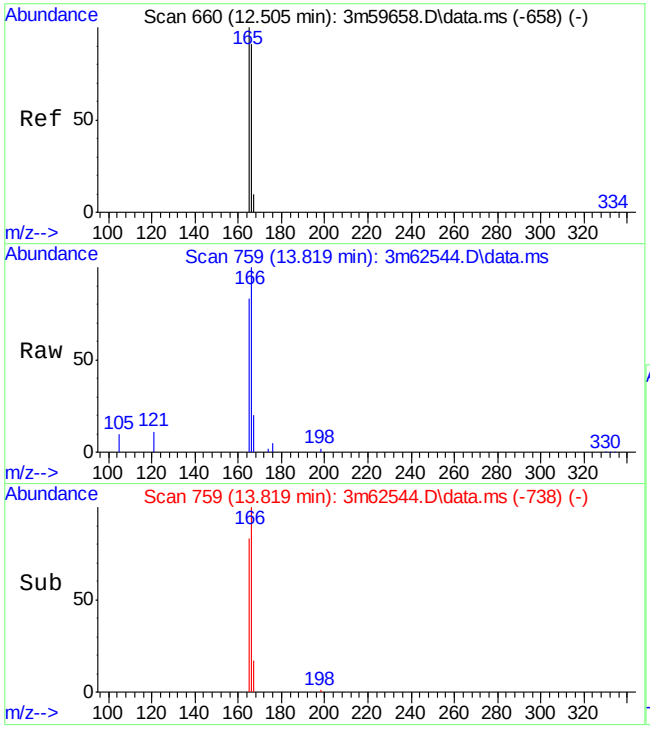
#17
Acenaphthene
Concen: 0.43 ppm
RT: 12.774 min Scan# 696
Delta R.T. -0.124 min
Lab File: 3m62544.D
Acq: 26 Jun 2016 11:34 pm

Tgt Ion:153 Resp: 79679

Ion	Ratio	Lower	Upper
153	100		
152	46.7	11.5	71.5
154	84.3	74.3	134.3



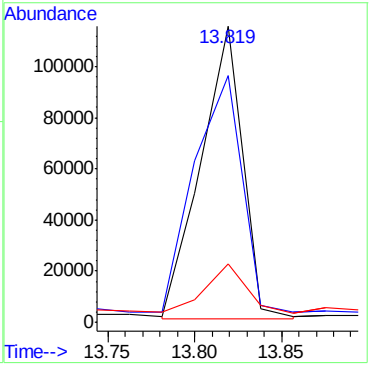
SGS ACCUTEST JC22613

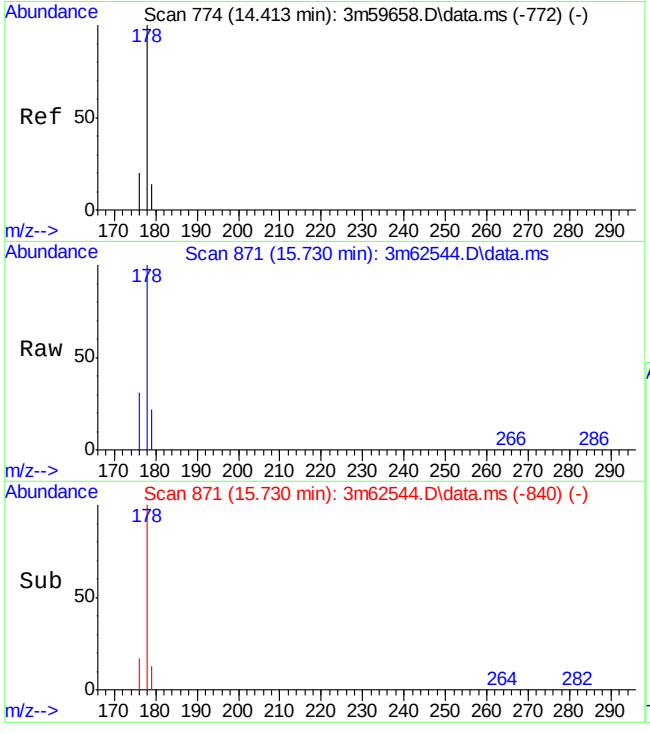


#19
Fluorene
Concen: 0.91 ppm
RT: 13.819 min Scan# 759
Delta R.T. -0.113 min
Lab File: 3m62544.D
Acq: 26 Jun 2016 11:34 pm

Tgt Ion:166 Resp: 189773

Ion	Ratio	Lower	Upper
166	100		
165	81.5	58.4	118.4
167	16.6	0.0	44.0

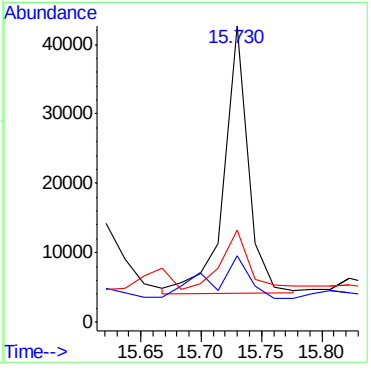




#24
Phenanthrene
Concen: 0.21 ppm
RT: 15.730 min Scan# 871
Delta R.T. -0.015 min
Lab File: 3m62544.D
Acq: 26 Jun 2016 11:34 pm

Tgt Ion:178 Resp: 54062

Ion	Ratio	Lower	Upper
178	100		
179	16.1	0.0	45.8
176	18.0	0.0	47.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62832.D
Acq On : 7 Jul 2016 6:45 pm
Operator : linseyk
Sample : jc22613-2
Misc : op95059a,e3m2967,900
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 08 10:07:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.681	150	804313	4.00	ppm	-0.08
14) Fluorene-d10	13.687	176	1166943	4.00	ppm	-0.04
21) Fluoranthene-d10	17.904	212	1841577	4.00	ppm	-0.02
31) Benzo(a)pyrene-d12	22.488	264	1513498	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.677	112	3348077	26.57	ppm	-0.04
Spiked Amount 50.000			Recovery = 53.14%			
4) Phenol-d5	6.285	99	3476648	17.43	ppm	0.00
Spiked Amount 50.000			Recovery = 34.86%			
7) Nitrobenzene-d5	7.782	82	6183150	37.90	ppm	-0.10
Spiked Amount 50.000			Recovery = 75.80%			
15) 2-Fluorobiphenyl	11.358	172	11830929	33.12	ppm	-0.04
Spiked Amount 50.000			Recovery = 66.24%			
20) 2,4,6-Tribromophenol	14.252	330	2022912	53.64	ppm	0.00
Spiked Amount 50.000			Recovery = 107.28%			
28) Terphenyl-d14	18.707	244	13860677	49.98	ppm	0.00
Spiked Amount 50.000			Recovery = 99.96%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.359	88	25421	0.51	ppm #	58
9) Naphthalene	9.194	128	466476	0.98	ppm	95

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

7.1.10

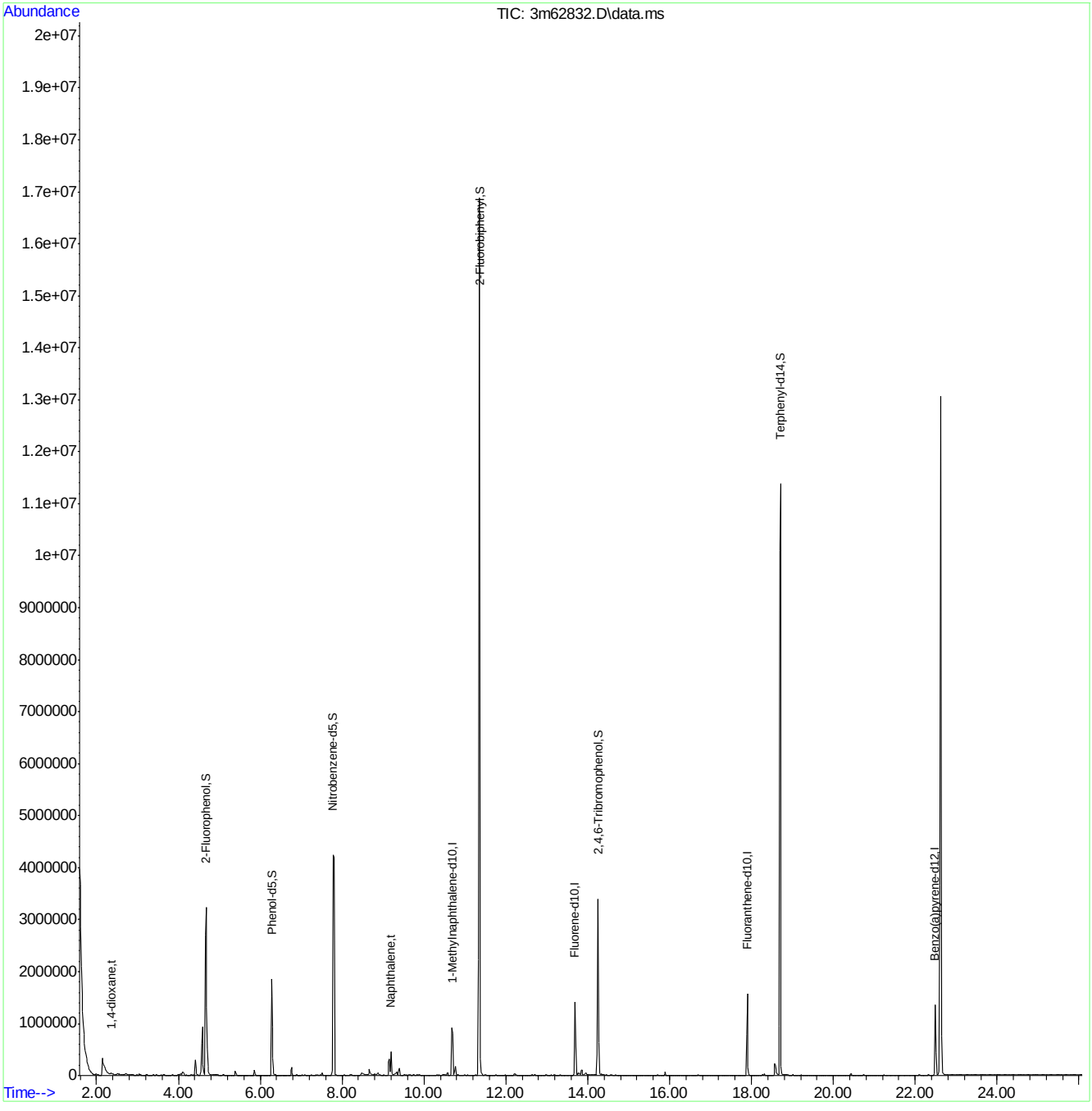
7

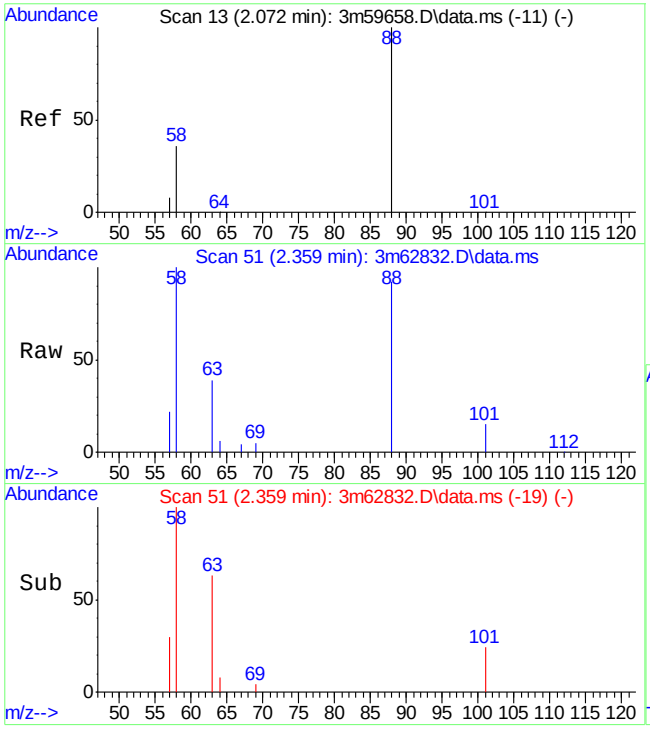
SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62832.D
Acq On : 7 Jul 2016 6:45 pm
Operator : linseyk
Sample : jc22613-2
Misc : op95059a,e3m2967,900
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 08 10:07:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

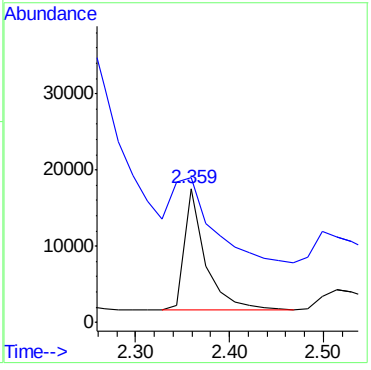


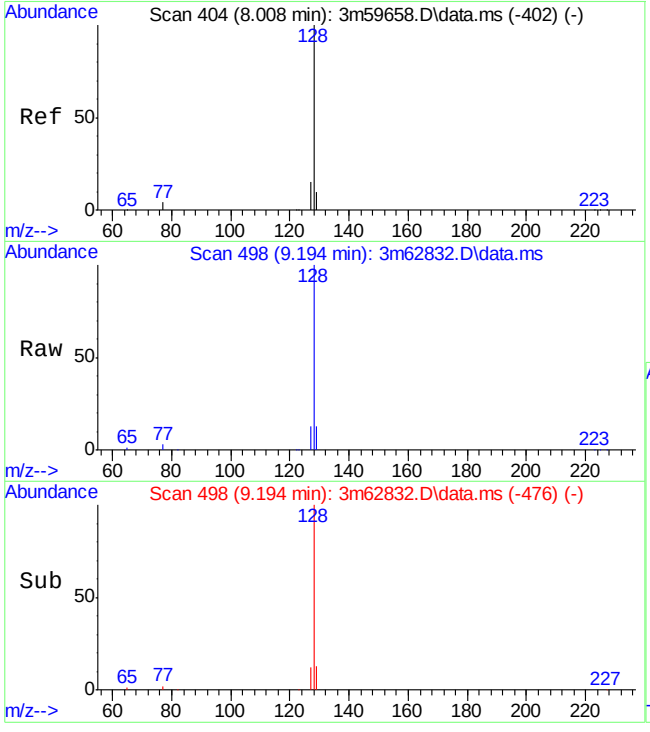


#2
1,4-dioxane
Concen: 0.51 ppm
RT: 2.359 min Scan# 51
Delta R.T. -0.009 min
Lab File: 3m62832.D
Acq: 7 Jul 2016 6:45 pm

Tgt Ion: 88 Resp: 25421

Ion	Ratio	Lower	Upper
88	100		
58	52.3	72.6	112.6#

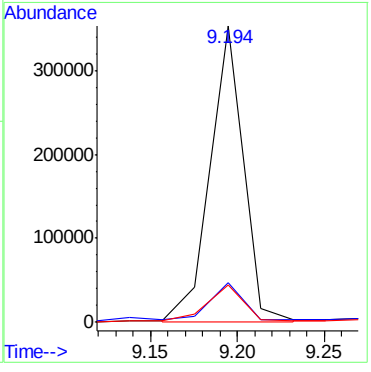




#9
Naphthalene
Concen: 0.98 ppm
RT: 9.194 min Scan# 498
Delta R.T. -0.082 min
Lab File: 3m62832.D
Acq: 7 Jul 2016 6:45 pm

Tgt Ion:128 Resp: 466476

Ion	Ratio	Lower	Upper
128	100		
129	12.6	0.0	40.2
127	12.3	0.0	43.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62833.D
Acq On : 7 Jul 2016 7:18 pm
Operator : linseyk
Sample : jc22613-3
Misc : op95059a,e3m2967,910
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 08 10:09:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

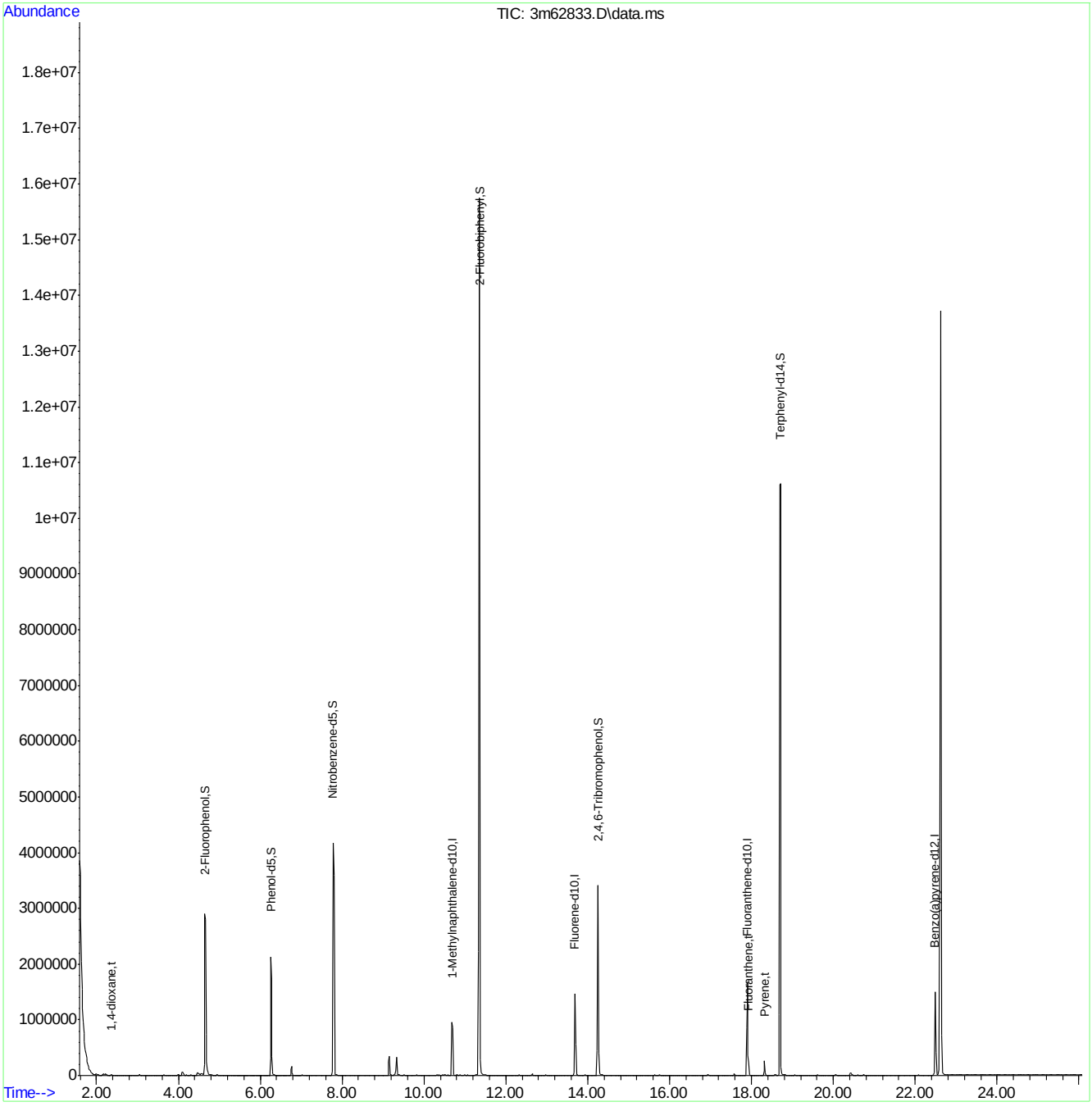
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.681	150	832431	4.00	ppm	-0.08
14) Fluorene-d10	13.687	176	1219881	4.00	ppm	-0.04
21) Fluoranthene-d10	17.904	212	1948286	4.00	ppm	-0.02
31) Benzo(a)pyrene-d12	22.488	264	1611336	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.662	112	3061685	23.48	ppm	-0.05
Spiked Amount 50.000			Recovery	=	46.96%	
4) Phenol-d5	6.261	99	3195126	15.48	ppm	-0.02
Spiked Amount 50.000			Recovery	=	30.96%	
7) Nitrobenzene-d5	7.782	82	5726874	33.92	ppm	-0.10
Spiked Amount 50.000			Recovery	=	67.84%	
15) 2-Fluorobiphenyl	11.358	172	11809111	31.62	ppm	-0.04
Spiked Amount 50.000			Recovery	=	63.24%	
20) 2,4,6-Tribromophenol	14.252	330	2011560	51.03	ppm	0.00
Spiked Amount 50.000			Recovery	=	102.06%	
28) Terphenyl-d14	18.708	244	13753882	46.88	ppm	0.00
Spiked Amount 50.000			Recovery	=	93.76%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.360	88	7141	0.14	ppm	# 57
26) Fluoranthene	17.919	202	355661	0.62	ppm	93
27) Pyrene	18.321	202	260634	0.49	ppm	90

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

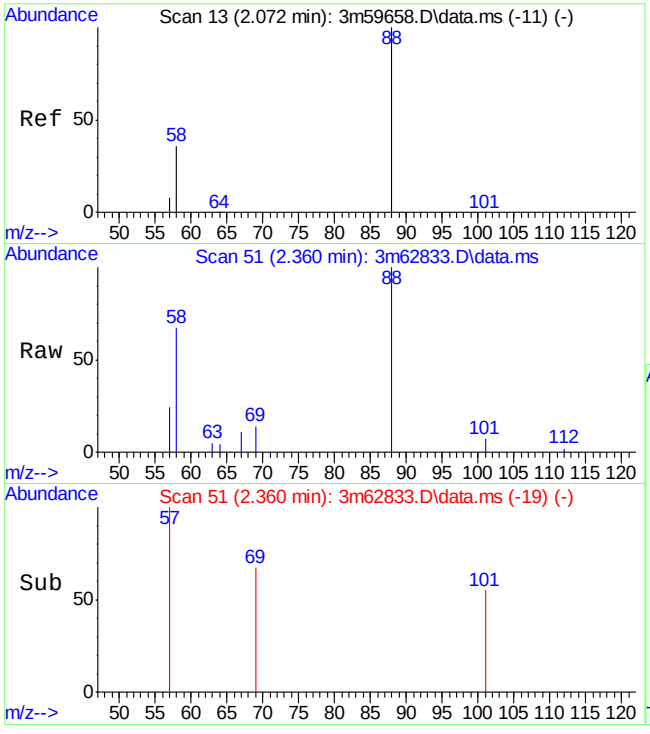
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62833.D
Acq On : 7 Jul 2016 7:18 pm
Operator : linseyk
Sample : jc22613-3
Misc : op95059a,e3m2967,910
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 08 10:09:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration



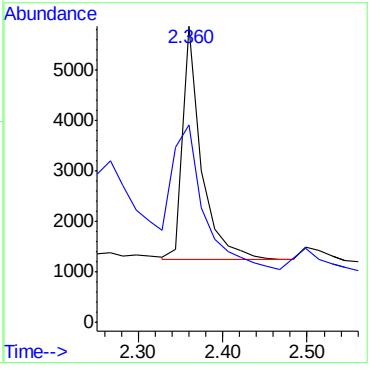
SGS ACCUTEST JC22613

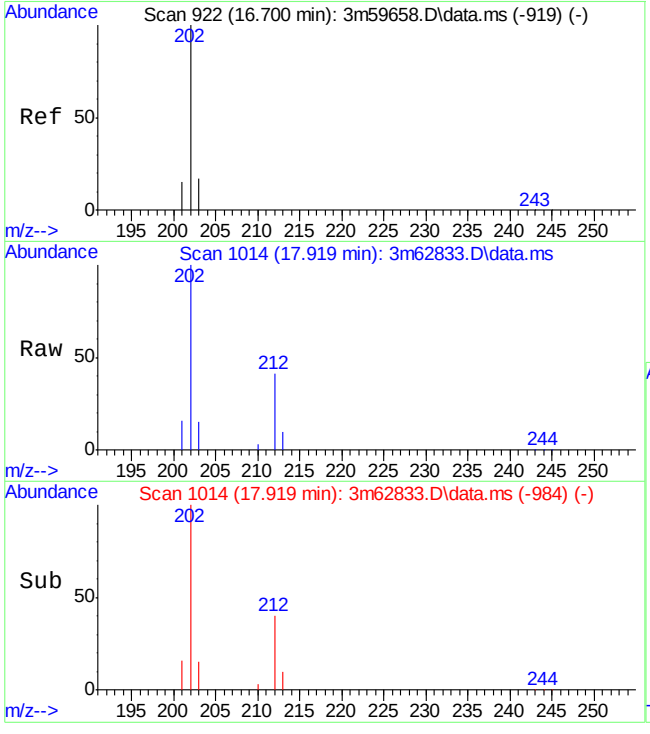


#2
1,4-dioxane
Concen: 0.14 ppm
RT: 2.360 min Scan# 51
Delta R.T. -0.008 min
Lab File: 3m62833.D
Acq: 7 Jul 2016 7:18 pm

Tgt Ion: 88 Resp: 7141

Ion	Ratio	Lower	Upper
88	100		
58	51.7	72.6	112.6#

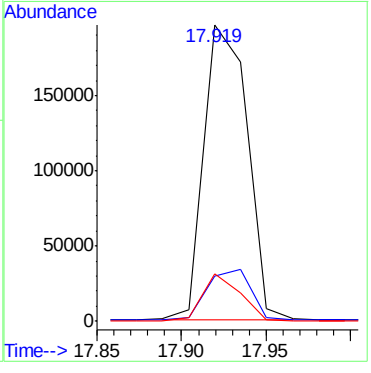


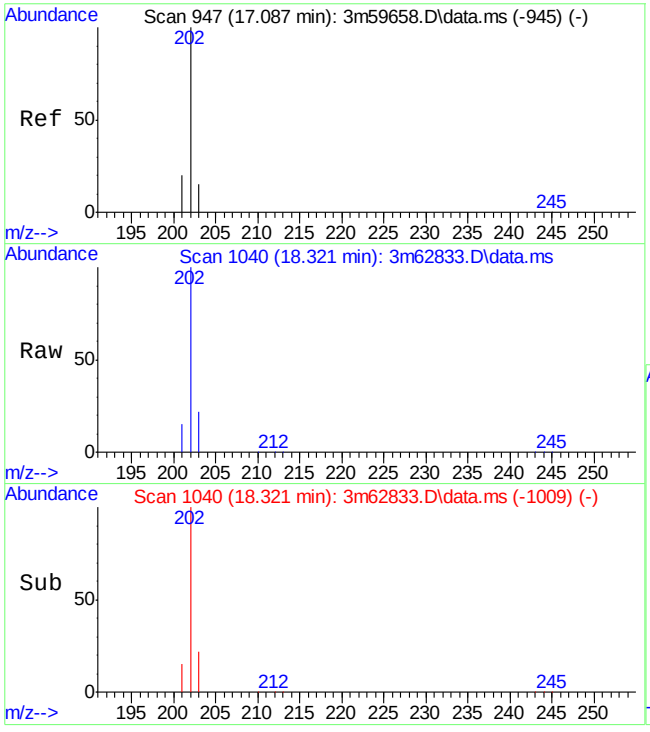


#26
Fluoranthene
Concen: 0.62 ppm
RT: 17.919 min Scan# 1014
Delta R.T. -0.035 min
Lab File: 3m62833.D
Acq: 7 Jul 2016 7:18 pm

Tgt Ion:202 Resp: 355661

Ion	Ratio	Lower	Upper
202	100		
203	14.7	0.0	47.3
201	15.7	0.0	42.4

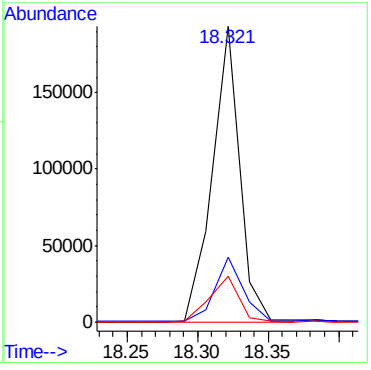




#27
Pyrene
Concen: 0.49 ppm
RT: 18.321 min Scan# 1040
Delta R.T. -0.016 min
Lab File: 3m62833.D
Acq: 7 Jul 2016 7:18 pm

Tgt Ion:202 Resp: 260634

Ion	Ratio	Lower	Upper
202	100		
203	21.7	0.0	45.5
201	15.3	0.0	47.4



7.1.11

7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62834.D
Acq On : 7 Jul 2016 7:51 pm
Operator : linseyk
Sample : jc22613-4
Misc : op95059a,e3m2967,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 08 10:10:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.681	150	788543	4.00	ppm	-0.08
14) Fluorene-d10	13.687	176	1112918	4.00	ppm	-0.04
21) Fluoranthene-d10	17.904	212	1810150	4.00	ppm	-0.02
31) Benzo(a)pyrene-d12	22.488	264	1478730	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.662	112	2555707	20.69	ppm	-0.05
Spiked Amount 50.000			Recovery = 41.38%			
4) Phenol-d5	6.261	99	2627560	13.44	ppm	-0.02
Spiked Amount 50.000			Recovery = 26.88%			
7) Nitrobenzene-d5	7.782	82	5290631	33.08	ppm	-0.10
Spiked Amount 50.000			Recovery = 66.16%			
15) 2-Fluorobiphenyl	11.358	172	11738368	34.45	ppm	-0.04
Spiked Amount 50.000			Recovery = 68.90%			
20) 2,4,6-Tribromophenol	14.252	330	1792546	49.84	ppm	0.00
Spiked Amount 50.000			Recovery = 99.68%			
28) Terphenyl-d14	18.692	244	10623842	38.97	ppm	-0.01
Spiked Amount 50.000			Recovery = 77.94%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.360	88	72769	1.49	ppm #	48
27) Pyrene	18.321	202	52051	0.11	ppm	95

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

7.1.12

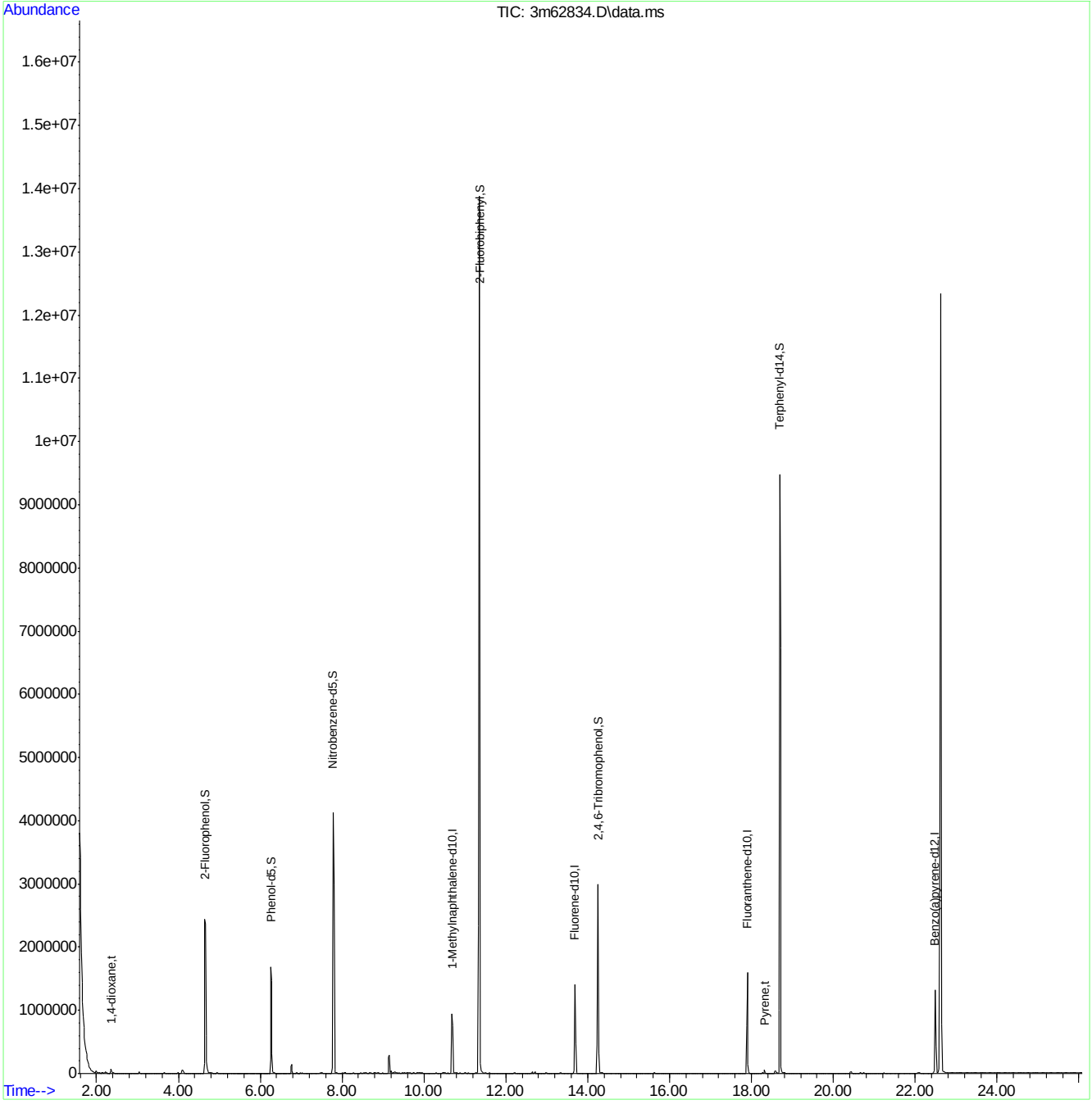
7

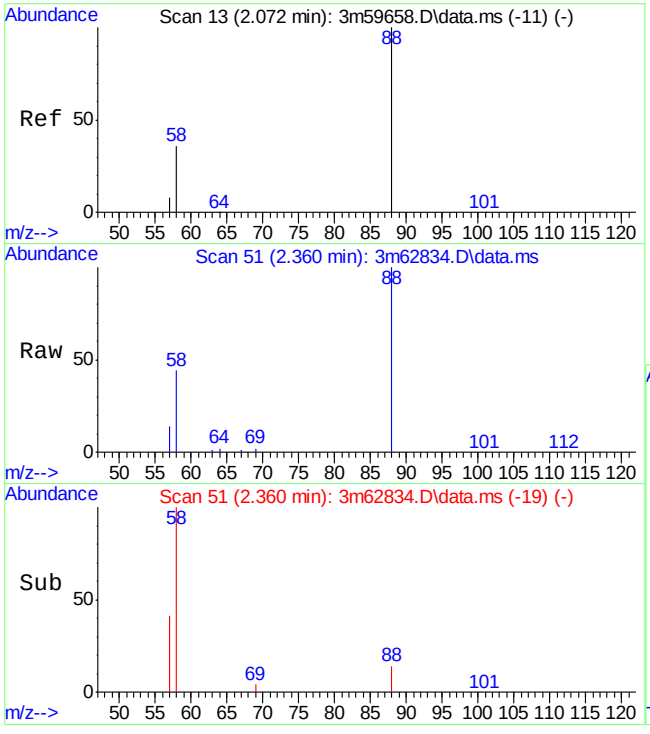
SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62834.D
Acq On : 7 Jul 2016 7:51 pm
Operator : linseyk
Sample : jc22613-4
Misc : op95059a,e3m2967,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 08 10:10:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

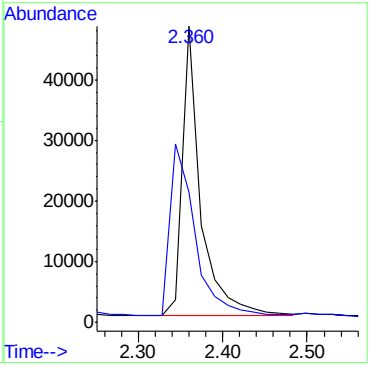


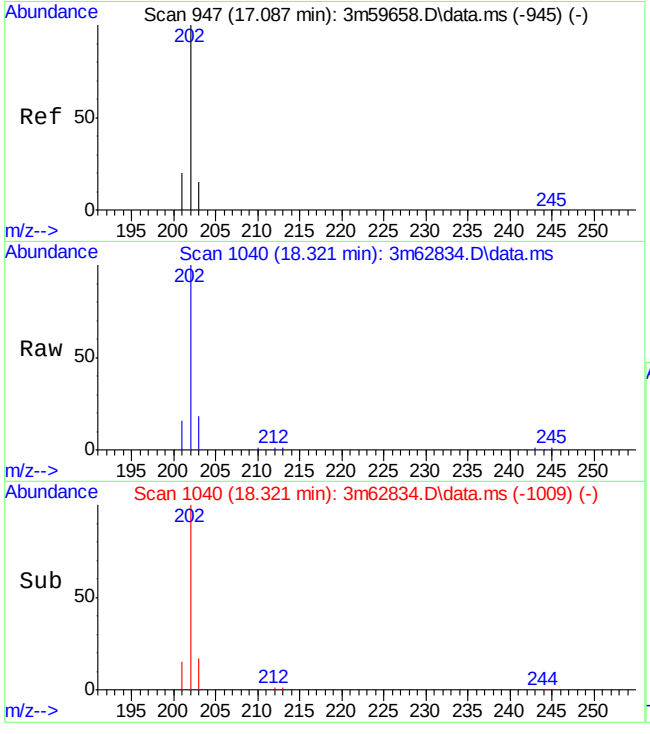


#2
1,4-dioxane
Concen: 1.49 ppm
RT: 2.360 min Scan# 51
Delta R.T. -0.008 min
Lab File: 3m62834.D
Acq: 7 Jul 2016 7:51 pm

Tgt Ion: 88 Resp: 72769

Ion	Ratio	Lower	Upper
88	100		
58	42.3	72.6	112.6#

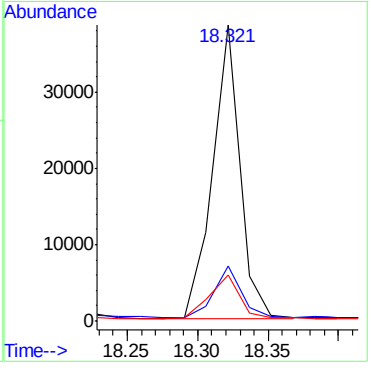




#27
Pyrene
Concen: 0.11 ppm
RT: 18.321 min Scan# 1040
Delta R.T. -0.016 min
Lab File: 3m62834.D
Acq: 7 Jul 2016 7:51 pm

Tgt Ion:202 Resp: 52051

Ion	Ratio	Lower	Upper
202	100		
203	17.3	0.0	45.5
201	14.8	0.0	47.4



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62835.D
Acq On : 7 Jul 2016 8:24 pm
Operator : linseyk
Sample : jc22613-5
Misc : op95059a,e3m2967,990
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 08 10:18:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.701	150	762243	4.00	ppm	-0.06
14) Fluorene-d10	13.687	176	1101530	4.00	ppm	-0.04
21) Fluoranthene-d10	17.904	212	1714820	4.00	ppm	-0.02
31) Benzo(a)pyrene-d12	22.488	264	1389063	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.662	112	2501009	20.95	ppm	-0.05
Spiked Amount 50.000			Recovery = 41.90%			
4) Phenol-d5	6.261	99	2440236	12.91	ppm	-0.02
Spiked Amount 50.000			Recovery = 25.82%			
7) Nitrobenzene-d5	7.782	82	5278670	34.14	ppm	-0.10
Spiked Amount 50.000			Recovery = 68.28%			
15) 2-Fluorobiphenyl	11.358	172	11534141	34.20	ppm	-0.04
Spiked Amount 50.000			Recovery = 68.40%			
20) 2,4,6-Tribromophenol	14.252	330	1815133	50.99	ppm	0.00
Spiked Amount 50.000			Recovery = 101.98%			
28) Terphenyl-d14	18.692	244	12193690	47.22	ppm	-0.01
Spiked Amount 50.000			Recovery = 94.44%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.359	88	15600	0.33	ppm #	60

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

7.1.13

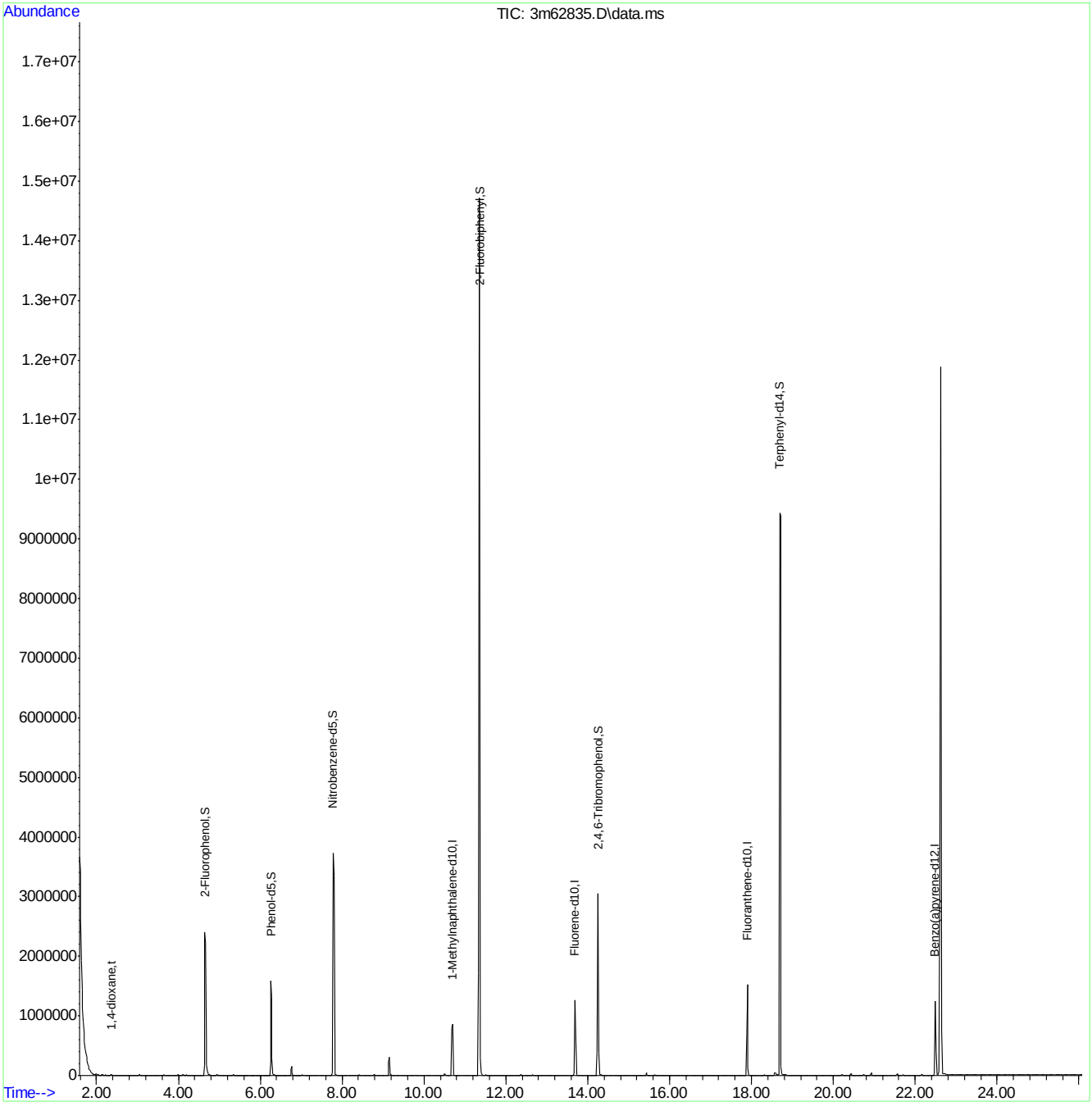
7

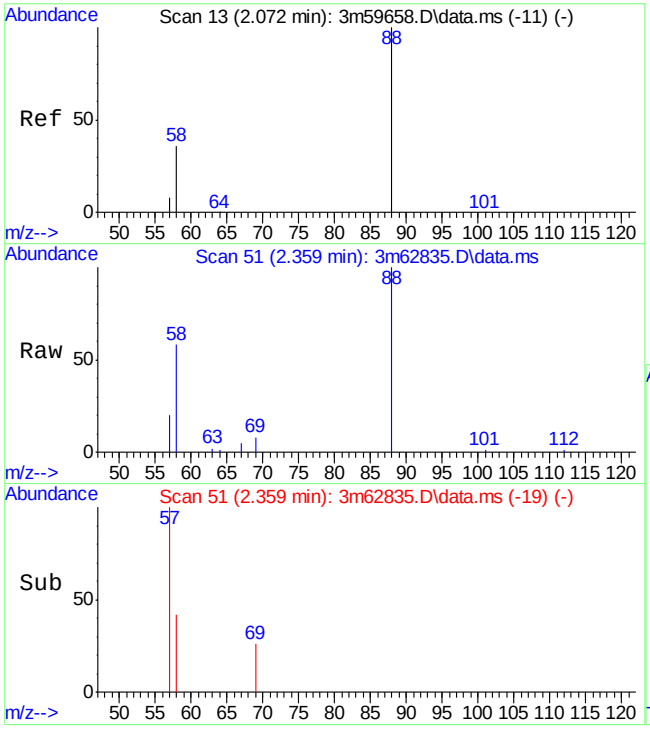
SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62835.D
Acq On : 7 Jul 2016 8:24 pm
Operator : linseyk
Sample : jc22613-5
Misc : op95059a,e3m2967,990
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 08 10:18:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

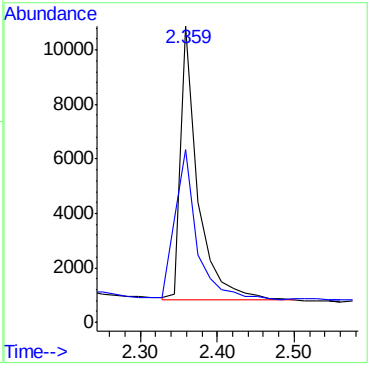




#2
1,4-dioxane
Concen: 0.33 ppm
RT: 2.359 min Scan# 51
Delta R.T. -0.009 min
Lab File: 3m62835.D
Acq: 7 Jul 2016 8:24 pm

Tgt Ion: 88 Resp: 15600

Ion	Ratio	Lower	Upper
88	100		
58	54.6	72.6	112.6#



Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 07/08/16 12:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62836.D
Acq On : 7 Jul 2016 8:57 pm
Operator : linseyk
Sample : jc22613-6
Misc : op95059a,e3m2967,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 08 12:17:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.681	150	760558	4.00	ppm	-0.08
14) Fluorene-d10	13.687	176	1079967	4.00	ppm	-0.04
21) Fluoranthene-d10	17.904	212	1690294	4.00	ppm	-0.02
31) Benzo(a)pyrene-d12	22.488	264	1428392	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.662	112	2846392	23.89	ppm	-0.05
Spiked Amount 50.000			Recovery = 47.78%			
4) Phenol-d5	6.261	99	2815609	14.93	ppm	-0.02
Spiked Amount 50.000			Recovery = 29.86%			
7) Nitrobenzene-d5	7.782	82	5475677	35.49	ppm	-0.10
Spiked Amount 50.000			Recovery = 70.98%			
15) 2-Fluorobiphenyl	11.358	172	11820712	35.75	ppm	-0.04
Spiked Amount 50.000			Recovery = 71.50%			
20) 2,4,6-Tribromophenol	14.252	330	1774482	50.85	ppm	0.00
Spiked Amount 50.000			Recovery = 101.70%			
28) Terphenyl-d14	18.692	244	11765731	46.22	ppm	-0.01
Spiked Amount 50.000			Recovery = 92.44%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.360	88	18749m	0.40	ppm	

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

7.1.14

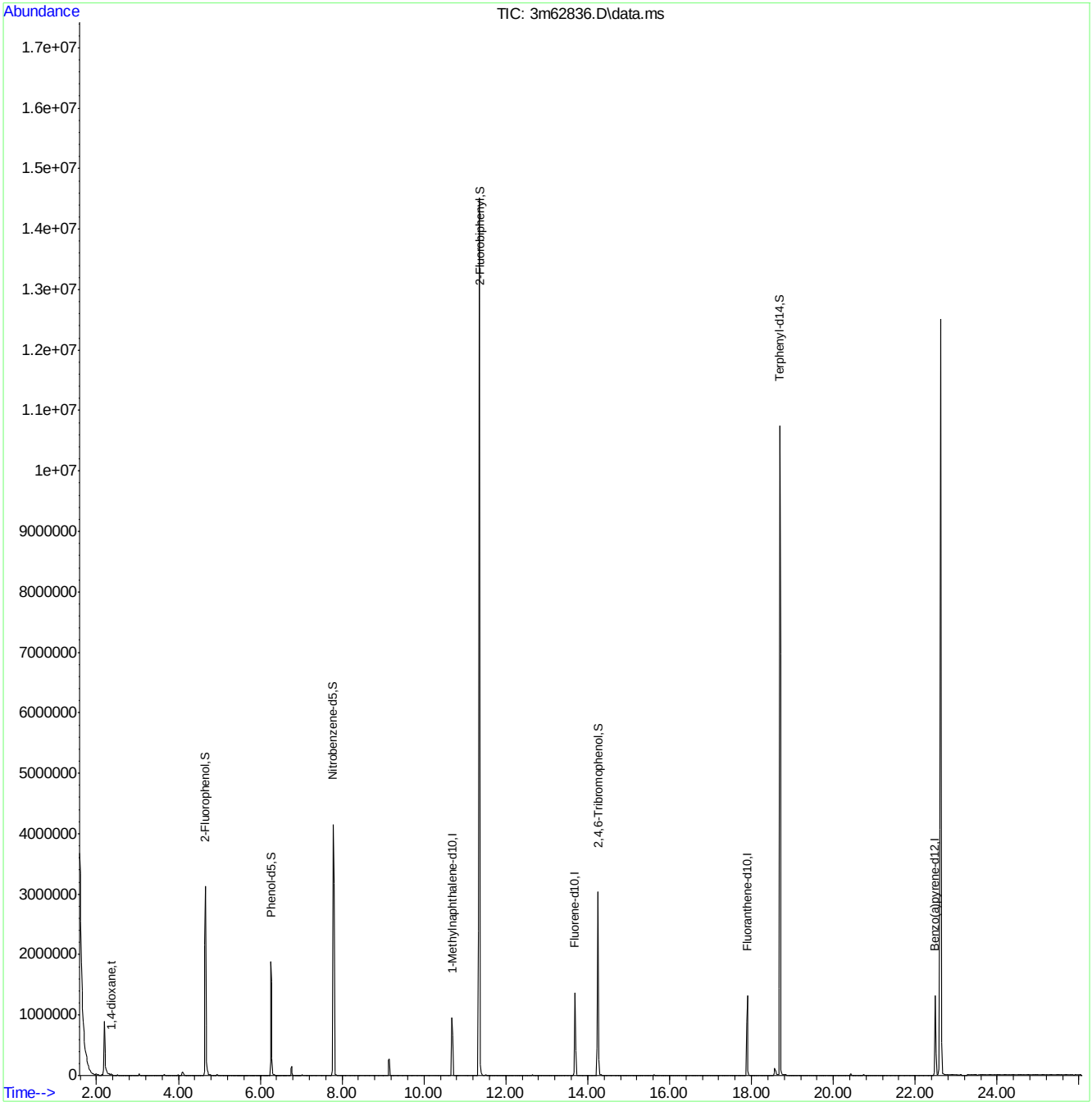
7

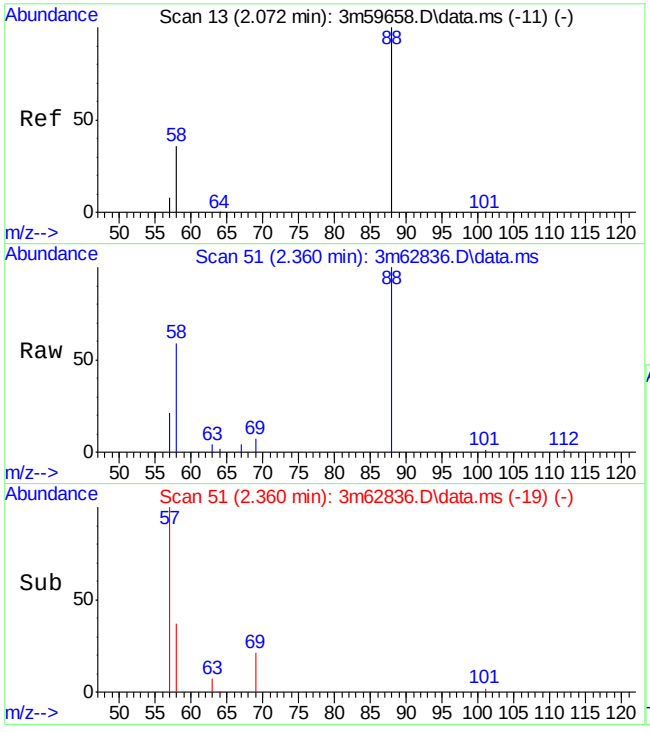
SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62836.D
Acq On : 7 Jul 2016 8:57 pm
Operator : linseyk
Sample : jc22613-6
Misc : op95059a,e3m2967,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 08 12:17:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

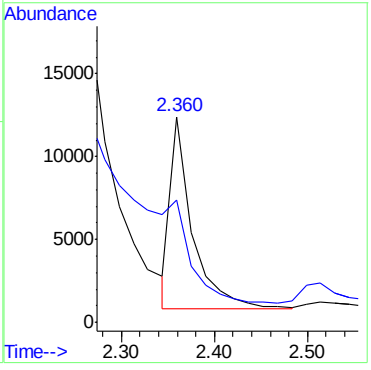




#2
1,4-dioxane
Concen: 0.40 ppm m
RT: 2.360 min Scan# 51
Delta R.T. -0.008 min
Lab File: 3m62836.D
Acq: 7 Jul 2016 8:57 pm

Tgt Ion: 88 Resp: 18749

Ion	Ratio	Lower	Upper
88	100		
58	59.5	72.6	112.6#



7.1.14

7

SGS ACCUTEST JC22613

Manual Integration Approval Summary

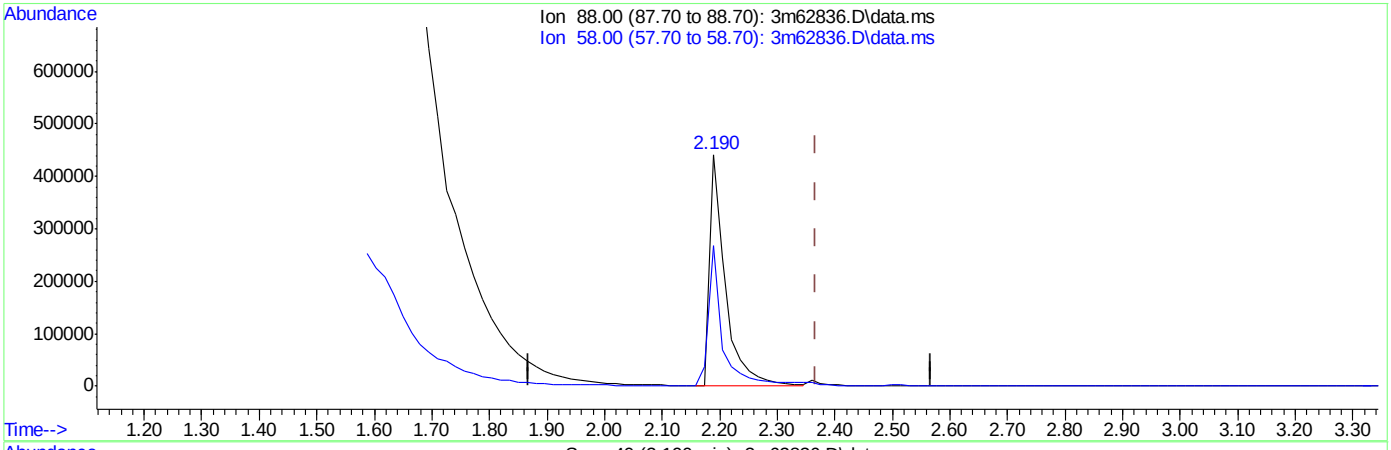
Sample Number:	JC22613-6	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M62836.D	**Analyst approved:**	07/08/16 12:24 Kristi Schollenberger
Injection Time:	07/07/16 20:57	**Supervisor approved:**	07/08/16 12:29 Kristi Schollenberger

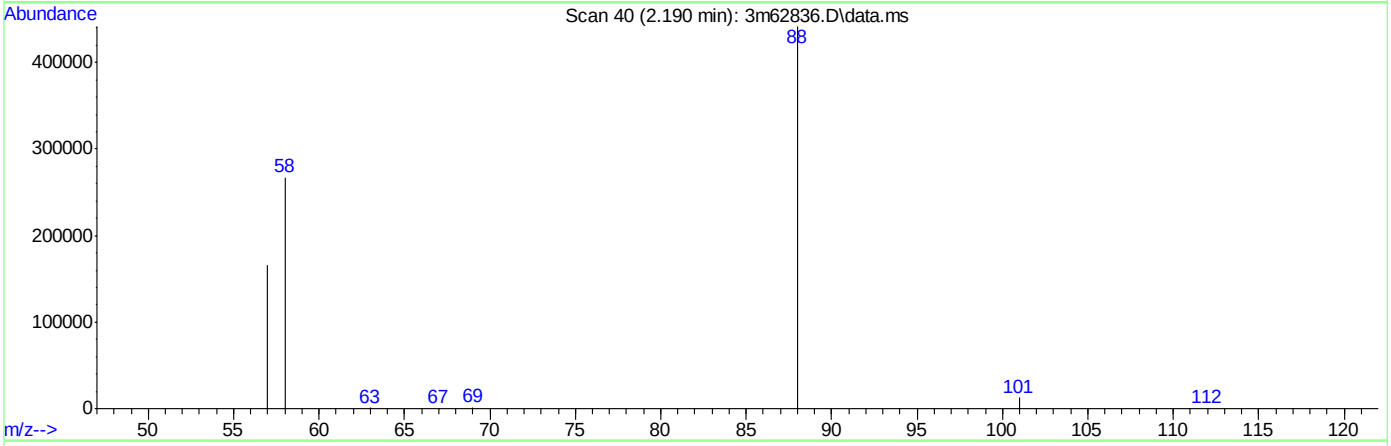
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.36	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62836.D
Acq On : 7 Jul 2016 8:57 pm
Operator : linseyk
Sample : jc22613-6
Misc : op95059a,e3m2967,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 08 10:19:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration





TIC: 3m62836.D\data.ms

(2) 1,4-dioxane (t)

2.190min (-0.178) 17.50ppm

response 823239

Ion	Exp%	Act%
88.00	100	100
58.00	92.60	59.84#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62837.D
Acq On : 7 Jul 2016 9:30 pm
Operator : linseyk
Sample : jc22613-7
Misc : op95059a,e3m2967,840
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 08 12:18:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.681	150	794424	4.00 ppm	-0.08
14) Fluorene-d10	13.687	176	1116755	4.00 ppm	-0.04
21) Fluoranthene-d10	17.904	212	1733902	4.00 ppm	-0.02
31) Benzo(a)pyrene-d12	22.488	264	1472150	4.00 ppm	-0.01
System Monitoring Compounds					
3) 2-Fluorophenol	4.662	112	3031268	24.36 ppm	-0.05
Spiked Amount 50.000			Recovery	= 48.72%	
4) Phenol-d5	6.261	99	3129160	15.89 ppm	-0.02
Spiked Amount 50.000			Recovery	= 31.78%	
7) Nitrobenzene-d5	7.782	82	5709876	35.43 ppm	-0.10
Spiked Amount 50.000			Recovery	= 70.86%	
15) 2-Fluorobiphenyl	11.358	172	12090415	35.36 ppm	-0.04
Spiked Amount 50.000			Recovery	= 70.72%	
20) 2,4,6-Tribromophenol	14.252	330	1870211	51.82 ppm	0.00
Spiked Amount 50.000			Recovery	= 103.64%	
28) Terphenyl-d14	18.692	244	12226494	46.83 ppm	-0.01
Spiked Amount 50.000			Recovery	= 93.66%	

Target Compounds Qvalue

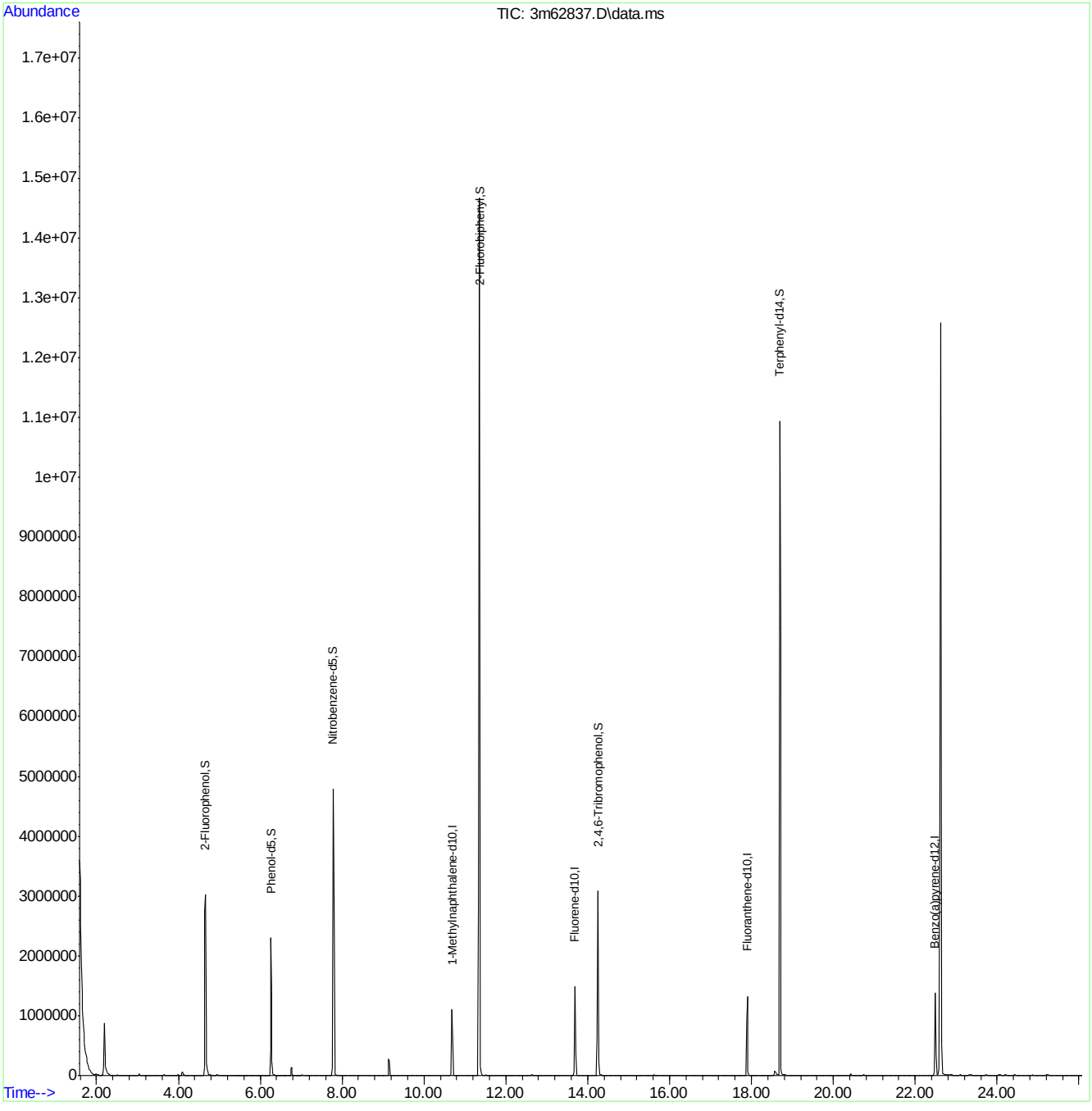
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62837.D
Acq On : 7 Jul 2016 9:30 pm
Operator : linseyk
Sample : jc22613-7
Misc : op95059a,e3m2967,840
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jul 08 12:18:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration



M3M2942SIM.M Fri Jul 08 12:31:37 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62838.D
Acq On : 7 Jul 2016 10:03 pm
Operator : linseyk
Sample : jc22613-8
Misc : op95059a,e3m2967,910
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 08 10:20:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.681	150	718886	4.00	ppm	-0.08
14) Fluorene-d10	13.687	176	1076465	4.00	ppm	-0.04
21) Fluoranthene-d10	17.904	212	1615254	4.00	ppm	-0.02
31) Benzo(a)pyrene-d12	22.488	264	1405321	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.662	112	2787382	24.75	ppm	-0.05
Spiked Amount 50.000			Recovery = 49.50%			
4) Phenol-d5	6.261	99	2880563	16.16	ppm	-0.02
Spiked Amount 50.000			Recovery = 32.32%			
7) Nitrobenzene-d5	7.782	82	5289878	36.28	ppm	-0.10
Spiked Amount 50.000			Recovery = 72.56%			
15) 2-Fluorobiphenyl	11.358	172	12026560	36.49	ppm	-0.04
Spiked Amount 50.000			Recovery = 72.98%			
20) 2,4,6-Tribromophenol	14.252	330	1744540	50.15	ppm	0.00
Spiked Amount 50.000			Recovery = 100.30%			
28) Terphenyl-d14	18.692	244	10979974	45.14	ppm	-0.01
Spiked Amount 50.000			Recovery = 90.28%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.359	88	26147	0.59	ppm	# 54

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

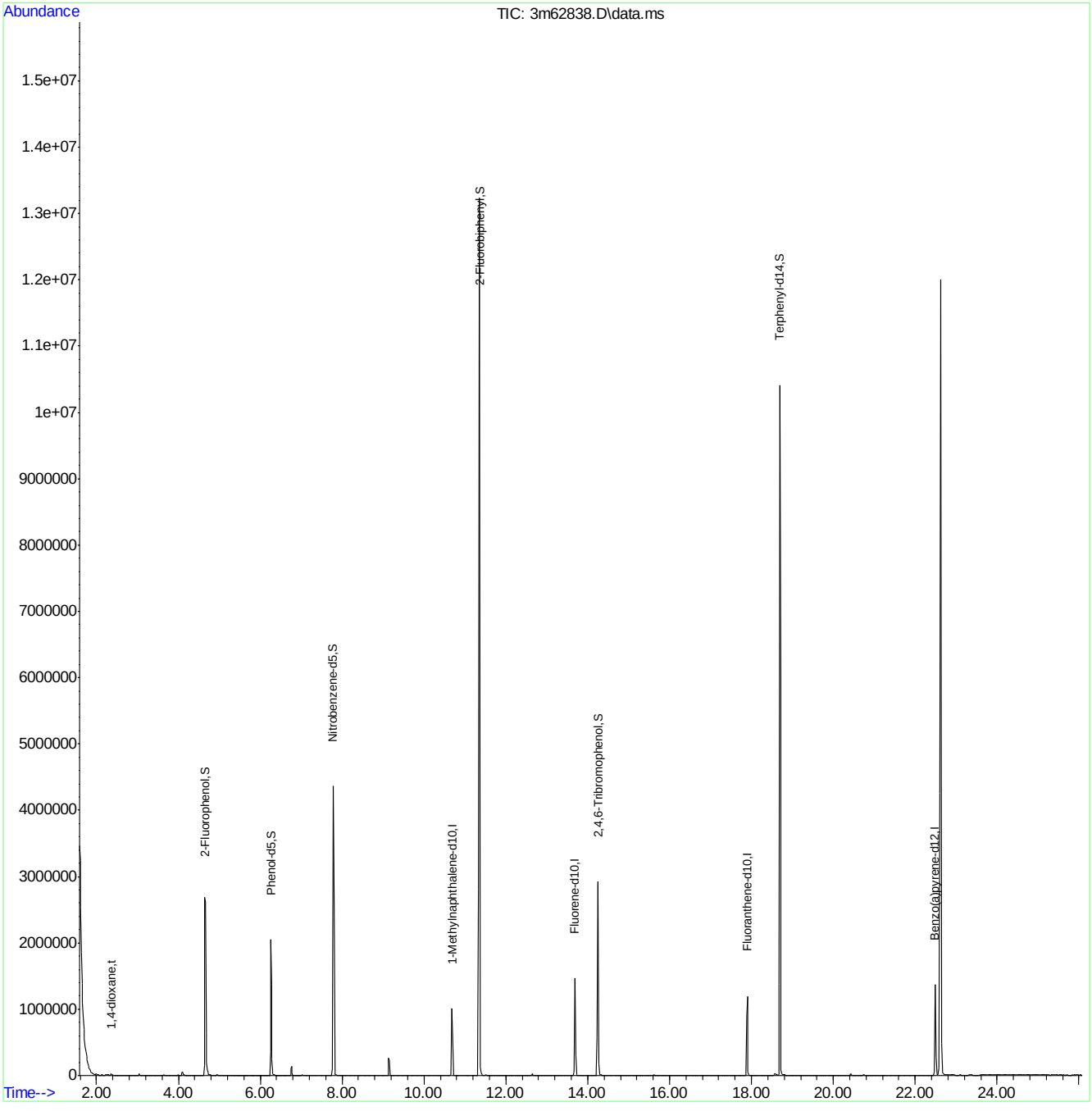
7.1.16

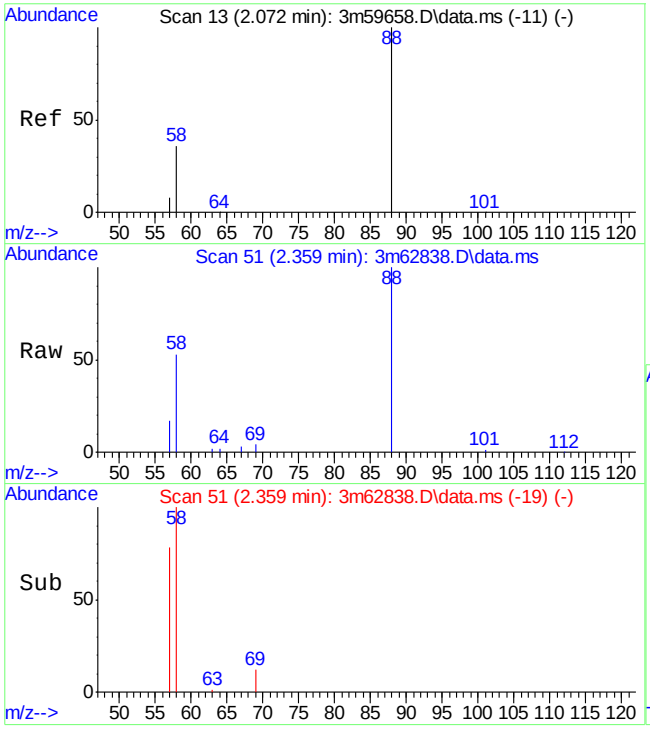
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62838.D
Acq On : 7 Jul 2016 10:03 pm
Operator : linseyk
Sample : jc22613-8
Misc : op95059a,e3m2967,910
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jul 08 10:20:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

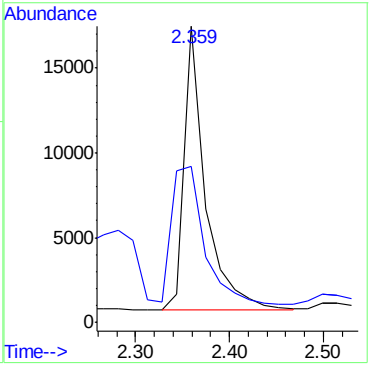




#2
1,4-dioxane
Concen: 0.59 ppm
RT: 2.359 min Scan# 51
Delta R.T. -0.008 min
Lab File: 3m62838.D
Acq: 7 Jul 2016 10:03 pm

Tgt Ion: 88 Resp: 26147

Ion	Ratio	Lower	Upper
88	100		
58	48.3	72.6	112.6#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125534.D
Acq On : 24 Jun 2016 12:11 am
Operator : seanb1
Sample : op95018-mb1
Misc : op95018,em5319,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 24 11:08:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.804	152	434981	40.00	ppm	0.00
24) Naphthalene-d8	5.963	136	1555960	40.00	ppm	0.00
47) Acenaphthene-d10	8.345	164	992623	40.00	ppm	-0.01
69) Phenanthrene-d10	10.989	188	1816174	40.00	ppm	-0.01
83) Chrysene-d12	16.169	240	1845066	40.00	ppm	-0.01
91) Perylene-d12	18.797	264	1665495	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.804	152	434981	40.00	ppm	0.00
103) Acenaphthene-d10a	8.345	164	992623	40.00	ppm	-0.01
106) Chrysene-d12a	16.169	240	1845066	40.00	ppm	-0.01
108) Naphthalene-d8a	5.963	136	1555960	40.00	ppm	0.00
110) Chrysene-d12b	16.169	240	1845066	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.832	112	274981	19.97	ppm	0.00
Spiked Amount 50.000			Recovery = 39.94%			
8) Phenol-d5	4.542	99	247167	14.03	ppm	0.01
Spiked Amount 50.000			Recovery = 28.06%			
25) Nitrobenzene-d5	5.263	82	466203	32.42	ppm	0.00
Spiked Amount 50.000			Recovery = 64.84%			
51) 2-Fluorobiphenyl	7.319	172	1116264	32.29	ppm	-0.01
Spiked Amount 50.000			Recovery = 64.58%			
73) 2,4,6-Tribromophenol	9.717	330	211358	39.97	ppm	-0.01
Spiked Amount 50.000			Recovery = 79.94%			
85) Terphenyl-d14	14.172	244	1860644	42.80	ppm	0.01
Spiked Amount 50.000			Recovery = 85.60%			

Target Compounds Qvalue

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

7.2.1

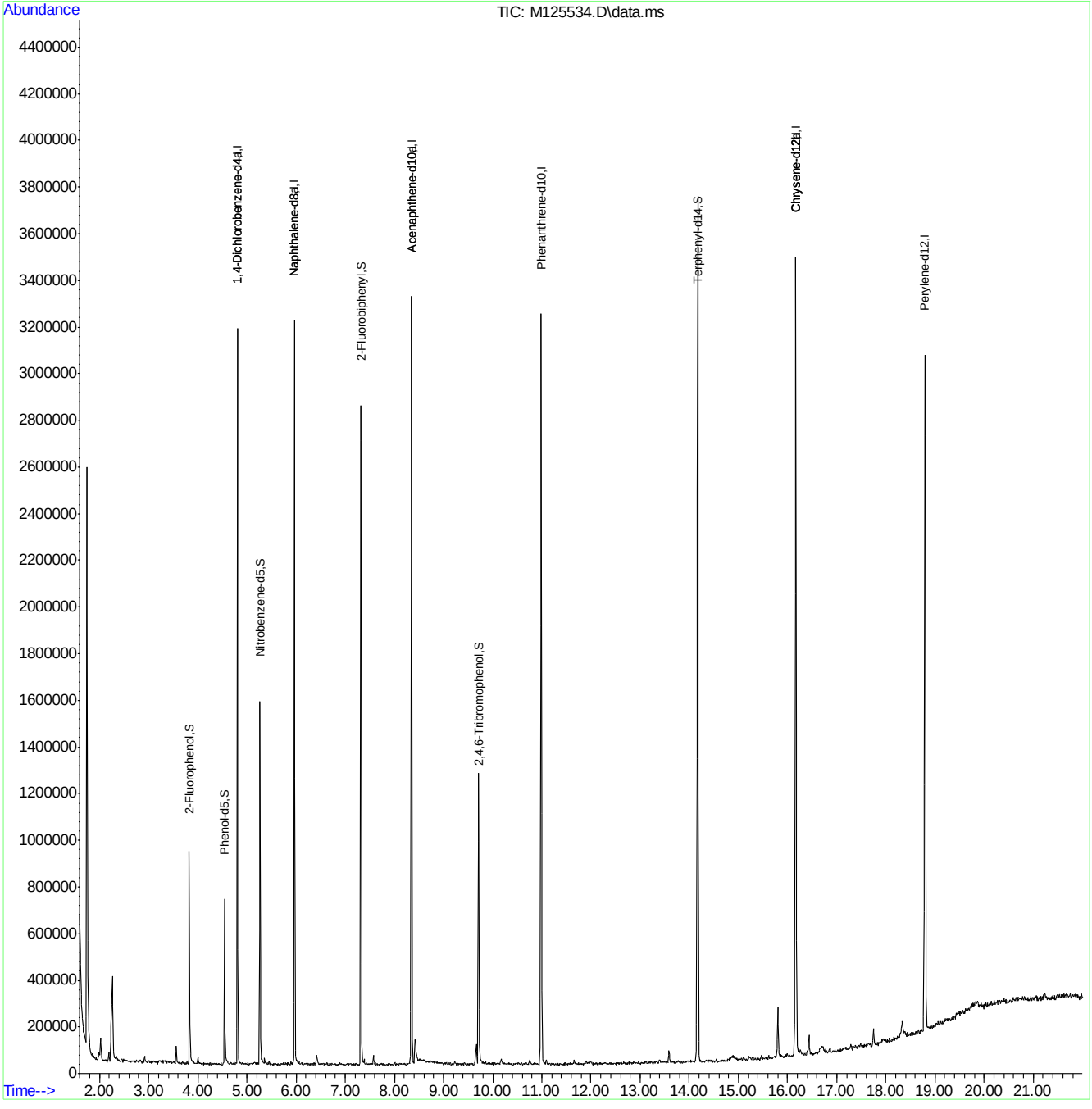
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125534.D
Acq On : 24 Jun 2016 12:11 am
Operator : seanb1
Sample : op95018-mb1
Misc : op95018,em5319,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 24 11:08:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration



MM5307.M Fri Jun 24 11:08:57 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84763.D
Acq On : 1 Jul 2016 9:50 pm
Operator : seanb1
Sample : op95059-mb1
Misc : op95059,e3e3716,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 03 17:34:57 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.014	152	88756	40.00 ppm	-0.03
24) Naphthalene-d8	6.164	136	336116	40.00 ppm	-0.11
47) Acenaphthene-d10	8.315	164	207833	40.00 ppm	-0.12
69) Phenanthrene-d10	10.540	188	346706	40.00 ppm	-0.11
83) Chrysene-d12	14.765	240	344796	40.00 ppm	-0.11
92) Perylene-d12	16.926	264	302910	40.00 ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	5.014	152	88756	40.00 ppm	-0.09
104) Acenaphthene-d10a	8.315	164	207833	40.00 ppm	-0.12
106) Phenanthrene-d10a	10.540	188	346706	40.00 ppm	-0.11
108) Chrysene-d12a	14.765	240	344796	40.00 ppm	-0.11
110) Naphthalene-d8a	6.164	136	336116	40.00 ppm	-0.10

System Monitoring Compounds					
5) 2-Fluorophenol	4.025	112	84086	30.57 ppm	-0.02
Spiked Amount 50.000			Recovery = 61.14%		
8) Phenol-d5	4.736	99	64299	19.23 ppm	-0.01
Spiked Amount 50.000			Recovery = 38.46%		
25) Nitrobenzene-d5	5.480	82	116914	45.61 ppm	-0.10
Spiked Amount 50.000			Recovery = 91.22%		
51) 2-Fluorobiphenyl	7.405	172	302196	43.96 ppm	-0.11
Spiked Amount 50.000			Recovery = 87.92%		
73) 2,4,6-Tribromophenol	9.475	330	35690	31.81 ppm	-0.11
Spiked Amount 50.000			Recovery = 63.62%		
85) Terphenyl-d14	13.107	244	372942	51.37 ppm	-0.11
Spiked Amount 50.000			Recovery = 102.74%		

Target Compounds	Qvalue

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

7.2.2

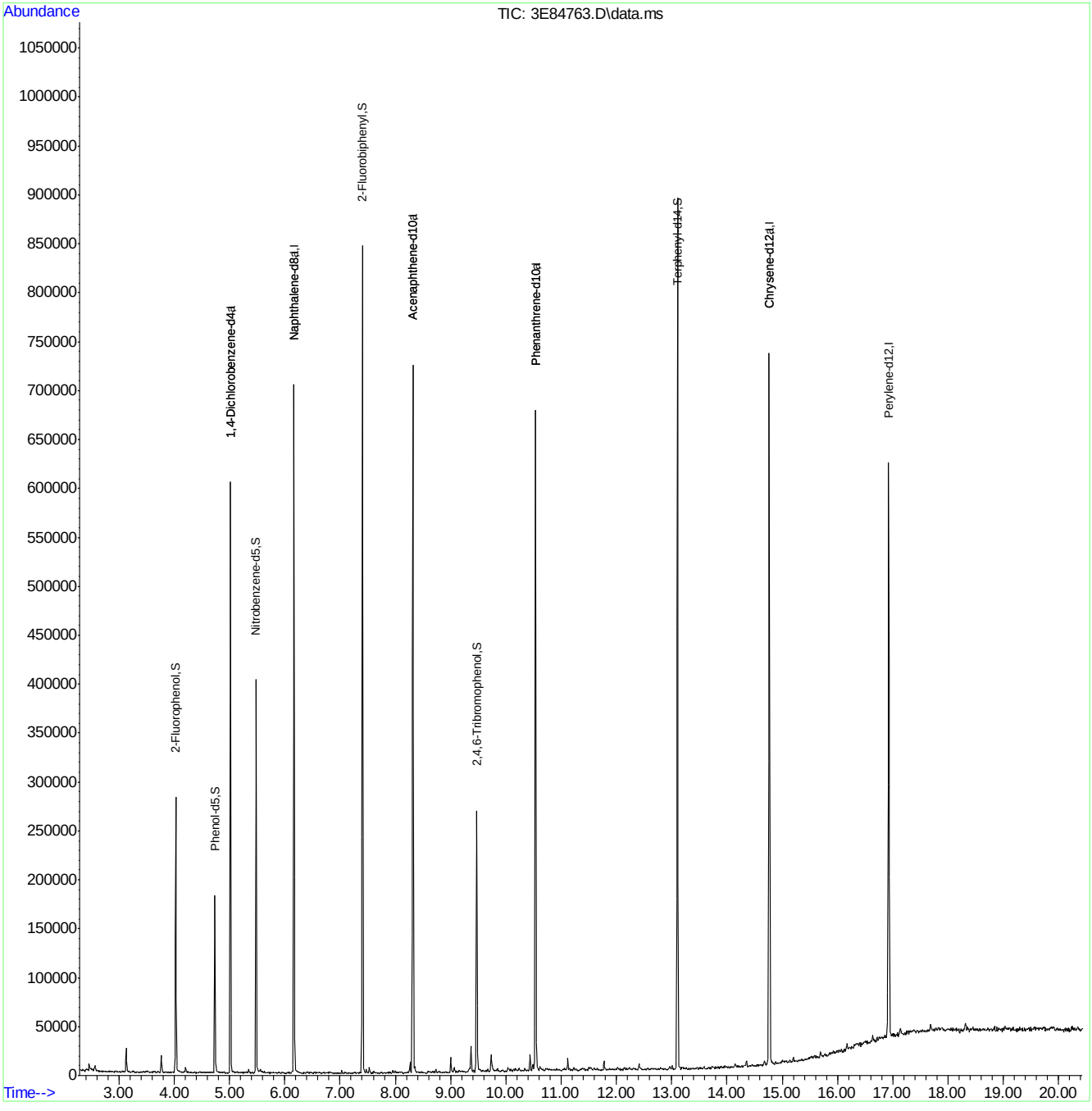
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84763.D
Acq On : 1 Jul 2016 9:50 pm
Operator : seanb1
Sample : op95059-mb1
Misc : op95059,e3e3716,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 03 17:34:57 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration



M3E3699.M Sun Jul 03 17:35:04 2016 MS3E

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e3m2951\
Data File : 3m62532.D
Acq On : 26 Jun 2016 4:58 pm
Operator : ariellec
Sample : op95018a-mb1
Misc : op95018a,e3m2951,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 27 11:54:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 27 10:40:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.763	150	422784	4.00	ppm	-0.10
14) Fluorene-d10	13.762	176	617041	4.00	ppm	-0.13
21) Fluoranthene-d10	17.955	212	884316	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.546	264	661467	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.678	112	1615142	24.39	ppm	-0.08
Spiked Amount 50.000			Recovery = 48.78%			
4) Phenol-d5	6.261	99	1682104	16.05	ppm	-0.08
Spiked Amount 50.000			Recovery = 32.10%			
7) Nitrobenzene-d5	7.839	82	2980532	34.76	ppm	-0.12
Spiked Amount 50.000			Recovery = 69.52%			
15) 2-Fluorobiphenyl	11.419	172	6056900	32.06	ppm	-0.12
Spiked Amount 50.000			Recovery = 64.12%			
20) 2,4,6-Tribromophenol	14.309	330	895354	44.90	ppm	-0.11
Spiked Amount 50.000			Recovery = 89.80%			
28) Terphenyl-d14	18.759	244	6324060	47.49	ppm	0.02
Spiked Amount 50.000			Recovery = 94.98%			

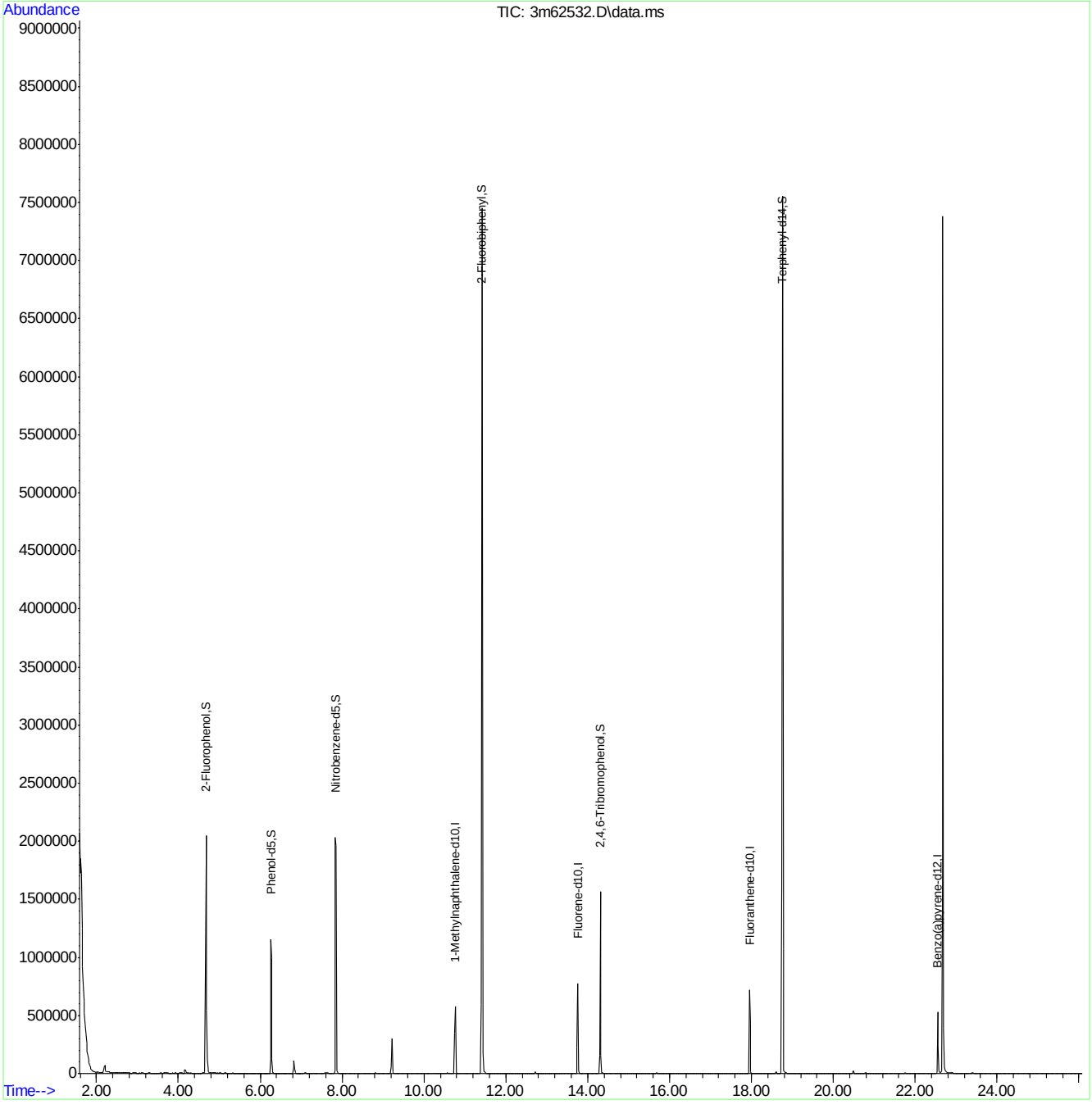
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e3m2951\
Data File : 3m62532.D
Acq On : 26 Jun 2016 4:58 pm
Operator : ariellec
Sample : op95018a-mb1
Misc : op95018a,e3m2951,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 27 11:54:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 27 10:40:58 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E2M3754\
Data File : 2m85124.D
Acq On : 28 Jun 2016 5:34 pm
Operator : ashleyn
Sample : op95018a-mb1
Misc : op95018a,e2m3754,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 29 09:10:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Jun 27 16:37:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.836	152	154107	40.00 ppm	-0.05
24) Naphthalene-d8	5.954	136	616420	40.00 ppm	-0.06
47) Acenaphthene-d10	8.067	164	356928	40.00 ppm	-0.06
69) Phenanthrene-d10	10.276	188	602153	40.00 ppm	-0.07
83) Chrysene-d12	14.490	240	510314	40.00 ppm	-0.08
91) Perylene-d12	16.630	264	433431	40.00 ppm	-0.09
101) 1,4-Dichlorobenzene-d4a	4.836	152	154107	40.00 ppm	-0.05
103) Acenaphthene-d10a	8.067	164	356928	40.00 ppm	-0.06
105) Chrysene-d12a	14.490	240	510314	40.00 ppm	-0.08
108) Phenanthrene-d10a	10.276	188	602153	40.00 ppm	-0.07
111) Naphthalene-d8a	5.954	136	616420	40.00 ppm	-0.06
113) Chrysene-d12b	14.490	240	510408	40.00 ppm	-0.08

System Monitoring Compounds					
5) 2-Fluorophenol	3.884	112	101122	18.54 ppm	-0.04
Spiked Amount 50.000			Recovery = 37.08%		
8) Phenol-d5	4.611	99	93352	13.52 ppm	-0.03
Spiked Amount 50.000			Recovery = 27.04%		
25) Nitrobenzene-d5	5.301	82	208936	30.72 ppm	-0.04
Spiked Amount 50.000			Recovery = 61.44%		
51) 2-Fluorobiphenyl	7.173	172	363183	31.56 ppm	-0.06
Spiked Amount 50.000			Recovery = 63.12%		
73) 2,4,6-Tribromophenol	9.227	330	58067	34.79 ppm	-0.07
Spiked Amount 50.000			Recovery = 69.58%		
85) Terphenyl-d14	12.832	244	535868	45.89 ppm	-0.09
Spiked Amount 50.000			Recovery = 91.78%		
107) 1-chlorooctadecane	0.000	57	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
110) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds	Qvalue

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

7.2.4

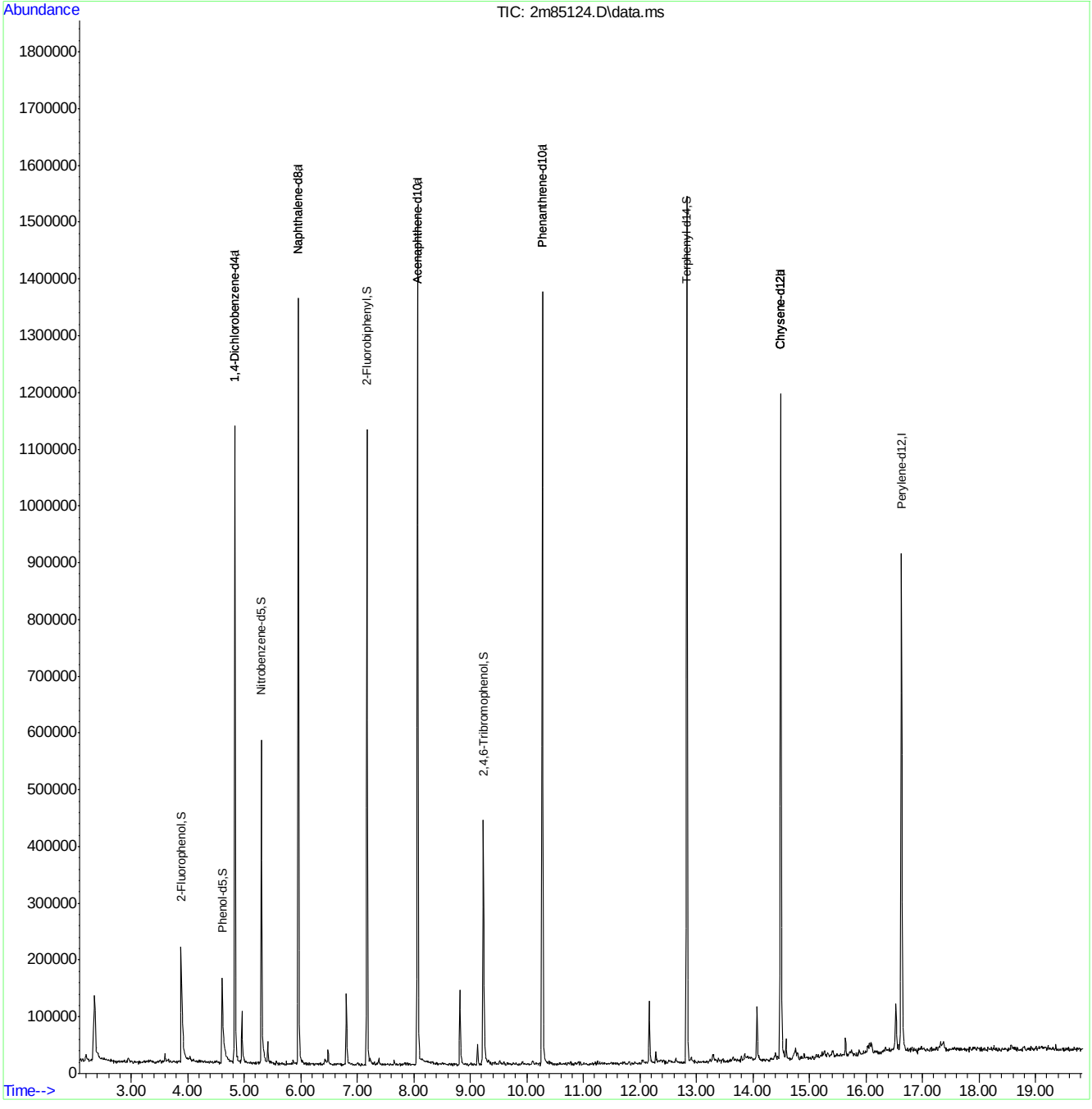
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E2M3754\
Data File : 2m85124.D
Acq On : 28 Jun 2016 5:34 pm
Operator : ashleyn
Sample : op95018a-mb1
Misc : op95018a,e2m3754,1000
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Jun 29 09:10:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Jun 27 16:37:24 2016
Response via : Initial Calibration



M2M3720.M Wed Jun 29 09:10:20 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66583.D
Acq On : 5 Jul 2016 1:28 pm
Operator : linseyk
Sample : op95018a-mb1
Misc : op95018a,e4m2995,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 05 15:37:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri Jul 01 16:10:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.715	152	54066	4.00	ppm	-0.07
12) Fluorene-d10	12.696	176	61812	4.00	ppm	-0.07
22) Fluoranthene-d10	16.878	212	141725	4.00	ppm	-0.06
28) Benzo(a)pyrene-d12	21.473	264	118746	4.00	ppm	-0.05
35) 1-Methylnaphthalene-d10a	9.715	152	54066	4.00	ppm	-0.07
38) Fluorene-d10a	12.696	176	61812	4.00	ppm	-0.07
System Monitoring Compounds						
2) 2-Fluorophenol	4.090	112	162587	18.87	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 37.74%			
3) Phenol-d5	5.525	99	184707	13.60	ppm	0.04
Spiked Amount 50.000			Recovery = 27.20%			
6) Nitrobenzene-d5	6.922	82	365836	30.27	ppm	-0.05
Spiked Amount 50.000			Recovery = 60.54%			
11) 2-Fluorobiphenyl	10.359	172	519176	23.86	ppm	-0.07
Spiked Amount 50.000			Recovery = 47.72%			
17) 2,4,6-Tribromophenol	13.266	330	146178	50.74	ppm	-0.05
Spiked Amount 50.000			Recovery = 101.48%			
25) Terphenyl-d14	17.687	244	1044530	52.19	ppm	-0.06
Spiked Amount 50.000			Recovery = 104.38%			
Target Compounds						Qvalue

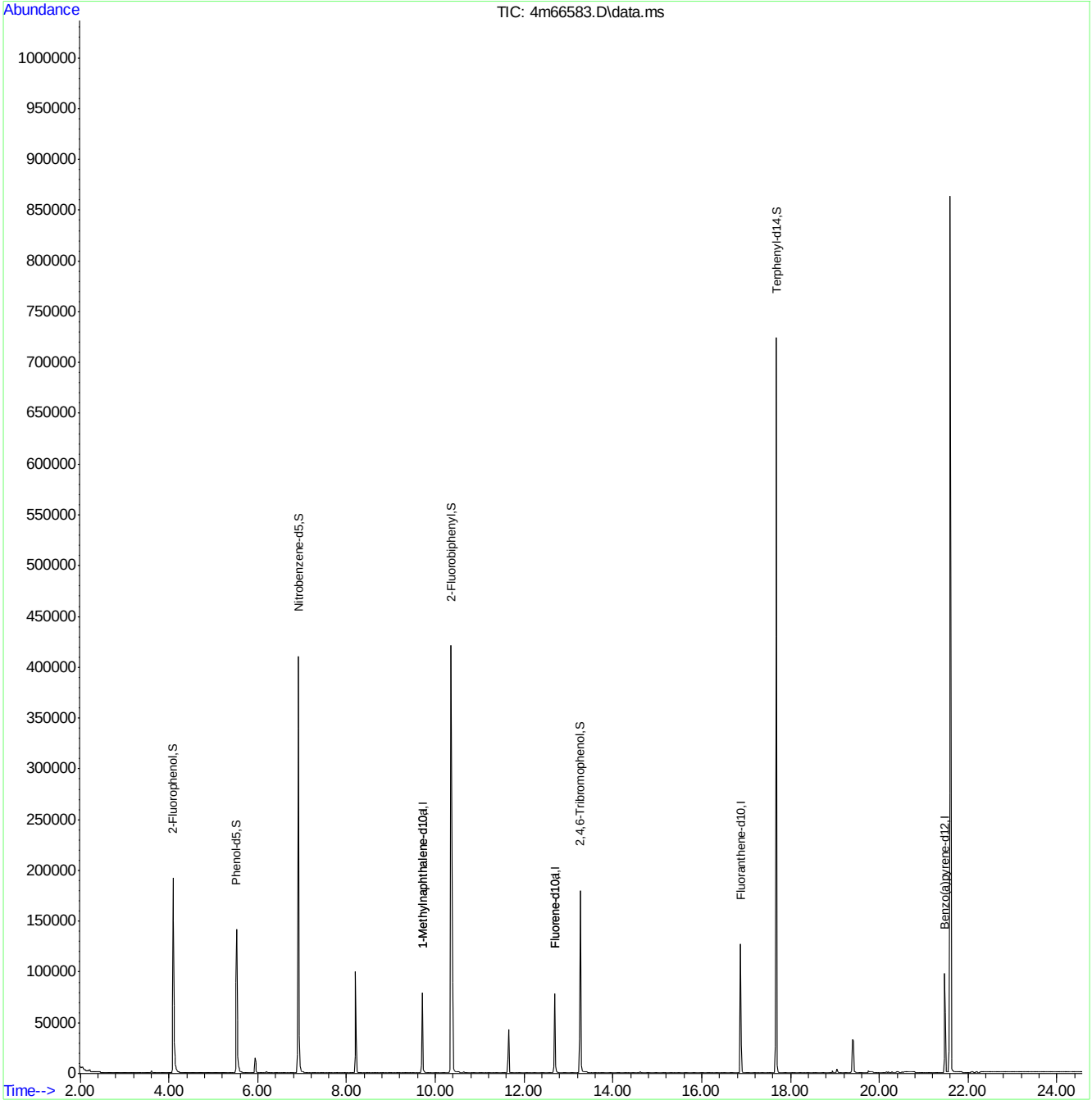
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66583.D
Acq On : 5 Jul 2016 1:28 pm
Operator : linseyk
Sample : op95018a-mb1
Misc : op95018a,e4m2995,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 05 15:37:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri Jul 01 16:10:51 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P933\
Data File : 4p17518.D
Acq On : 5 Jul 2016 4:15 pm
Operator : linseyk
Sample : op95059a-mb1
Misc : op95059a,e4p933,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 05 23:06:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Jul 05 09:58:35 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.525	150	155730	4.00	ppm	-0.05
13) Fluorene-d10	10.462	176	223909	4.00	ppm	-0.05
23) Fluoranthene-d10	14.667	212	304254	4.00	ppm	-0.05
33) Benzo(a)pyrene-d12	19.318	264	225454	4.00	ppm	-0.05
System Monitoring Compounds						
3) 2-Fluorophenol	2.469	112	534099	25.04	ppm	-0.12
Spiked Amount 50.000			Recovery = 50.08%			
4) Phenol-d5	3.579	99	610158	16.94	ppm	-0.08
Spiked Amount 50.000			Recovery = 33.88%			
7) Nitrobenzene-d5	4.857	82	1210326	46.04	ppm	-0.08
Spiked Amount 50.000			Recovery = 92.08%			
14) 2-Fluorobiphenyl	8.189	172	2680116	44.58	ppm	-0.08
Spiked Amount 50.000			Recovery = 89.16%			
22) 2,4,6-Tribromophenol	10.992	330	309988	50.10	ppm	-0.03
Spiked Amount 50.000			Recovery = 100.20%			
30) Terphenyl-d14	15.545	244	2464539	64.64	ppm	-0.02
Spiked Amount 50.000			Recovery = 129.28%			

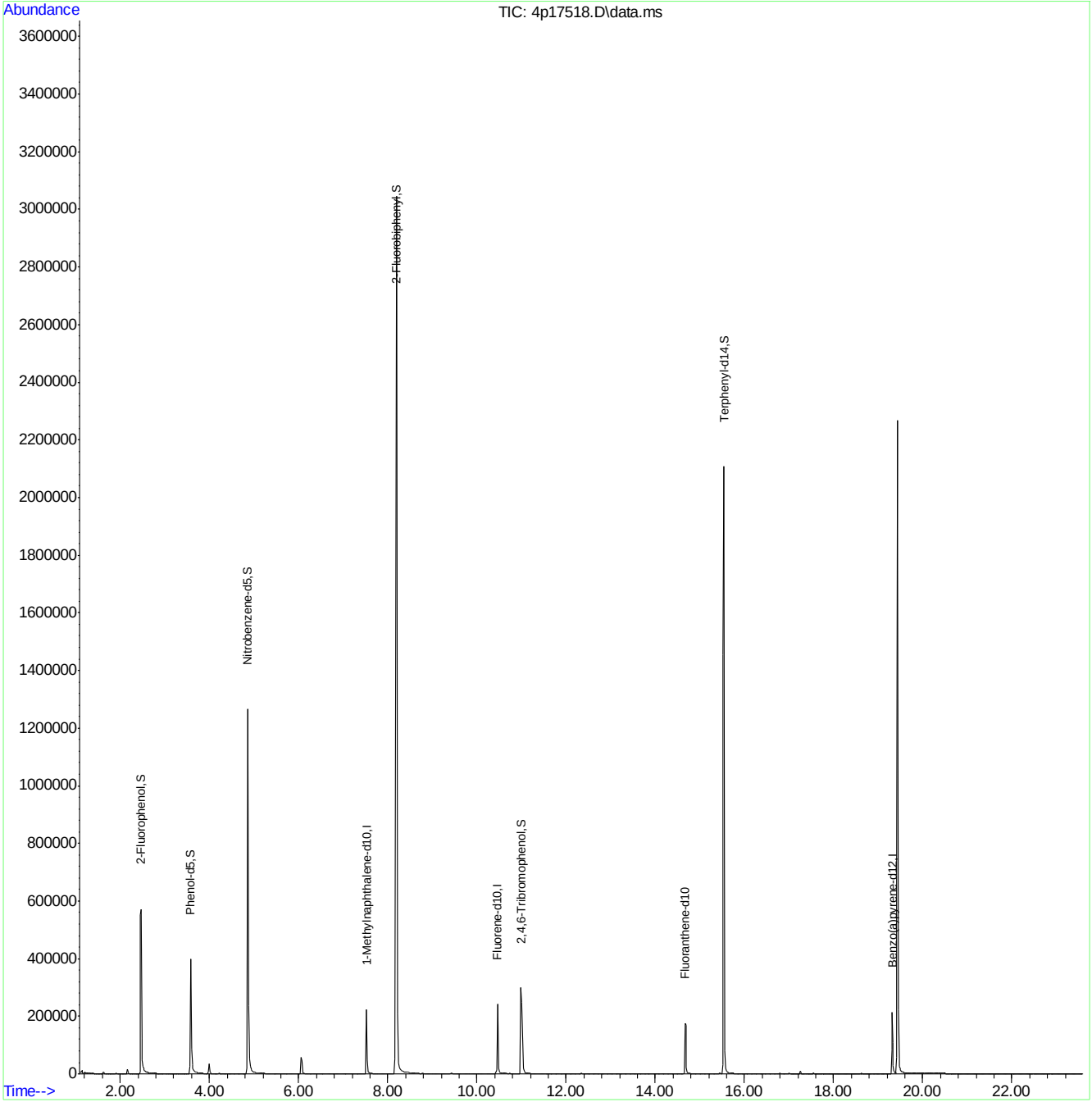
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P933\
Data File : 4p17518.D
Acq On : 5 Jul 2016 4:15 pm
Operator : linseyk
Sample : op95059a-mb1
Misc : op95059a,e4p933,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 05 23:06:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Jul 05 09:58:35 2016
Response via : Initial Calibration



M4P887SIM.M Tue Jul 05 23:06:15 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62828.D
Acq On : 7 Jul 2016 4:32 pm
Operator : linseyk
Sample : op95059a-mb1
Misc : op95059a,e3m2967,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 08 10:04:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.681	150	758005	4.00	ppm	-0.08
14) Fluorene-d10	13.687	176	1132179	4.00	ppm	-0.04
21) Fluoranthene-d10	17.904	212	1846316	4.00	ppm	-0.02
31) Benzo(a)pyrene-d12	22.488	264	1594848	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.662	112	3110369	26.20	ppm	-0.05
Spiked Amount 50.000			Recovery = 52.40%			
4) Phenol-d5	6.261	99	3179643	16.92	ppm	-0.02
Spiked Amount 50.000			Recovery = 33.84%			
7) Nitrobenzene-d5	7.782	82	5921155	38.51	ppm	-0.10
Spiked Amount 50.000			Recovery = 77.02%			
15) 2-Fluorobiphenyl	11.358	172	11730373	33.84	ppm	-0.04
Spiked Amount 50.000			Recovery = 67.68%			
20) 2,4,6-Tribromophenol	14.252	330	1945889	53.19	ppm	0.00
Spiked Amount 50.000			Recovery = 106.38%			
28) Terphenyl-d14	18.707	244	13892283	49.97	ppm	0.00
Spiked Amount 50.000			Recovery = 99.94%			

Target Compounds Qvalue

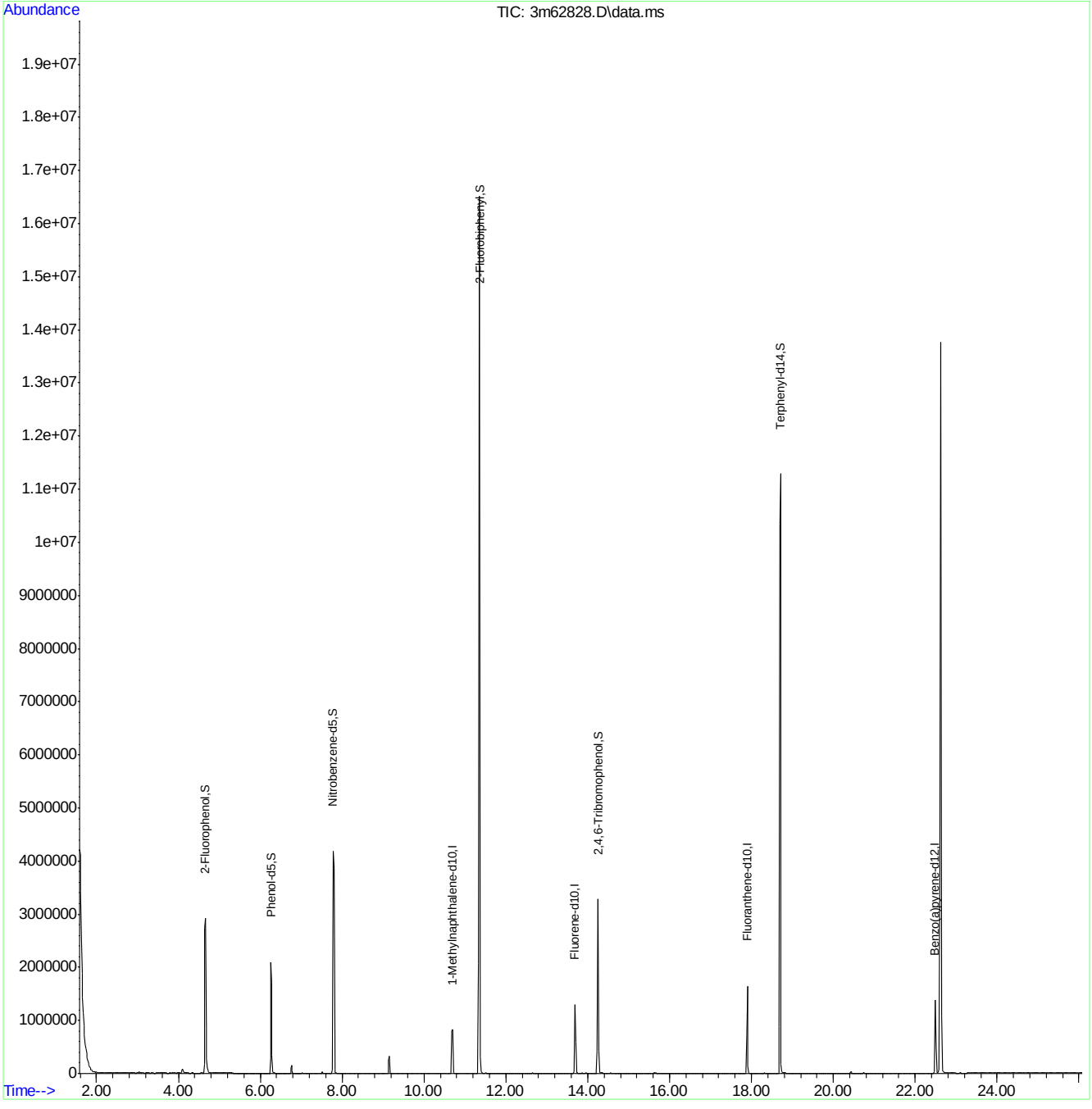
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62828.D
Acq On : 7 Jul 2016 4:32 pm
Operator : linseyk
Sample : op95059a-mb1
Misc : op95059a,e3m2967,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 08 10:04:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125535.D
Acq On : 24 Jun 2016 12:40 am
Operator : seanb1
Sample : op95018-bs1
Misc : op95018,em5319,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 24 11:09:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.805	152	437099	40.00	ppm	0.00
24) Naphthalene-d8	5.964	136	1531331	40.00	ppm	0.00
47) Acenaphthene-d10	8.346	164	989280	40.00	ppm	0.00
69) Phenanthrene-d10	10.990	188	1778007	40.00	ppm	0.00
83) Chrysene-d12	16.176	240	1807767	40.00	ppm	0.00
91) Perylene-d12	18.799	264	1777799	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.805	152	437099	40.00	ppm	0.00
103) Acenaphthene-d10a	8.346	164	989280	40.00	ppm	0.00
106) Chrysene-d12a	16.176	240	1807767	40.00	ppm	0.00
108) Naphthalene-d8a	5.964	136	1531331	40.00	ppm	0.00
110) Chrysene-d12b	16.176	240	1807767	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.838	112	332475	24.03	ppm	0.00
Spiked Amount 50.000			Recovery = 48.06%			
8) Phenol-d5	4.549	99	312524	17.66	ppm	0.02
Spiked Amount 50.000			Recovery = 35.32%			
25) Nitrobenzene-d5	5.265	82	532542	37.63	ppm	0.00
Spiked Amount 50.000			Recovery = 75.26%			
51) 2-Fluorobiphenyl	7.321	172	1334886	38.74	ppm	0.00
Spiked Amount 50.000			Recovery = 77.48%			
73) 2,4,6-Tribromophenol	9.719	330	242481	46.83	ppm	0.00
Spiked Amount 50.000			Recovery = 93.66%			
85) Terphenyl-d14	14.168	244	1834758	43.08	ppm	0.01
Spiked Amount 50.000			Recovery = 86.16%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.370	88	94969	14.32	ppm	93
3) Pyridine	2.711	79	228877	15.94	ppm	98
4) N-Nitrosodimethylamine	2.663	42	166654	22.98	ppm	91
6) Indene	5.013	116	878171	35.83	ppm	97
7) Cumene	4.202	105	979529	29.36	ppm	97
9) Phenol	4.559	94	323274	16.72	ppm #	59
10) Aniline	4.554	93	378670	19.24	ppm	71
11) bis(2-Chloroethyl)ether	4.597	93	437589	32.36	ppm	98
12) 2-Chlorophenol	4.656	128	509392	33.19	ppm	96
13) Decane	4.677	43	309342	22.97	ppm	100
14) 1,3-Dichlorobenzene	4.762	146	427896	24.65	ppm	99
15) 1,4-Dichlorobenzene	4.821	146	422636	25.42	ppm	99
16) Benzyl alcohol	4.928	108	271403	29.54	ppm	96
17) 1,2-Dichlorobenzene	4.944	146	426725	26.79	ppm	98
18) Acetophenone	5.131	105	716640	39.55	ppm #	62
19) 2-Methylphenol	5.024	108	395468	30.09	ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.019	121	139280	30.01	ppm	93
21) 3&4-Methylphenol	5.152	108	389510	27.91	ppm	83
22) n-Nitroso-di-n-propyla...	5.131	70	328370	34.35	ppm	96
23) Hexachloroethane	5.227	201	158554	25.36	ppm	97
26) Nitrobenzene	5.286	77	473249	33.43	ppm	97
27) Quinoline	6.365	129	1247058	41.20	ppm	98

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125535.D
Acq On : 24 Jun 2016 12:40 am
Operator : seanb1
Sample : op95018-bs1
Misc : op95018,em5319,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 24 11:09:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28)	Isophorone	5.500	82	952373	37.29	ppm		95
29)	2-Nitrophenol	5.580	139	309591	39.76	ppm		87
30)	2,4-Dimethylphenol	5.628	107	459853	38.07	ppm		95
32)	bis(2-Chloroethoxy)met...	5.702	93	557035	37.08	ppm		99
33)	2,4-Dichlorophenol	5.831	162	509411	40.72	ppm		97
34)	2,6-Dichlorophenol	6.060	162	477484	40.06	ppm		95
36)	1,2,4-Trichlorobenzene	5.905	180	405455	27.89	ppm		96
38)	Naphthalene	5.991	128	1156884	27.97	ppm		99
39)	4-Chloroaniline	6.050	127	430324	24.47	ppm		95
40)	2,3-Dichloroaniline	7.198	161	692113	43.84	ppm		97
41)	Caprolactam	6.445	55	83363	14.92	ppm	#	79
42)	Hexachlorobutadiene	6.124	225	207397	27.00	ppm		98
43)	4-Chloro-3-methylphenol	6.637	107	459133	38.83	ppm		99
44)	2-Methylnaphthalene	6.813	141	871190	34.41	ppm		99
45)	1-Methylnaphthalene	6.942	142	1134635	37.43	ppm		98
46)	Dimethylnaphthalene	7.700	156	1047826	38.25	ppm		99
48)	Hexachlorocyclopentadiene	7.032	237	418685	51.57	ppm		96
49)	2,4,6-Trichlorophenol	7.209	196	403772	43.46	ppm		99
50)	2,4,5-Trichlorophenol	7.267	196	444587	43.08	ppm		96
52)	2-Chloronaphthalene	7.486	162	868400	29.61	ppm		99
53)	Biphenyl	7.465	154	1456145	37.70	ppm		99
54)	2-Nitroaniline	7.652	65	311301	41.79	ppm		92
55)	Dimethylphthalate	7.946	163	1353026	39.90	ppm		99
56)	Acenaphthylene	8.117	152	1532519	32.02	ppm		97
57)	2,6-Dinitrotoluene	8.031	165	325304	45.05	ppm		97
58)	3-Nitroaniline	8.298	138	261105	31.33	ppm		92
59)	Acenaphthene	8.400	153	935856	31.37	ppm		96
60)	2,4-Dinitrophenol	8.480	184	438410	97.02	ppm		93
61)	4-Nitrophenol	8.661	109	96298	26.71	ppm		98
62)	Dibenzofuran	8.693	168	1627032	38.77	ppm		99
63)	2,4-Dinitrotoluene	8.699	165	409268	43.20	ppm		86
64)	2,3,4,6-Tetrachlorophenol	8.928	232	367086	47.93	ppm		97
65)	Diethylphthalate	9.147	149	1280728	40.02	ppm		99
66)	Fluorene	9.281	166	1236042	34.85	ppm		98
67)	4-Chlorophenyl-phenyle...	9.308	204	608891	35.61	ppm		95
68)	4-Nitroaniline	9.350	138	319544	38.80	ppm		98
70)	4,6-Dinitro-2-methylph...	9.415	198	287675	43.03	ppm		93
71)	n-Nitrosodiphenylamine	9.527	169	955012	37.54	ppm		97
72)	1,2-Diphenylhydrazine	9.591	77	1044262	35.02	ppm		96
74)	4-Bromophenyl-phenylether	10.194	248	408066	38.38	ppm		92
75)	Hexachlorobenzene	10.285	284	469893	39.18	ppm		99
76)	Pentachlorophenol	10.675	266	242074	39.41	ppm		98
77)	Phenanthrene	11.033	178	1899393	36.68	ppm		99
78)	Anthracene	11.129	178	1931235	36.93	ppm		99
79)	Carbazole	11.476	167	2005389	39.98	ppm		99
80)	Di-n-butylphthalate	12.272	149	2307064	41.38	ppm		98
81)	Fluoranthene	13.335	202	2430326	40.49	ppm		97
82)	Octadecane	10.969	57	651488	37.23	ppm		97
84)	Pyrene	13.762	202	2516059	39.40	ppm		98
86)	Butylbenzylphthalate	15.220	149	1036231	40.81	ppm		100

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125535.D
Acq On : 24 Jun 2016 12:40 am
Operator : seanb1
Sample : op95018-bs1
Misc : op95018,em5319,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 24 11:09:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

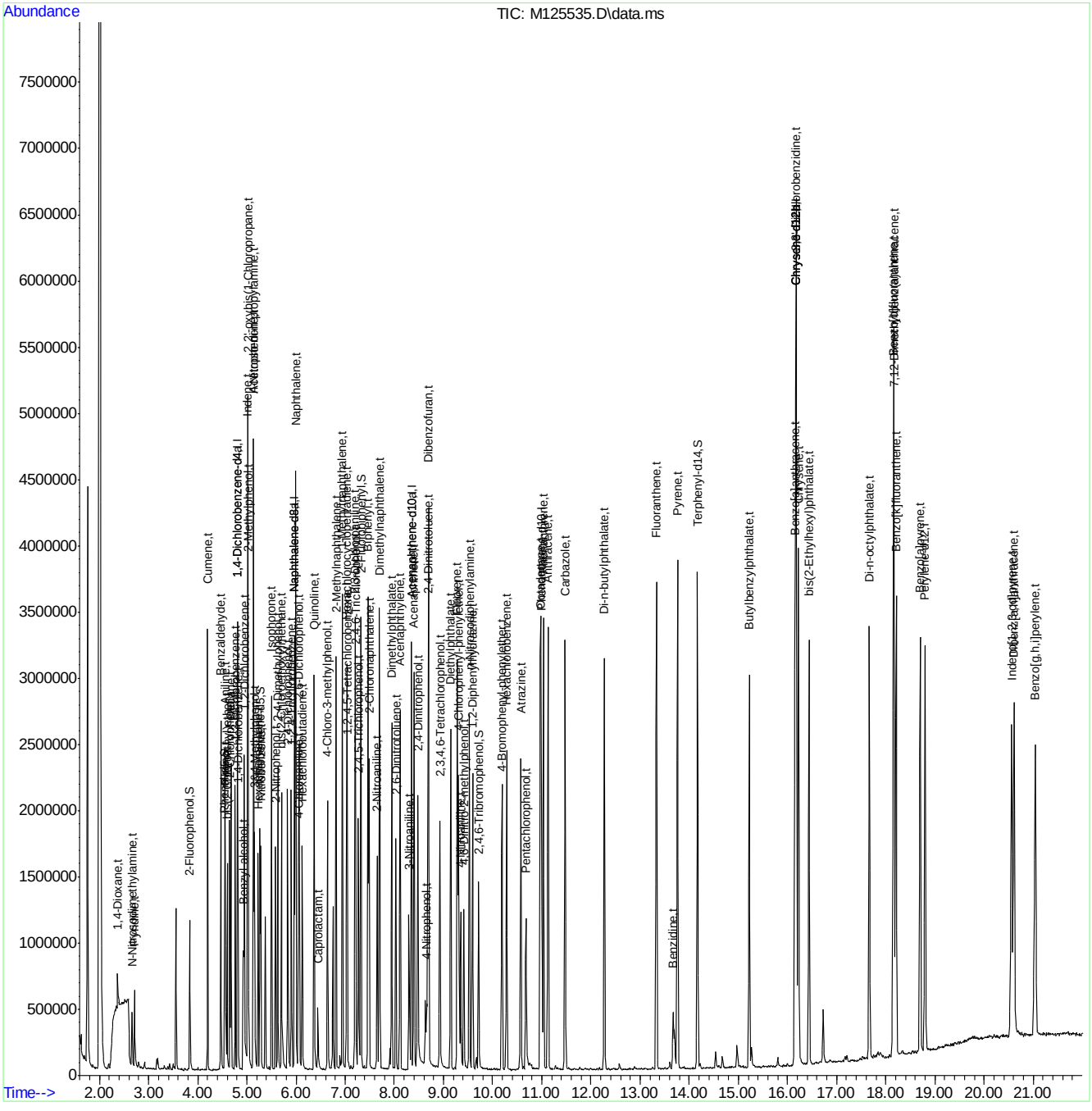
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
87)	Benzo[a]anthracene	16.155	228	2231659	39.38	ppm	98
88)	3,3'-Dichlorobenzidine	16.182	252	1165143	59.87	ppm	97
89)	Chrysene	16.224	228	2093237	36.92	ppm	99
90)	bis(2-Ethylhexyl)phtha...	16.438	149	1389140	41.04	ppm	99
92)	Di-n-octylphthalate	17.666	149	2441563	44.84	ppm	98
93)	Benzo[b]fluoranthene	18.158	252	2247810	39.57	ppm	98
94)	Benzo[k]fluoranthene	18.211	252	2111933	39.06	ppm	99
95)	Benzo[a]pyrene	18.703	252	1957065	38.12	ppm	97
96)	Indeno[1,2,3-cd]pyrene	20.561	276	1863661	37.54	ppm	93
98)	Dibenz[a,h]anthracene	20.609	278	1943907	37.47	ppm	96
99)	7,12-Dimethylbenz(a)an...	18.169	256	1036322	47.42	ppm	98
100)	Benzo[g,h,i]perylene	21.042	276	1938199	35.89	ppm	98
102)	Benzaldehyde	4.469	105	412706	43.27	ppm	94
104)	1,2,4,5-Tetrachloroben...	7.043	216	439724	32.94	ppm	95
105)	Atrazine	10.579	215	243179	56.45	ppm	98
107)	Benzidine	13.671	184	309163	13.05	ppm	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125535.D
Acq On : 24 Jun 2016 12:40 am
Operator : seanb1
Sample : op95018-bs1
Misc : op95018,em5319,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 24 11:09:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
07/05/16 10:28

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84764.D
Acq On : 1 Jul 2016 10:17 pm
Operator : seanb1
Sample : op95059-bs1
Misc : op95059,e3e3716,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 03 17:36:46 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.015	152	86789	40.00 ppm	-0.03
24) Naphthalene-d8	6.170	136	358660	40.00 ppm	-0.10
47) Acenaphthene-d10	8.320	164	175457	40.00 ppm	-0.11
69) Phenanthrene-d10	10.540	188	267746	40.00 ppm	-0.11
83) Chrysene-d12	14.771	240	262579	40.00 ppm	-0.11
92) Perylene-d12	16.931	264	202281	40.00 ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	5.015	152	86789	40.00 ppm	-0.09
104) Acenaphthene-d10a	8.320	164	175457	40.00 ppm	-0.11
106) Phenanthrene-d10a	10.540	188	267746	40.00 ppm	-0.11
108) Chrysene-d12a	14.771	240	262579	40.00 ppm	-0.11
110) Naphthalene-d8a	6.170	136	358660	40.00 ppm	-0.10

System Monitoring Compounds					
5) 2-Fluorophenol	4.030	112	82939	30.84 ppm	-0.01
Spiked Amount 50.000			Recovery	= 61.68%	
8) Phenol-d5	4.736	99	70006	21.41 ppm	-0.01
Spiked Amount 50.000			Recovery	= 42.82%	
25) Nitrobenzene-d5	5.480	82	113148	41.36 ppm	-0.10
Spiked Amount 50.000			Recovery	= 82.72%	
51) 2-Fluorobiphenyl	7.405	172	251361	43.31 ppm	-0.11
Spiked Amount 50.000			Recovery	= 86.62%	
73) 2,4,6-Tribromophenol	9.475	330	28663	33.08 ppm	-0.11
Spiked Amount 50.000			Recovery	= 66.16%	
85) Terphenyl-d14	13.107	244	256004	46.31 ppm	-0.11
Spiked Amount 50.000			Recovery	= 92.62%	

Target Compounds					Qvalue
2) 1,4-Dioxane	2.597	88	24361	21.20 ppm	99
3) Pyridine	2.923	79	50096	17.18 ppm	95
4) N-Nitrosodimethylamine	2.875	74	41164	24.59 ppm	89
6) Indene	5.229	116	209033	39.22 ppm	98
7) Cumene	4.399	105	210717	30.79 ppm	97
9) Phenol	4.747	94	80703	20.97 ppm	73
10) Aniline	4.758	93	124676	30.83 ppm	97
11) bis(2-Chloroethyl)ether	4.795	93	111400	41.78 ppm	96
12) 2-Chlorophenol	4.859	128	119886	37.75 ppm	98
13) Decane	4.876	43	56897	21.29 ppm	96
14) 1,3-Dichlorobenzene	4.972	146	105539	29.65 ppm	97
15) 1,4-Dichlorobenzene	5.031	146	106644	28.99 ppm	94
16) Benzyl alcohol	5.127	108	66967	35.78 ppm	98
17) 1,2-Dichlorobenzene	5.159	146	102715	30.38 ppm	99
18) Acetophenone	5.346	105	162664	40.98 ppm	88
19) 2-Methylphenol	5.223	108	100454	38.32 ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.229	121	36161	33.95 ppm #	85
21) 3&4-Methylphenol	5.346	108	100439	35.41 ppm	97
22) n-Nitroso-di-n-propyla...	5.341	70	72601	41.27 ppm	94
23) Hexachloroethane	5.442	201	31811	28.79 ppm	93
26) Nitrobenzene	5.496	77	104870	36.25 ppm	94
27) Quinoline	6.550	129	241228	38.30 ppm	98
28) Isophorone	5.710	82	194611	38.42 ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84764.D
Acq On : 1 Jul 2016 10:17 pm
Operator : seanb1
Sample : op95059-bs1
Misc : op95059,e3e3716,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 03 17:36:46 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2-Nitrophenol	5.790	139	67208	37.54	ppm		97
30) 2,4-Dimethylphenol	5.822	107	105932	40.09	ppm		99
31) Benzoic acid	5.924	105	38302	19.03	ppm		97
32) bis(2-Chloroethoxy)met...	5.902	93	120965	36.94	ppm		98
33) 2,4-Dichlorophenol	6.031	162	103904	39.05	ppm		99
34) 2,6-Dichlorophenol	6.255	162	98588	37.53	ppm		97
36) 1,2,4-Trichlorobenzene	6.111	180	79434	27.50	ppm		96
38) Naphthalene	6.191	128	307680	31.43	ppm		99
39) 4-Chloroaniline	6.239	127	119825	31.42	ppm		97
40) 2,3-Dichloroaniline	7.304	161	118765	37.42	ppm		97
41) Caprolactam	6.619	55	14661	11.72	ppm		93
42) Hexachlorobutadiene	6.314	225	38174	26.64	ppm		96
43) 4-Chloro-3-methylphenol	6.780	107	89463	37.33	ppm		95
44) 2-Methylnaphthalene	6.956	141	192977	34.67	ppm		94
45) 1-Methylnaphthalene	7.079	141	198973	34.47	ppm		99
46) Dimethylnaphthalene	7.748	156	183116	32.52	ppm		99
48) Hexachlorocyclopentadiene	7.154	237	44287	30.81	ppm		98
49) 2,4,6-Trichlorophenol	7.309	196	71962	44.37	ppm		96
50) 2,4,5-Trichlorophenol	7.363	196	69308	41.51	ppm		96
52) 2-Chloronaphthalene	7.566	162	165904	33.35	ppm		97
53) Biphenyl	7.539	154	262945	38.21	ppm		99
54) 2-Nitroaniline	7.705	65	52286	44.72	ppm		97
55) Dimethylphthalate	7.946	163	231183	42.30	ppm		98
56) Acenaphthylene	8.122	152	291529	34.40	ppm		99
57) 2,6-Dinitrotoluene	8.031	165	55264	46.02	ppm		97
58) 3-Nitroaniline	8.267	138	53699	38.13	ppm		95
59) Acenaphthene	8.363	153	194657	35.91	ppm		97
60) 2,4-Dinitrophenol	8.427	184	59883	89.55	ppm	#	66
61) 4-Nitrophenol	8.550	109	14949	29.96	ppm	#	70
62) Dibenzofuran	8.614	168	289835	40.72	ppm		100
63) 2,4-Dinitrotoluene	8.609	165	71737	47.60	ppm		74
64) 2,3,4,6-Tetrachlorophenol	8.807	232	52491	41.58	ppm		96
65) Diethylphthalate	8.962	149	212929	40.19	ppm		98
66) Fluorene	9.112	166	225119	38.19	ppm		98
67) 4-Chlorophenyl-phenyle...	9.117	204	103075	37.01	ppm		98
68) 4-Nitroaniline	9.160	138	59558	41.16	ppm		88
70) 4,6-Dinitro-2-methylph...	9.224	198	42124	46.47	ppm		95
71) n-Nitrosodiphenylamine	9.299	169	152495	42.97	ppm		99
72) 1,2-Diphenylhydrazine	9.358	77	183411	41.20	ppm		99
74) 4-Bromophenyl-phenylether	9.855	248	58638	41.13	ppm		97
75) Hexachlorobenzene	9.957	284	64544	37.07	ppm		89
76) Pentachlorophenol	10.272	266	36964	38.92	ppm		97
77) Phenanthrene	10.577	178	311827	41.77	ppm		99
78) Anthracene	10.657	178	298970	39.96	ppm		100
79) Carbazole	10.925	167	308615	44.17	ppm		99
80) Di-n-butylphthalate	11.524	149	366106	43.08	ppm		100
81) Fluoranthene	12.465	202	353971	45.42	ppm		97
82) Octadecane	10.438	57	106511	37.32	ppm		96
84) Pyrene	12.818	202	372251	47.20	ppm		99
86) Butylbenzylphthalate	13.920	149	156408	43.78	ppm		100

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84764.D
Acq On : 1 Jul 2016 10:17 pm
Operator : seanb1
Sample : op95059-bs1
Misc : op95059,e3e3716,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 03 17:36:46 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
88) Benzo[a]anthracene	14.754	228	332779	43.42 ppm	97
89) 3,3'-Dichlorobenzidine	14.738	252	193535	62.10 ppm	100
90) Chrysene	14.813	228	295601	42.47 ppm	100
91) bis(2-Ethylhexyl)phtha...	14.877	149	208003	42.10 ppm	97
93) Di-n-octylphthalate	15.867	149	356825	48.09 ppm	100
94) Benzo[b]fluoranthene	16.380	252	309590	45.54 ppm	100
95) Benzo[k]fluoranthene	16.423	252	275072	46.33 ppm	99
96) Benzo[a]pyrene	16.846	252	242593	43.59 ppm	98
97) Indeno[1,2,3-cd]pyrene	18.734	276	260936m	44.69 ppm	
99) Dibenz[a,h]anthracene	18.766	278	246055	42.22 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.375	256	141851	46.92 ppm	96
101) Benzo[g,h,i]perylene	19.263	276	236674	42.61 ppm	97
103) Benzaldehyde	4.672	105	88796	43.72 ppm	97
105) 1,2,4,5-Tetrachloroben...	7.165	216	80728	34.52 ppm	99
107) Atrazine	10.144	215	34319	46.24 ppm	94
109) benzidine	12.701	184	81657	30.84 ppm	99

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

7.3.2

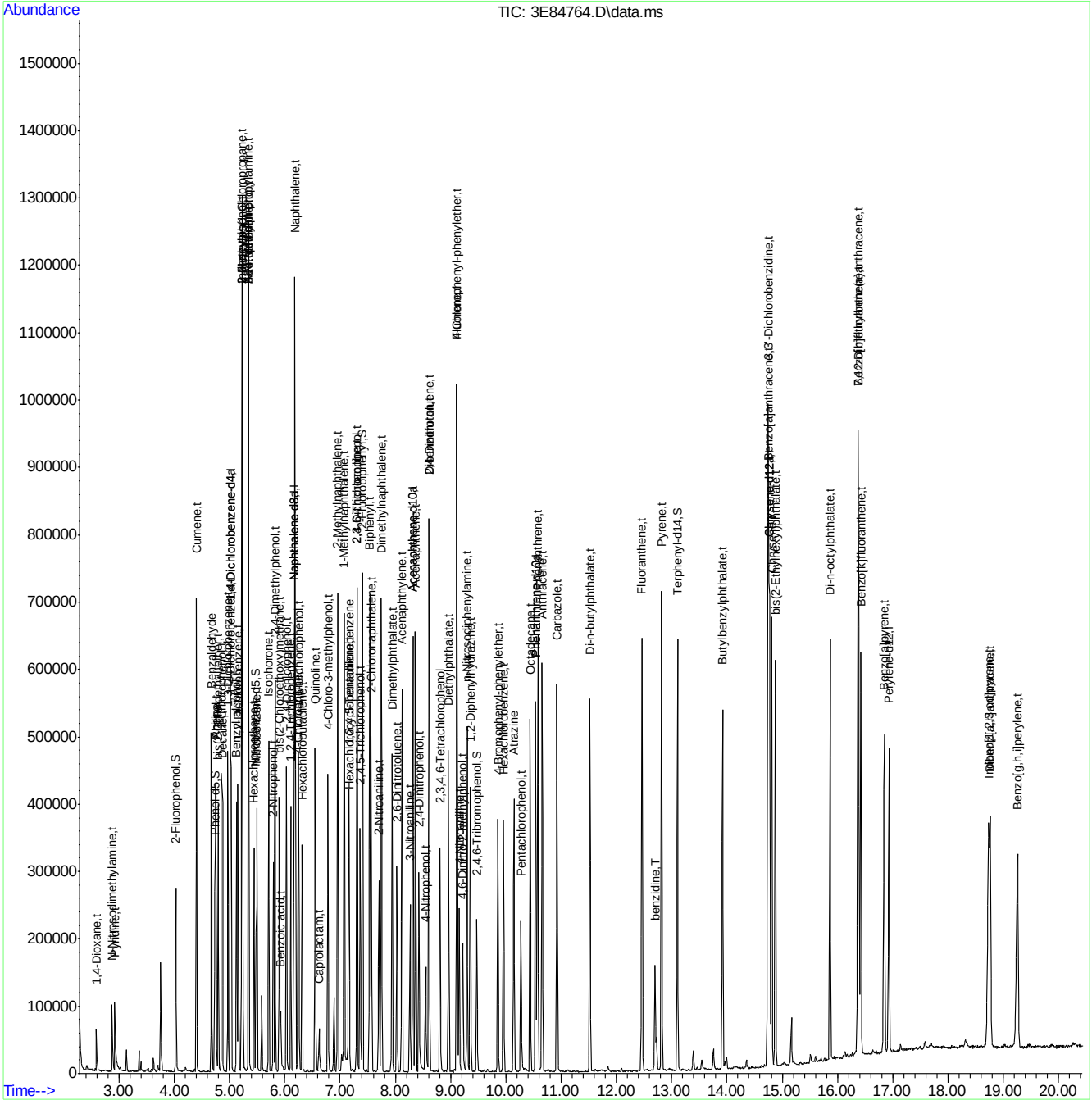
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84764.D
Acq On : 1 Jul 2016 10:17 pm
Operator : seanb1
Sample : op95059-bs1
Misc : op95059,e3e3716,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 03 17:36:46 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Manual Integration Approval Summary

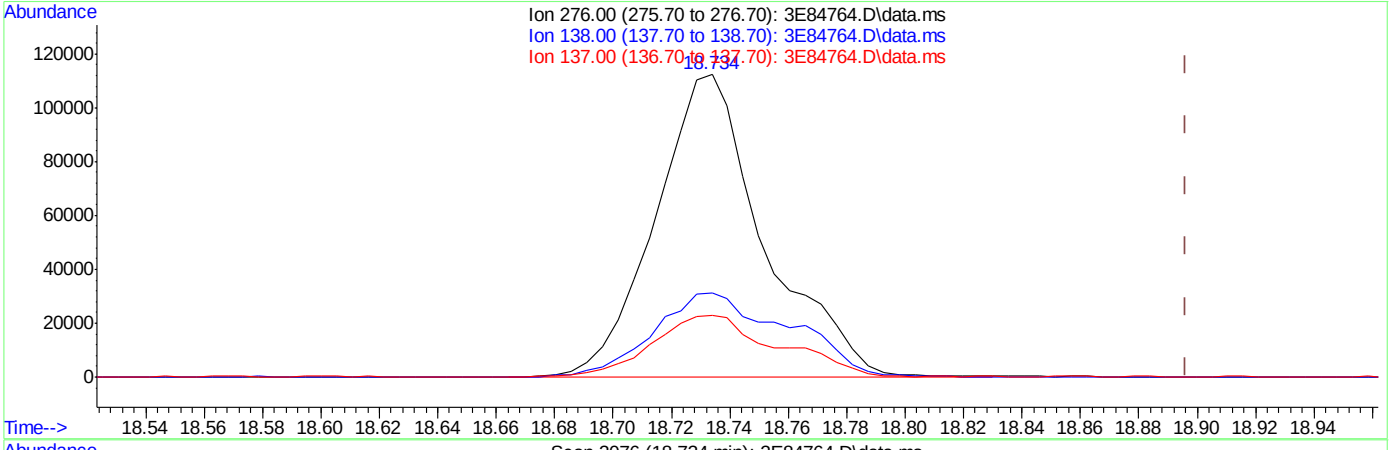
Sample Number:	OP95059-BS1	**Method:**	SW846 8270D
Lab FileID:	3E84764.D	**Analyst approved:**	07/03/16 17:48 Kristi Schollenberger
Injection Time:	07/01/16 22:17	**Supervisor approved:**	07/05/16 10:28 Nina Pandya

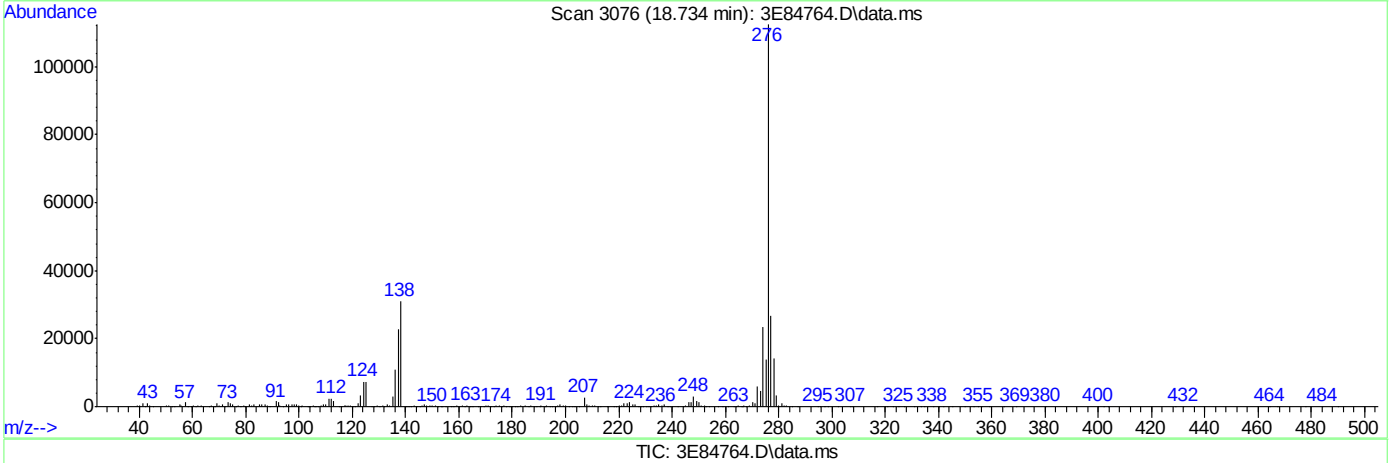
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.73	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84764.D
Acq On : 1 Jul 2016 10:17 pm
Operator : seanb1
Sample : op95059-bs1
Misc : op95059,e3e3716,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 03 17:35:49 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration





TIC: 3E84764.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.734min (-0.162) 50.01ppm

response 292007

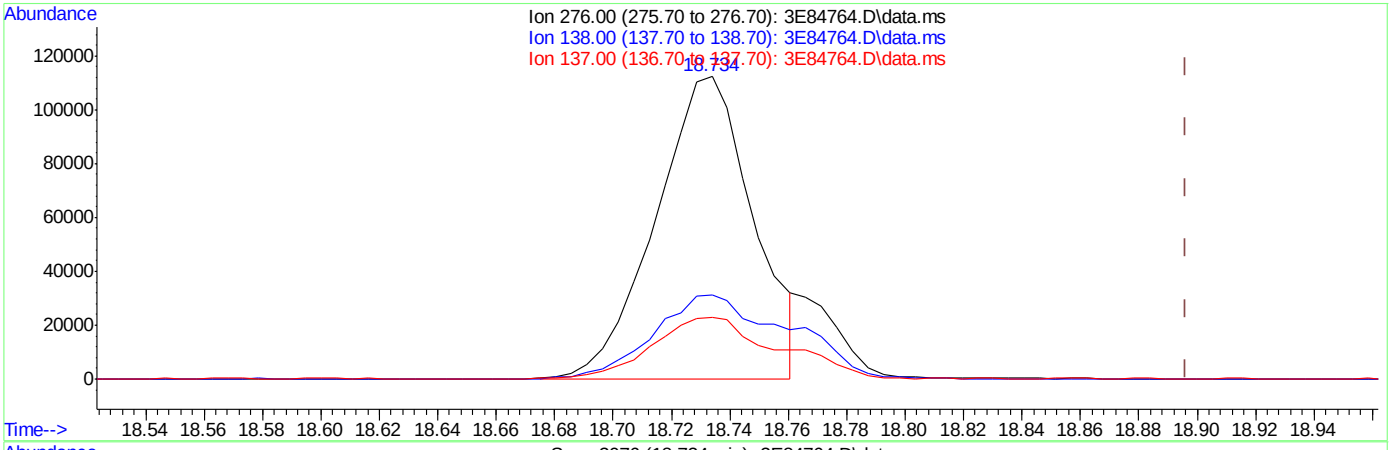
Ion	Exp%	Act%
276.00	100	100
138.00	20.80	27.55
137.00	17.00	20.02
0.00	0.00	0.00

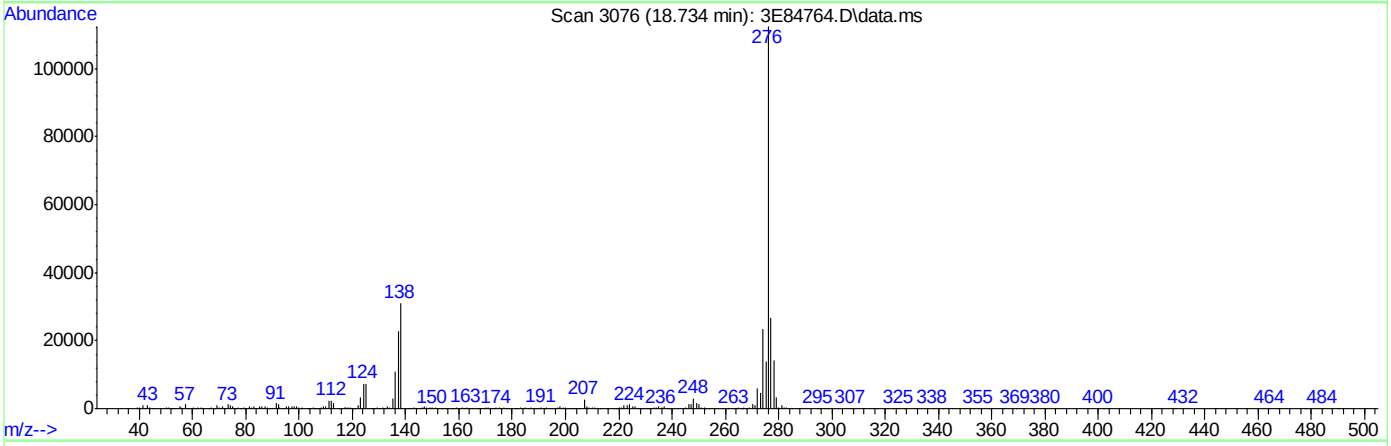
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84764.D
Acq On : 1 Jul 2016 10:17 pm
Operator : seanb1
Sample : op95059-bs1
Misc : op95059,e3e3716,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 03 17:35:49 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration





TIC: 3E84764.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.734min (-0.162) 44.69ppm m

response 260936

Ion	Exp%	Act%
276.00	100	100
138.00	20.80	27.61
137.00	17.00	20.21
0.00	0.00	0.00

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e3m2951\
Data File : 3m62533.D
Acq On : 26 Jun 2016 5:31 pm
Operator : ariellec
Sample : op95018a-bs12
Misc : op95018a,e3m2951,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 27 11:54:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 27 10:40:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.763	150	459349	4.00 ppm	-0.10
14) Fluorene-d10	13.762	176	653165	4.00 ppm	-0.13
21) Fluoranthene-d10	17.955	212	940846	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.546	264	714876	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	4.677	112	1648250	22.91 ppm	-0.08
Spiked Amount 50.000			Recovery = 45.82%		
4) Phenol-d5	6.273	99	1766008	15.51 ppm	-0.07
Spiked Amount 50.000			Recovery = 31.02%		
7) Nitrobenzene-d5	7.839	82	3469621	37.24 ppm	-0.12
Spiked Amount 50.000			Recovery = 74.48%		
15) 2-Fluorobiphenyl	11.419	172	6474555	32.38 ppm	-0.12
Spiked Amount 50.000			Recovery = 64.76%		
20) 2,4,6-Tribromophenol	14.309	330	1028254	48.72 ppm	-0.11
Spiked Amount 50.000			Recovery = 97.44%		
28) Terphenyl-d14	18.759	244	6618509	46.71 ppm	0.02
Spiked Amount 50.000			Recovery = 93.42%		
Target Compounds					Qvalue
2) 1,4-dioxane	2.421	88	12409	0.44 ppm #	43
5) Phenol	6.285	94	233742	1.86 ppm #	69
6) bis(2-Chloroethyl)ether	6.406	93	71383	0.75 ppm	92
8) Nitrobenzene	7.876	77	77320	0.76 ppm #	65
9) Naphthalene	9.251	128	188872	0.69 ppm	99
10) Hexachlorobutadiene	9.571	225	22784	0.55 ppm	98
11) 2-Methylnaphthalene	10.640	141	89502	0.63 ppm #	72
13) Hexachlorocyclopentadiene	10.989	237	11204	0.39 ppm	82
16) Acenaphthylene	12.403	152	172520	0.71 ppm	97
17) Acenaphthene	12.774	153	115872	0.73 ppm	94
18) 4,6-dinitro-2-methylph...	13.970	198	43514	4.58 ppm	86
19) Fluorene	13.819	166	122277	0.68 ppm	88
22) Hexachlorobenzene	14.926	284	33401	0.70 ppm	73
23) Pentachlorophenol	15.343	266	78716	4.32 ppm	89
24) Phenanthrene	15.730	178	189026	0.79 ppm	97
25) Anthracene	15.822	178	176330	0.79 ppm	98
26) Fluoranthene	17.986	202	226185	0.81 ppm	97
27) Pyrene	18.388	202	222626	0.87 ppm	90
29) Benzo[a]anthracene	20.458	228	178270	0.92 ppm	94
30) Chrysene	20.520	228	184129	0.81 ppm	95
32) Benzo[b]fluoranthene	22.132	252	175473	0.78 ppm	92
33) Benzo[k]fluoranthene	22.170	252	140585	0.58 ppm	97
34) Benzo[a]pyrene	22.584	252	159731	0.67 ppm	95
35) Indeno[1,2,3-cd]pyrene	24.107	276	123563	0.63 ppm	98
36) Dibenz[a,h]anthracene	24.145	278	92991	0.59 ppm	96
37) Benzo[g,h,i]perylene	24.502	276	110746	0.61 ppm	100

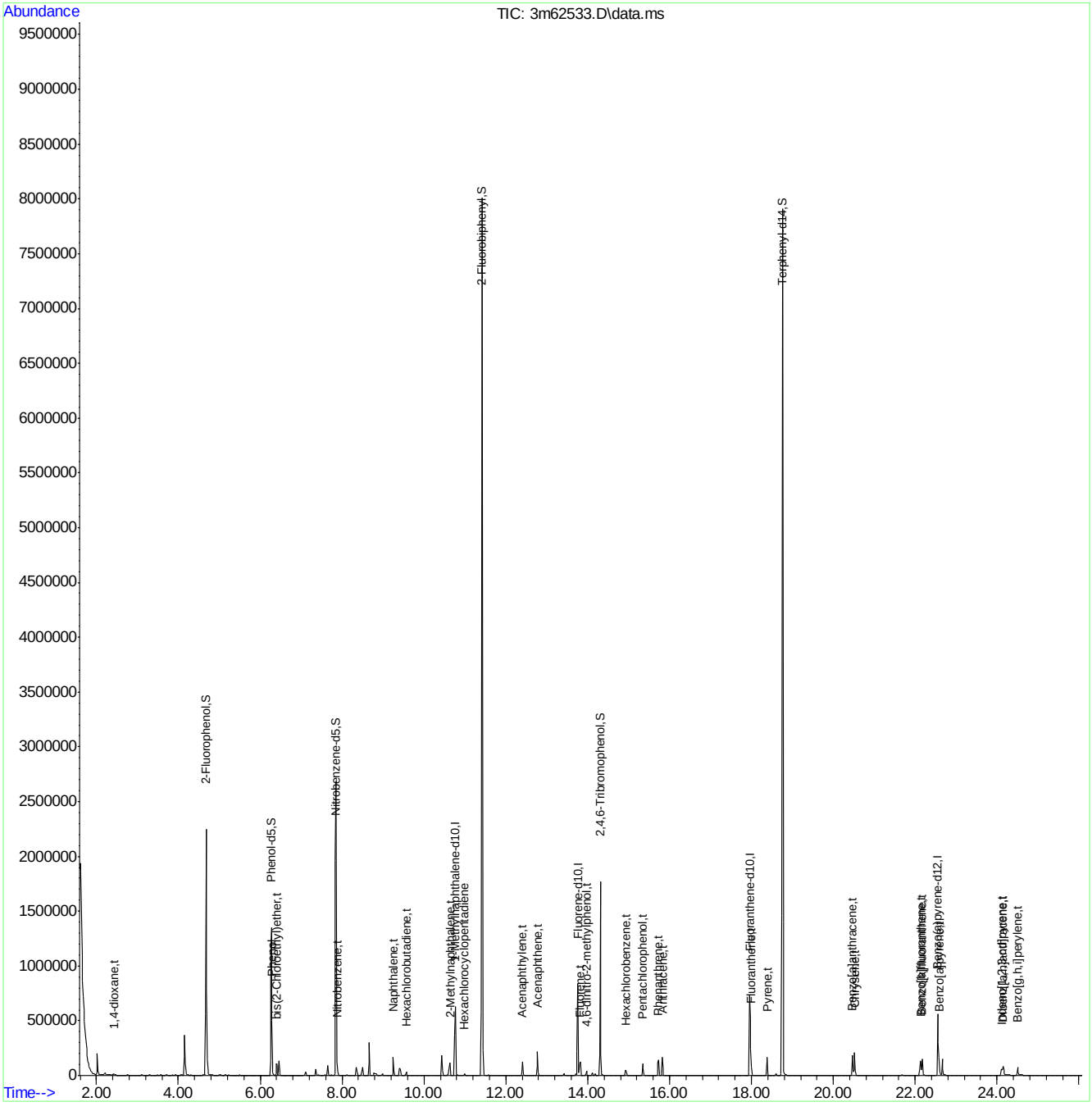
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e3m2951\
Data File : 3m62533.D
Acq On : 26 Jun 2016 5:31 pm
Operator : ariellec
Sample : op95018a-bs12
Misc : op95018a,e3m2951,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 27 11:54:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 27 10:40:58 2016
Response via : Initial Calibration



M3M2942SIM.M Mon Jun 27 12:02:39 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66584.D
Acq On : 5 Jul 2016 2:00 pm
Operator : linseyk
Sample : op95018a-bs12
Misc : op95018a,e4m2995,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 05 15:38:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.715	152	57449	4.00	ppm	-0.07
12) Fluorene-d10	12.696	176	63901	4.00	ppm	-0.07
22) Fluoranthene-d10	16.878	212	143490	4.00	ppm	-0.06
28) Benzo(a)pyrene-d12	21.474	264	122212	4.00	ppm	-0.05
35) 1-Methylnaphthalene-d10a	9.715	152	57449	4.00	ppm	-0.07
38) Fluorene-d10a	12.696	176	63901	4.00	ppm	-0.07
System Monitoring Compounds						
2) 2-Fluorophenol	4.100	112	167088	18.25	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 36.50%			
3) Phenol-d5	5.525	99	188188	13.04	ppm	0.04
Spiked Amount 50.000			Recovery = 26.08%			
6) Nitrobenzene-d5	6.922	82	415381	32.35	ppm	-0.05
Spiked Amount 50.000			Recovery = 64.70%			
11) 2-Fluorobiphenyl	10.359	172	553474	23.94	ppm	-0.07
Spiked Amount 50.000			Recovery = 47.88%			
17) 2,4,6-Tribromophenol	13.266	330	159488	53.55	ppm	-0.05
Spiked Amount 50.000			Recovery = 107.10%			
25) Terphenyl-d14	17.687	244	1091483	53.87	ppm	-0.06
Spiked Amount 50.000			Recovery = 107.74%			
Target Compounds						Qvalue
4) Phenol	5.539	94	25122	1.61	ppm	54
5) bis(2-Chloroethyl)ether	5.552	93	7655	0.69	ppm	94
7) Naphthalene	8.253	128	23141	0.58	ppm	98
8) Hexachlorobutadiene	8.516	225	3446	0.50	ppm	89
9) 2-Methylnaphthalene	9.595	142	11782	0.62	ppm	93
10) Hexachlorocyclopentadiene	9.930	237	183	0.52	ppm	94
13) Acenaphthylene	11.361	152	16477	0.97	ppm	88
14) Acenaphthene	11.698	153	11395	1.08	ppm	96
15) Dibenzofuran	12.075	168	16043	0.94	ppm	100
16) Fluorene	12.740	166	18012	0.95	ppm	94
18) Hexachlorobenzene	13.827	284	5758	0.91	ppm	89
19) Pentachlorophenol	14.298	266	12155	5.22	ppm	97
20) Phenanthrene	14.656	178	27003	1.06	ppm	95
21) Anthracene	14.750	178	25628	1.09	ppm	93
23) Fluoranthene	16.915	202	33115	0.79	ppm	98
24) Pyrene	17.292	202	33431	0.82	ppm	84
26) Benzo[a]anthracene	19.401	228	28003	0.79	ppm #	81
27) Chrysene	19.457	228	28645	0.78	ppm	99
29) Benzo[b]fluoranthene	21.047	252	29763	0.70	ppm	95
30) Benzo[k]fluoranthene	21.088	252	26865	0.65	ppm	96
31) Benzo[a]pyrene	21.515	252	24950	0.65	ppm	92
32) Indeno[1,2,3-cd]pyrene	23.043	276	27520	0.61	ppm	92
33) Dibenz[a,h]anthracene	23.071	278	23218	0.62	ppm	93
34) Benzo[g,h,i]perylene	23.442	276	22931	0.59	ppm	98
36) 1,4-Dioxane	2.247	88	1742	0.39	ppm #	22
39) 4,6-dinitro-2-methylph...	12.955	198	16483	5.35	ppm	90
40) 1,2-Diphenylhydrazine	13.099	77	16816	0.95	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66584.D
Acq On : 5 Jul 2016 2:00 pm
Operator : linseyk
Sample : op95018a-bs12
Misc : op95018a,e4m2995,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 05 15:38:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	13.075	169	12092	0.96	ppm #	74

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

7.3.4

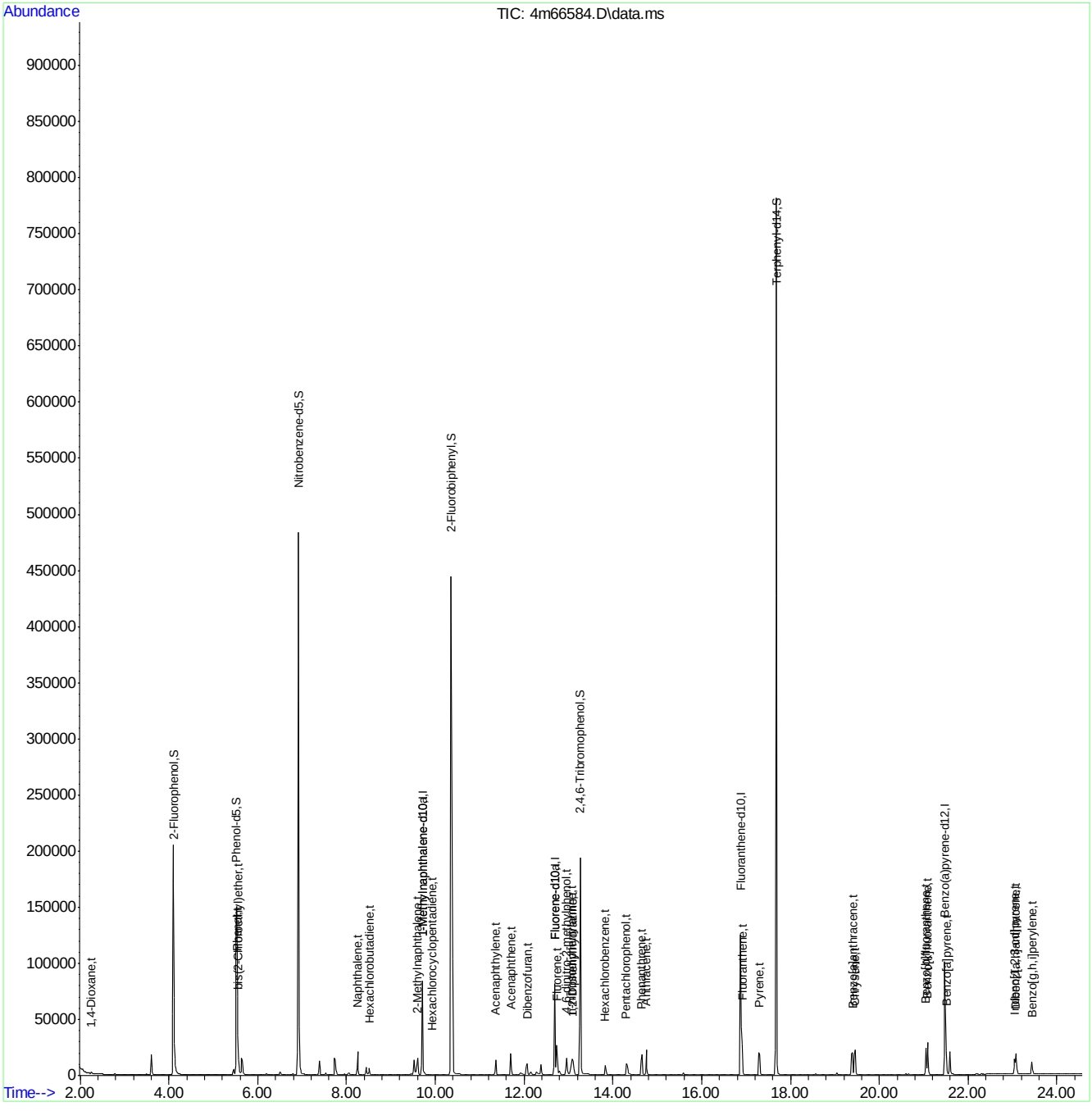
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66584.D
Acq On : 5 Jul 2016 2:00 pm
Operator : linseyk
Sample : op95018a-bs12
Misc : op95018a,e4m2995,1000
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jul 05 15:38:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P933\
Data File : 4p17519.D
Acq On : 5 Jul 2016 4:45 pm
Operator : linseyk
Sample : op95059a-bs12
Misc : op95059a,e4p933,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 05 23:06:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Jul 05 23:05:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.525	150	119002	4.00	ppm	0.00
13) Fluorene-d10	10.462	176	162301	4.00	ppm	0.00
23) Fluoranthene-d10	14.667	212	222966	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.318	264	163489	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.468	112	411310	25.23	ppm	-0.11
Spiked Amount 50.000			Recovery = 50.46%			
4) Phenol-d5	3.579	99	481071	17.48	ppm	-0.06
Spiked Amount 50.000			Recovery = 34.96%			
7) Nitrobenzene-d5	4.857	82	908592	45.23	ppm	-0.05
Spiked Amount 50.000			Recovery = 90.46%			
14) 2-Fluorobiphenyl	8.189	172	2031527	46.62	ppm	-0.04
Spiked Amount 50.000			Recovery = 93.24%			
22) 2,4,6-Tribromophenol	10.992	330	239078	53.31	ppm	0.02
Spiked Amount 50.000			Recovery = 106.62%			
30) Terphenyl-d14	15.528	244	1714546	61.37	ppm	0.01
Spiked Amount 50.000			Recovery = 122.74%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.315	88	2976	0.32	ppm #	51
5) Phenol	3.596	94	54874	1.79	ppm #	78
6) bis(2-Chloroethyl)ether	3.665	93	17325	0.74	ppm	84
8) Naphthalene	6.118	128	51518	0.66	ppm	95
9) Hexachlorobutadiene	6.405	225	9056	0.67	ppm	86
15) Acenaphthylene	9.129	152	44803	0.71	ppm	88
16) Acenaphthene	9.473	153	36246	1.07	ppm #	69
17) Dibenzofuran	9.839	168	51714	0.88	ppm	80
18) Fluorene	10.511	166	37801	0.90	ppm	89
19) 4,6-dinitro-2-methylph...	10.735	198	19003	5.40	ppm	85
20) n-nitrosodiphenylamine	10.859	169	23565	0.95	ppm	77
21) 1,2-Diphenylhydrazine	10.883	77	31053	0.74	ppm	89
24) Hexachlorobenzene	11.604	284	11370	0.87	ppm	72
25) Pentachlorophenol	12.051	266	28980	5.86	ppm	95
26) Phenanthrene	12.378	178	53837	0.89	ppm	96
27) Anthracene	12.482	178	49813	0.85	ppm	95
28) Fluoranthene	14.702	202	64398	0.92	ppm	98
29) Pyrene	15.098	202	63834	1.00	ppm	98
31) Benzo[a]anthracene	17.236	228	43154	0.95	ppm	91
32) Chrysene	17.294	228	58352	1.06	ppm	98
34) Benzo[b]fluoranthene	18.904	252	51124	0.88	ppm	90
35) Benzo[k]fluoranthene	18.938	252	47093	0.94	ppm	98
36) Benzo[a]pyrene	19.341	252	44628	0.85	ppm	98
37) Indeno[1,2,3-cd]pyrene	20.774	276	51038	0.88	ppm	99
38) Dibenz[a,h]anthracene	20.812	278	41606	0.88	ppm	72
39) Benzo[g,h,i]perylene	21.062	276	45487	0.86	ppm	99

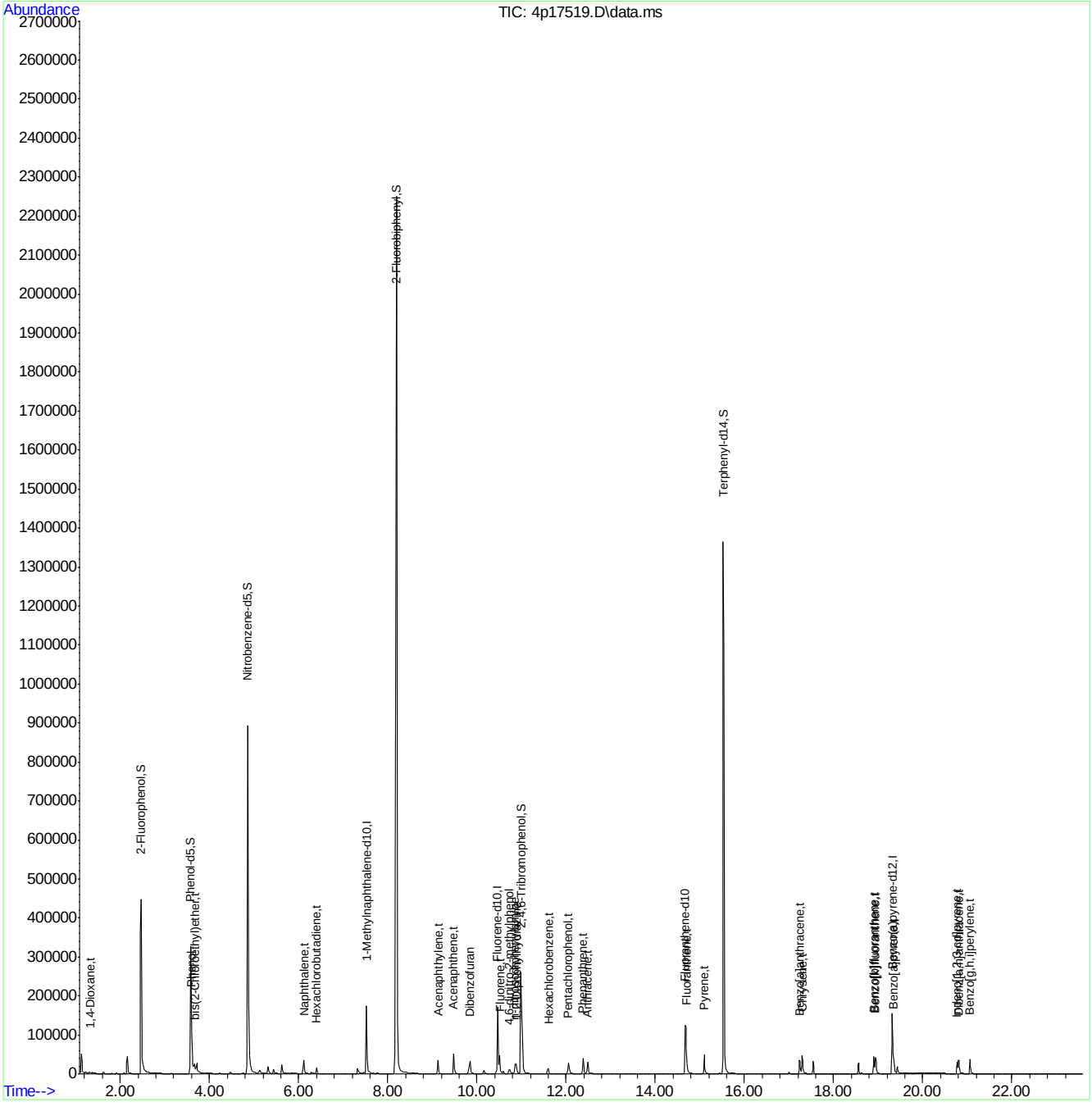
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P933\
Data File : 4p17519.D
Acq On : 5 Jul 2016 4:45 pm
Operator : linseyk
Sample : op95059a-bs12
Misc : op95059a,e4p933,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 05 23:06:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Jul 05 23:05:15 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62829.D
Acq On : 7 Jul 2016 5:05 pm
Operator : linseyk
Sample : op95059a-bs12
Misc : op95059a,e3m2967,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 08 10:05:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.681	150	713899	4.00	ppm	-0.08
14) Fluorene-d10	13.687	176	1056387	4.00	ppm	-0.04
21) Fluoranthene-d10	17.904	212	1695331	4.00	ppm	-0.02
31) Benzo(a)pyrene-d12	22.488	264	1457927	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.662	112	3100094	27.72	ppm	-0.05
Spiked Amount 50.000			Recovery = 55.44%			
4) Phenol-d5	6.273	99	3169983	17.91	ppm	-0.01
Spiked Amount 50.000			Recovery = 35.82%			
7) Nitrobenzene-d5	7.782	82	5621833	38.82	ppm	-0.10
Spiked Amount 50.000			Recovery = 77.64%			
15) 2-Fluorobiphenyl	11.358	172	11675621	36.10	ppm	-0.04
Spiked Amount 50.000			Recovery = 72.20%			
20) 2,4,6-Tribromophenol	14.252	330	1891374	55.40	ppm	0.00
Spiked Amount 50.000			Recovery = 110.80%			
28) Terphenyl-d14	18.692	244	12824860	50.24	ppm	-0.01
Spiked Amount 50.000			Recovery = 100.48%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.360	88	18729	0.42	ppm #	76
5) Phenol	6.285	94	397492	2.04	ppm #	91
6) bis(2-Chloroethyl)ether	6.345	93	116623	0.79	ppm	84
8) Nitrobenzene	7.820	77	130026	0.82	ppm	87
9) Naphthalene	9.195	128	363672	0.86	ppm	96
10) Hexachlorobutadiene	9.496	225	52945	0.83	ppm	89
11) 2-Methylnaphthalene	10.558	141	182876	0.83	ppm #	57
13) Hexachlorocyclopentadiene	10.927	237	36904	0.83	ppm	89
16) Acenaphthylene	12.341	152	354314	0.90	ppm	95
17) Acenaphthene	12.712	153	236772	0.92	ppm	78
18) 4,6-dinitro-2-methylph...	13.913	198	205578	10.15	ppm	82
19) Fluorene	13.744	166	273141	0.94	ppm	77
22) Hexachlorobenzene	14.859	284	75391	0.88	ppm	82
23) Pentachlorophenol	15.292	266	130695	4.02	ppm	98
24) Phenanthrene	15.663	178	389166	0.90	ppm	95
25) Anthracene	15.756	178	356525	0.88	ppm	94
26) Fluoranthene	17.919	202	455834	0.91	ppm	92
27) Pyrene	18.321	202	466228	1.01	ppm	95
29) Benzo[a]anthracene	20.407	228	410352	1.18	ppm	92
30) Chrysene	20.453	228	382737	0.94	ppm	90
32) Benzo[b]fluoranthene	22.074	252	494020	1.07	ppm	82
33) Benzo[k]fluoranthene	22.112	252	249498	0.51	ppm	85
34) Benzo[a]pyrene	22.526	252	367182	0.76	ppm	91
35) Indeno[1,2,3-cd]pyrene	24.050	276	394947	0.98	ppm	91
36) Dibenz[a,h]anthracene	24.068	278	315583	0.98	ppm	97
37) Benzo[g,h,i]perylene	24.426	276	326393	0.88	ppm	100

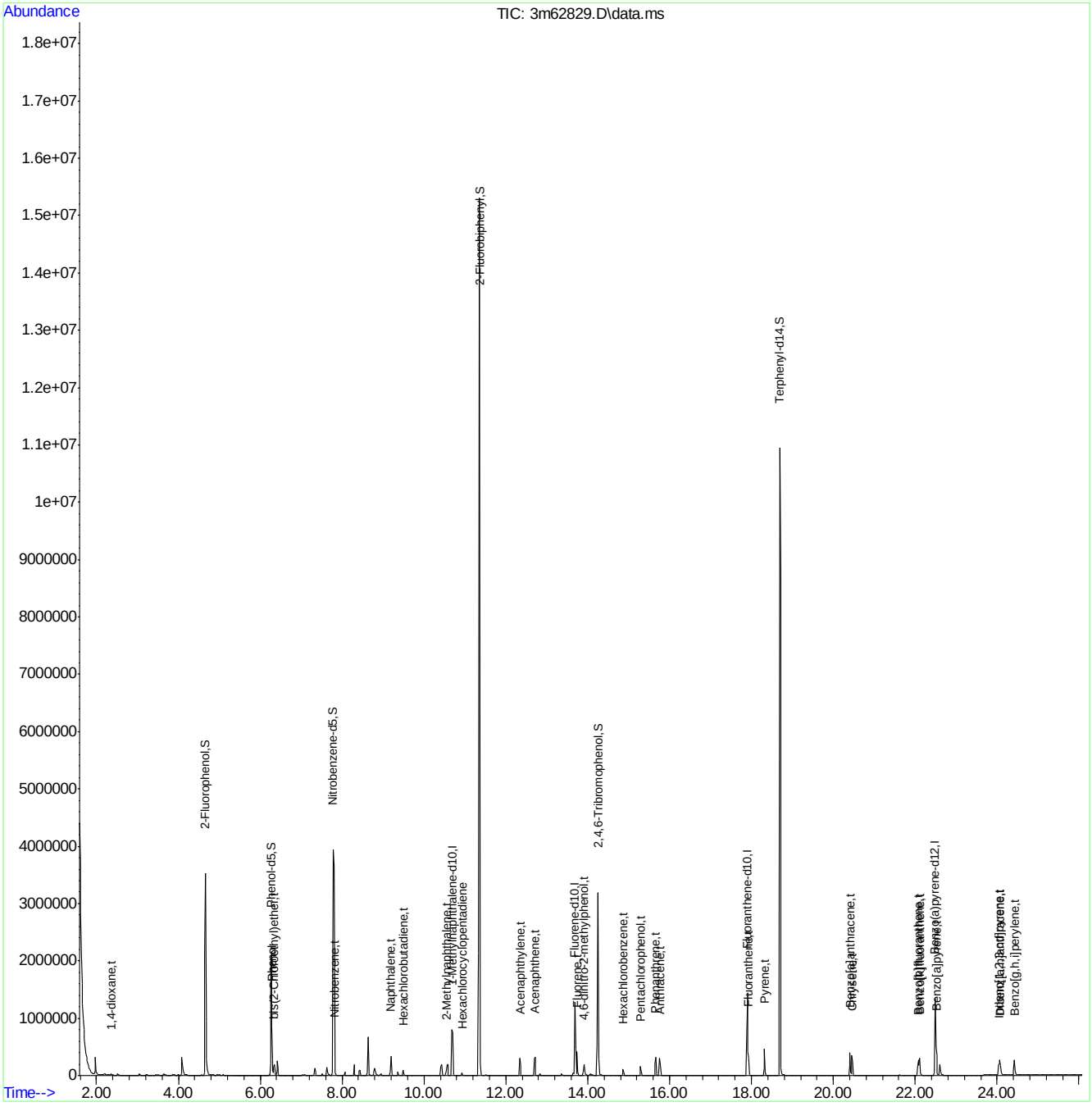
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62829.D
Acq On : 7 Jul 2016 5:05 pm
Operator : linseyk
Sample : op95059a-bs12
Misc : op95059a,e3m2967,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jul 08 10:05:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration



M3M2942SIM.M Fri Jul 08 10:05:43 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125536.D
Acq On : 24 Jun 2016 1:09 am
Operator : seanb1
Sample : op95018-ms
Misc : op95018,em5319,455
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 24 11:10:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.803	152	434425	40.00	ppm	0.00
24) Naphthalene-d8	5.968	136	1530014	40.00	ppm	0.00
47) Acenaphthene-d10	8.350	164	964571	40.00	ppm	0.00
69) Phenanthrene-d10	10.988	188	1763962	40.00	ppm	-0.01
83) Chrysene-d12	16.174	240	1841572	40.00	ppm	0.00
91) Perylene-d12	18.797	264	1776706	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.803	152	434425	40.00	ppm	0.00
103) Acenaphthene-d10a	8.350	164	964571	40.00	ppm	0.00
106) Chrysene-d12a	16.174	240	1841572	40.00	ppm	0.00
108) Naphthalene-d8a	5.968	136	1530014	40.00	ppm	0.00
110) Chrysene-d12b	16.174	240	1841572	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.831	112	444630	32.33	ppm	0.00
Spiked Amount 50.000			Recovery = 64.66%			
8) Phenol-d5	4.542	99	483348	27.48	ppm	0.01
Spiked Amount 50.000			Recovery = 54.96%			
25) Nitrobenzene-d5	5.268	82	536891	37.97	ppm	0.00
Spiked Amount 50.000			Recovery = 75.94%			
51) 2-Fluorobiphenyl	7.319	172	1315628	39.16	ppm	-0.01
Spiked Amount 50.000			Recovery = 78.32%			
73) 2,4,6-Tribromophenol	9.717	330	258395	50.31	ppm	-0.01
Spiked Amount 50.000			Recovery = 100.62%			
85) Terphenyl-d14	14.166	244	1813115	41.79	ppm	0.00
Spiked Amount 50.000			Recovery = 83.58%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.368	88	134659	20.43	ppm	97
3) Pyridine	2.694	79	270766	18.97	ppm	96
4) N-Nitrosodimethylamine	2.651	42	210284	29.18	ppm	88
6) Indene	5.012	116	900167	36.96	ppm	97
7) Cumene	4.200	105	1022298	30.83	ppm	97
9) Phenol	4.552	94	483676	25.16	ppm #	56
10) Aniline	4.552	93	399586	20.43	ppm	91
11) bis(2-Chloroethyl)ether	4.595	93	426990	31.77	ppm	99
12) 2-Chlorophenol	4.648	128	518993	34.03	ppm	97
13) Decane	4.675	43	356794	26.66	ppm	97
14) 1,3-Dichlorobenzene	4.761	146	496457	28.77	ppm	98
15) 1,4-Dichlorobenzene	4.819	146	486247	29.42	ppm	98
16) Benzyl alcohol	4.921	108	280818	30.75	ppm	94
17) 1,2-Dichlorobenzene	4.942	146	479272	30.28	ppm	99
18) Acetophenone	5.129	105	694107	38.54	ppm	84
19) 2-Methylphenol	5.017	108	450803	34.51	ppm	96
20) 2,2'-oxybis(1-Chloropr...	5.022	121	141390	30.65	ppm	99
21) 3&4-Methylphenol	5.145	108	447401	32.25	ppm	92
22) n-Nitroso-di-n-propyla...	5.129	70	318024	33.47	ppm	93
23) Hexachloroethane	5.231	201	184252	29.65	ppm	88
26) Nitrobenzene	5.284	77	489434	34.61	ppm	96
27) Quinoline	6.363	129	1275096	42.17	ppm	99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125536.D
Acq On : 24 Jun 2016 1:09 am
Operator : seanb1
Sample : op95018-ms
Misc : op95018,em5319,455
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 24 11:10:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
28) Isophorone	5.498	82	922599	36.16	ppm	96
29) 2-Nitrophenol	5.578	139	301684	38.78	ppm	95
30) 2,4-Dimethylphenol	5.626	107	497433	41.22	ppm	96
32) bis(2-Chloroethoxy)met...	5.701	93	530754	35.36	ppm	100
33) 2,4-Dichlorophenol	5.829	162	513449	41.07	ppm	98
34) 2,6-Dichlorophenol	6.064	162	456511	38.34	ppm	97
36) 1,2,4-Trichlorobenzene	5.904	180	468983	32.29	ppm	98
38) Naphthalene	5.989	128	1297713	31.40	ppm	99
39) 4-Chloroaniline	6.048	127	369571	21.03	ppm	97
40) 2,3-Dichloroaniline	7.196	161	623403	39.52	ppm	98
41) Caprolactam	6.443	55	156250	27.99	ppm	76
42) Hexachlorobutadiene	6.128	225	243562	31.74	ppm	96
43) 4-Chloro-3-methylphenol	6.641	107	455683	38.57	ppm	100
44) 2-Methylnaphthalene	6.812	141	873925	34.55	ppm	94
45) 1-Methylnaphthalene	6.940	142	1147961	37.91	ppm	98
46) Dimethylnaphthalene	7.698	156	1087177	39.73	ppm	98
48) Hexachlorocyclopentadiene	7.031	237	513638	64.89	ppm	98
49) 2,4,6-Trichlorophenol	7.207	196	404777	44.68	ppm	99
50) 2,4,5-Trichlorophenol	7.271	196	426030	42.33	ppm	99
52) 2-Chloronaphthalene	7.485	162	1016397	35.55	ppm	98
53) Biphenyl	7.463	154	1505006	39.97	ppm	98
54) 2-Nitroaniline	7.650	65	303226	41.75	ppm	91
55) Dimethylphthalate	7.944	163	1333496	40.33	ppm	99
56) Acenaphthylene	8.115	152	1680566	36.02	ppm	99
57) 2,6-Dinitrotoluene	8.029	165	313671	44.55	ppm	99
58) 3-Nitroaniline	8.302	138	245370	30.20	ppm	96
59) Acenaphthene	8.398	153	1058063	36.37	ppm	97
60) 2,4-Dinitrophenol	8.478	184	478260	106.97	ppm	95
61) 4-Nitrophenol	8.665	109	161209	45.85	ppm	87
62) Dibenzofuran	8.692	168	1608598	39.31	ppm	99
63) 2,4-Dinitrotoluene	8.697	165	412349	44.64	ppm	92
64) 2,3,4,6-Tetrachlorophenol	8.927	232	369928	49.54	ppm	97
65) Diethylphthalate	9.151	149	1274179	40.84	ppm	98
66) Fluorene	9.279	166	1326088	38.35	ppm	98
67) 4-Chlorophenyl-phenyle...	9.306	204	692721	41.55	ppm	93
68) 4-Nitroaniline	9.349	138	289093	36.00	ppm	96
70) 4,6-Dinitro-2-methylph...	9.413	198	291874	43.88	ppm	97
71) n-Nitrosodiphenylamine	9.530	169	964185	38.21	ppm	96
72) 1,2-Diphenylhydrazine	9.589	77	1090034	36.85	ppm	96
74) 4-Bromophenyl-phenylether	10.193	248	451347	42.79	ppm	94
75) Hexachlorobenzene	10.283	284	490267	41.20	ppm	96
76) Pentachlorophenol	10.679	266	285939	45.44	ppm	97
77) Phenanthrene	11.031	178	1920324	37.38	ppm	98
78) Anthracene	11.127	178	1926568	37.13	ppm	99
79) Carbazole	11.474	167	1956910	39.32	ppm	98
80) Di-n-butylphthalate	12.270	149	2249054	40.66	ppm	100
81) Fluoranthene	13.333	202	2377060	39.92	ppm	97
82) Octadecane	10.972	57	700355	40.35	ppm	98
84) Pyrene	13.760	202	2449974	37.66	ppm	98
86) Butylbenzylphthalate	15.218	149	1006519	38.91	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125536.D
Acq On : 24 Jun 2016 1:09 am
Operator : seanb1
Sample : op95018-ms
Misc : op95018,em5319,455
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 24 11:10:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

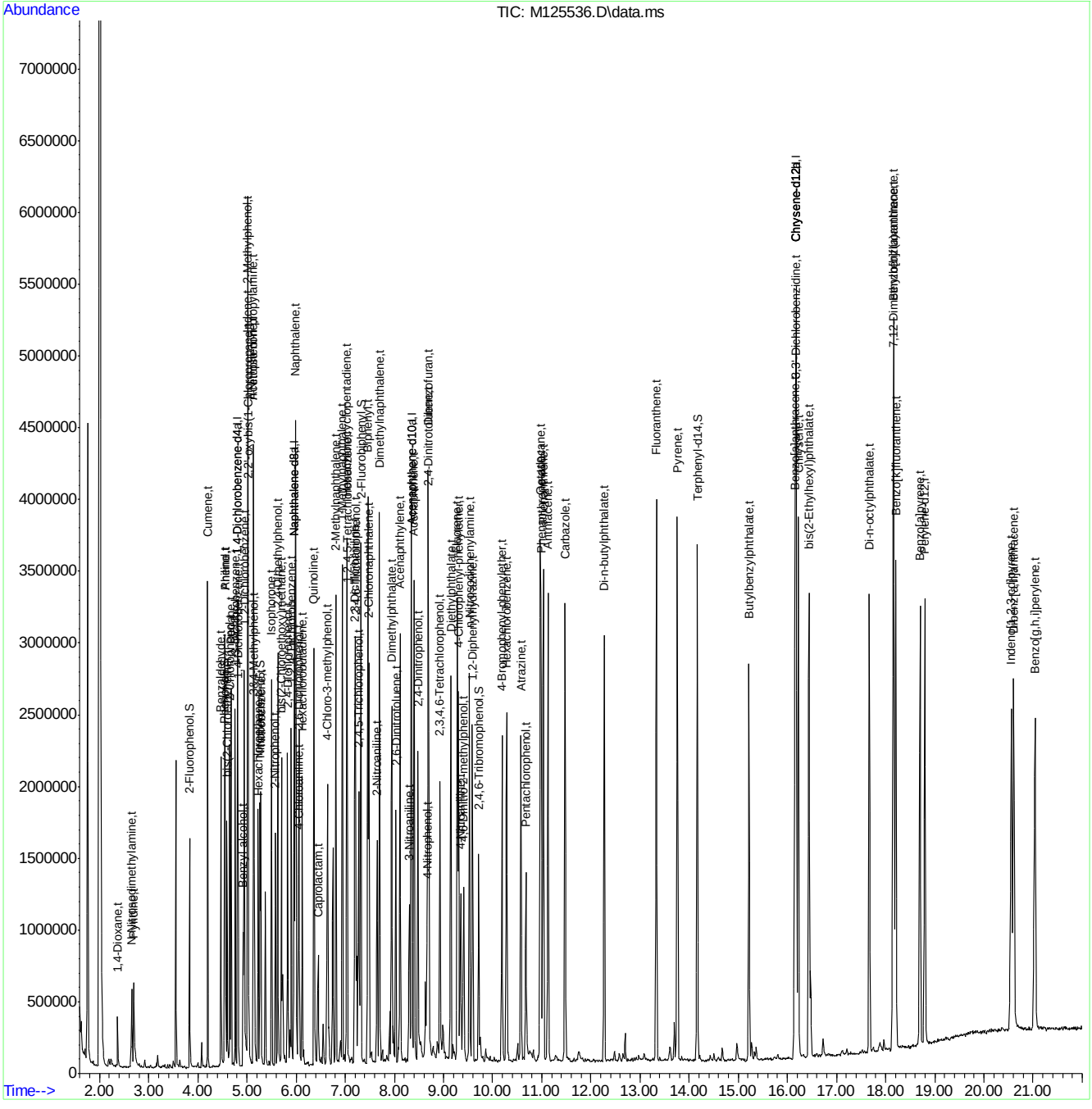
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
87)	Benzo[a]anthracene	16.153	228	2206867	38.23	ppm	98
88)	3,3'-Dichlorobenzidine	16.180	252	615672	31.06	ppm	96
89)	Chrysene	16.223	228	2082492	36.06	ppm	99
90)	bis(2-Ethylhexyl)phtha...	16.436	149	1383082	40.11	ppm	99
92)	Di-n-octylphthalate	17.665	149	2379653	43.73	ppm	98
93)	Benzo[b]fluoranthene	18.156	252	2195451	38.67	ppm	99
94)	Benzo[k]fluoranthene	18.209	252	2062331	38.17	ppm	98
95)	Benzo[a]pyrene	18.701	252	1921563	37.45	ppm	96
96)	Indeno[1,2,3-cd]pyrene	20.560	276	1818267	36.65	ppm	93
98)	Dibenz[a,h]anthracene	20.608	278	1924348	37.12	ppm	97
99)	7,12-Dimethylbenz(a)an...	18.167	256	1010379	46.26	ppm	98
100)	Benzo[g,h,i]perylene	21.040	276	1911494	35.42	ppm	96
102)	Benzaldehyde	4.467	105	352766	37.21	ppm	97
104)	1,2,4,5-Tetrachloroben...	7.041	216	524363	40.28	ppm	95
105)	Atrazine	10.577	215	222031	52.86	ppm	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125536.D
Acq On : 24 Jun 2016 1:09 am
Operator : seanb1
Sample : op95018-ms
Misc : op95018,em5319,455
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 24 11:10:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration



MM5307.M Fri Jun 24 11:10:52 2016 MSM

Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125537.D
Acq On : 24 Jun 2016 1:38 am
Operator : seanb1
Sample : op95018-msd
Misc : op95018,em5319,455
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 24 11:11:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.804	152	431878	40.00	ppm	0.00
24) Naphthalene-d8	5.968	136	1504502	40.00	ppm	0.00
47) Acenaphthene-d10	8.345	164	963632	40.00	ppm	0.00
69) Phenanthrene-d10	10.989	188	1735849	40.00	ppm	0.00
83) Chrysene-d12	16.175	240	1800457	40.00	ppm	0.00
91) Perylene-d12	18.798	264	1771700	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.804	152	431878	40.00	ppm	0.00
103) Acenaphthene-d10a	8.345	164	963632	40.00	ppm	0.00
106) Chrysene-d12a	16.175	240	1800457	40.00	ppm	0.00
108) Naphthalene-d8a	5.968	136	1504502	40.00	ppm	0.00
110) Chrysene-d12b	16.175	240	1800457	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.832	112	459312	33.59	ppm	0.00
Spiked Amount 50.000			Recovery = 67.18%			
8) Phenol-d5	4.542	99	482762	27.61	ppm	0.01
Spiked Amount 50.000			Recovery = 55.22%			
25) Nitrobenzene-d5	5.269	82	573636	41.26	ppm	0.00
Spiked Amount 50.000			Recovery = 82.52%			
51) 2-Fluorobiphenyl	7.320	172	1345855	40.10	ppm	-0.01
Spiked Amount 50.000			Recovery = 80.20%			
73) 2,4,6-Tribromophenol	9.718	330	251978	49.85	ppm	-0.01
Spiked Amount 50.000			Recovery = 99.70%			
85) Terphenyl-d14	14.167	244	1767990	41.68	ppm	0.00
Spiked Amount 50.000			Recovery = 83.36%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.368	88	149880	22.87	ppm	98
3) Pyridine	2.694	79	332683	23.45	ppm	97
4) N-Nitrosodimethylamine	2.652	42	223998	31.27	ppm	84
6) Indene	5.012	116	964528	39.83	ppm	97
7) Cumene	4.200	105	1138739	34.54	ppm	98
9) Phenol	4.553	94	501757	26.26	ppm #	50
10) Aniline	4.553	93	507236	26.09	ppm	81
11) bis(2-Chloroethyl)ether	4.596	93	463596	34.70	ppm	99
12) 2-Chlorophenol	4.649	128	554929	36.60	ppm	97
13) Decane	4.676	43	386910	29.08	ppm	99
14) 1,3-Dichlorobenzene	4.761	146	526956	30.72	ppm	99
15) 1,4-Dichlorobenzene	4.820	146	530017	32.26	ppm	97
16) Benzyl alcohol	4.921	108	306583	33.77	ppm	98
17) 1,2-Dichlorobenzene	4.943	146	533615	33.91	ppm	96
18) Acetophenone	5.130	105	744438	41.58	ppm	86
19) 2-Methylphenol	5.018	108	456135	35.12	ppm	95
20) 2,2'-oxybis(1-Chloropr...	5.018	121	151171	32.97	ppm	93
21) 3&4-Methylphenol	5.146	108	467449	33.90	ppm	92
22) n-Nitroso-di-n-propyla...	5.130	70	346138	36.64	ppm	95
23) Hexachloroethane	5.226	201	203219	32.89	ppm	97
26) Nitrobenzene	5.285	77	521625	37.51	ppm	99
27) Quinoline	6.364	129	1240904	41.73	ppm	99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125537.D
Acq On : 24 Jun 2016 1:38 am
Operator : seanb1
Sample : op95018-msd
Misc : op95018,em5319,455
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 24 11:11:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
28) Isophorone	5.498	82	987492	39.35	ppm	97
29) 2-Nitrophenol	5.578	139	319200	41.73	ppm	95
30) 2,4-Dimethylphenol	5.621	107	497291	41.91	ppm	92
32) bis(2-Chloroethoxy)met...	5.701	93	567351	38.44	ppm	98
33) 2,4-Dichlorophenol	5.829	162	525685	42.77	ppm	97
34) 2,6-Dichlorophenol	6.064	162	471498	40.27	ppm	96
36) 1,2,4-Trichlorobenzene	5.904	180	502497	35.19	ppm	95
38) Naphthalene	5.990	128	1377212	33.89	ppm	99
39) 4-Chloroaniline	6.048	127	426184	24.66	ppm	98
40) 2,3-Dichloroaniline	7.197	161	634271	40.89	ppm	97
41) Caprolactam	6.449	55	139781	25.47	ppm	80
42) Hexachlorobutadiene	6.129	225	259595	34.40	ppm	98
43) 4-Chloro-3-methylphenol	6.641	107	441932	38.04	ppm	98
44) 2-Methylnaphthalene	6.812	141	897951	36.10	ppm	99
45) 1-Methylnaphthalene	6.940	142	1205587	40.48	ppm	99
46) Dimethylnaphthalene	7.699	156	1122822	41.72	ppm	99
48) Hexachlorocyclopentadiene	7.031	237	552965	69.93	ppm	99
49) 2,4,6-Trichlorophenol	7.207	196	397010	43.87	ppm	98
50) 2,4,5-Trichlorophenol	7.272	196	414869	41.27	ppm	99
52) 2-Chloronaphthalene	7.485	162	1032988	36.16	ppm	98
53) Biphenyl	7.464	154	1531726	40.72	ppm	99
54) 2-Nitroaniline	7.651	65	291628	40.19	ppm	92
55) Dimethylphthalate	7.945	163	1311297	39.70	ppm	99
56) Acenaphthylene	8.115	152	1687760	36.21	ppm	98
57) 2,6-Dinitrotoluene	8.030	165	306836	43.63	ppm	98
58) 3-Nitroaniline	8.302	138	233886	28.82	ppm	98
59) Acenaphthene	8.399	153	1046439	36.01	ppm	97
60) 2,4-Dinitrophenol	8.479	184	451716	101.87	ppm	93
61) 4-Nitrophenol	8.666	109	151635	43.17	ppm	90
62) Dibenzofuran	8.692	168	1584707	38.76	ppm	99
63) 2,4-Dinitrotoluene	8.698	165	389507	42.21	ppm	89
64) 2,3,4,6-Tetrachlorophenol	8.927	232	364603	48.87	ppm	96
65) Diethylphthalate	9.152	149	1239019	39.75	ppm	98
66) Fluorene	9.280	166	1301232	37.67	ppm	97
67) 4-Chlorophenyl-phenyle...	9.306	204	664959	39.92	ppm	95
68) 4-Nitroaniline	9.349	138	283653	35.36	ppm	98
70) 4,6-Dinitro-2-methylph...	9.413	198	283535	43.39	ppm	97
71) n-Nitrosodiphenylamine	9.525	169	944100	38.02	ppm	97
72) 1,2-Diphenylhydrazine	9.590	77	1068156	36.69	ppm	98
74) 4-Bromophenyl-phenylether	10.188	248	426707	41.11	ppm	97
75) Hexachlorobenzene	10.284	284	468761	40.03	ppm	96
76) Pentachlorophenol	10.679	266	273610	44.40	ppm	99
77) Phenanthrene	11.032	178	1882688	37.24	ppm	100
78) Anthracene	11.128	178	1878412	36.79	ppm	98
79) Carbazole	11.475	167	1911607	39.03	ppm	98
80) Di-n-butylphthalate	12.271	149	2195509	40.34	ppm	99
81) Fluoranthene	13.334	202	2326582	39.70	ppm	97
82) Octadecane	10.968	57	694996	40.69	ppm	96
84) Pyrene	13.761	202	2387234	37.54	ppm	99
86) Butylbenzylphthalate	15.219	149	998373	39.48	ppm	98

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125537.D
Acq On : 24 Jun 2016 1:38 am
Operator : seanb1
Sample : op95018-msd
Misc : op95018,em5319,455
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 24 11:11:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

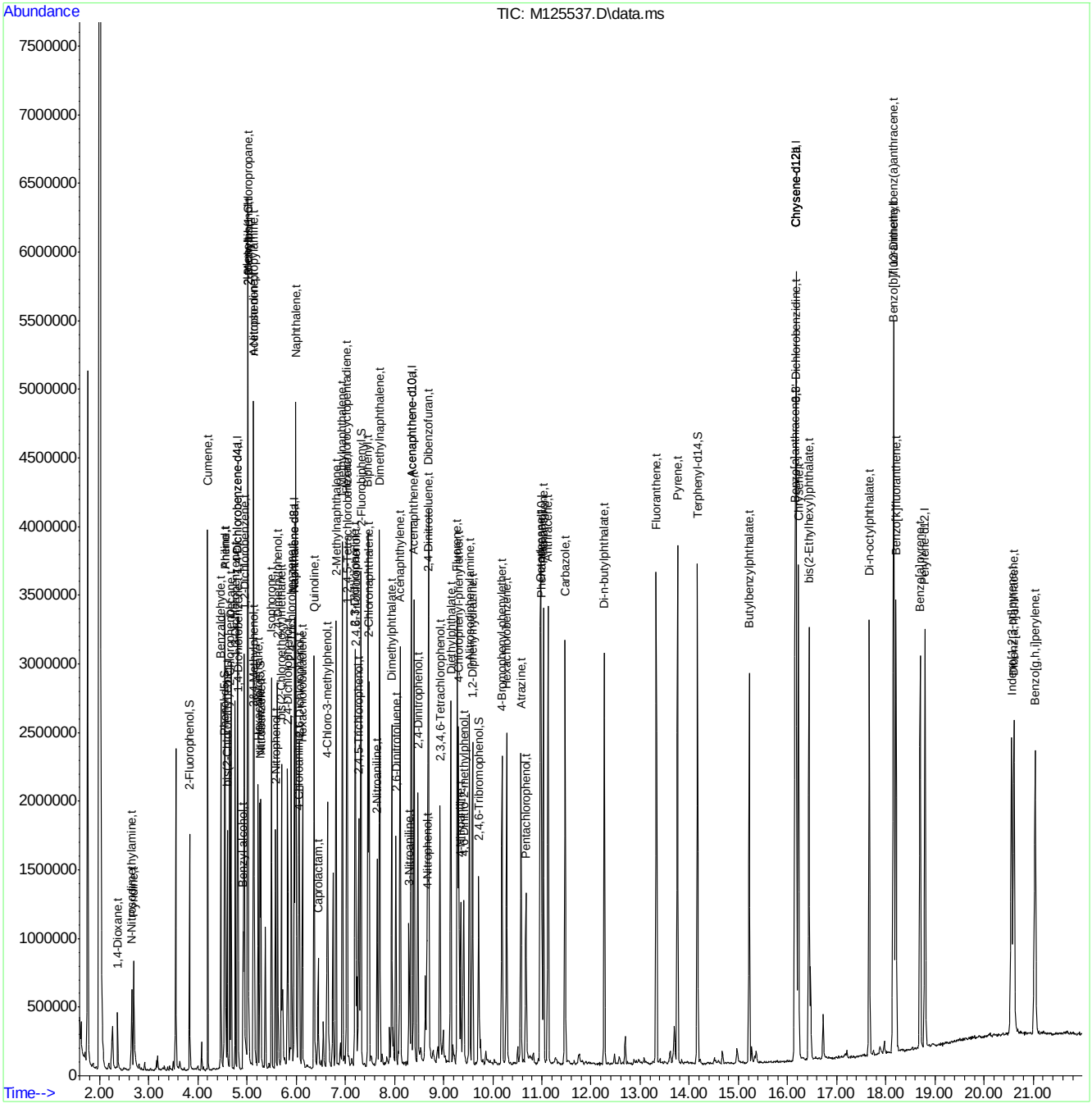
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
87)	Benzo[a]anthracene	16.154	228	2140221	37.92	ppm	98
88)	3,3'-Dichlorobenzidine	16.180	252	852474	43.98	ppm	96
89)	Chrysene	16.223	228	2003050	35.48	ppm	100
90)	bis(2-Ethylhexyl)phtha...	16.437	149	1364252	40.47	ppm	98
92)	Di-n-octylphthalate	17.665	149	2340362	43.13	ppm	100
93)	Benzo[b]fluoranthene	18.157	252	2150148	37.98	ppm	98
94)	Benzo[k]fluoranthene	18.205	252	1945974	36.12	ppm	99
95)	Benzo[a]pyrene	18.701	252	1857026	36.29	ppm	95
96)	Indeno[1,2,3-cd]pyrene	20.560	276	1745061	35.27	ppm	90
98)	Dibenz[a,h]anthracene	20.608	278	1810569	35.02	ppm	97
99)	7,12-Dimethylbenz(a)an...	18.162	256	1005670	46.18	ppm	99
100)	Benzo[g,h,i]perylene	21.041	276	1784599	33.16	ppm	96
102)	Benzaldehyde	4.467	105	415302	44.07	ppm	96
104)	1,2,4,5-Tetrachloroben...	7.042	216	546379	42.01	ppm	97
105)	Atrazine	10.578	215	229186	54.62	ppm	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125537.D
Acq On : 24 Jun 2016 1:38 am
Operator : seanb1
Sample : op95018-msd
Misc : op95018,em5319,455
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 24 11:11:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
07/05/16 10:28

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84765.D
Acq On : 1 Jul 2016 10:44 pm
Operator : seanb1
Sample : op95059-ms
Misc : op95059,e3e3716,500
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 03 17:38:03 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:35:42 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.015	152	82514	40.00 ppm	-0.03
24) Naphthalene-d8	6.170	136	351805	40.00 ppm	-0.10
47) Acenaphthene-d10	8.320	164	165897	40.00 ppm	-0.11
69) Phenanthrene-d10	10.540	188	253695	40.00 ppm	-0.11
83) Chrysene-d12	14.771	240	240424	40.00 ppm	-0.11
92) Perylene-d12	16.931	264	192510	40.00 ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	5.015	152	82514	40.00 ppm	-0.09
104) Acenaphthene-d10a	8.320	164	165897	40.00 ppm	-0.11
106) Phenanthrene-d10a	10.540	188	253695	40.00 ppm	-0.11
108) Chrysene-d12a	14.771	240	240424	40.00 ppm	-0.11
110) Naphthalene-d8a	6.170	136	351805	40.00 ppm	-0.10
System Monitoring Compounds					
5) 2-Fluorophenol	4.030	112	106731	41.74 ppm	-0.01
Spiked Amount 50.000			Recovery	= 83.48%	
8) Phenol-d5	4.737	99	107412	34.56 ppm	-0.01
Spiked Amount 50.000			Recovery	= 69.12%	
25) Nitrobenzene-d5	5.480	82	114745	42.77 ppm	-0.10
Spiked Amount 50.000			Recovery	= 85.54%	
51) 2-Fluorobiphenyl	7.405	172	247636	45.13 ppm	-0.11
Spiked Amount 50.000			Recovery	= 90.26%	
73) 2,4,6-Tribromophenol	9.481	330	27601	33.62 ppm	-0.10
Spiked Amount 50.000			Recovery	= 67.24%	
85) Terphenyl-d14	13.107	244	240055	47.42 ppm	-0.11
Spiked Amount 50.000			Recovery	= 94.84%	

Target Compounds					Qvalue
2) 1,4-Dioxane	2.597	88	31746	29.06 ppm	99
3) Pyridine	2.923	79	53175	19.18 ppm	97
4) N-Nitrosodimethylamine	2.875	74	55969	35.17 ppm	89
6) Indene	5.229	116	217073	42.84 ppm	96
7) Cumene	4.400	105	268250	41.23 ppm	97
9) Phenol	4.747	94	119430	32.65 ppm	78
10) Aniline	4.758	93	136090	35.39 ppm	97
11) bis(2-Chloroethyl)ether	4.795	93	111185	43.86 ppm	96
12) 2-Chlorophenol	4.860	128	121316	40.18 ppm	99
13) Decane	4.876	43	77139	30.36 ppm	94
14) 1,3-Dichlorobenzene	4.972	146	113548	33.55 ppm	95
15) 1,4-Dichlorobenzene	5.031	146	120124	34.35 ppm	100
16) Benzyl alcohol	5.127	108	77229	43.40 ppm	95
17) 1,2-Dichlorobenzene	5.159	146	110797	34.47 ppm	99
18) Acetophenone	5.346	105	166978	44.25 ppm	88
19) 2-Methylphenol	5.223	108	107355	43.07 ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.229	121	38227	37.74 ppm #	81
21) 3&4-Methylphenol	5.346	108	112434	41.69 ppm	100
22) n-Nitroso-di-n-propyla...	5.341	70	73564	43.98 ppm	97
23) Hexachloroethane	5.443	201	35040	33.35 ppm	91
26) Nitrobenzene	5.496	77	108284	38.16 ppm	93
27) Quinoline	6.550	129	242298	39.22 ppm	97
28) Isophorone	5.710	82	194697	39.19 ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84765.D
Acq On : 1 Jul 2016 10:44 pm
Operator : seanb1
Sample : op95059-ms
Misc : op95059,e3e3716,500
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 03 17:38:03 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:35:42 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2-Nitrophenol	5.790	139	67125	38.23	ppm		92
30) 2,4-Dimethylphenol	5.822	107	108194	41.75	ppm		98
31) Benzoic acid	5.935	105	58449	29.61	ppm		95
32) bis(2-Chloroethoxy)met...	5.902	93	120591	37.54	ppm		99
33) 2,4-Dichlorophenol	6.031	162	99452	38.11	ppm		98
34) 2,6-Dichlorophenol	6.256	162	97177	37.71	ppm		98
36) 1,2,4-Trichlorobenzene	6.111	180	88769	31.33	ppm		100
38) Naphthalene	6.191	128	340877	35.49	ppm		99
39) 4-Chloroaniline	6.239	127	109276	29.21	ppm		97
40) 2,3-Dichloroaniline	7.304	161	112510	36.14	ppm		95
41) Caprolactam	6.625	55	25646	20.91	ppm		92
42) Hexachlorobutadiene	6.314	225	41123	29.26	ppm		96
43) 4-Chloro-3-methylphenol	6.785	107	93656	39.84	ppm		95
44) 2-Methylnaphthalene	6.956	141	192892	35.33	ppm		95
45) 1-Methylnaphthalene	7.079	141	209150	36.93	ppm		98
46) Dimethylnaphthalene	7.748	156	196747	35.62	ppm		98
48) Hexachlorocyclopentadiene	7.154	237	54872	40.37	ppm		96
49) 2,4,6-Trichlorophenol	7.315	196	65740	42.87	ppm		99
50) 2,4,5-Trichlorophenol	7.368	196	65031	41.20	ppm		96
52) 2-Chloronaphthalene	7.566	162	183233	38.96	ppm		98
53) Biphenyl	7.539	154	271006	41.65	ppm		99
54) 2-Nitroaniline	7.705	65	53766	48.64	ppm		96
55) Dimethylphthalate	7.946	163	222862	43.13	ppm		99
56) Acenaphthylene	8.122	152	303470	37.87	ppm		99
57) 2,6-Dinitrotoluene	8.031	165	53809	47.39	ppm		95
58) 3-Nitroaniline	8.267	138	49913	37.48	ppm		98
59) Acenaphthene	8.363	153	210282	41.03	ppm		96
60) 2,4-Dinitrophenol	8.432	184	66558	103.85	ppm	#	80
61) 4-Nitrophenol	8.555	109	22355	47.39	ppm	#	75
62) Dibenzofuran	8.614	168	285269	42.39	ppm		98
63) 2,4-Dinitrotoluene	8.609	165	70968	49.80	ppm		70
64) 2,3,4,6-Tetrachlorophenol	8.807	232	49928	41.83	ppm		98
65) Diethylphthalate	8.962	149	214558	42.83	ppm		99
66) Fluorene	9.112	166	235655	42.28	ppm		99
67) 4-Chlorophenyl-phenyle...	9.117	204	105809	40.18	ppm		93
68) 4-Nitroaniline	9.160	138	58581	42.82	ppm		87
70) 4,6-Dinitro-2-methylph...	9.224	198	42682	49.43	ppm		96
71) n-Nitrosodiphenylamine	9.299	169	155002	46.10	ppm		99
72) 1,2-Diphenylhydrazine	9.358	77	198370	47.03	ppm		97
74) 4-Bromophenyl-phenylether	9.855	248	58973	43.65	ppm		95
75) Hexachlorobenzene	9.962	284	58627	35.54	ppm		90
76) Pentachlorophenol	10.272	266	36206	40.06	ppm		98
77) Phenanthrene	10.577	178	301840	42.67	ppm		98
78) Anthracene	10.657	178	290722	41.01	ppm		99
79) Carbazole	10.925	167	301540	45.55	ppm		99
80) Di-n-butylphthalate	11.524	149	366792	45.55	ppm		99
81) Fluoranthene	12.465	202	349949	47.39	ppm		97
82) Octadecane	10.444	57	124369	45.99	ppm		96
84) Pyrene	12.818	202	364552	50.48	ppm		99
86) Butylbenzylphthalate	13.920	149	155855	47.65	ppm		97

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84765.D
Acq On : 1 Jul 2016 10:44 pm
Operator : seanb1
Sample : op95059-ms
Misc : op95059,e3e3716,500
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 03 17:38:03 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:35:42 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
88) Benzo[a]anthracene	14.755	228	324109	46.18 ppm	97
89) 3,3'-Dichlorobenzidine	14.744	252	194482	68.16 ppm	99
90) Chrysene	14.813	228	282757	44.37 ppm	98
91) bis(2-Ethylhexyl)phtha...	14.878	149	208160	46.01 ppm	98
93) Di-n-octylphthalate	15.867	149	357979	50.69 ppm	100
94) Benzo[b]fluoranthene	16.386	252	296613	45.84 ppm	98
95) Benzo[k]fluoranthene	16.423	252	266395	47.15 ppm	98
96) Benzo[a]pyrene	16.846	252	235433	44.45 ppm	100
97) Indeno[1,2,3-cd]pyrene	18.734	276	252034m	45.36 ppm	
99) Dibenz[a,h]anthracene	18.766	278	242375	43.70 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.375	256	134035	46.58 ppm	93
101) Benzo[g,h,i]perylene	19.258	276	225599	42.67 ppm	95
103) Benzaldehyde	4.672	105	82061	42.49 ppm	96
105) 1,2,4,5-Tetrachloroben...	7.165	216	90756	41.04 ppm	97
107) Atrazine	10.149	215	33782	48.04 ppm	91
109) benzidine	12.706	184	18535	7.64 ppm	97

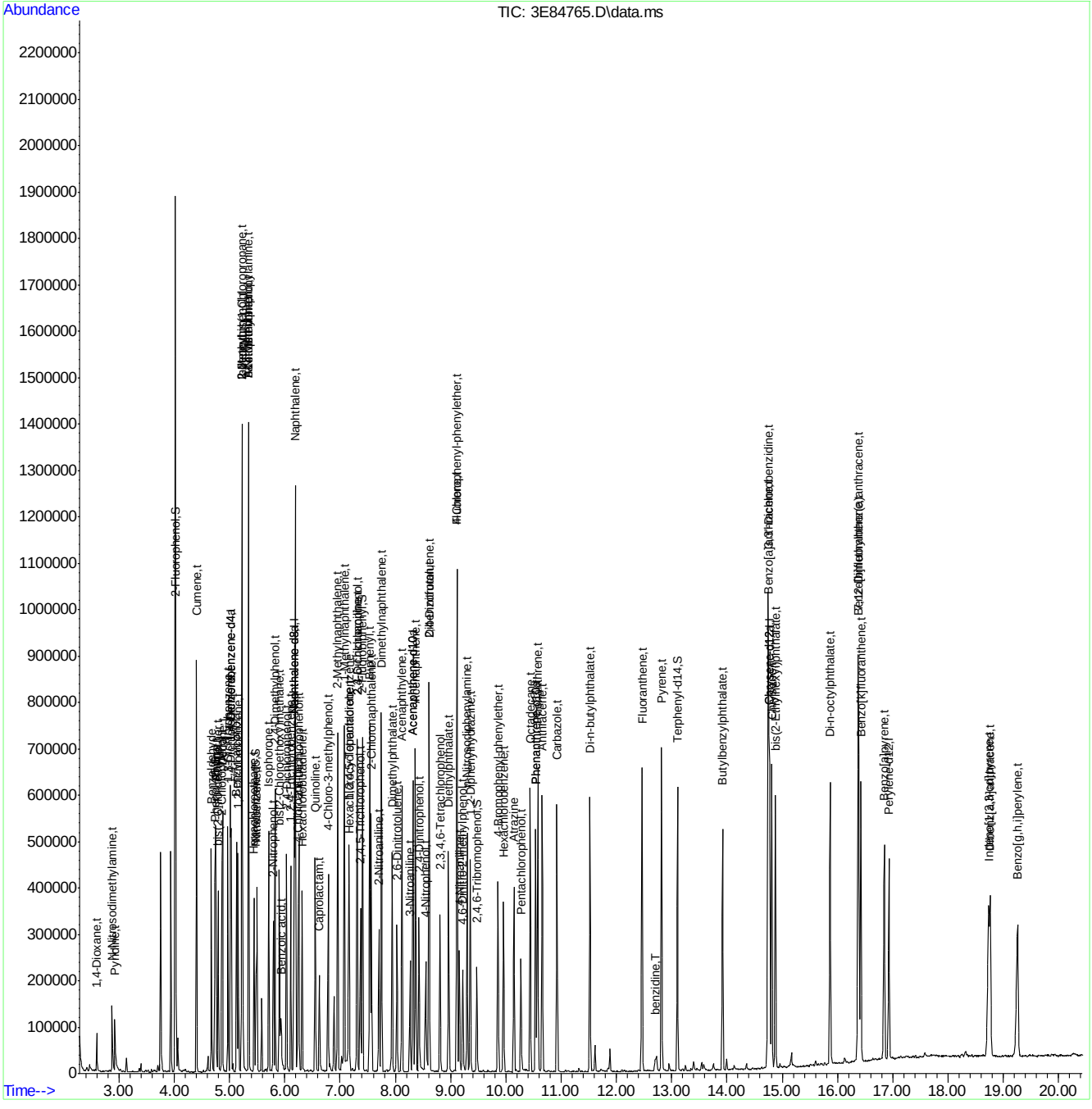
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84765.D
Acq On : 1 Jul 2016 10:44 pm
Operator : seanb1
Sample : op95059-ms
Misc : op95059,e3e3716,500
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 03 17:38:03 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:35:42 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration



M3E3699.M Sun Jul 03 17:38:18 2016 MS3E

SGS ACCUTEST JC22613

Manual Integration Approval Summary

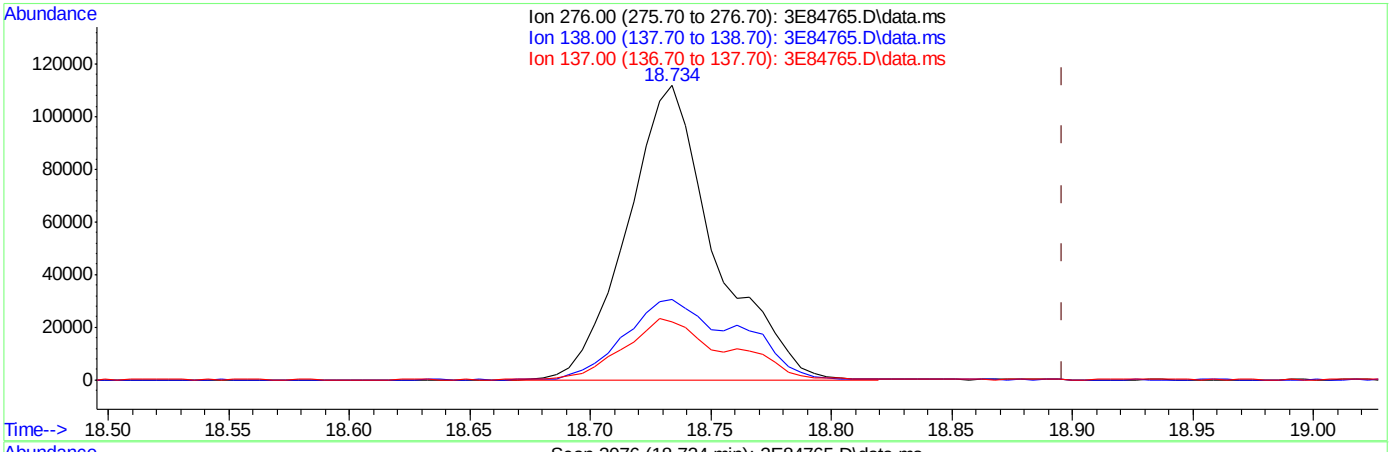
Sample Number:	OP95059-MS	**Method:**	SW846 8270D
Lab FileID:	3E84765.D	**Analyst approved:**	07/03/16 17:48 Kristi Schollenberger
Injection Time:	07/01/16 22:44	**Supervisor approved:**	07/05/16 10:28 Nina Pandya

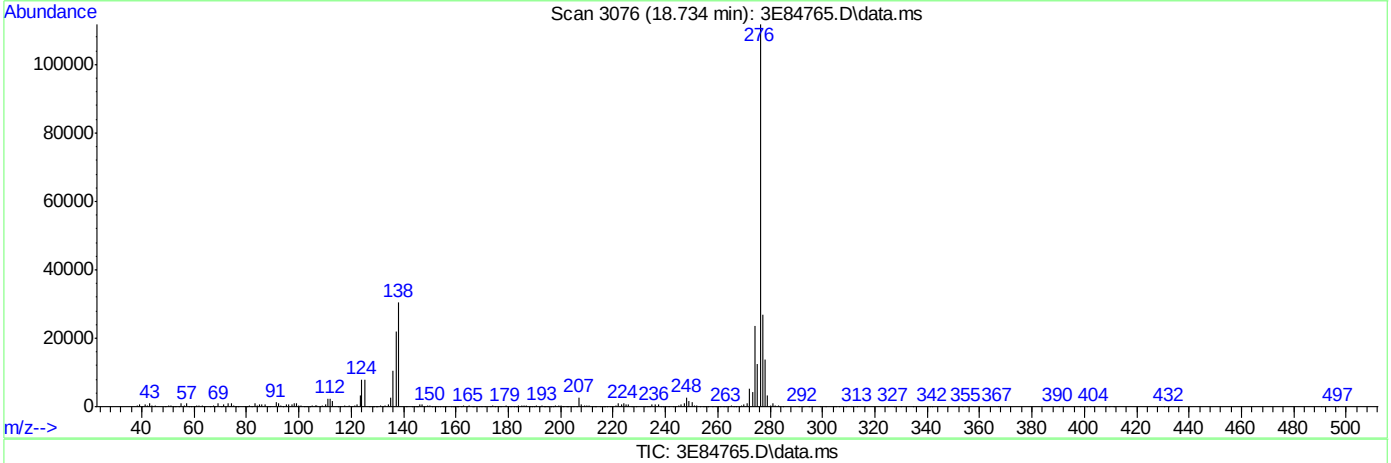
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.73	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84765.D
Acq On : 1 Jul 2016 10:44 pm
Operator : seanb1
Sample : op95059-ms
Misc : op95059,e3e3716,500
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 03 17:37:06 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:35:42 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration





TIC: 3E84765.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.734min (-0.162) 50.89ppm

response 282758

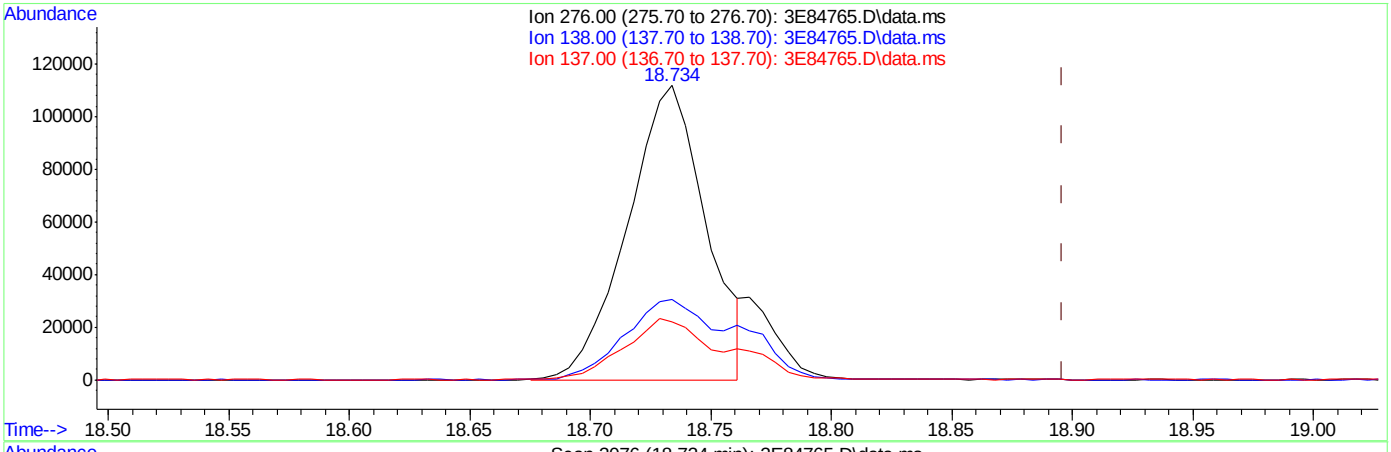
Ion	Exp%	Act%
276.00	100	100
138.00	20.80	27.23
137.00	17.00	19.34
0.00	0.00	0.00

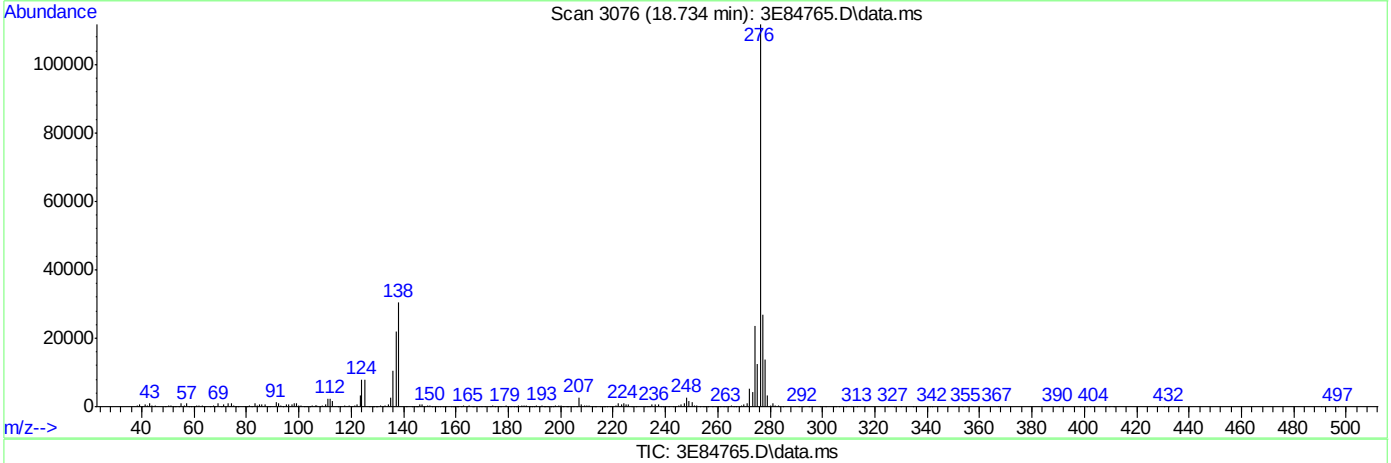
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84765.D
Acq On : 1 Jul 2016 10:44 pm
Operator : seanb1
Sample : op95059-ms
Misc : op95059,e3e3716,500
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jul 03 17:37:06 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:35:42 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration





TIC: 3E84765.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.734min (-0.162) 45.36ppm m

response 252034

Ion	Exp%	Act%
276.00	100	100
138.00	20.80	27.31
137.00	17.00	19.56
0.00	0.00	0.00

SGS ACCUTEST JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
07/05/16 10:28

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84766.D
Acq On : 1 Jul 2016 11:12 pm
Operator : seanb1
Sample : op95059-msd
Misc : op95059,e3e3716,500
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 03 17:39:19 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:35:42 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.015	152	80361	40.00	ppm	-0.03
24) Naphthalene-d8	6.170	136	338762	40.00	ppm	-0.10
47) Acenaphthene-d10	8.320	164	158634	40.00	ppm	-0.11
69) Phenanthrene-d10	10.540	188	241494	40.00	ppm	-0.11
83) Chrysene-d12	14.771	240	235802	40.00	ppm	-0.11
92) Perylene-d12	16.931	264	185845	40.00	ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	5.015	152	80361	40.00	ppm	-0.09
104) Acenaphthene-d10a	8.320	164	158634	40.00	ppm	-0.11
106) Phenanthrene-d10a	10.540	188	241494	40.00	ppm	-0.11
108) Chrysene-d12a	14.771	240	235802	40.00	ppm	-0.11
110) Naphthalene-d8a	6.170	136	338762	40.00	ppm	-0.10

System Monitoring Compounds						
5) 2-Fluorophenol	4.030	112	103642	41.62	ppm	-0.01
Spiked Amount 50.000			Recovery = 83.24%			
8) Phenol-d5	4.736	99	105917	34.99	ppm	-0.01
Spiked Amount 50.000			Recovery = 69.98%			
25) Nitrobenzene-d5	5.480	82	113025	43.75	ppm	-0.10
Spiked Amount 50.000			Recovery = 87.50%			
51) 2-Fluorobiphenyl	7.405	172	242266	46.17	ppm	-0.11
Spiked Amount 50.000			Recovery = 92.34%			
73) 2,4,6-Tribromophenol	9.475	330	27811	35.59	ppm	-0.11
Spiked Amount 50.000			Recovery = 71.18%			
85) Terphenyl-d14	13.107	244	236285	47.59	ppm	-0.11
Spiked Amount 50.000			Recovery = 95.18%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.592	88	29059	27.31	ppm		98
3) Pyridine	2.923	79	61082	22.62	ppm		94
4) N-Nitrosodimethylamine	2.875	74	52534	33.90	ppm		85
6) Indene	5.229	116	208999	42.35	ppm		98
7) Cumene	4.399	105	244659	38.61	ppm		97
9) Phenol	4.747	94	118349	33.22	ppm		80
10) Aniline	4.758	93	125663	33.56	ppm		95
11) bis(2-Chloroethyl)ether	4.795	93	110800	44.88	ppm		100
12) 2-Chlorophenol	4.859	128	121736	41.39	ppm		97
13) Decane	4.876	43	70620	28.54	ppm		96
14) 1,3-Dichlorobenzene	4.972	146	106784	32.40	ppm		97
15) 1,4-Dichlorobenzene	5.031	146	111346	32.69	ppm		98
16) Benzyl alcohol	5.127	108	74870	43.21	ppm		90
17) 1,2-Dichlorobenzene	5.154	146	104788	33.47	ppm		98
18) Acetophenone	5.346	105	164227	44.69	ppm		85
19) 2-Methylphenol	5.223	108	110093	45.35	ppm		98
20) 2,2'-oxybis(1-Chloropr...	5.229	121	36617	37.12	ppm	#	79
21) 3&4-Methylphenol	5.346	108	111925	42.62	ppm		98
22) n-Nitroso-di-n-propyla...	5.341	70	72070	44.24	ppm		96
23) Hexachloroethane	5.442	201	32044	31.32	ppm		93
26) Nitrobenzene	5.496	77	107844	39.46	ppm		94
27) Quinoline	6.550	129	237721	39.96	ppm		97
28) Isophorone	5.710	82	195403	40.85	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84766.D
Acq On : 1 Jul 2016 11:12 pm
Operator : seanb1
Sample : op95059-msd
Misc : op95059,e3e3716,500
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 03 17:39:19 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:35:42 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2-Nitrophenol	5.790	139	66254	39.18	ppm		92
30) 2,4-Dimethylphenol	5.822	107	108996	43.68	ppm		99
31) Benzoic acid	5.929	105	48541	25.54	ppm		95
32) bis(2-Chloroethoxy)met...	5.902	93	123437	39.91	ppm		98
33) 2,4-Dichlorophenol	6.031	162	100665	40.06	ppm		97
34) 2,6-Dichlorophenol	6.255	162	95108	38.33	ppm		94
36) 1,2,4-Trichlorobenzene	6.111	180	83131	30.47	ppm		99
38) Naphthalene	6.191	128	337622	36.51	ppm		99
39) 4-Chloroaniline	6.239	127	99392	27.59	ppm		97
40) 2,3-Dichloroaniline	7.304	161	111140	37.08	ppm		98
41) Caprolactam	6.625	55	25329	21.45	ppm		94
42) Hexachlorobutadiene	6.314	225	37994	28.08	ppm		97
43) 4-Chloro-3-methylphenol	6.785	107	90096	39.80	ppm		96
44) 2-Methylnaphthalene	6.956	141	192987	36.70	ppm		97
45) 1-Methylnaphthalene	7.079	141	209319	38.39	ppm		99
46) Dimethylnaphthalene	7.748	156	193459	36.37	ppm		97
48) Hexachlorocyclopentadiene	7.154	237	55927	43.04	ppm		99
49) 2,4,6-Trichlorophenol	7.309	196	65533	44.69	ppm		95
50) 2,4,5-Trichlorophenol	7.368	196	64409	42.67	ppm		99
52) 2-Chloronaphthalene	7.566	162	176656	39.28	ppm		96
53) Biphenyl	7.539	154	267683	43.02	ppm		97
54) 2-Nitroaniline	7.705	65	53664	50.77	ppm		94
55) Dimethylphthalate	7.946	163	216832	43.88	ppm		99
56) Acenaphthylene	8.122	152	297667	38.84	ppm		100
57) 2,6-Dinitrotoluene	8.031	165	52134	48.02	ppm		93
58) 3-Nitroaniline	8.267	138	45084	35.40	ppm		97
59) Acenaphthene	8.368	153	203859	41.59	ppm		95
60) 2,4-Dinitrophenol	8.432	184	66225	107.71	ppm	#	72
61) 4-Nitrophenol	8.555	109	22135	49.07	ppm	#	76
62) Dibenzofuran	8.614	168	282801	43.95	ppm		99
63) 2,4-Dinitrotoluene	8.609	165	69783	51.21	ppm		76
64) 2,3,4,6-Tetrachlorophenol	8.807	232	48573	42.55	ppm		97
65) Diethylphthalate	8.967	149	206980	43.21	ppm		99
66) Fluorene	9.112	166	228099	42.80	ppm		98
67) 4-Chlorophenyl-phenyle...	9.117	204	106169	42.16	ppm		97
68) 4-Nitroaniline	9.160	138	57336	43.83	ppm		85
70) 4,6-Dinitro-2-methylph...	9.219	198	42950	52.04	ppm		89
71) n-Nitrosodiphenylamine	9.299	169	150269	46.95	ppm		100
72) 1,2-Diphenylhydrazine	9.358	77	193846	48.28	ppm		97
74) 4-Bromophenyl-phenylether	9.855	248	58422	45.43	ppm		97
75) Hexachlorobenzene	9.962	284	57819	36.82	ppm		92
76) Pentachlorophenol	10.272	266	36256	41.87	ppm		98
77) Phenanthrene	10.577	178	298386	44.31	ppm		100
78) Anthracene	10.657	178	285884	42.36	ppm		99
79) Carbazole	10.925	167	297439	47.20	ppm		98
80) Di-n-butylphthalate	11.524	149	360559	47.04	ppm		99
81) Fluoranthene	12.465	202	345984	49.22	ppm		97
82) Octadecane	10.443	57	125786	48.86	ppm		98
84) Pyrene	12.818	202	355881	50.25	ppm		99
86) Butylbenzylphthalate	13.920	149	154514	48.16	ppm		96

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84766.D
Acq On : 1 Jul 2016 11:12 pm
Operator : seanb1
Sample : op95059-msd
Misc : op95059,e3e3716,500
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 03 17:39:19 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:35:42 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
88) Benzo[a]anthracene	14.754	228	320022	46.49	ppm	97
89) 3,3'-Dichlorobenzidine	14.744	252	193324	69.08	ppm	99
90) Chrysene	14.813	228	277987	44.47	ppm	99
91) bis(2-Ethylhexyl)phtha...	14.877	149	203051	45.76	ppm	98
93) Di-n-octylphthalate	15.867	149	355857	52.20	ppm	99
94) Benzo[b]fluoranthene	16.386	252	297274	47.59	ppm	95
95) Benzo[k]fluoranthene	16.423	252	267135	48.97	ppm	98
96) Benzo[a]pyrene	16.846	252	236301	46.21	ppm	99
97) Indeno[1,2,3-cd]pyrene	18.728	276	250416m	46.68	ppm	
99) Dibenz[a,h]anthracene	18.766	278	240228	44.87	ppm	99
100) 7,12-Dimethylbenz(a)an...	16.375	256	138292	49.79	ppm	97
101) Benzo[g,h,i]perylene	19.258	276	230656	45.19	ppm	98
103) Benzaldehyde	4.672	105	81106	43.12	ppm	97
105) 1,2,4,5-Tetrachloroben...	7.165	216	89384	42.27	ppm	98
107) Atrazine	10.149	215	32593	48.69	ppm	94
109) benzidine	12.701	184	81134	34.12	ppm	99

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

7.4.4

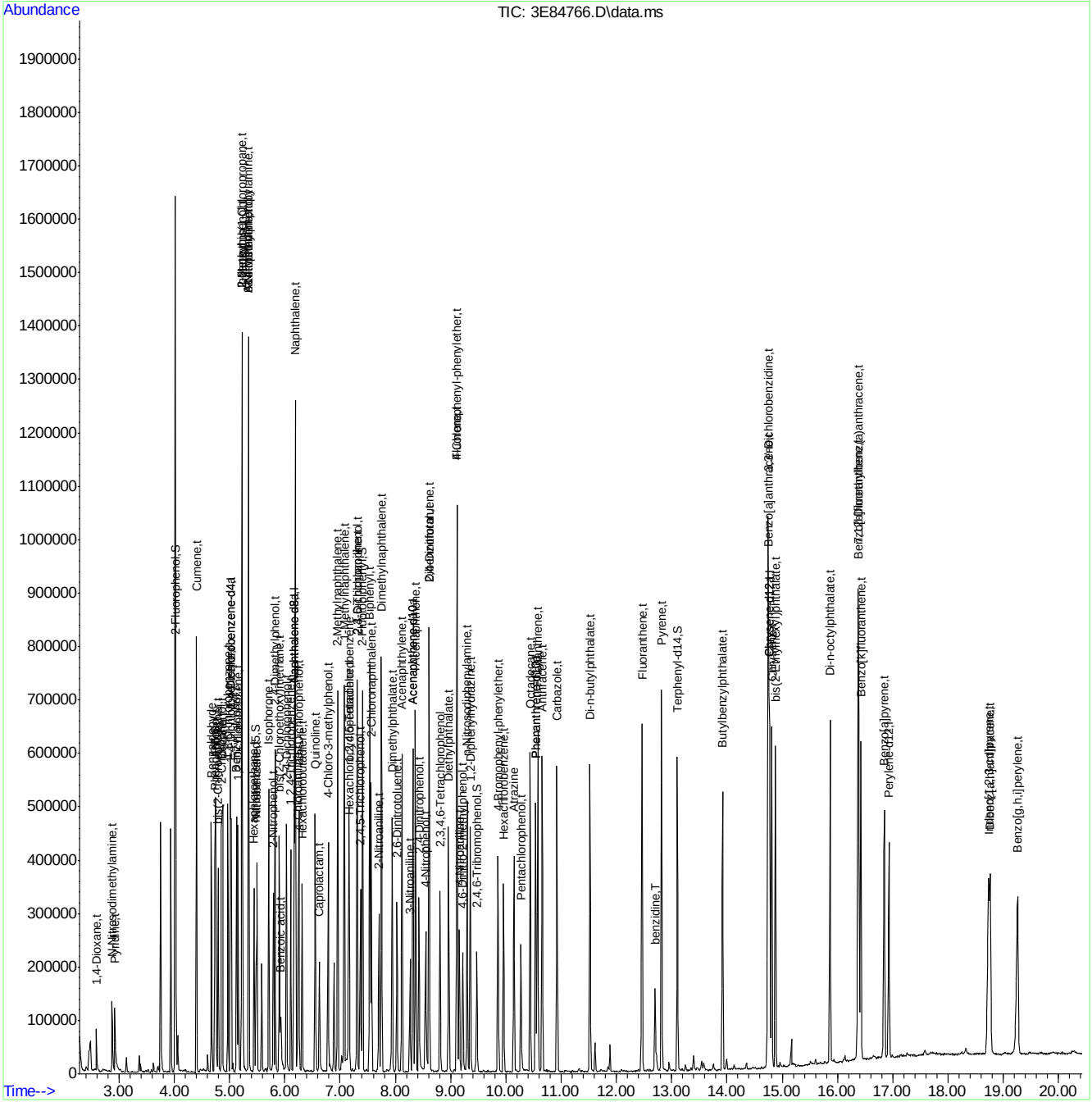
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84766.D
Acq On : 1 Jul 2016 11:12 pm
Operator : seanb1
Sample : op95059-msd
Misc : op95059,e3e3716,500
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 03 17:39:19 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:35:42 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration



Manual Integration Approval Summary

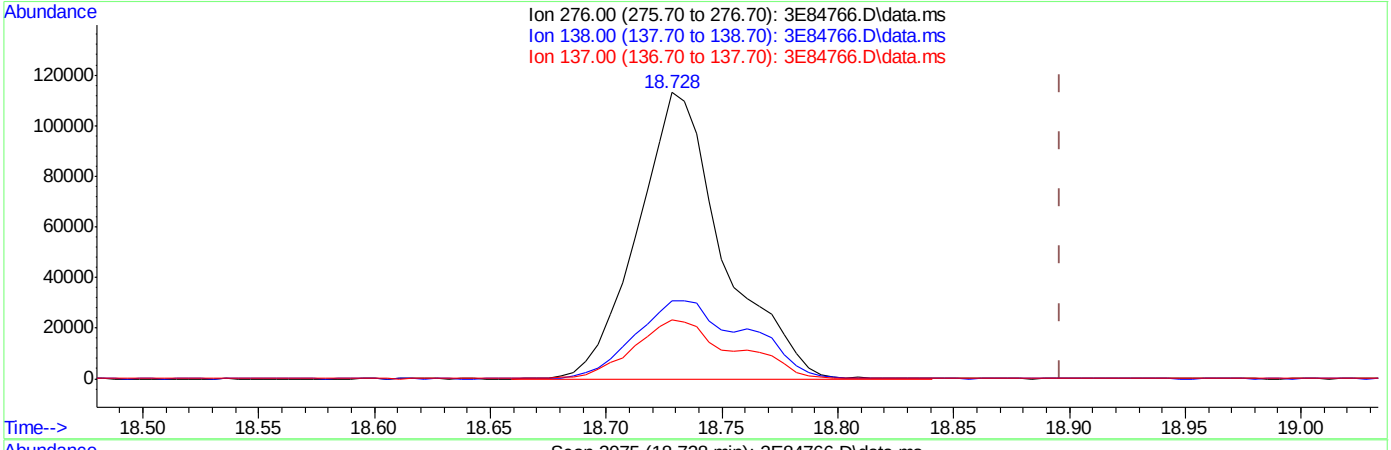
Sample Number:	OP95059-MSD	**Method:**	SW846 8270D
Lab FileID:	3E84766.D	**Analyst approved:**	07/03/16 17:48 Kristi Schollenberger
Injection Time:	07/01/16 23:12	**Supervisor approved:**	07/05/16 10:28 Nina Pandya

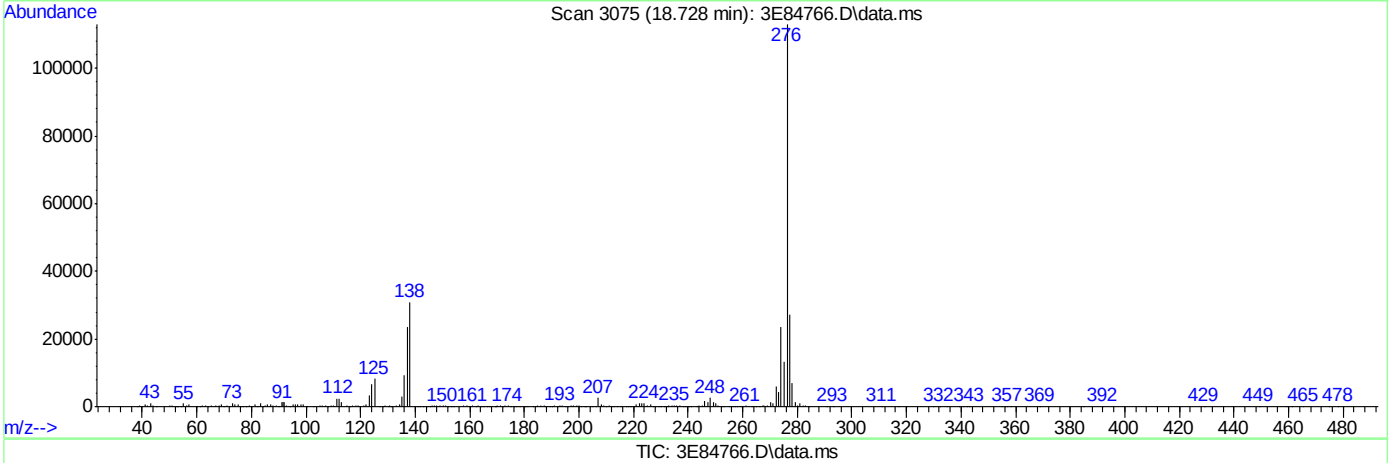
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.73	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84766.D
Acq On : 1 Jul 2016 11:12 pm
Operator : seanb1
Sample : op95059-msd
Misc : op95059,e3e3716,500
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 03 17:38:24 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:35:42 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration





TIC: 3E84766.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.728min (-0.168) 54.26ppm

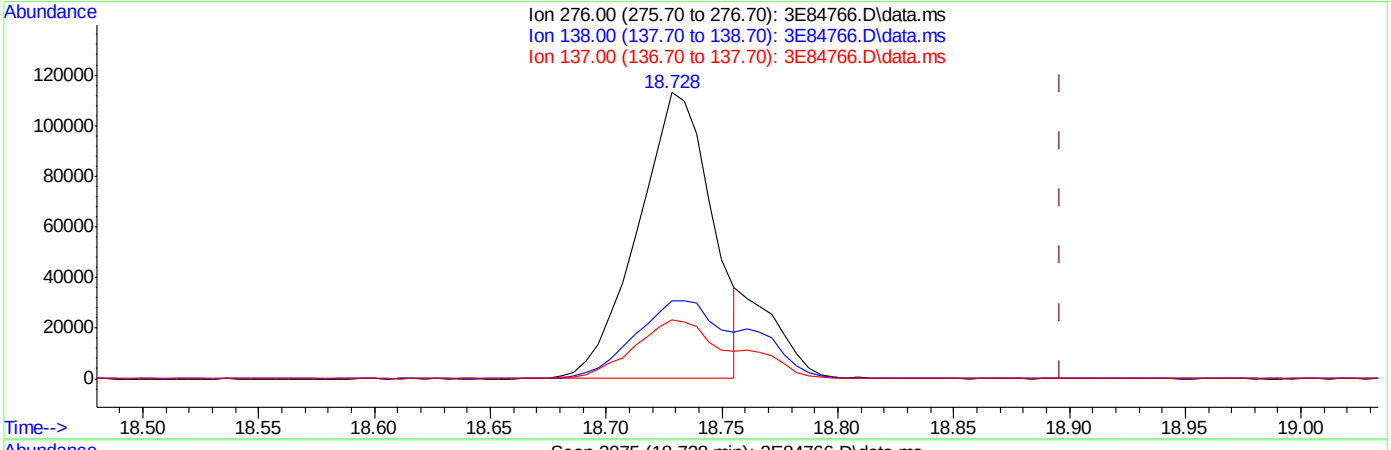
response 291056

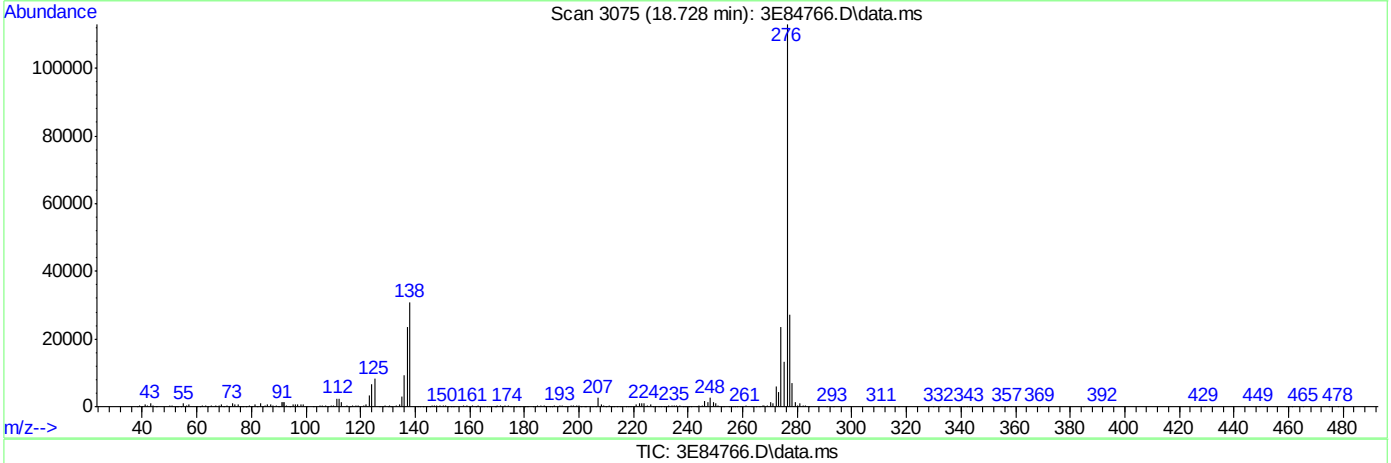
Ion	Exp%	Act%
276.00	100	100
138.00	20.80	27.31
137.00	17.00	20.61
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84766.D
Acq On : 1 Jul 2016 11:12 pm
Operator : seanb1
Sample : op95059-msd
Misc : op95059,e3e3716,500
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jul 03 17:38:24 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MSun Jul 03 17:35:42 2016
QLast Update : Sun Jul 03 17:35:42 2016
Response via : Initial Calibration





TIC: 3E84766.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.728min (-0.168) 46.68ppm m

response 250416

Ion	Exp%	Act%
276.00	100	100
138.00	20.80	27.38
137.00	17.00	20.75
0.00	0.00	0.00

SGS ACCUTEST JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
07/06/16 08:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66585.D
Acq On : 5 Jul 2016 3:04 pm
Operator : linseyk
Sample : op95018a-ms
Misc : op95018a,e4m2995,500
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 05 15:40:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.715	152	56626	4.00	ppm	-0.07
12) Fluorene-d10	12.696	176	67085	4.00	ppm	-0.07
22) Fluoranthene-d10	16.878	212	141952	4.00	ppm	-0.06
28) Benzo(a)pyrene-d12	21.473	264	112553	4.00	ppm	-0.05
35) 1-Methylnaphthalene-d10a	9.715	152	56626	4.00	ppm	-0.07
38) Fluorene-d10a	12.696	176	67085	4.00	ppm	-0.07
System Monitoring Compounds						
2) 2-Fluorophenol	4.111	112	253361	28.08	ppm	0.02
Spiked Amount 50.000	Range 11 - 58		Recovery = 56.16%			
3) Phenol-d5	5.539	99	340019	23.90	ppm	0.05
Spiked Amount 50.000			Recovery = 47.80%			
6) Nitrobenzene-d5	6.922	82	447476	35.35	ppm	-0.05
Spiked Amount 50.000			Recovery = 70.70%			
11) 2-Fluorobiphenyl	10.359	172	627375	27.53	ppm	-0.07
Spiked Amount 50.000			Recovery = 55.06%			
17) 2,4,6-Tribromophenol	13.266	330	179700	57.47	ppm	-0.05
Spiked Amount 50.000			Recovery = 114.94%			
25) Terphenyl-d14	17.687	244	1022017	50.98	ppm	-0.06
Spiked Amount 50.000			Recovery = 101.96%			
Target Compounds						Qvalue
4) Phenol	5.552	94	45763	2.97	ppm	55
5) bis(2-Chloroethyl)ether	5.552	93	8584	0.79	ppm	64
7) Naphthalene	8.252	128	26037	0.66	ppm	98
8) Hexachlorobutadiene	8.515	225	4473	0.66	ppm	89
9) 2-Methylnaphthalene	9.595	142	13405	0.72	ppm	91
10) Hexachlorocyclopentadiene	9.929	237	521	0.73	ppm	97
13) Acenaphthylene	11.361	152	19634	1.10	ppm	87
14) Acenaphthene	11.698	153	13056	1.18	ppm	96
15) Dibenzofuran	12.075	168	18839	1.05	ppm	100
16) Fluorene	12.740	166	21664	1.09	ppm	91
18) Hexachlorobenzene	13.827	284	6937	1.05	ppm	84
19) Pentachlorophenol	14.317	266	22191	9.08	ppm	80
20) Phenanthrene	14.656	178	30795	1.15	ppm	97
21) Anthracene	14.750	178	29109	1.18	ppm	92
23) Fluoranthene	16.915	202	34031	0.82	ppm	99
24) Pyrene	17.311	202	35250	0.87	ppm	98
26) Benzo[a]anthracene	19.401	228	29789	0.85	ppm #	83
27) Chrysene	19.457	228	29245	0.80	ppm	99
29) Benzo[b]fluoranthene	21.060	252	30927	0.79	ppm	93
30) Benzo[k]fluoranthene	21.088	252	28475	0.75	ppm	94
31) Benzo[a]pyrene	21.515	252	26719	0.76	ppm	93
32) Indeno[1,2,3-cd]pyrene	23.043	276	34198	0.83	ppm	91
33) Dibenz[a,h]anthracene	23.084	278	28046	0.82	ppm	93
34) Benzo[g,h,i]perylene	23.442	276	28708	0.80	ppm	98
36) 1,4-Dioxane	2.247	88	3358m	0.86	ppm	
39) 4,6-dinitro-2-methylph...	12.955	198	18144	5.60	ppm	95
40) 1,2-Diphenylhydrazine	13.098	77	21358	1.15	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66585.D
Acq On : 5 Jul 2016 3:04 pm
Operator : linseyk
Sample : op95018a-ms
Misc : op95018a,e4m2995,500
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 05 15:40:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	13.075	169	15915	1.21	ppm #	76

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

7.4.5

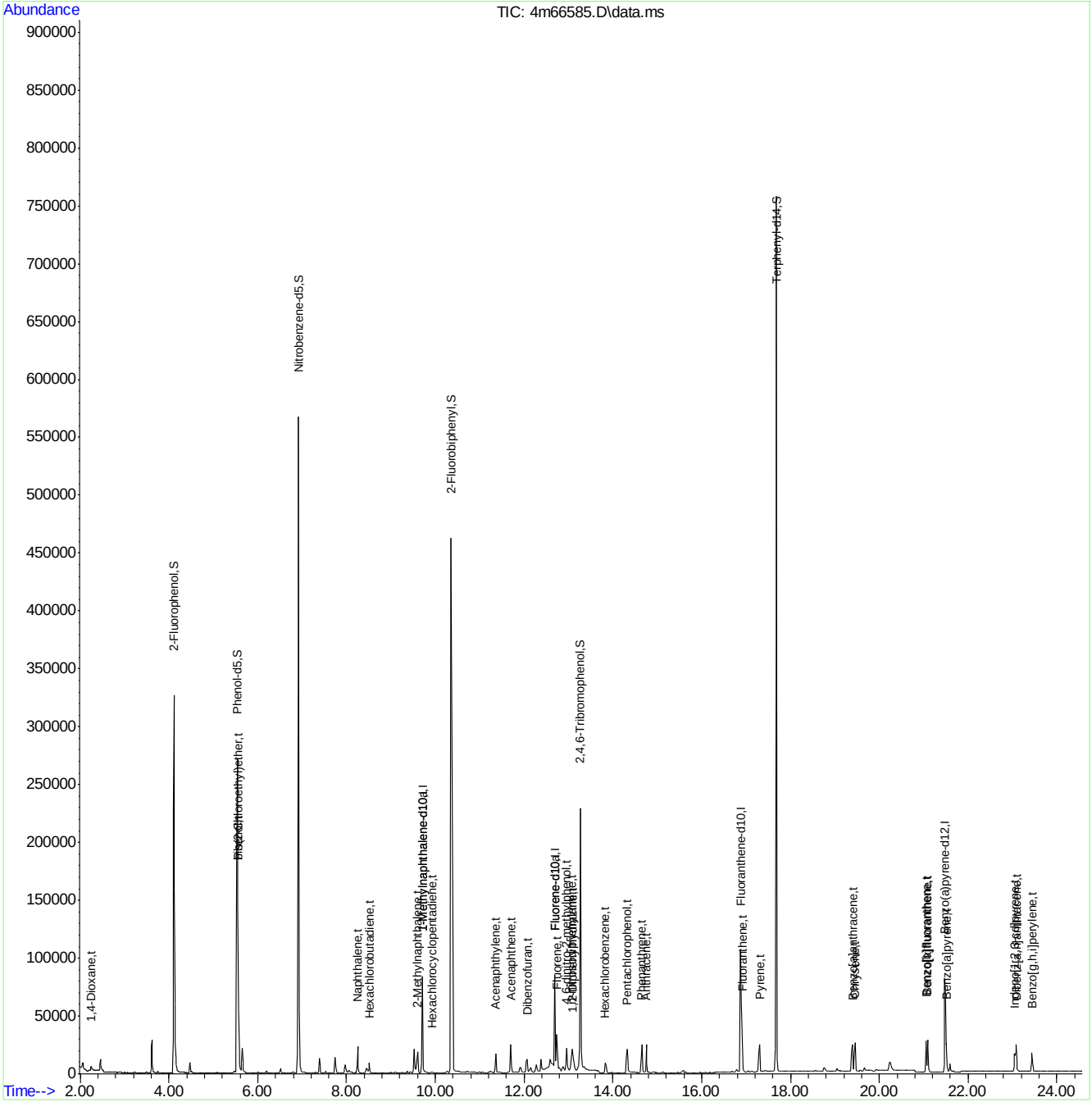
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66585.D
Acq On : 5 Jul 2016 3:04 pm
Operator : linseyk
Sample : op95018a-ms
Misc : op95018a,e4m2995,500
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 05 15:40:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration



M4M2974SIM.M Tue Jul 05 15:40:38 2016 MANAGER Page: 3

Manual Integration Approval Summary

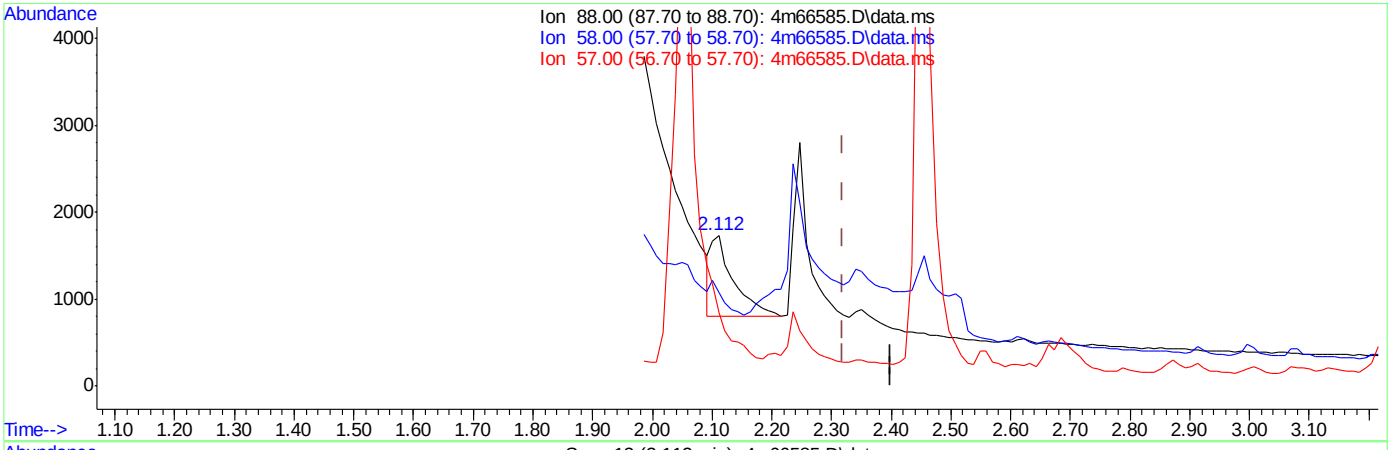
Sample Number:	OP95018A-MS	**Method:**	SW846 8270D BY SIM
Lab FileID:	4M66585.D	**Analyst approved:**	07/05/16 15:43 Linsey Kirschmann
Injection Time:	07/05/16 15:04	**Supervisor approved:**	07/06/16 08:23 Nina Pandya

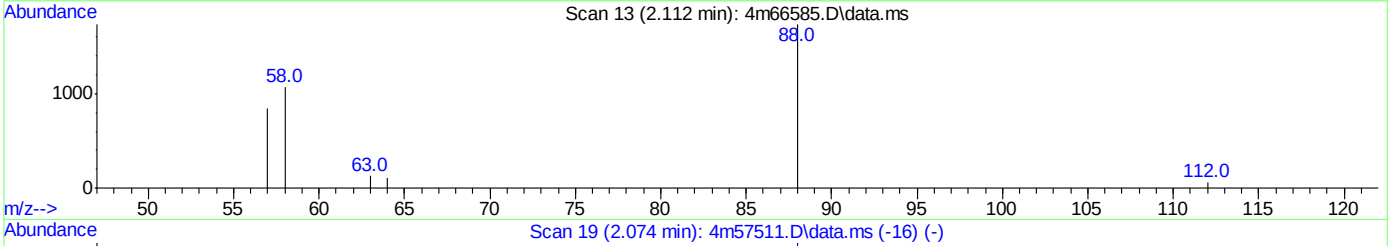
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.25	Poor instrument integration

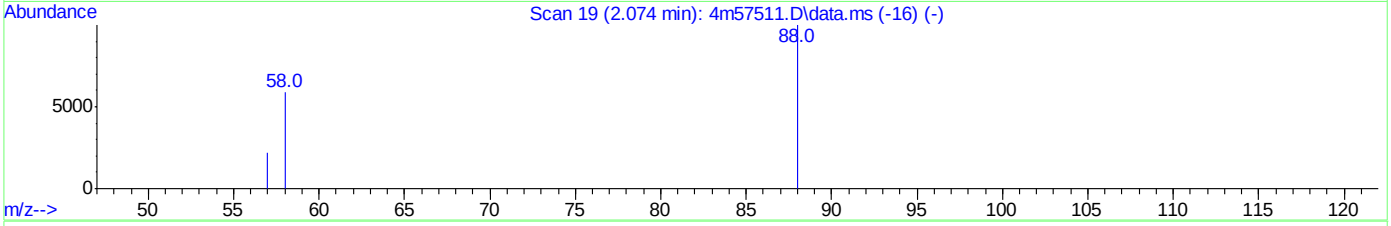
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66585.D
Acq On : 5 Jul 2016 3:04 pm
Operator : linseyk
Sample : op95018a-ms
Misc : op95018a,e4m2995,500
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 05 15:38:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration







TIC: 4m66585.D\data.ms

(36) 1,4-Dioxane (t)

2.112min (-0.208) 0.60ppm

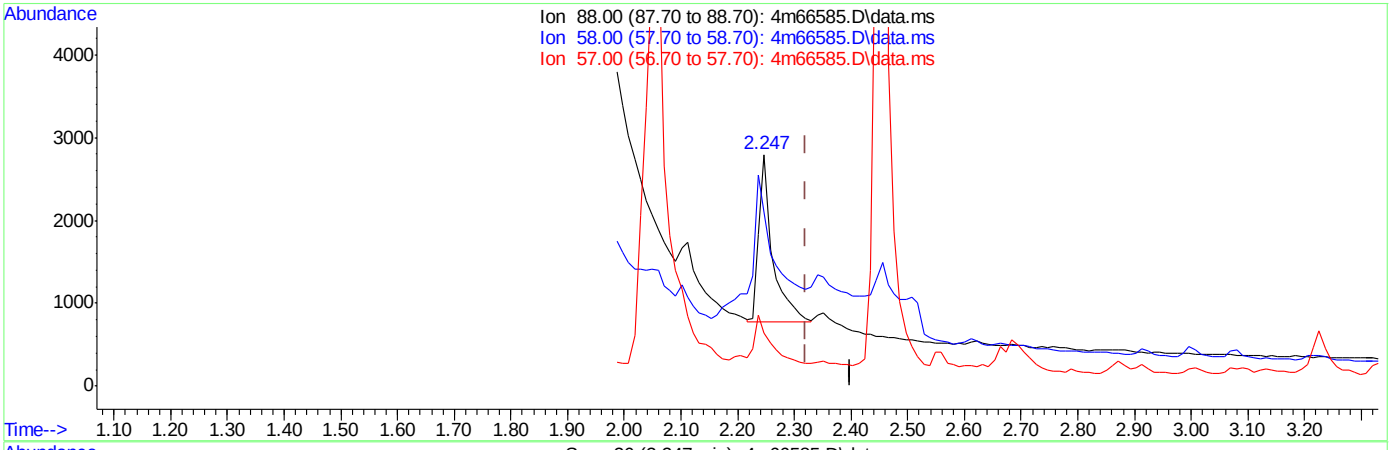
response 2441

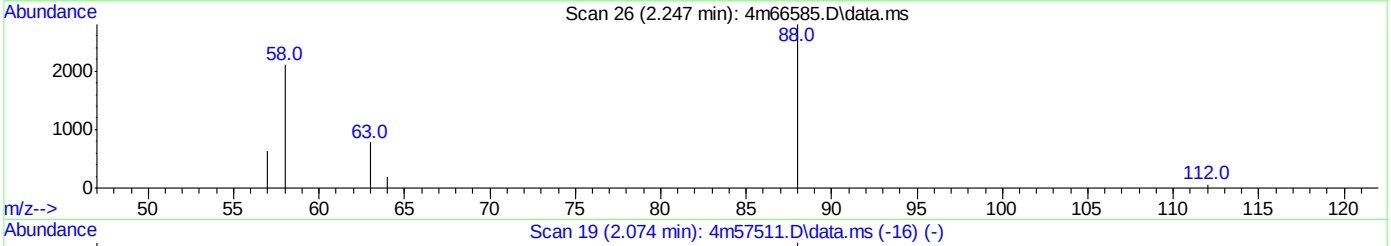
Ion	Exp%	Act%
88.00	100	100
58.00	12.30	0.00
57.00	5.80	0.00
0.00	0.00	0.00

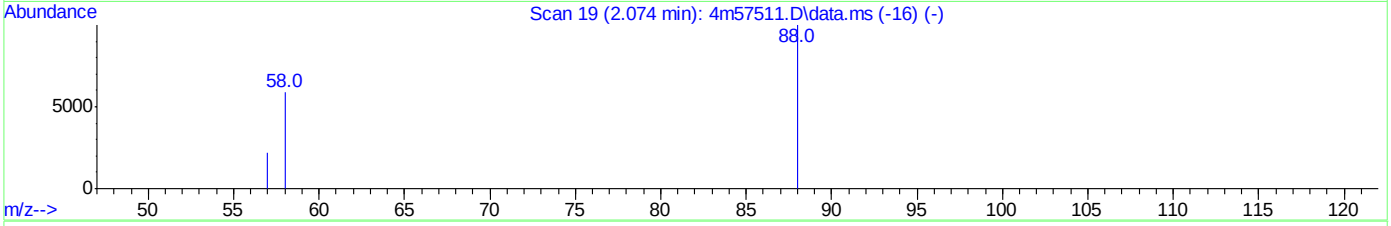
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66585.D
Acq On : 5 Jul 2016 3:04 pm
Operator : linseyk
Sample : op95018a-ms
Misc : op95018a,e4m2995,500
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jul 05 15:38:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration







TIC: 4m66585.D\data.ms

(36) 1,4-Dioxane (t)

2.247min (-0.073) 0.86ppm m

response 3358

Ion	Exp%	Act%
88.00	100	100
58.00	12.30	75.15#
57.00	5.80	22.70
0.00	0.00	0.00

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66586.D
Acq On : 5 Jul 2016 3:37 pm
Operator : linseyk
Sample : op95018a-msd
Misc : op95018a,e4m2995,500
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 05 17:33:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jul 05 15:35:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	9.715	152	60324	4.00	ppm		-0.07
12) Fluorene-d10	12.696	176	71538	4.00	ppm		-0.07
22) Fluoranthene-d10	16.897	212	152138	4.00	ppm		-0.04
28) Benzo(a)pyrene-d12	21.487	264	130217	4.00	ppm		-0.03
35) 1-Methylnaphthalene-d10a	9.715	152	60324	4.00	ppm		#-0.07
38) Fluorene-d10a	12.696	176	71538	4.00	ppm		-0.07
System Monitoring Compounds							
2) 2-Fluorophenol	4.163	112	274354	28.54	ppm		0.07
Spiked Amount 50.000	Range 11 - 58		Recovery = 57.08%				
3) Phenol-d5	5.607	99	356537	23.52	ppm		0.12
Spiked Amount 50.000			Recovery = 47.04%				
6) Nitrobenzene-d5	6.922	82	420541	31.19	ppm		-0.05
Spiked Amount 50.000			Recovery = 62.38%				
11) 2-Fluorobiphenyl	10.383	172	600256	24.72	ppm		-0.05
Spiked Amount 50.000			Recovery = 49.44%				
17) 2,4,6-Tribromophenol	13.290	330	183736	55.11	ppm		-0.02
Spiked Amount 50.000			Recovery = 110.22%				
25) Terphenyl-d14	17.687	244	964558	44.90	ppm		-0.06
Spiked Amount 50.000			Recovery = 89.80%				
Target Compounds							Qvalue
4) Phenol	5.621	94	49349	3.01	ppm	#	35
5) bis(2-Chloroethyl)ether	5.552	93	7157	0.62	ppm	#	53
7) Naphthalene	8.252	128	24316	0.58	ppm		100
8) Hexachlorobutadiene	8.515	225	4063	0.57	ppm		86
9) 2-Methylnaphthalene	9.595	142	45531	2.28	ppm		65
10) Hexachlorocyclopentadiene	9.929	237	507	0.70	ppm		99
13) Acenaphthylene	11.361	152	20676	1.09	ppm		90
14) Acenaphthene	11.697	153	12099	1.03	ppm		97
15) Dibenzofuran	12.075	168	20310	1.06	ppm		100
16) Fluorene	12.740	166	20803	0.98	ppm		85
18) Hexachlorobenzene	13.827	284	6699	0.95	ppm		81
19) Pentachlorophenol	14.336	266	16150	6.20	ppm		94
20) Phenanthrene	14.656	178	30860	1.08	ppm		100
21) Anthracene	14.750	178	29107	1.11	ppm		90
23) Fluoranthene	16.915	202	33371	0.75	ppm		97
24) Pyrene	17.311	202	35414	0.82	ppm		97
26) Benzo[a]anthracene	19.401	228	27652	0.74	ppm	#	86
27) Chrysene	19.457	228	26532	0.68	ppm		95
29) Benzo[b]fluoranthene	21.060	252	24978	0.55	ppm		96
30) Benzo[k]fluoranthene	21.102	252	24395	0.56	ppm		97
31) Benzo[a]pyrene	21.515	252	21426	0.52	ppm		96
32) Indeno[1,2,3-cd]pyrene	23.057	276	24069	0.50	ppm		98
33) Dibenz[a,h]anthracene	23.084	278	20431	0.52	ppm		95
34) Benzo[g,h,i]perylene	23.442	276	19710	0.47	ppm		98
36) 1,4-Dioxane	2.247	88	2701	0.63	ppm	#	28
39) 4,6-dinitro-2-methylph...	12.979	198	12856	3.84	ppm		61
40) 1,2-Diphenylhydrazine	13.098	77	21419	1.08	ppm		94

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66586.D
Acq On : 5 Jul 2016 3:37 pm
Operator : linseyk
Sample : op95018a-msd
Misc : op95018a,e4m2995,500
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 05 17:33:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jul 05 15:35:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	13.075	169	15478	1.10	ppm	87

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

7.4.6

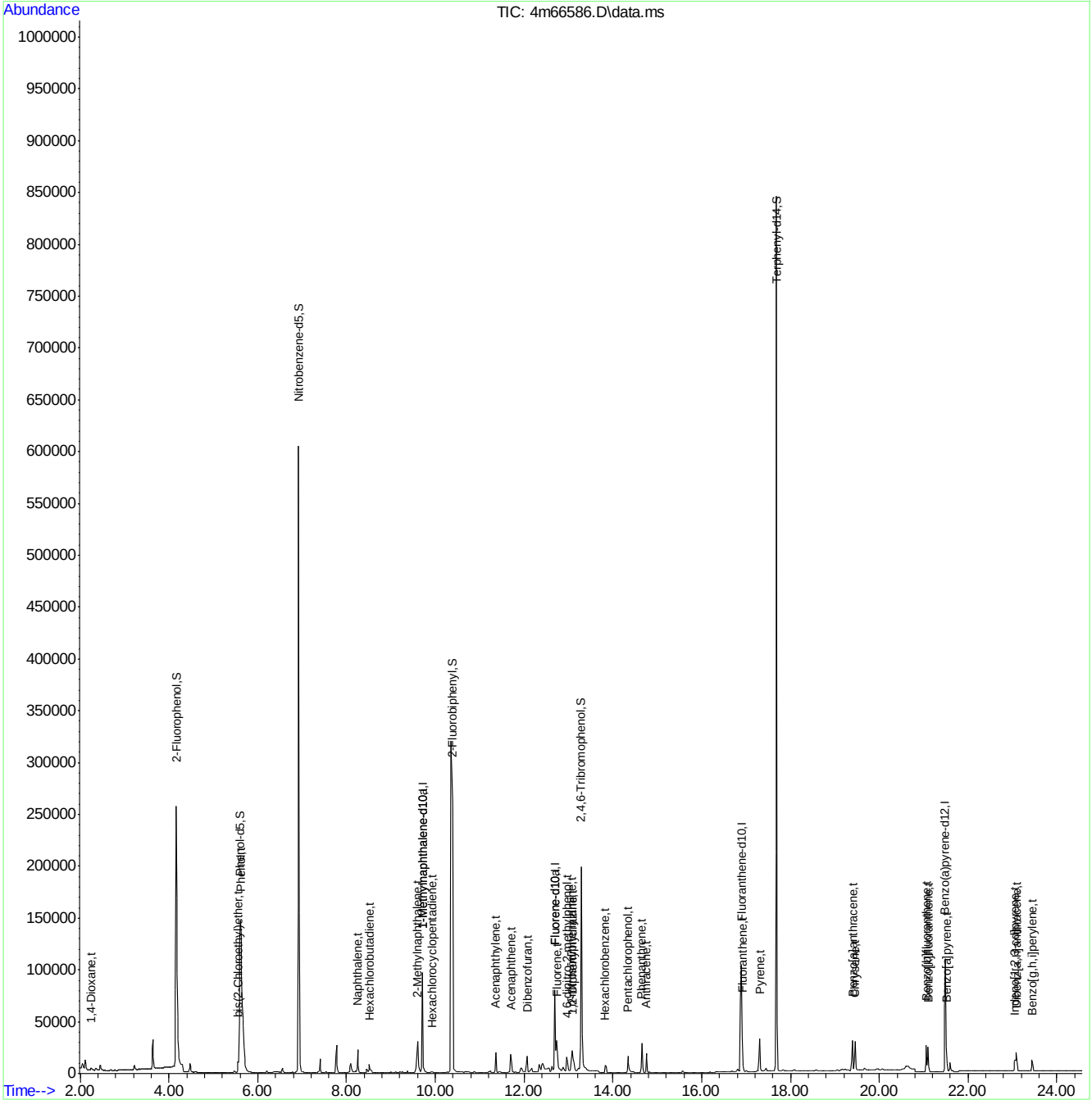
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66586.D
Acq On : 5 Jul 2016 3:37 pm
Operator : linseyk
Sample : op95018a-msd
Misc : op95018a,e4m2995,500
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jul 05 17:33:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jul 05 15:35:21 2016
Response via : Initial Calibration



M4M2974SIM.M Tue Jul 05 17:33:36 2016 MANAGER Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62830.D
Acq On : 7 Jul 2016 5:39 pm
Operator : linseyk
Sample : op95059a-ms
Misc : op95059a,e3m2967,500
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 08 10:05:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.702	150	709881	4.00	ppm	-0.06
14) Fluorene-d10	13.687	176	1002026	4.00	ppm	-0.04
21) Fluoranthene-d10	17.904	212	1662681	4.00	ppm	-0.02
31) Benzo(a)pyrene-d12	22.488	264	1440434	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.662	112	3632909	32.67	ppm	-0.05
Spiked Amount 50.000			Recovery = 65.34%			
4) Phenol-d5	6.273	99	4612556	26.21	ppm	-0.01
Spiked Amount 50.000			Recovery = 52.42%			
7) Nitrobenzene-d5	7.782	82	5128755	35.62	ppm	-0.10
Spiked Amount 50.000			Recovery = 71.24%			
15) 2-Fluorobiphenyl	11.358	172	11459193	37.36	ppm	-0.04
Spiked Amount 50.000			Recovery = 74.72%			
20) 2,4,6-Tribromophenol	14.252	330	1738932	53.70	ppm	0.00
Spiked Amount 50.000			Recovery = 107.40%			
28) Terphenyl-d14	18.692	244	10822811	43.23	ppm	-0.01
Spiked Amount 50.000			Recovery = 86.46%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.360	88	21644	0.49	ppm #	67
5) Phenol	6.285	94	634201	3.27	ppm #	88
6) bis(2-Chloroethyl)ether	6.345	93	108452	0.74	ppm	82
8) Nitrobenzene	7.820	77	120267	0.76	ppm	87
9) Naphthalene	9.195	128	342648	0.81	ppm	97
10) Hexachlorobutadiene	9.496	225	51482	0.81	ppm	91
11) 2-Methylnaphthalene	10.579	141	170956	0.78	ppm	93
13) Hexachlorocyclopentadiene	10.927	237	34716	0.78	ppm	91
16) Acenaphthylene	12.341	152	324212	0.86	ppm	94
17) Acenaphthene	12.712	153	218650	0.90	ppm	80
18) 4,6-dinitro-2-methylph...	13.913	198	219505	11.05	ppm	71
19) Fluorene	13.744	166	249220	0.91	ppm	73
22) Hexachlorobenzene	14.859	284	75022	0.89	ppm	79
23) Pentachlorophenol	15.292	266	100626	3.25	ppm	93
24) Phenanthrene	15.663	178	375344	0.89	ppm	95
25) Anthracene	15.756	178	344271	0.87	ppm	93
26) Fluoranthene	17.935	202	438338	0.89	ppm	95
27) Pyrene	18.321	202	444693	0.99	ppm	95
29) Benzo[a]anthracene	20.407	228	381076	1.12	ppm	92
30) Chrysene	20.453	228	356163	0.89	ppm	88
32) Benzo[b]fluoranthene	22.074	252	411381	0.90	ppm	83
33) Benzo[k]fluoranthene	22.112	252	232311	0.48	ppm	87
34) Benzo[a]pyrene	22.526	252	185389	0.39	ppm	92
35) Indeno[1,2,3-cd]pyrene	24.049	276	240093	0.61	ppm	91
36) Dibenz[a,h]anthracene	24.068	278	190880	0.60	ppm	97
37) Benzo[g,h,i]perylene	24.426	276	140011	0.38	ppm	100

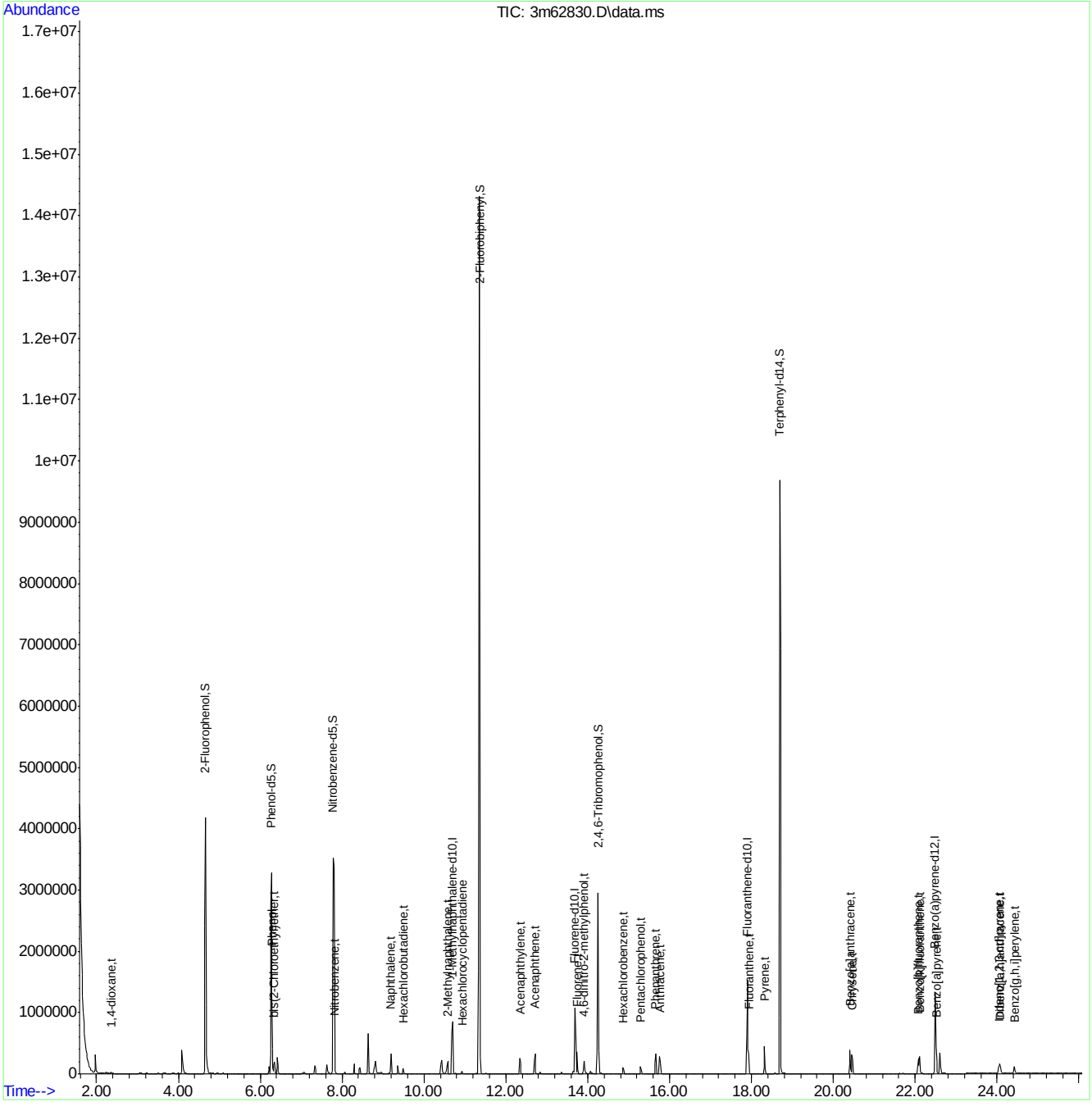
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62830.D
Acq On : 7 Jul 2016 5:39 pm
Operator : linseyk
Sample : op95059a-ms
Misc : op95059a,e3m2967,500
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jul 08 10:05:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62831.D
Acq On : 7 Jul 2016 6:12 pm
Operator : linseyk
Sample : op95059a-msd
Misc : op95059a,e3m2967,500
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 08 10:06:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.681	150	735365	4.00	ppm	-0.08
14) Fluorene-d10	13.687	176	1041203	4.00	ppm	-0.04
21) Fluoranthene-d10	17.904	212	1685335	4.00	ppm	-0.02
31) Benzo(a)pyrene-d12	22.488	264	1459930	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.662	112	3405948	29.57	ppm	-0.05
Spiked Amount 50.000			Recovery = 59.14%			
4) Phenol-d5	6.261	99	4201161	23.04	ppm	-0.02
Spiked Amount 50.000			Recovery = 46.08%			
7) Nitrobenzene-d5	7.782	82	5075770	34.03	ppm	-0.10
Spiked Amount 50.000			Recovery = 68.06%			
15) 2-Fluorobiphenyl	11.358	172	11624692	36.47	ppm	-0.04
Spiked Amount 50.000			Recovery = 72.94%			
20) 2,4,6-Tribromophenol	14.252	330	1730208	51.42	ppm	0.00
Spiked Amount 50.000			Recovery = 102.84%			
28) Terphenyl-d14	18.692	244	9116599	35.92	ppm	-0.01
Spiked Amount 50.000			Recovery = 71.84%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.359	88	20687	0.45	ppm	99
5) Phenol	6.285	94	539316	2.69	ppm	95
6) bis(2-Chloroethyl)ether	6.345	93	105806	0.70	ppm	84
8) Nitrobenzene	7.820	77	115575	0.71	ppm	84
9) Naphthalene	9.194	128	326574	0.75	ppm	97
10) Hexachlorobutadiene	9.496	225	49741	0.76	ppm	90
11) 2-Methylnaphthalene	10.558	141	165822	0.73	ppm #	57
13) Hexachlorocyclopentadiene	10.927	237	32559	0.71	ppm	91
16) Acenaphthylene	12.341	152	314380	0.81	ppm	94
17) Acenaphthene	12.712	153	213680	0.84	ppm	77
18) 4,6-dinitro-2-methylph...	13.913	198	201887	10.12	ppm	81
19) Fluorene	13.743	166	244145	0.86	ppm	76
22) Hexachlorobenzene	14.859	284	71589	0.84	ppm	83
23) Pentachlorophenol	15.292	266	110470	3.48	ppm	97
24) Phenanthrene	15.663	178	357447	0.83	ppm	95
25) Anthracene	15.756	178	327523	0.81	ppm	93
26) Fluoranthene	17.935	202	427461	0.86	ppm	95
27) Pyrene	18.321	202	432169	0.95	ppm	95
29) Benzo[a]anthracene	20.407	228	365317	1.06	ppm	92
30) Chrysene	20.453	228	351916	0.87	ppm	90
32) Benzo[b]fluoranthene	22.074	252	387990	0.84	ppm	84
33) Benzo[k]fluoranthene	22.112	252	221357	0.45	ppm	88
34) Benzo[a]pyrene	22.526	252	179367	0.37	ppm	92
35) Indeno[1,2,3-cd]pyrene	24.049	276	232480	0.58	ppm	91
36) Dibenz[a,h]anthracene	24.068	278	178216	0.55	ppm	97
37) Benzo[g,h,i]perylene	24.426	276	138850	0.38	ppm	100

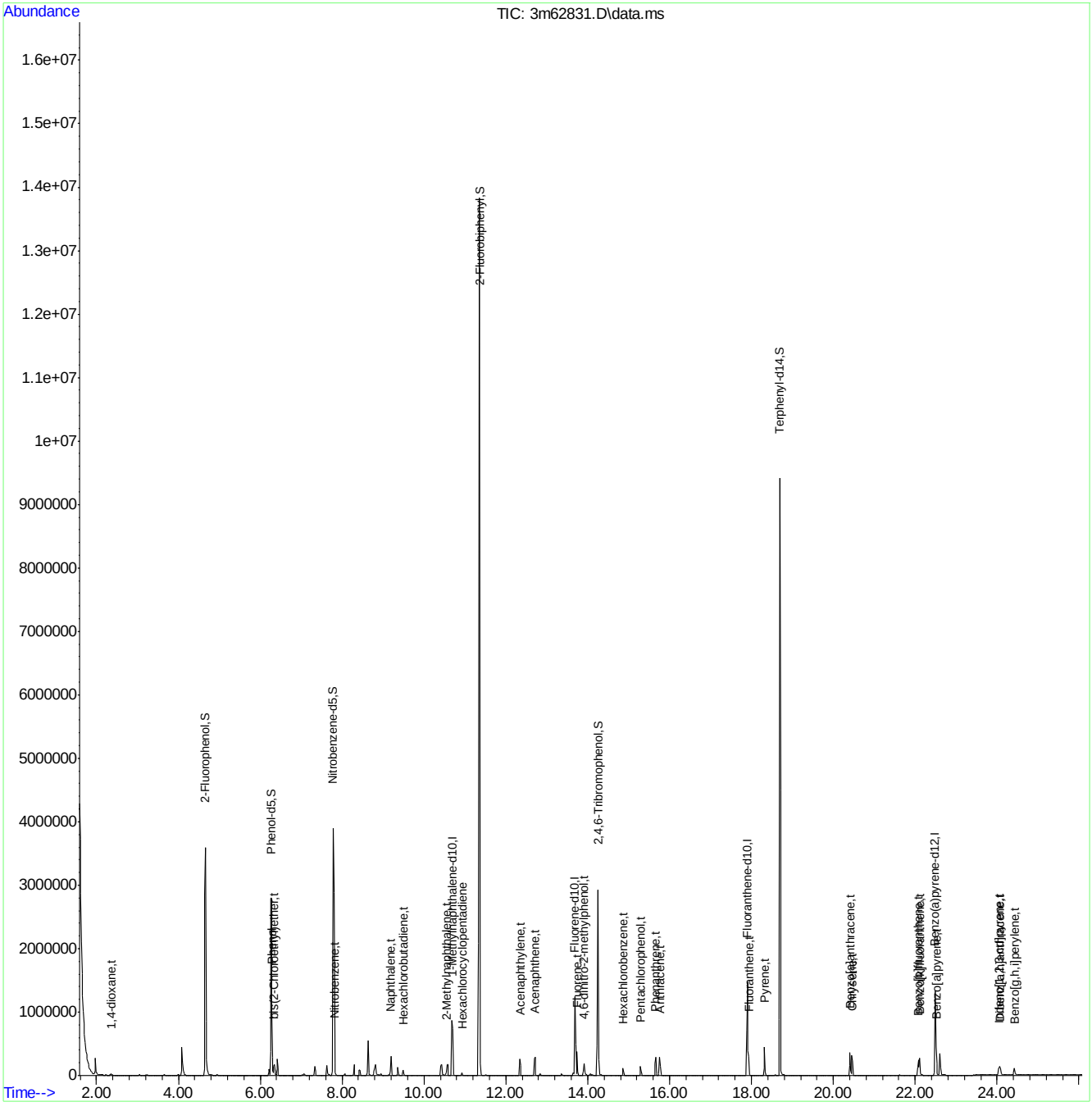
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62831.D
Acq On : 7 Jul 2016 6:12 pm
Operator : linseyk
Sample : op95059a-msd
Misc : op95059a,e3m2967,500
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jul 08 10:06:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration



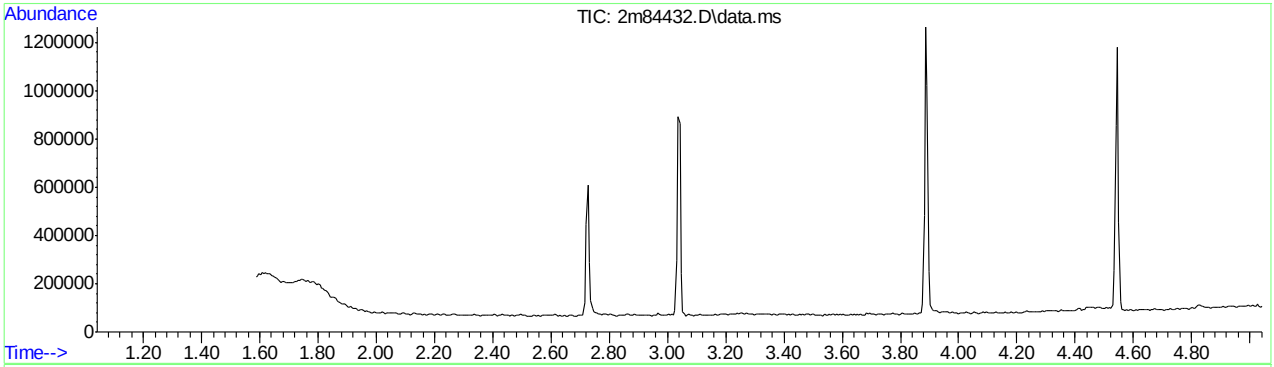
M3M2942SIM.M Fri Jul 08 10:06:31 2016 RPT1 Page: 2

DFTPP

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84432.D
Acq On : 7 Jun 2016 9:17 am
Operator : ashleyn
Sample : dftpp
Misc : op94122,e2m3720
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\dftpp2m.M
Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
Last Update : Thu Mar 24 11:54:32 2016



AutoFind: Scans 272, 273, 274; Background Corrected with Scan 263

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.0	28076	PASS
68	69	0.00	2	1.9	578	PASS
69	198	0.00	100	47.6	29659	PASS
70	69	0.00	2	0.5	163	PASS
127	198	40	60	55.5	34590	PASS
197	198	0.00	1	0.4	231	PASS
198	198	100	100	100.0	62365	PASS
199	198	5	9	7.0	4366	PASS
275	198	10	30	25.5	15903	PASS
365	198	1	100	4.8	3000	PASS
441	443	0.10	100	77.1	5772	PASS
442	198	40	100	62.4	38906	PASS
443	442	17	23	19.2	7487	PASS

SGS ACCUTEST JC22613

Average of 3.036 to 3.047 min.: 2m84432.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	1666	52.00	1632	64.00	80	77.05	34428
37.00	71	52.80	30	65.05	520	78.05	2185
38.00	325	54.10	33	66.95	152	79.05	2847
39.10	2144	56.00	827	68.05	578	80.00	1899
42.05	64	57.00	2153	69.00	29659	81.10	2316
43.10	175	57.95	94	70.00	163	81.95	547
45.05	70	59.20	23	72.10	18	83.05	389
46.20	34	59.95	156	73.15	391	85.05	748
49.05	101	61.05	173	74.00	3481	86.00	967
50.05	7543	62.00	271	75.05	4970	86.95	338
51.05	28076	63.00	1171	76.00	1729	87.95	89

Average of 3.036 to 3.047 min.: 2m84432.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
88.95	146	100.00	297	109.95	17462	120.00	167
90.00	75	100.95	1492	111.05	2391	120.20	40
91.00	550	101.90	27	112.00	274	120.90	118
91.95	549	102.20	38	113.00	57	122.05	603
93.05	4542	102.95	470	113.80	32	123.10	1086
93.90	301	104.00	770	115.10	149	123.95	448
94.90	342	105.00	765	115.70	34	125.05	461
96.05	381	106.05	366	116.15	548	125.90	43
98.00	2898	107.05	11181	117.10	9523	126.20	72
99.00	2308	108.05	1859	118.00	724	127.10	34590
99.70	23	108.95	93	118.90	21	128.05	2532

Average of 3.036 to 3.047 min.: 2m84432.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
129.00	13253	138.15	102	147.05	973	156.90	244
130.00	1067	139.10	32	148.05	2324	158.05	299
131.05	418	140.10	7	149.00	252	159.00	229
132.10	204	141.05	1699	149.90	91	159.20	53
133.95	433	142.00	658	151.10	236	160.00	673
134.20	72	143.00	350	151.30	25	161.00	685
135.05	1087	144.00	217	152.05	73	161.20	77
136.00	432	144.50	40	153.05	652	162.05	264
137.00	571	144.80	49	154.00	408	162.60	30
137.20	232	145.05	103	155.05	925	163.15	126
137.90	79	145.95	376	156.05	1590	163.70	23

Average of 3.036 to 3.047 min.: 2m84432.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
164.05	119	173.05	252	182.80	69	193.10	1073
165.05	719	174.00	508	183.10	36	193.90	136
166.00	490	175.10	1659	184.00	286	194.10	203
167.10	3224	176.00	419	185.05	1335	194.50	32
168.00	1506	177.00	729	186.10	9248	194.90	34
168.20	140	178.00	170	187.05	2560	195.20	153
169.00	185	179.00	3040	188.05	325	196.10	1263
169.80	83	180.05	1847	189.05	759	196.70	231
170.30	59	181.10	869	189.70	16	197.05	175
171.00	179	181.60	41	191.00	274	198.00	62365
172.00	421	182.10	209	192.00	647	199.00	4366

Average of 3.036 to 3.047 min.: 2m84432.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
199.90	272	210.05	288	220.10	91	229.05	948
201.05	156	211.10	595	221.00	1966	229.80	123
201.55	121	212.00	133	221.80	78	230.00	51
202.05	27	212.60	21	222.10	469	231.00	270

203.05	509	213.05	95	223.05	1255	231.20	75
204.00	2295	214.25	61	224.10	9932	231.95	83
205.10	4501	215.00	84	225.10	2602	232.95	15
206.10	16868	216.05	431	225.95	161	233.20	41
207.10	2226	217.05	4538	226.30	151	233.90	109
208.00	467	218.10	727	227.10	4486	234.10	221
208.95	124	219.15	56	228.05	720	235.10	540

Average of 3.036 to 3.047 min.: 2m84432.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
236.00	224	243.05	421	251.90	65	261.10	105
237.00	446	244.10	7234	252.25	108	262.05	63
238.10	27	245.05	846	253.10	81	262.50	36
238.30	23	246.05	1589	253.60	26	263.00	20
238.60	38	247.05	311	254.00	276	263.85	7
239.00	15	248.10	73	255.10	38585	264.20	68
239.20	45	249.05	348	256.10	5741	265.05	1190
240.05	222	249.50	31	257.05	430	265.70	36
240.85	222	249.95	72	258.05	2485	265.90	36
241.10	48	250.60	27	259.00	464	266.70	23
242.10	495	251.10	103	260.10	77	267.85	54

Average of 3.036 to 3.047 min.: 2m84432.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
269.60	20	278.10	149	286.80	26	296.10	6247
270.05	111	278.70	23	288.10	35	297.10	861
270.90	57	279.00	23	288.80	34	297.70	26
271.30	129	279.20	33	289.00	31	298.00	69
272.00	158	279.90	53	290.80	24	300.30	43
272.95	1088	280.60	42	291.15	127	301.00	120
274.10	3205	282.90	31	292.05	116	301.70	31
275.10	15903	283.20	92	293.10	384	301.95	49
276.05	2086	283.95	85	293.90	43	302.90	262
277.05	1669	285.05	374	294.25	57	303.10	321
277.90	98	286.15	86	295.00	123	303.90	122

Average of 3.036 to 3.047 min.: 2m84432.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
304.10	46	313.05	71	324.05	298	335.10	358
304.70	39	313.90	42	325.05	42	335.90	47
306.00	19	314.15	311	325.90	41	337.10	26
306.80	31	315.00	651	327.05	401	338.90	21
307.60	20	316.10	312	328.05	173	339.80	28
308.05	71	316.85	59	329.00	65	340.20	18
308.30	33	317.30	29	331.10	18	341.00	41
309.20	65	319.10	22	332.05	164	341.15	103
310.15	123	321.10	183	333.00	44	343.20	17
310.70	17	322.10	59	333.15	129	344.00	39
311.20	19	323.10	2018	334.05	1201	345.10	17

Average of 3.036 to 3.047 min.: 2m84432.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
346.05	516	359.00	37	371.10	131	384.70	28
346.95	33	360.00	43	371.30	61	387.40	20
347.90	21	362.10	18	372.10	917	388.10	24
351.10	41	363.70	20	372.95	266	389.20	47
351.90	156	364.10	44	373.80	20	390.10	122
352.10	409	365.00	3000	374.20	34	391.10	107
353.00	119	366.05	419	378.00	17	391.95	53
353.20	278	366.90	16	379.10	38	400.80	57
354.10	528	367.10	68	379.50	22	402.05	342
356.00	36	369.00	22	383.05	319	403.00	442
356.90	16	370.10	54	384.00	63	404.05	377

Average of 3.036 to 3.047 min.: 2m84432.D\data.ms

dftpp2m.M Tue Jun 07 12:21:52 2016 Page: 3

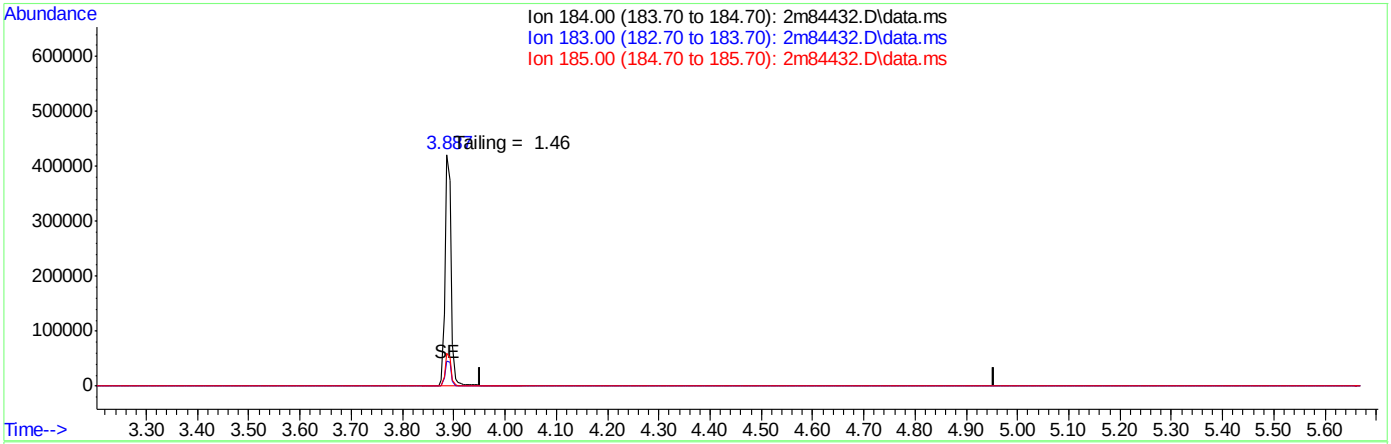
dftpp
Modified:subtracted

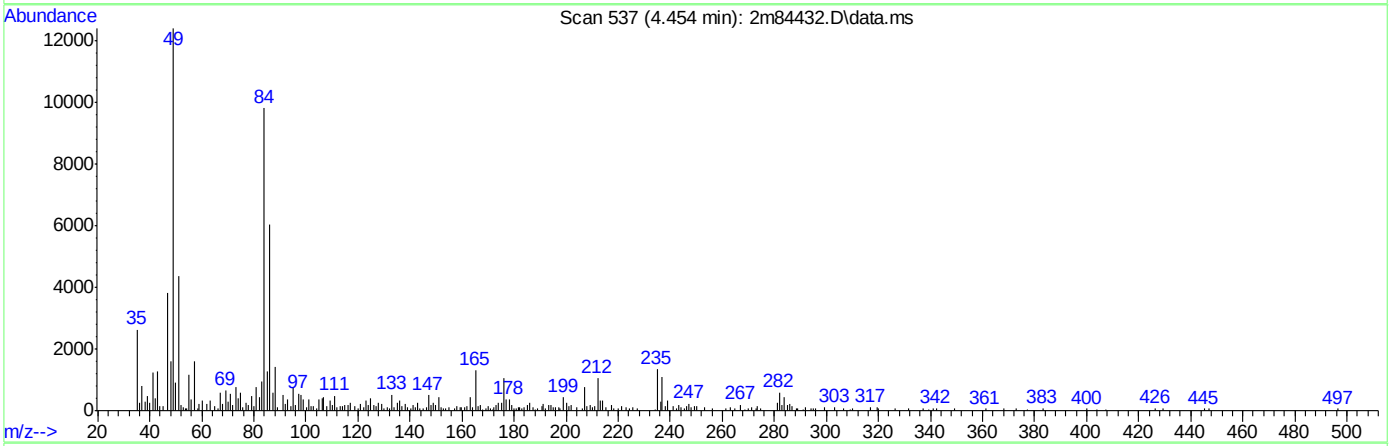
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
404.80	18	421.00	464	428.90	54	443.10	7487
409.30	30	422.05	374	429.80	42	444.05	742
413.00	18	423.10	2772	431.00	36	445.10	20
413.80	17	424.05	346	432.30	103	446.70	23
414.00	17	424.70	18	432.50	17	454.70	29
415.10	40	425.10	38	433.30	121	456.20	27
415.90	24	425.90	17	434.90	19	473.20	18
417.10	51	426.50	20	435.10	49	485.70	17
417.80	19	427.70	68	439.20	17	487.00	53
419.10	29	428.10	33	441.05	5772	495.60	23
420.00	32	428.40	18	442.10	38906		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84432.D
Acq On : 7 Jun 2016 9:17 am
Operator : ashleyn
Sample : dftpp
Misc : op94122,e2m3720
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 07 09:24:36 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





(1) Benzidine

4.454min 0.00 d

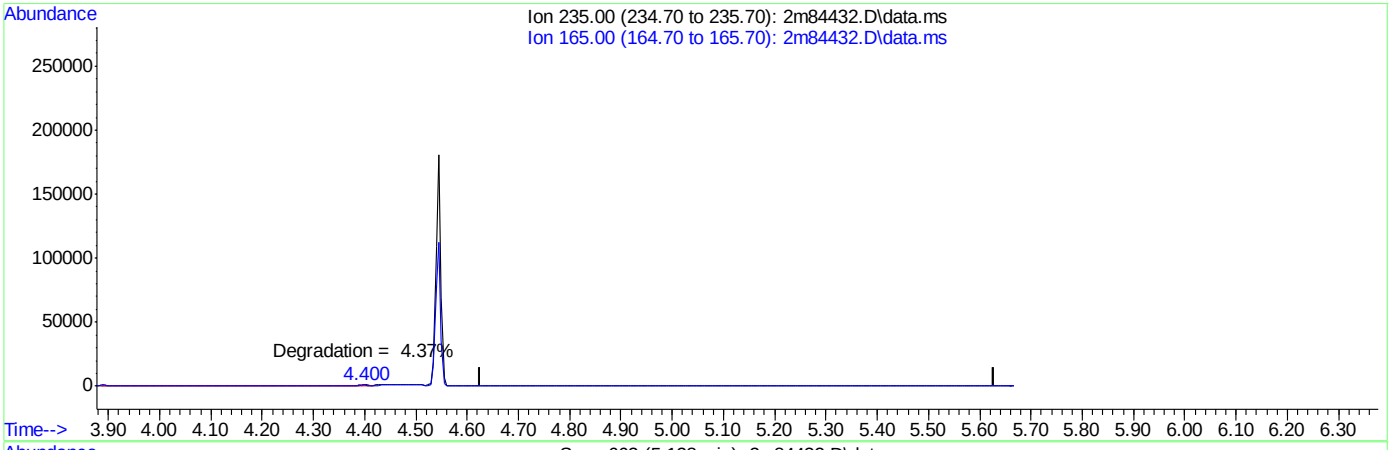
response 0

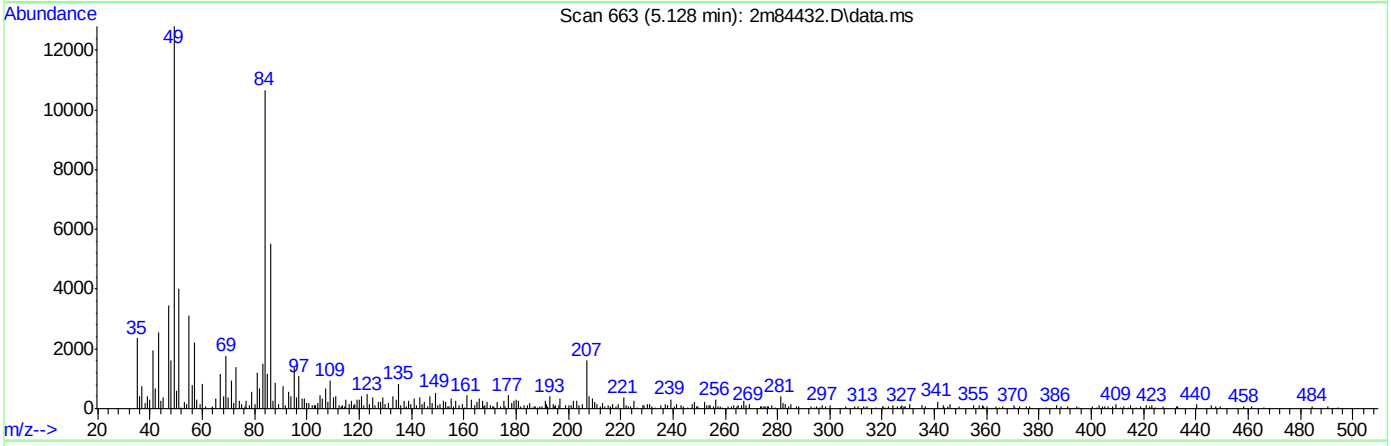
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84432.D
Acq On : 7 Jun 2016 9:17 am
Operator : ashleyn
Sample : dftpp
Misc : op94122,e2m3720
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 07 09:24:36 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m84432.D\data.ms

(2) ddt

5.128min (-5.128) 0.00

response 0

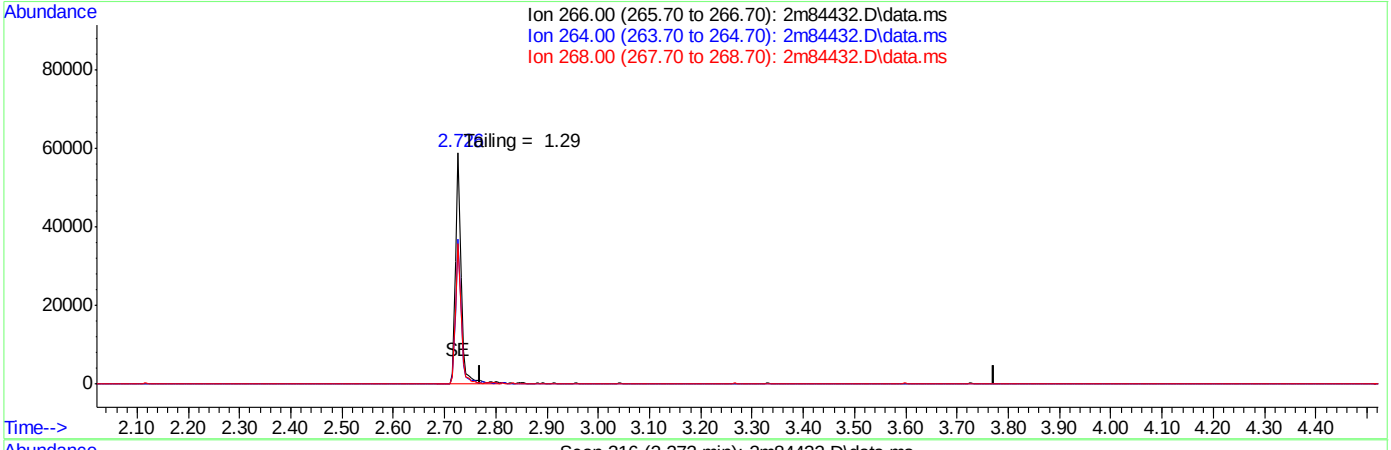
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

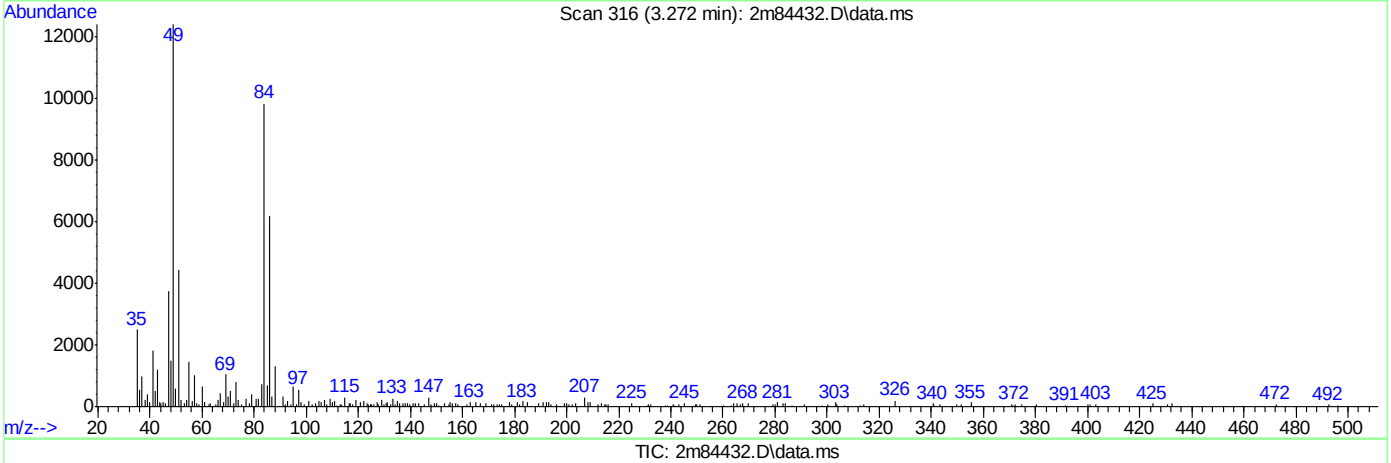
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84432.D
Acq On : 7 Jun 2016 9:17 am
Operator : ashleyn
Sample : dftpp
Misc : op94122,e2m3720
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 07 09:24:36 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m84432.D\data.ms

(3) Pentachlorophenol

3.272min (-3.272) 0.00

response 0

Ion	Exp%	Act%
266.00	100	0.00
264.00	0.00	0.00
268.00	0.00	0.00
0.00	0.00	0.00

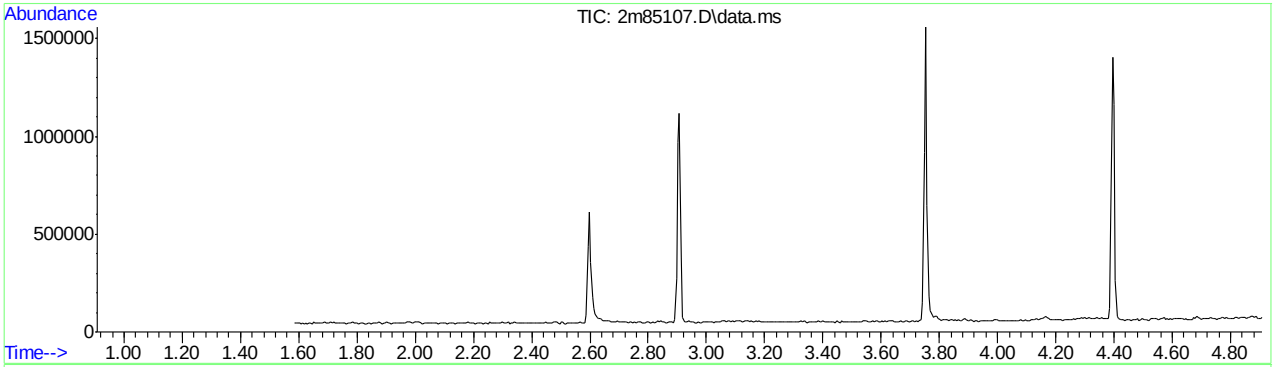
SGS ACCUTEST JC22613

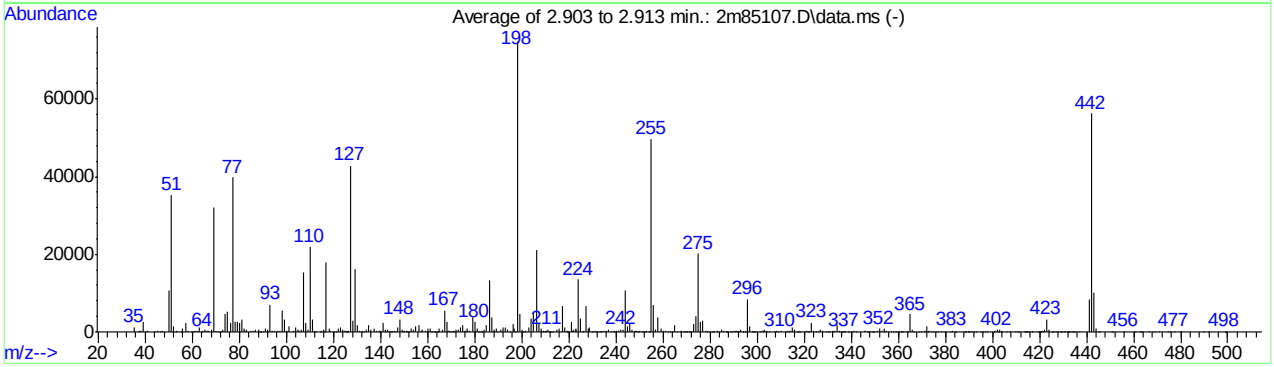
DFTPP

Data Path : C:\msdchem\1\DATA\E2M3754\
Data File : 2m85107.D
Acq On : 28 Jun 2016 9:52 am
Operator : ashleyn
Sample : dftpp
Misc : op94766,e2m3754
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\dftpp2m.M
Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Jun 09 16:42:34 2016
Last Update : Thu Jun 09 16:42:34 2016





AutoFind: Scans 247, 248, 249; Background Corrected with Scan 241

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.2	35314	PASS
68	69	0.00	2	1.7	552	PASS
69	198	0.00	100	42.7	31975	PASS
70	69	0.00	2	0.8	261	PASS
127	198	40	60	57.3	42834	PASS
197	198	0.00	1	1.0	740	PASS
198	198	100	100	100.0	74813	PASS
199	198	5	9	6.1	4542	PASS
275	198	10	30	26.9	20160	PASS
365	198	1	100	6.1	4586	PASS
441	443	0.10	100	81.9	8383	PASS
442	198	40	100	75.2	56266	PASS
443	442	17	23	18.2	10241	PASS

Average of 2.903 to 2.913 min.: 2m85107.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	1253	50.10	10722	60.95	439	70.95	97
37.00	66	51.10	35314	61.95	399	71.50	18
37.90	300	52.05	1483	63.10	1034	72.20	48
38.20	347	52.95	59	63.80	44	72.95	559
39.10	2622	53.30	168	64.20	176	74.10	4625
40.15	151	55.15	24	65.10	529	75.00	5313
41.10	309	56.00	741	66.15	182	76.05	2407
44.00	57	57.00	2362	66.90	353	77.10	39811
45.15	376	58.15	190	68.15	552	78.05	2517
46.10	89	59.80	75	69.00	31975	79.00	2603
47.00	428	60.30	65	70.05	261	80.00	2298

Average of 2.903 to 2.913 min.: 2m85107.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.05	3056	91.95	649	102.90	339	112.30	132
82.00	902	92.20	39	103.90	1185	114.20	71
83.00	497	93.05	7065	104.90	559	115.05	175
85.05	418	93.95	363	105.10	359	116.00	639
86.00	333	95.05	413	106.15	511	116.20	94
86.95	468	96.10	259	107.05	15277	117.00	17838
87.95	480	97.10	330	108.05	2228	118.00	956
88.70	137	98.05	5475	109.05	678	118.85	326
89.10	8	99.05	3090	109.95	21877	120.05	124
90.10	19	100.00	404	111.05	3173	121.00	57
90.95	854	101.05	1597	111.95	295	121.90	917

Average of 2.903 to 2.913 min.: 2m85107.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.00	1258	130.05	1702	139.80	201	147.10	1306
123.90	545	130.90	187	140.10	239	148.10	3322
124.80	320	131.90	28	140.90	2302	149.10	665
125.00	280	132.10	142	141.80	49	149.40	81
125.20	130	133.00	6	142.05	624	149.95	263
125.60	72	134.05	638	142.95	627	151.00	383
125.90	19	135.00	1629	143.70	161	151.20	37
126.20	181	135.95	708	144.20	33	151.70	42
127.10	42834	137.05	860	144.85	104	151.95	134
128.00	2793	138.10	343	145.90	291	153.05	795
129.00	16159	139.05	151	146.10	77	153.95	618

Average of 2.903 to 2.913 min.: 2m85107.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
155.00	1496	163.90	81	171.30	287	180.95	886
156.10	1726	164.20	100	171.95	599	181.70	55
157.10	411	165.05	799	173.05	717	181.90	67
157.95	564	166.10	542	174.05	1200	182.80	115
159.10	303	167.05	5526	175.05	1601	183.00	71
160.00	877	168.05	2580	176.00	158	183.95	449
161.00	898	168.90	443	176.25	274	185.05	1771
161.60	128	169.10	238	176.95	911	186.10	13338
161.90	119	169.70	21	177.90	426	187.10	3879
162.85	76	169.95	79	179.00	3677	188.00	473
163.20	93	170.90	94	180.05	2481	188.40	43

Average of 2.903 to 2.913 min.: 2m85107.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
188.95	981	199.00	4542	208.30	121	214.95	566
189.85	132	200.00	498	208.95	178	216.00	791
191.00	450	200.55	123	209.20	63	217.05	6731
192.05	1278	201.25	73	209.90	152	218.15	1055

dftpp2m.M Tue Jun 28 14:53:42 2016 Page: 2

193.00	1280	201.60	363	210.10	187	218.95	189
194.05	501	203.00	1222	210.80	237	219.30	74
194.85	68	204.05	3513	211.00	707	219.80	41
196.15	2032	205.05	4837	211.70	132	221.00	2664
196.85	740	206.10	20965	211.95	18	221.70	376
197.10	52	207.05	2435	212.50	68	221.95	513
198.00	74813	208.00	745	213.10	57	223.00	896

Average of 2.903 to 2.913 min.: 2m85107.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
223.20	684	231.40	31	239.95	264	248.90	306
224.10	13532	232.00	46	241.00	231	249.20	143
225.05	3419	233.15	124	241.20	187	249.70	71
225.90	133	233.70	80	242.10	694	250.15	177
226.15	214	234.00	284	243.10	526	251.05	16
227.10	6691	235.05	392	244.10	10671	251.65	99
228.05	991	235.95	363	245.05	1336	252.10	94
228.90	1227	237.00	633	246.05	2321	252.30	43
229.90	102	237.90	20	246.90	507	252.95	322
230.20	139	239.05	218	247.80	76	254.00	74
231.00	435	239.30	102	248.05	188	254.20	68

Average of 2.903 to 2.913 min.: 2m85107.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
255.10	49827	265.90	112	274.05	4115	283.10	252
256.10	6942	267.40	47	275.10	20160	284.05	109
257.05	616	267.95	208	276.10	2695	285.10	491
258.00	3624	268.70	19	277.05	2782	286.05	200
259.10	840	269.15	147	278.10	325	286.70	17
260.10	277	269.70	31	278.95	105	287.10	53
261.05	161	270.30	42	279.70	17	287.50	17
262.00	73	271.00	131	280.40	18	288.85	73
262.90	69	271.80	70	281.10	99	289.40	43
263.90	73	272.10	134	281.40	30	290.30	174
265.10	1790	273.10	1956	282.90	21	290.50	46

Average of 2.903 to 2.913 min.: 2m85107.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
291.00	158	297.80	23	305.00	29	316.90	18
291.60	30	298.20	17	307.10	64	317.50	34
291.90	72	298.75	46	308.15	220	317.70	34
292.20	100	299.00	39	308.90	117	318.30	28
292.95	628	300.90	37	310.05	168	320.10	142
293.90	97	301.90	182	312.15	78	320.90	370
294.10	55	302.60	147	312.85	159	321.70	24
294.75	22	302.90	163	313.35	20	321.90	120
295.10	37	303.10	663	314.05	412	323.10	2363
296.00	8483	303.90	97	315.05	1172	323.95	215
297.05	1433	304.10	264	316.10	535	325.15	67

Average of 2.903 to 2.913 min.: 2m85107.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
326.10	53	335.15	253	346.10	371	353.90	126
326.95	516	335.90	47	346.70	10	354.05	735
328.00	239	336.50	60	347.20	36	355.05	364
329.20	99	336.70	35	347.35	61	356.70	64
330.10	46	337.20	76	347.80	34	358.00	39
330.70	23	338.60	60	348.70	28	358.90	58
331.95	158	339.00	21	349.40	90	359.30	90
332.20	33	340.00	24	349.90	36	360.00	61
333.00	209	341.20	178	351.20	156	361.20	31
334.05	1671	341.90	56	352.10	824	361.80	26
334.90	110	345.90	339	353.00	259	362.10	28

Average of 2.903 to 2.913 min.: 2m85107.D\data.ms

dftpp2m.M Tue Jun 28 14:53:42 2016 Page: 3

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
363.50	37	373.00	215	388.40	56	398.00	27
364.00	86	373.80	93	388.70	19	400.80	63
365.05	4586	374.90	78	389.60	51	401.20	197
366.00	572	376.10	19	389.90	35	402.05	516
366.60	18	376.80	50	390.35	70	402.60	56
368.60	54	378.10	18	391.15	24	402.80	153
369.75	67	379.70	40	392.10	63	403.10	501
371.00	181	382.00	103	393.20	17	403.90	58
371.20	85	382.95	414	395.00	39	404.05	359
372.05	1492	384.00	18	396.00	18	405.90	22
372.80	101	384.30	27	396.80	36	407.40	24

Average of 2.903 to 2.913 min.: 2m85107.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
409.60	21	419.20	23	425.60	85	432.50	49
410.70	19	419.70	19	425.80	62	432.70	57
411.20	22	420.00	50	427.10	39	433.70	48
413.60	23	420.30	18	427.80	48	434.10	36
414.00	52	420.60	67	428.90	16	434.50	19
414.40	22	421.10	376	429.30	22	435.10	17
414.70	30	421.70	103	429.50	38	437.10	31
415.00	33	422.10	664	430.20	17	441.10	8383
415.90	22	423.05	3276	430.50	37	442.10	56266
416.70	23	423.95	544	431.75	76	443.05	10241
417.00	23	425.25	97	432.20	44	444.15	837

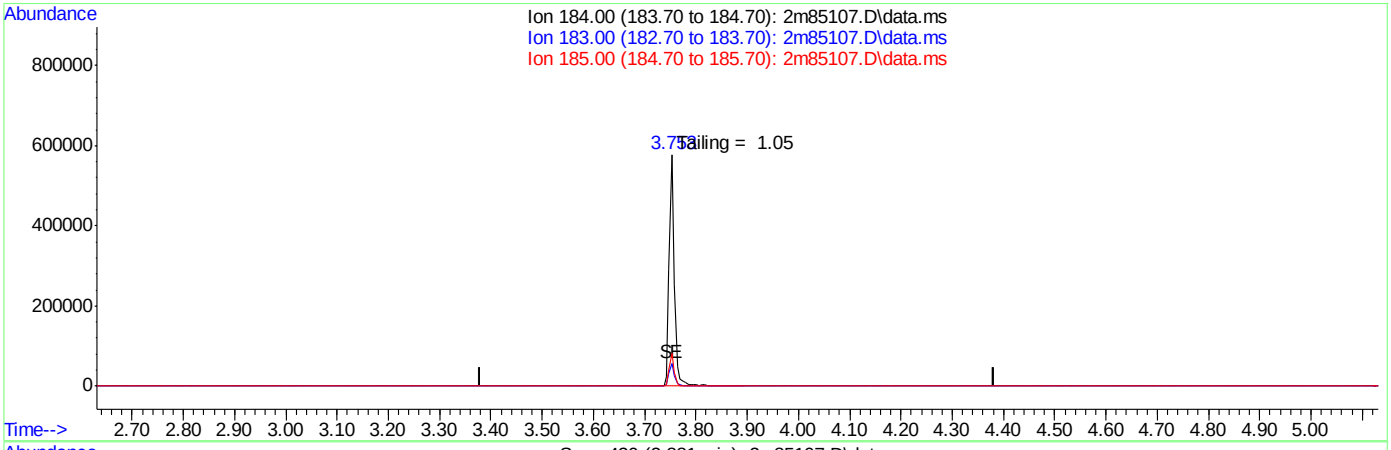
Average of 2.903 to 2.913 min.: 2m85107.D\data.ms
dftpp
Modified:subtracted

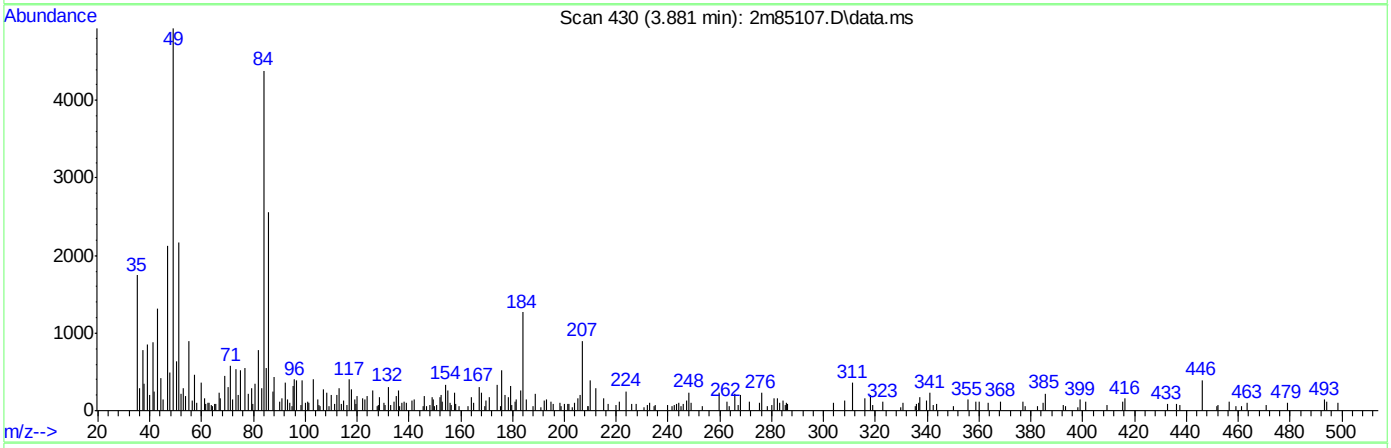
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
445.10	72	469.20	24				
445.40	19	470.50	17				
450.90	34	474.50	23				
451.30	17	475.70	17				
455.80	53	477.25	102				
460.90	23	479.60	27				
462.50	32	480.30	36				
462.90	28	489.80	26				
463.60	22	491.80	36				
466.40	43	498.60	72				
468.10	23	499.10	33				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E2M3754\
Data File : 2m85107.D
Acq On : 28 Jun 2016 9:52 am
Operator : ashleyn
Sample : dftpp
Misc : op94766,e2m3754
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 28 10:02:41 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Jun 09 16:42:34 2016
QLast Update : Thu Jun 09 16:42:34 2016
Response via : Initial Calibration





TIC: 2m85107.D\data.ms

(1) Benzidine

3.881min (-3.881) 0.00

response 0

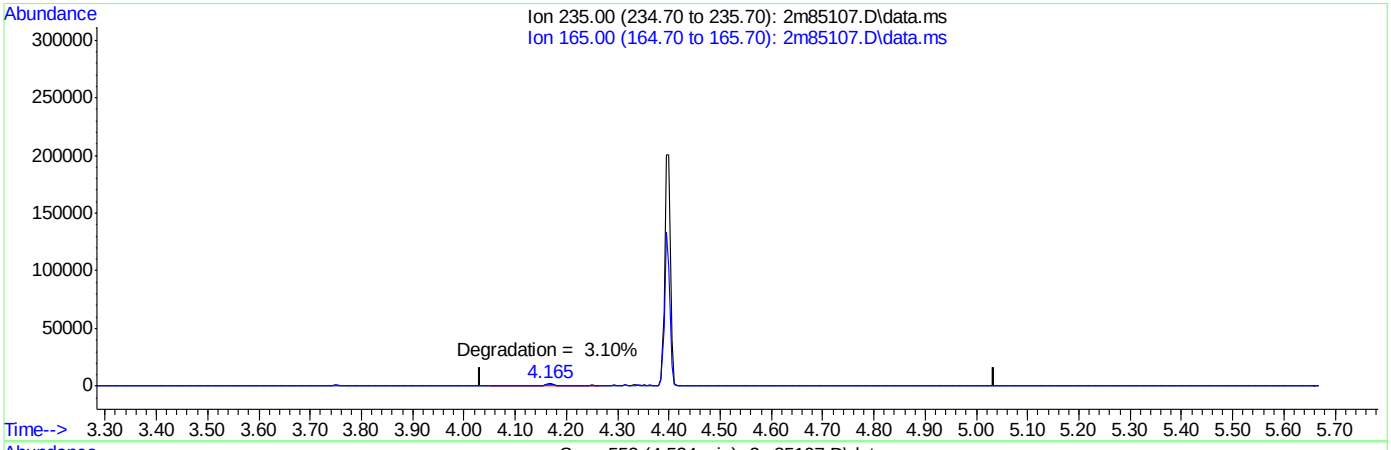
Ion	Exp%	Act%
184.00	100	0.00
183.00	11.70	0.00
185.00	13.90	0.00
0.00	0.00	0.00

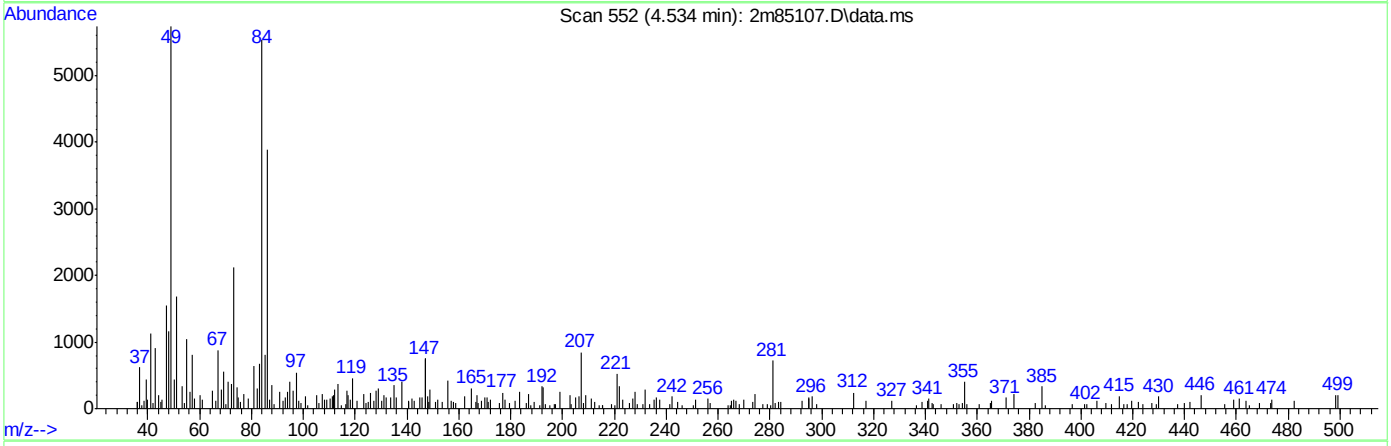
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E2M3754\
Data File : 2m85107.D
Acq On : 28 Jun 2016 9:52 am
Operator : ashleyn
Sample : dftpp
Misc : op94766,e2m3754
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 28 10:02:41 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Jun 09 16:42:34 2016
QLast Update : Thu Jun 09 16:42:34 2016
Response via : Initial Calibration





TIC: 2m85107.D\data.ms

(2) ddt

4.534min (-4.534) 0.00

response 0

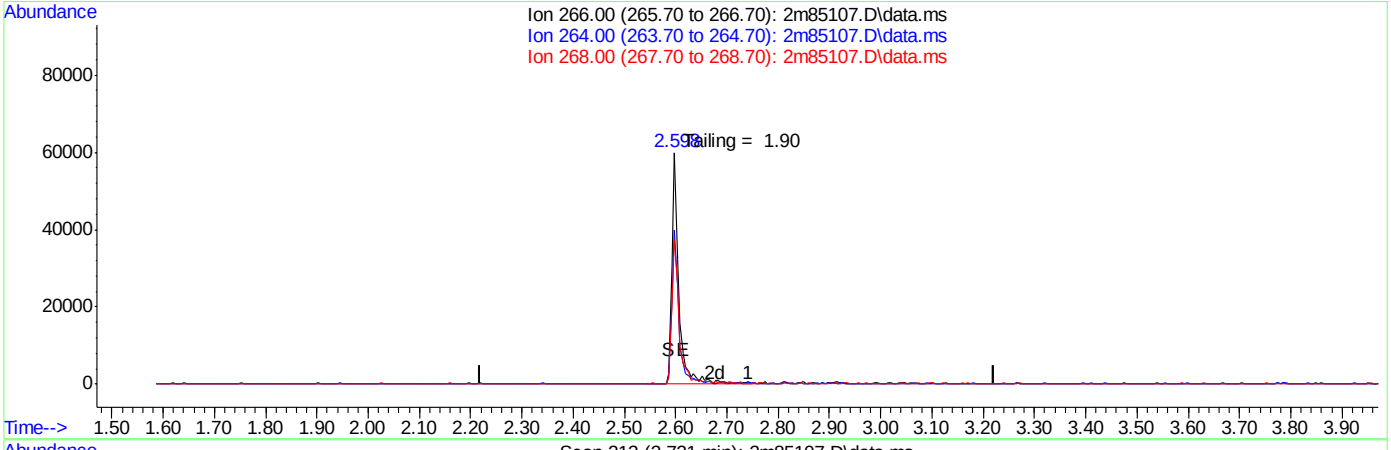
Ion	Exp%	Act%
235.00	100	0.00
165.00	67.20	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

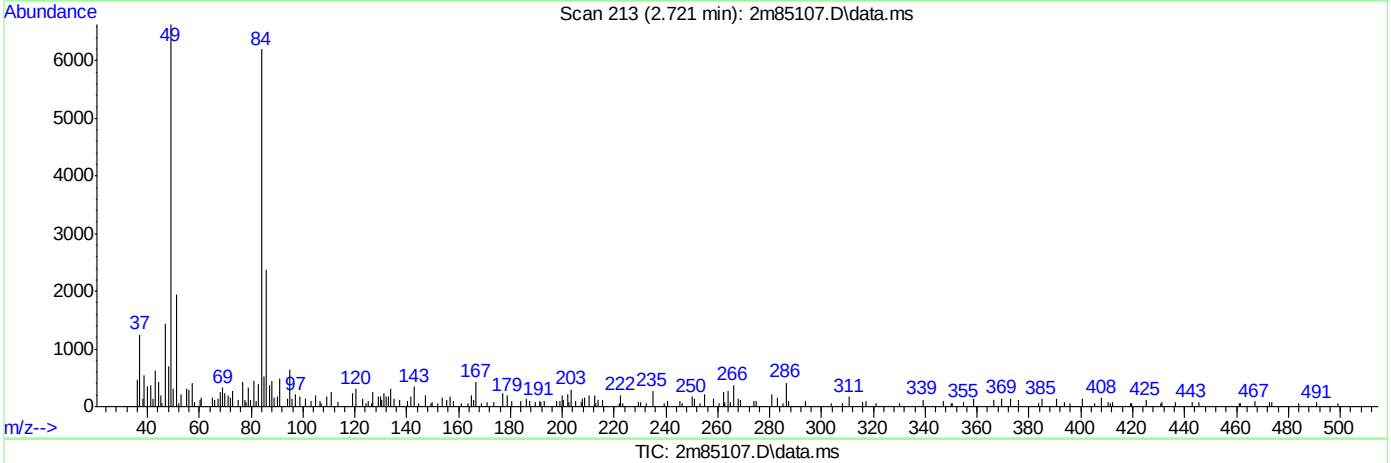
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E2M3754\
Data File : 2m85107.D
Acq On : 28 Jun 2016 9:52 am
Operator : ashleyn
Sample : dftpp
Misc : op94766,e2m3754
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 28 10:02:41 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Jun 09 16:42:34 2016
QLast Update : Thu Jun 09 16:42:34 2016
Response via : Initial Calibration





TIC: 2m85107.D\data.ms

(3) Pentachlorophenol

2.721min 0.00 d

response 0

Ion	Exp%	Act%
266.00	100	0.00
264.00	62.40	0.00
268.00	62.70	0.00
0.00	0.00	0.00

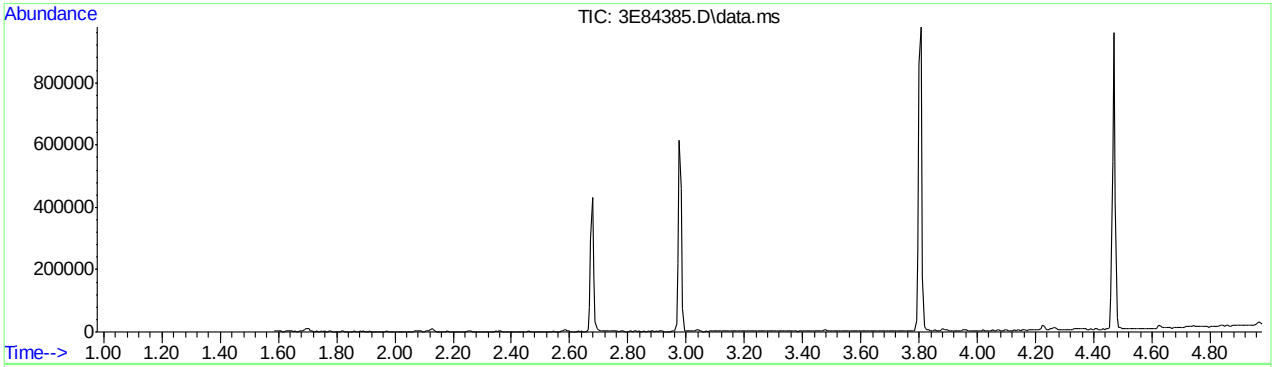
SGS ACCUTEST JC22613

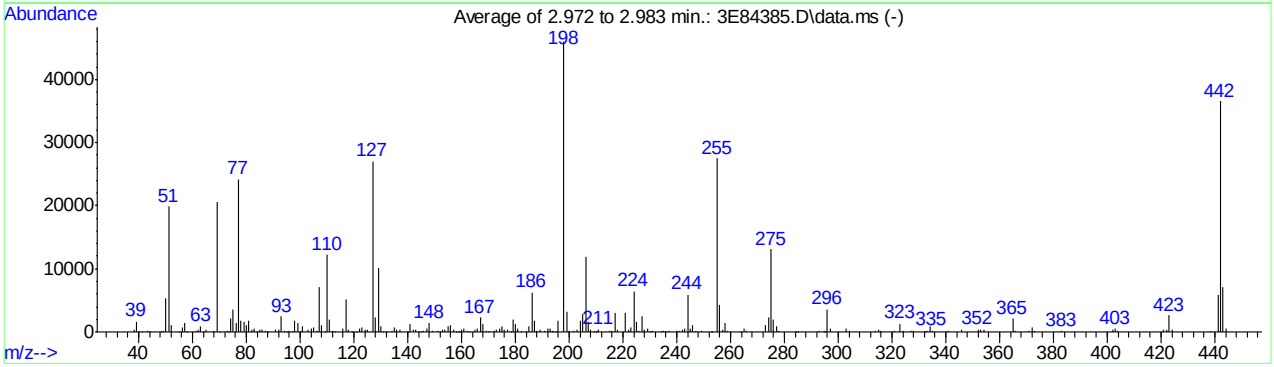
DFTPP

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84385.D
Acq On : 22 Jun 2016 9:48 am
Operator : ashleyn
Sample : dftpp
Misc : op94630a,e3e3699
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp3e.M
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
Last Update : Sat Aug 08 13:07:52 2015





AutoFind: Scans 260, 261, 262; Background Corrected with Scan 256

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	43.1	19816	PASS
68	69	0.00	2	0.7	138	PASS
69	198	0.00	100	44.7	20559	PASS
70	69	0.00	2	0.3	52	PASS
127	198	40	60	58.8	27055	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	46000	PASS
199	198	5	9	7.1	3276	PASS
275	198	10	30	28.5	13103	PASS
365	198	1	100	4.5	2054	PASS
441	443	0.10	100	83.4	5905	PASS
442	198	40	100	79.3	36501	PASS
443	442	17	23	19.4	7084	PASS

Average of 2.972 to 2.983 min.: 3E84385.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.15	290	55.00	31	70.00	52	82.00	386
39.10	1668	56.05	640	73.00	175	83.00	537
40.00	74	57.10	1499	73.20	73	83.95	77
41.05	21	58.10	60	74.10	2118	85.10	351
43.15	119	61.15	267	75.10	3476	86.00	348
44.00	77	62.15	286	76.15	1373	87.00	177
48.20	50	63.05	890	77.10	24184	88.00	56
49.00	157	64.00	74	78.10	1731	91.00	400
50.10	5262	65.05	387	79.05	1531	92.05	395
51.10	19816	68.00	138	80.05	1109	93.00	2446
52.10	1041	69.10	20559	81.00	1751	94.10	184

Average of 2.972 to 2.983 min.: 3E84385.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	60	107.05	7068	120.80	50	134.00	271
95.90	146	108.05	1122	121.95	531	135.00	730
97.20	85	109.00	87	123.05	726	135.95	395
98.00	1753	110.10	12244	124.05	390	137.05	383
99.05	1425	111.00	1873	125.05	355	139.90	60
99.90	71	112.00	212	127.10	27055	140.95	1181
101.00	907	113.00	82	128.05	2295	142.00	318
102.95	309	116.00	493	129.00	10150	143.00	358
104.00	523	117.10	5169	130.00	807	143.90	55
105.05	666	118.00	337	131.00	84	144.90	59
106.15	138	119.00	54	132.00	57	145.95	231

Average of 2.972 to 2.983 min.: 3E84385.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
147.05	569	158.90	52	169.90	53	182.00	60
148.05	1346	159.10	67	172.00	179	183.90	57
149.05	270	160.00	348	173.00	289	185.05	827
151.10	186	161.05	493	174.00	529	186.10	6253
151.90	64	162.00	139	175.05	847	187.10	1848
153.00	394	163.00	63	176.05	356	188.00	178
153.95	306	164.95	413	177.00	447	189.00	379
155.05	858	166.00	453	178.20	93	190.95	181
156.05	985	167.05	2279	179.00	1914	192.00	567
157.00	302	168.05	1162	180.05	1299	192.90	102
157.90	85	169.00	197	181.00	557	193.05	606

Average of 2.972 to 2.983 min.: 3E84385.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
193.90	99	206.10	11852	221.05	3075	234.00	68
194.10	50	207.10	1674	221.95	330	234.90	231
194.90	55	208.00	355	223.10	756	235.90	52
196.05	1822	209.00	95	224.10	6439	237.05	247
198.00	46000	210.10	64	225.10	1639	239.90	124
199.00	3276	210.40	114	226.00	149	240.95	146
200.05	242	211.05	388	227.05	2494	242.05	362
201.55	269	214.95	109	228.05	354	243.10	486
202.95	369	216.00	258	229.00	596	244.10	5944
204.05	1754	217.00	3029	230.00	55	244.90	103
205.10	2871	217.95	352	231.05	171	245.10	568

Average of 2.972 to 2.983 min.: 3E84385.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
246.00	999	264.95	626	293.05	252	323.10	1283
247.05	240	266.00	214	294.70	52	324.05	267
249.00	203	273.00	1043	295.00	84	327.05	246
252.80	65	274.05	2246	296.00	3595	327.90	120

dftpp3e.M Wed Jun 22 14:30:54 2016 MS3E Page: 2

253.00	68	275.10	13103	296.95	521	332.00	68
255.10	27467	276.00	1965	303.00	474	333.00	159
256.05	4232	277.00	926	304.00	148	334.05	859
257.00	345	277.95	165	313.95	126	334.95	179
258.05	1443	284.00	60	315.00	342	340.95	147
258.95	268	284.90	93	316.00	166	345.95	323
263.90	55	285.10	53	321.05	143	352.00	427

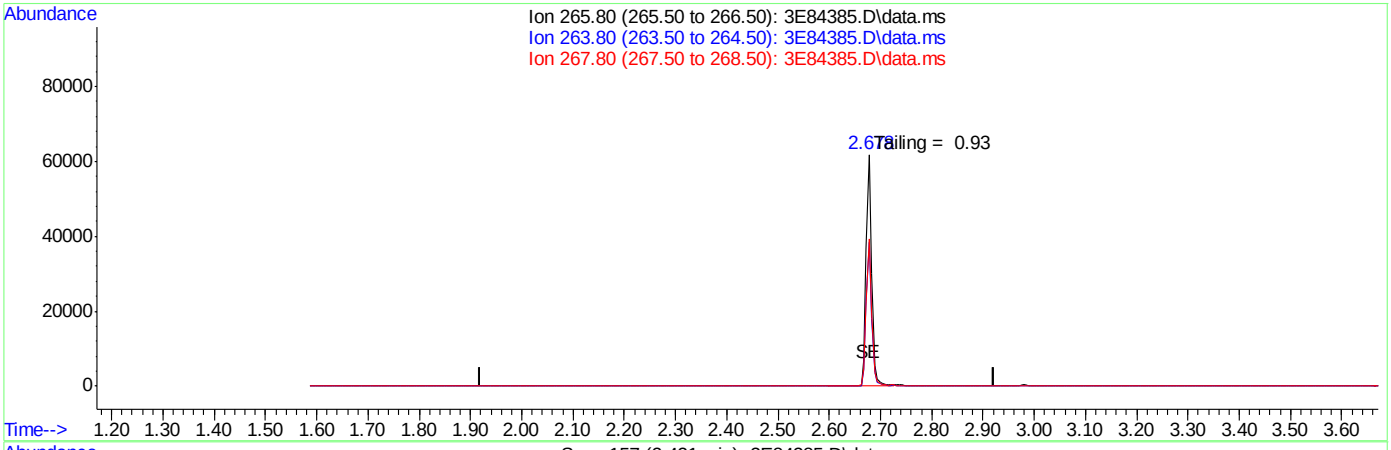
Average of 2.972 to 2.983 min.: 3E84385.D\data.ms
dftpp
Modified:subtracted

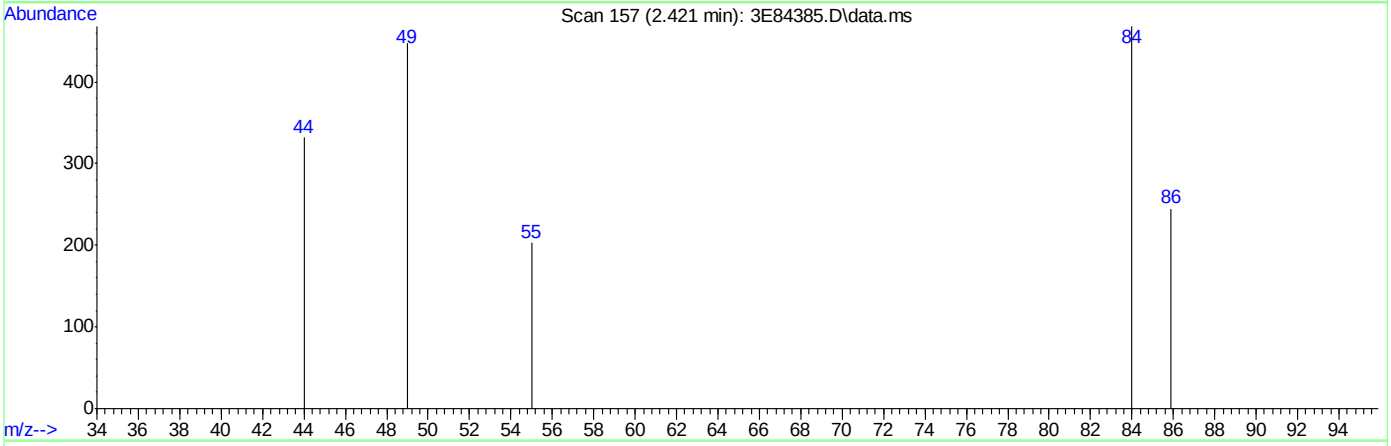
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
353.00	284	421.00	389				
354.05	428	422.05	324				
365.00	2054	423.00	2624				
365.95	260	424.00	416				
371.05	129	438.20	55				
372.00	776	441.10	5905				
373.05	170	442.10	36501				
383.00	135	443.05	7084				
402.00	313	444.05	514				
403.00	498						
403.95	148						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84385.D
Acq On : 22 Jun 2016 9:48 am
Operator : ashleyn
Sample : dftpp
Misc : op94630a,e3e3699
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 22 09:55:39 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E84385.D\data.ms

(1) Pentachlorophenol (t)

2.421min (-2.421) 0.00ppb

response 0

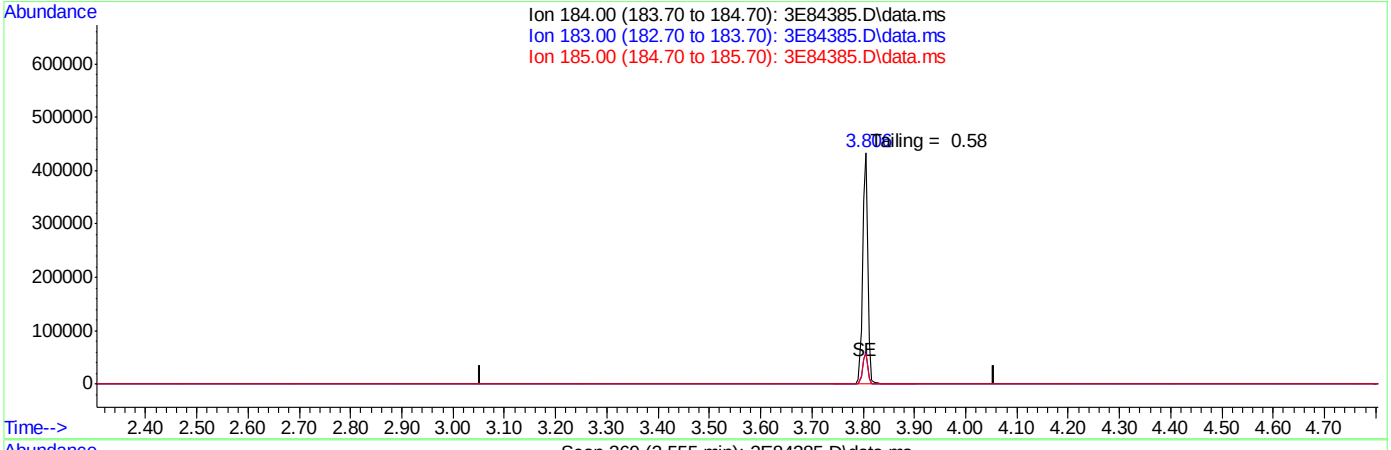
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.20	0.00#
267.80	64.70	0.00#
0.00	0.00	0.00

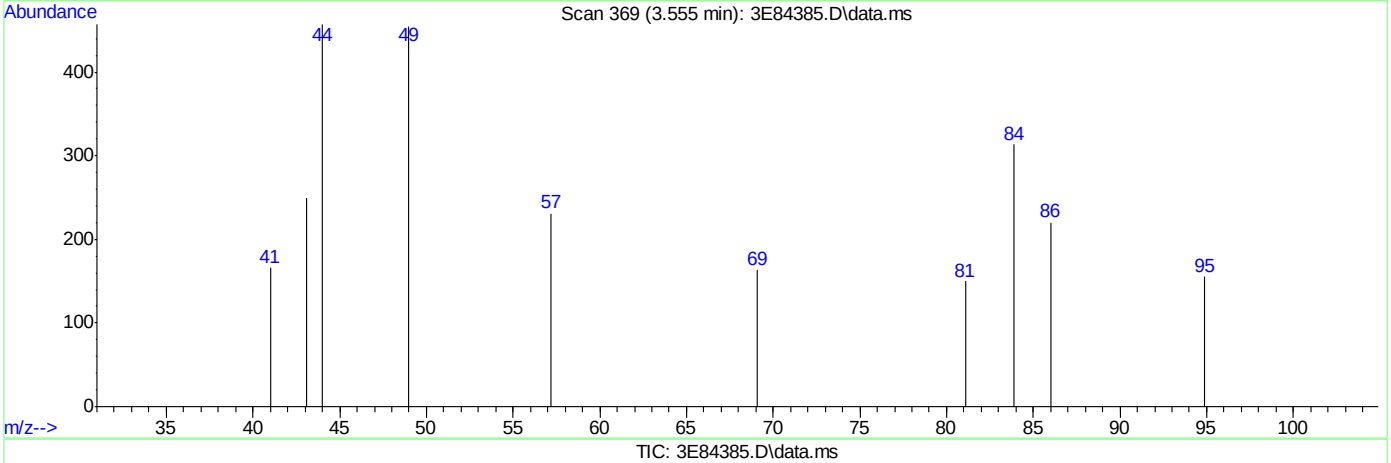
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84385.D
Acq On : 22 Jun 2016 9:48 am
Operator : ashleyn
Sample : dftpp
Misc : op94630a,e3e3699
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 22 09:55:39 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E84385.D\data.ms

(2) Benzidine (t)

3.555min (-3.555) 0.00ppb

response 0

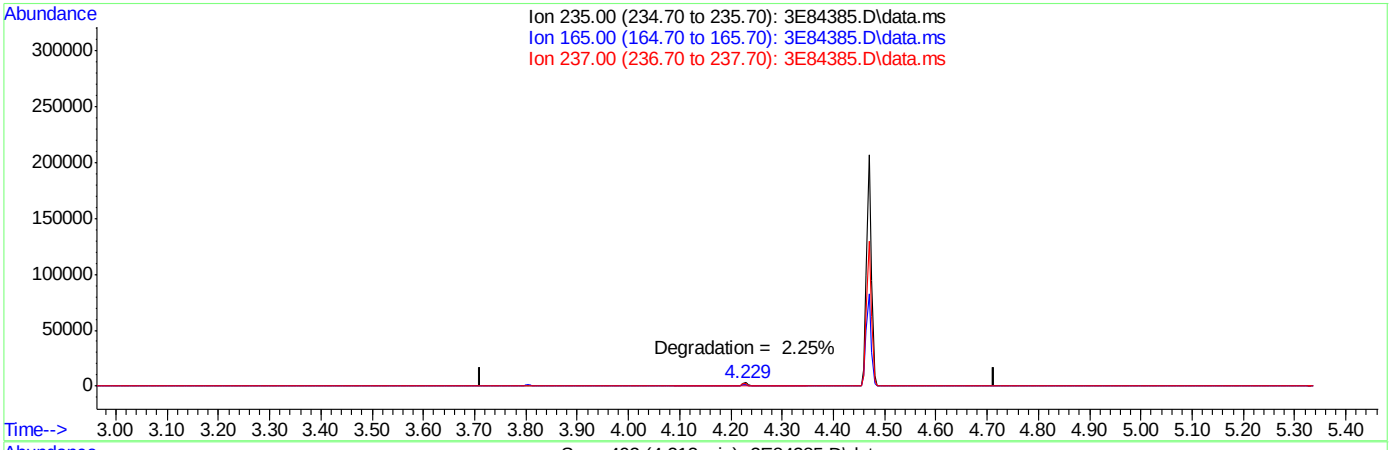
Ion	Exp%	Act%
184.00	100	0.00
183.00	13.20	0.00
185.00	15.40	0.00
0.00	0.00	0.00

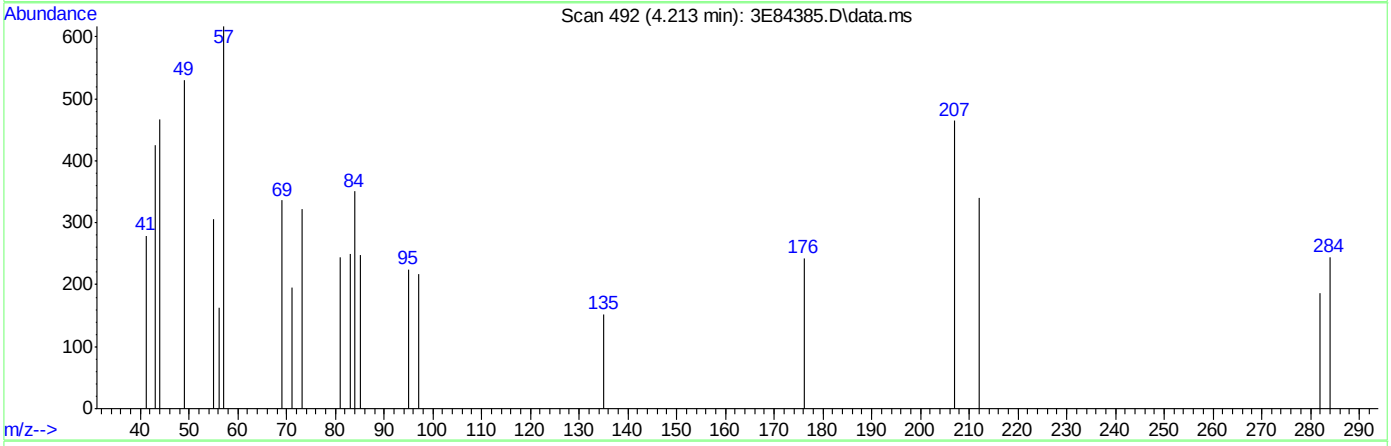
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84385.D
Acq On : 22 Jun 2016 9:48 am
Operator : ashleyn
Sample : dftpp
Misc : op94630a,e3e3699
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 22 09:55:39 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E84385.D\data.ms

(3) PP-DDT (t)

4.213min 0.00ppb d

response 0

Ion	Exp%	Act%
235.00	100	0.00
165.00	0.10	0.00
237.00	0.10	0.00
0.00	0.00	0.00

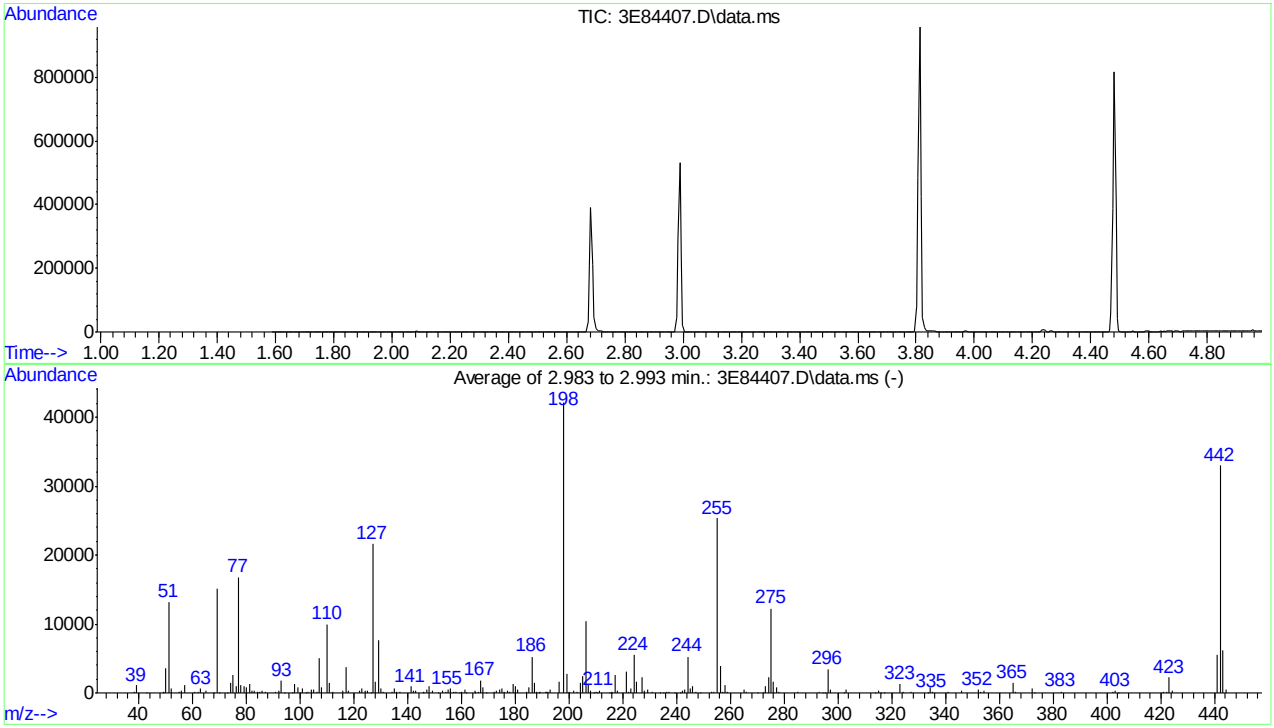
SGS ACCUTEST JC22613

DFTPP

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84407.D
Acq On : 22 Jun 2016 6:13 pm
Operator : seanb1
Sample : dftpp
Misc : op94630a,e3e3700
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp3e.M
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
Last Update : Sat Aug 08 13:07:52 2015



AutoFind: Scans 262, 263, 264; Background Corrected with Scan 257

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	31.3	13193	PASS
68	69	0.00	2	0.4	54	PASS
69	198	0.00	100	35.9	15136	PASS
70	69	0.00	2	0.4	60	PASS
127	198	40	60	51.3	21600	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	42130	PASS
199	198	5	9	6.5	2745	PASS
275	198	10	30	29.1	12241	PASS
365	198	1	100	3.5	1457	PASS
441	443	0.10	100	90.4	5574	PASS
442	198	40	100	78.2	32954	PASS
443	442	17	23	18.7	6168	PASS

SGS ACCUTEST JC22613

Average of 2.983 to 2.993 min.: 3E84407.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.15	169	61.05	155	77.10	16813	91.05	241
39.10	1078	62.05	208	78.10	1090	92.00	287
43.10	55	63.10	627	79.05	983	93.05	1756
49.05	177	65.10	324	80.10	846	94.10	68
49.30	52	68.00	54	81.10	1270	97.20	56
50.10	3642	69.10	15136	82.05	319	98.00	1323
51.15	13193	70.10	60	83.10	399	99.05	871
52.05	734	72.90	56	84.00	106	100.10	72
55.05	132	74.10	1399	85.10	171	101.05	641
56.05	390	75.10	2592	86.00	283	102.00	52
57.05	1094	76.20	1001	87.05	158	103.05	196

Average of 2.983 to 2.993 min.: 3E84407.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
104.00	428	122.05	354	135.10	686	151.10	81
105.00	415	123.05	645	136.00	216	153.00	250
106.10	184	124.05	263	137.00	228	154.05	244
107.10	5112	125.00	314	141.10	964	155.00	499
108.05	791	126.10	63	142.10	361	156.05	721
110.10	9926	127.10	21600	143.00	263	157.15	132
111.05	1500	128.10	1569	145.90	69	157.95	201
112.05	208	129.10	7639	146.05	162	159.10	82
116.05	359	130.00	635	147.10	492	160.10	245
117.10	3816	130.90	123	148.00	956	161.10	470
118.00	265	134.00	206	149.05	256	161.90	70

Average of 2.983 to 2.993 min.: 3E84407.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
165.00	334	177.00	289	189.05	239	204.05	1518
165.20	56	178.10	101	191.10	171	205.10	2460
166.15	229	179.05	1355	191.90	211	206.10	10376
167.10	1867	180.00	913	192.10	173	207.10	1278
168.00	785	181.05	509	193.05	434	208.00	298
169.10	74	184.05	123	196.10	1671	209.00	78
172.05	119	185.10	756	198.05	42130	210.10	100
173.05	257	186.10	5257	199.10	2745	210.60	83
174.00	422	187.10	1423	200.05	188	211.10	380
175.10	699	188.10	119	201.50	307	215.00	71
176.05	233	188.80	52	203.05	229	215.90	51

Average of 2.983 to 2.993 min.: 3E84407.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
216.05	242	231.00	119	246.05	992	265.90	96
217.00	2661	234.00	57	247.00	127	270.00	57
218.00	410	235.00	69	249.00	74	272.00	75
221.10	3167	236.10	120	253.05	209	273.05	977
222.10	97	237.00	145	253.60	159	274.10	2351
223.05	650	239.20	59	255.10	25365	275.10	12241
224.10	5464	241.10	73	256.10	3942	276.05	1686
225.10	1599	242.00	384	257.10	221	277.05	828
227.10	2277	243.10	450	258.10	1163	278.10	111
228.05	326	244.10	5260	259.00	148	285.05	173
229.05	453	245.05	678	265.05	548	293.00	203

Average of 2.983 to 2.993 min.: 3E84407.D\data.ms
dftpp
Modified:subtracted

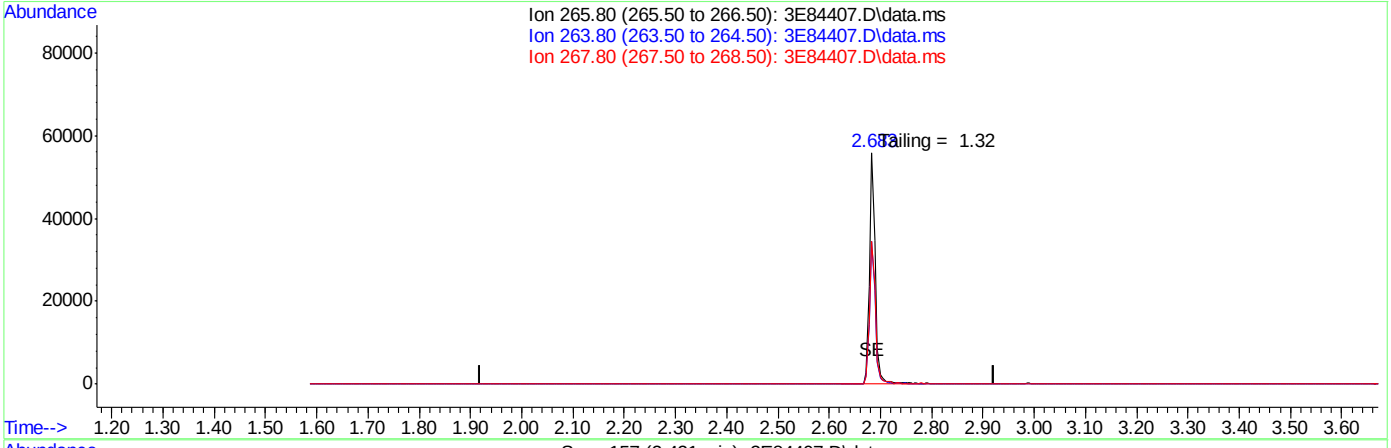
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
294.10	51	324.10	214	366.00	160	441.10	5574
294.90	77	327.00	187	372.05	683	442.10	32954
296.10	3426	333.30	61	373.00	81	443.10	6168
297.05	482	334.05	752	383.00	181	444.10	438

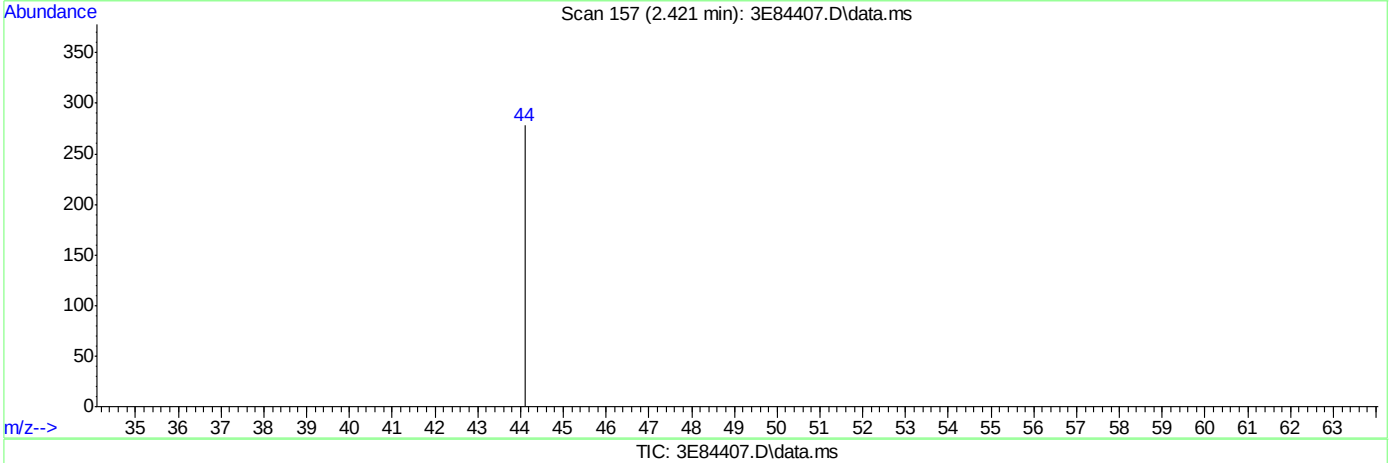
302.20	59	334.90	99	402.00	187
303.05	530	341.10	91	403.05	252
313.90	75	346.00	273	404.10	64
314.95	369	352.10	454	421.10	218
316.10	63	353.10	186	422.05	209
317.00	52	354.05	402	423.10	2229
323.10	1289	365.00	1457	424.10	354

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84407.D
Acq On : 22 Jun 2016 6:13 pm
Operator : seanb1
Sample : dftpp
Misc : op94630a,e3e3700
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 22 18:18:55 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E84407.D\data.ms

(1) Pentachlorophenol (t)

2.421min (-2.421) 0.00ppb

response 0

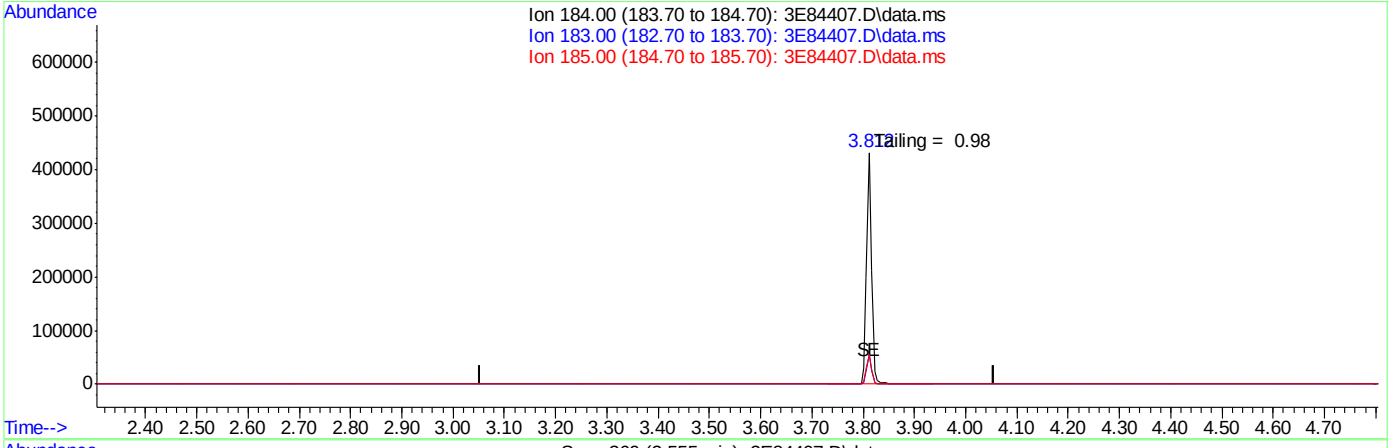
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.20	0.00#
267.80	64.70	0.00#
0.00	0.00	0.00

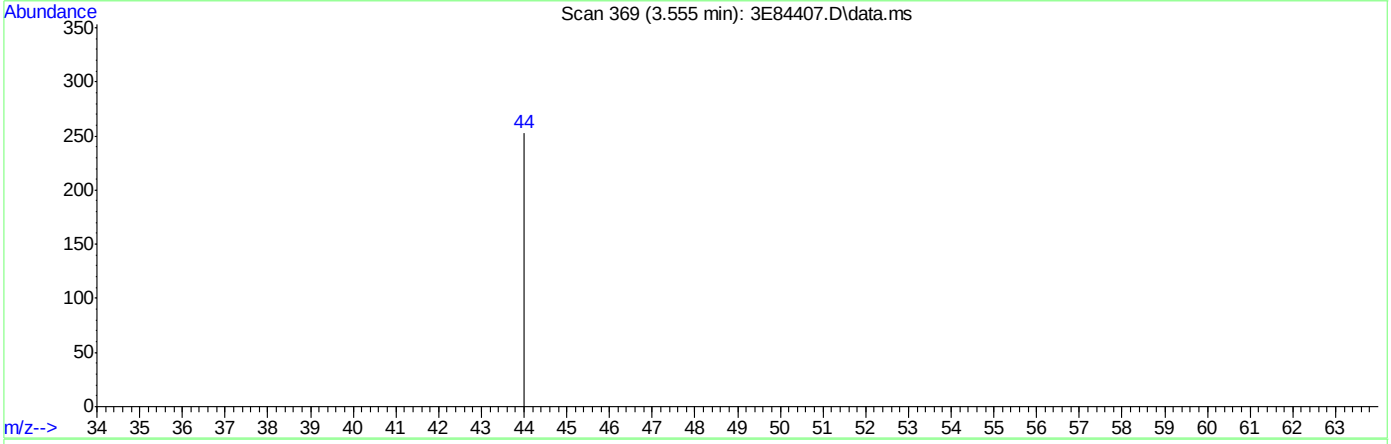
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84407.D
Acq On : 22 Jun 2016 6:13 pm
Operator : seanb1
Sample : dftpp
Misc : op94630a,e3e3700
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 22 18:18:55 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E84407.D\data.ms

(2) Benzidine (t)

3.555min (-3.555) 0.00ppb

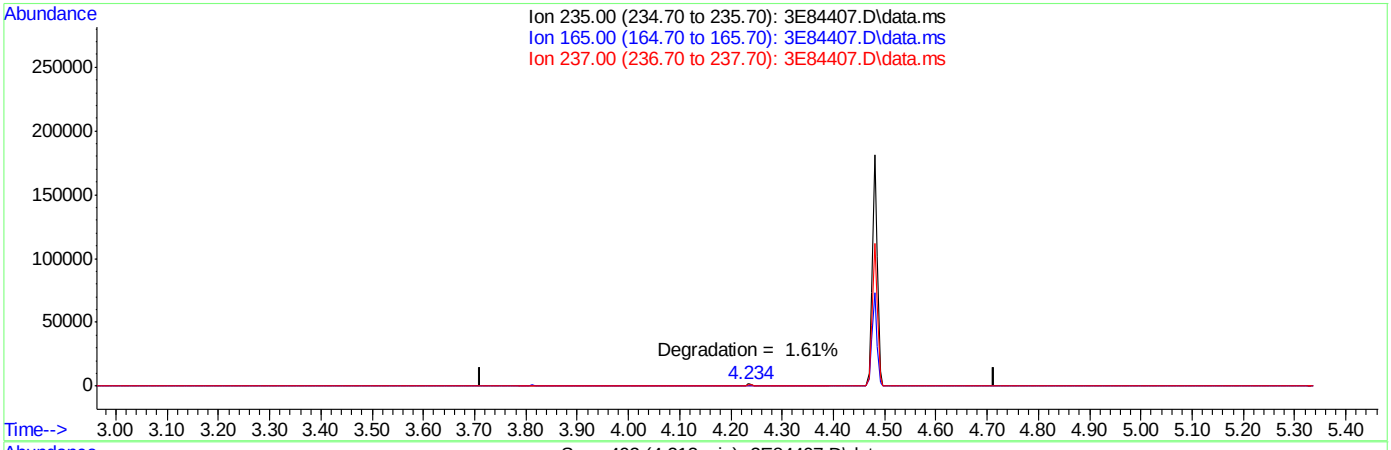
response 0

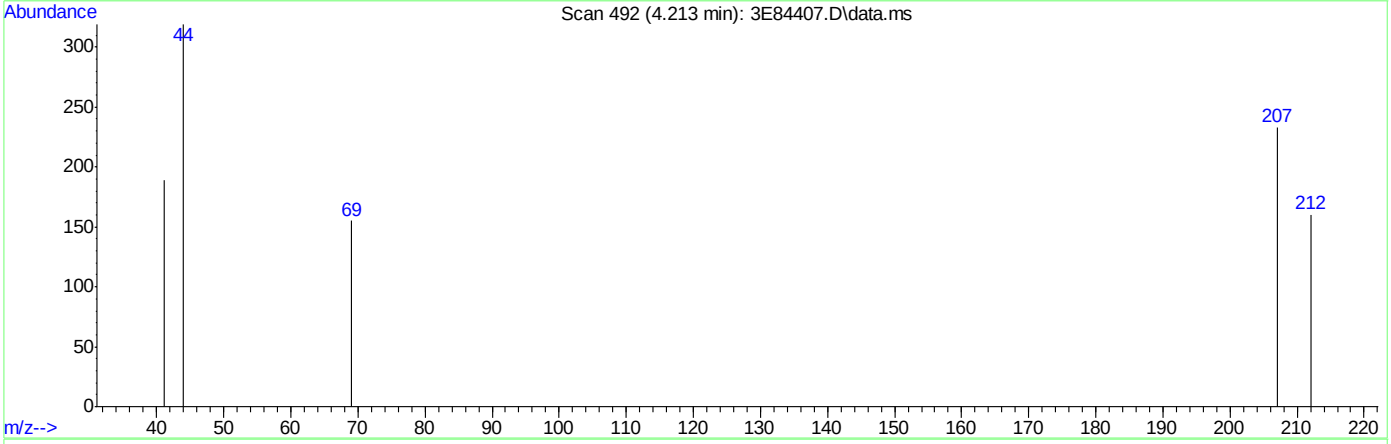
Ion	Exp%	Act%
184.00	100	0.00
183.00	13.20	0.00
185.00	15.40	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84407.D
Acq On : 22 Jun 2016 6:13 pm
Operator : seanb1
Sample : dftpp
Misc : op94630a,e3e3700
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 22 18:18:55 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E84407.D\data.ms

(3) PP-DDT (t)

4.213min 0.00ppb d

response 0

Ion	Exp%	Act%
235.00	100	0.00
165.00	0.10	0.00
237.00	0.10	0.00
0.00	0.00	0.00

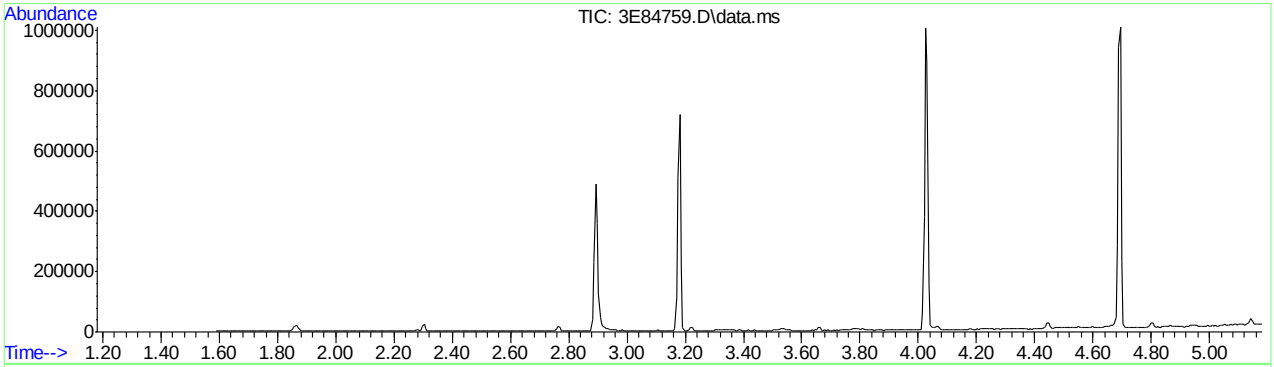
SGS ACCUTEST JC22613

DFTPP

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84759.D
Acq On : 1 Jul 2016 8:09 pm
Operator : seanb1
Sample : dftpp
Misc : op95221,e3e3716
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp3e.M
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Thu Jun 23 15:20:12 2016
Last Update : Thu Jun 23 15:20:12 2016



AutoFind: Scans 298, 299, 300; Background Corrected with Scan 293

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.6	22765	PASS
68	69	0.00	2	1.5	368	PASS
69	198	0.00	100	45.1	24065	PASS
70	69	0.00	2	0.9	223	PASS
127	198	40	60	55.9	29871	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	53392	PASS
199	198	5	9	6.6	3511	PASS
275	198	10	30	26.6	14227	PASS
365	198	1	100	3.4	1800	PASS
441	443	0.10	100	80.9	4800	PASS
442	198	40	100	56.2	30008	PASS
443	442	17	23	19.8	5933	PASS

SGS ACCUTEST JC22613

Average of 3.175 to 3.186 min.: 3E84759.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.20	81	52.10	1213	67.10	56	78.10	1854
38.10	326	53.15	120	68.20	368	79.10	1786
39.15	1737	55.10	76	69.10	24065	80.05	1206
40.15	155	56.10	532	70.10	223	81.05	2062
42.10	56	57.10	1348	71.20	90	82.05	545
43.15	46	60.10	82	72.10	53	83.05	673
44.00	69	61.05	369	73.00	44	83.95	39
47.00	63	62.10	281	74.10	2814	85.00	297
49.05	222	63.10	982	75.10	3767	86.00	389
50.20	6588	64.10	85	76.10	1595	87.05	386
51.15	22765	65.05	644	77.10	27868	88.00	163

Average of 3.175 to 3.186 min.: 3E84759.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
89.00	50	99.05	1662	111.10	2398	127.10	29871
91.10	573	100.05	279	112.05	345	128.10	2427
92.05	492	101.05	1073	113.00	61	129.05	11195
93.10	3023	103.00	389	115.20	59	130.00	1074
94.00	221	104.10	696	116.05	473	131.05	181
94.20	56	105.05	625	117.10	6835	132.10	86
95.10	55	106.10	124	118.05	488	132.90	60
96.00	224	107.10	7944	122.05	635	133.90	201
97.00	71	108.10	1300	123.05	829	135.05	796
97.20	132	109.20	148	124.00	313	136.05	312
98.10	2298	110.10	14468	125.00	367	136.90	93

Average of 3.175 to 3.186 min.: 3E84759.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
137.15	423	148.00	1774	158.90	120	171.10	72
138.00	52	149.10	255	160.00	444	172.00	237
139.10	64	150.10	75	161.00	658	173.00	349
139.90	115	151.05	155	162.05	245	174.05	623
140.20	87	152.00	67	163.10	56	175.05	1004
141.05	1351	152.95	368	164.10	55	175.90	83
142.05	383	154.00	252	165.00	649	176.10	303
143.05	347	155.00	786	165.95	455	176.95	482
144.90	60	156.10	1080	167.05	3005	177.95	173
146.00	261	157.05	211	168.05	1268	179.00	2081
147.00	941	157.95	263	169.00	212	180.05	1446

Average of 3.175 to 3.186 min.: 3E84759.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
181.00	734	193.00	727	205.05	3387	218.00	630
182.00	88	194.10	124	206.10	14169	219.00	61
183.95	147	195.00	81	207.05	1852	221.10	3186
184.20	66	196.00	2192	208.00	470	222.00	408
185.00	989	198.00	53392	209.10	100	223.10	985
186.10	7161	199.00	3511	209.90	161	224.05	8034
187.05	2083	199.90	307	210.60	191	225.10	2074
187.95	168	201.50	386	211.05	560	226.15	193
189.00	448	202.00	56	214.95	160	227.00	3156
190.95	300	202.90	338	216.00	392	228.00	489
192.00	730	204.05	1892	217.00	3704	229.00	769

Average of 3.175 to 3.186 min.: 3E84759.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
231.05	310	245.10	793	259.00	318	277.90	134
234.00	191	246.00	1116	260.90	65	283.00	69
235.05	240	246.95	316	264.95	732	284.10	57
235.90	146	248.95	197	265.80	179	285.05	148

SGS ACCUTEST JC22613

237.05	239	251.90	59	270.80	58	290.00	65
239.00	102	253.10	147	272.10	132	292.95	272
240.10	54	255.10	31106	273.00	1197	296.00	4159
240.95	180	256.00	4441	274.05	2442	297.00	680
242.00	442	257.00	313	275.10	14227	302.95	530
243.05	439	257.20	83	276.05	1934	303.90	68
244.10	6250	258.00	1879	277.00	1292	304.10	108

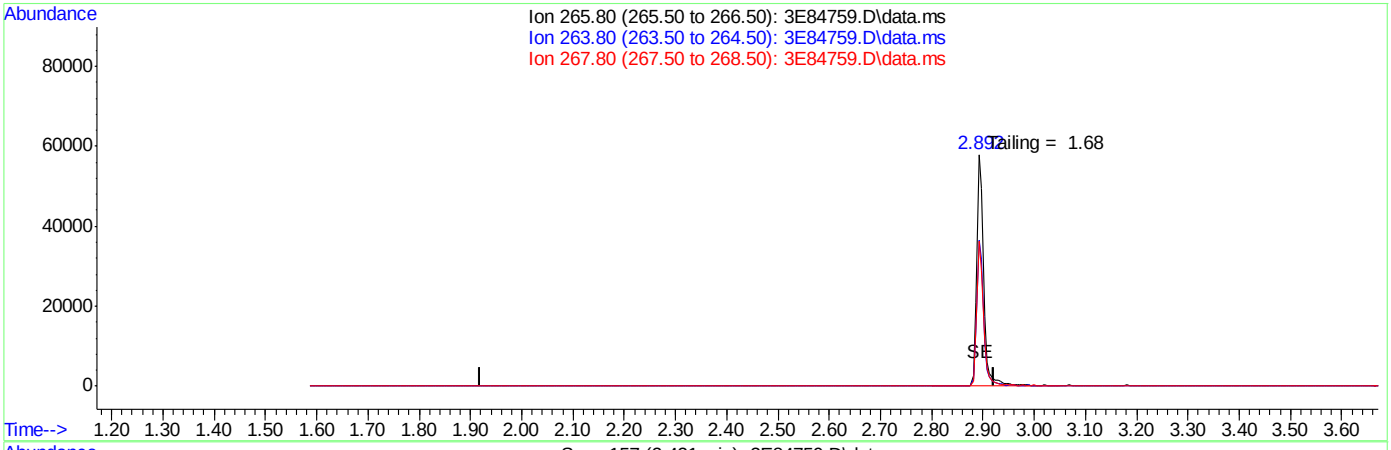
Average of 3.175 to 3.186 min.: 3E84759.D\data.ms
dftpp
Modified:subtracted

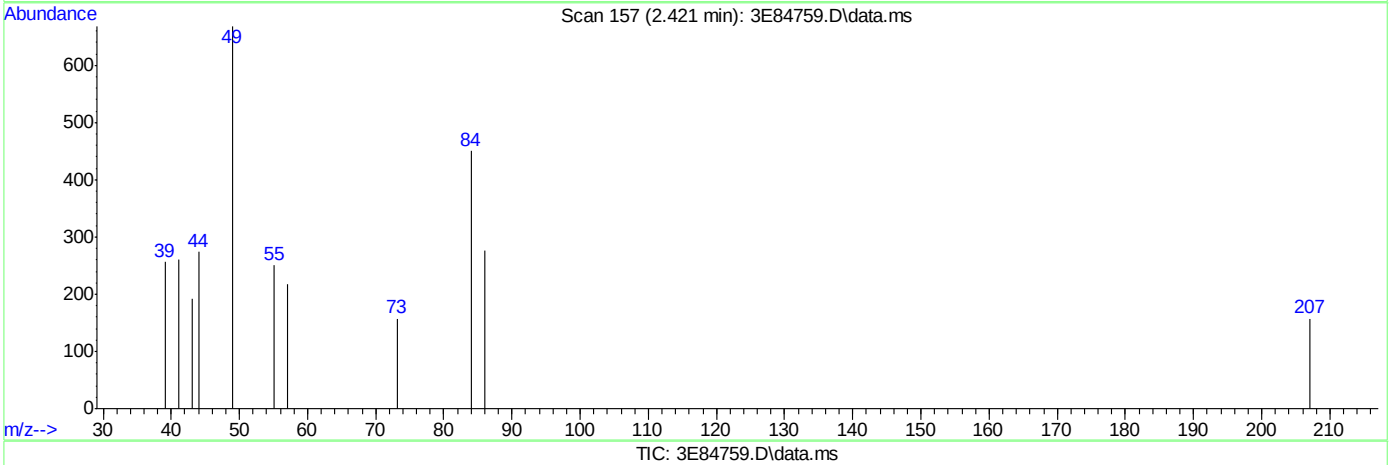
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
304.30	54	328.00	75	365.95	206	423.10	1697
308.00	52	332.95	167	371.00	77	424.05	411
309.10	56	334.00	766	372.00	579	441.10	4800
314.00	238	335.05	193	372.70	58	442.05	30008
315.00	496	341.00	80	373.00	98	443.05	5933
316.00	238	346.00	243	382.95	108	444.00	605
321.00	74	352.00	499	402.00	187		
322.10	81	352.90	58	403.00	260		
323.05	1474	353.10	164	404.00	77		
324.05	229	354.00	425	420.95	320		
326.90	277	364.95	1800	422.05	204		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84759.D
Acq On : 1 Jul 2016 8:09 pm
Operator : seanb1
Sample : dftpp
Misc : op95221,e3e3716
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 01 20:21:08 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Thu Jun 23 15:20:12 2016
QLast Update : Thu Jun 23 15:20:12 2016
Response via : Initial Calibration





TIC: 3E84759.D\data.ms

(1) Pentachlorophenol (t)

2.421min (-2.421) 0.00ppb

response 0

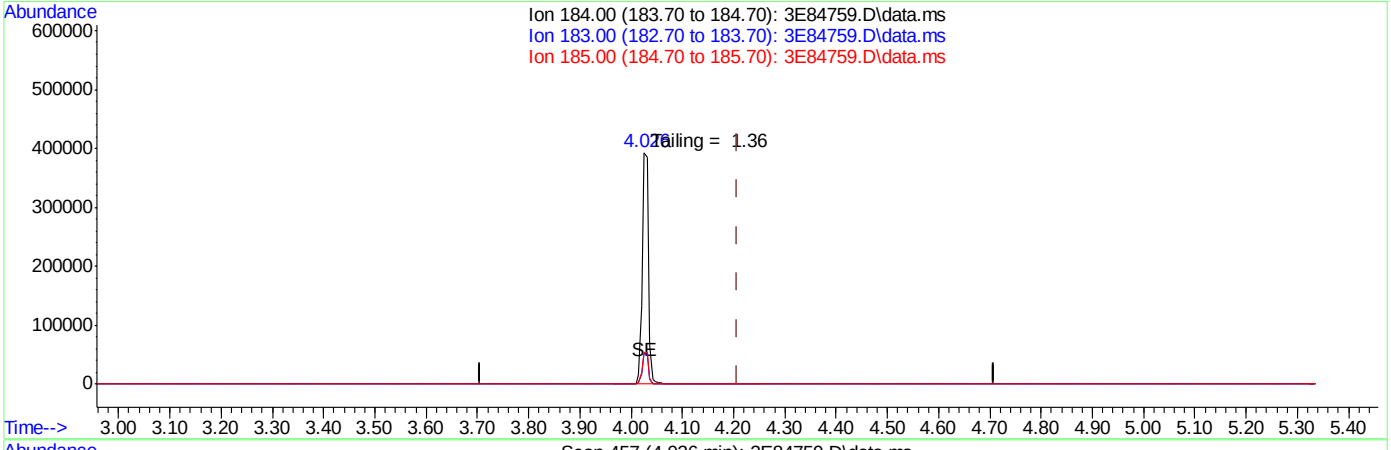
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.20	0.00#
267.80	64.70	0.00#
0.00	0.00	0.00

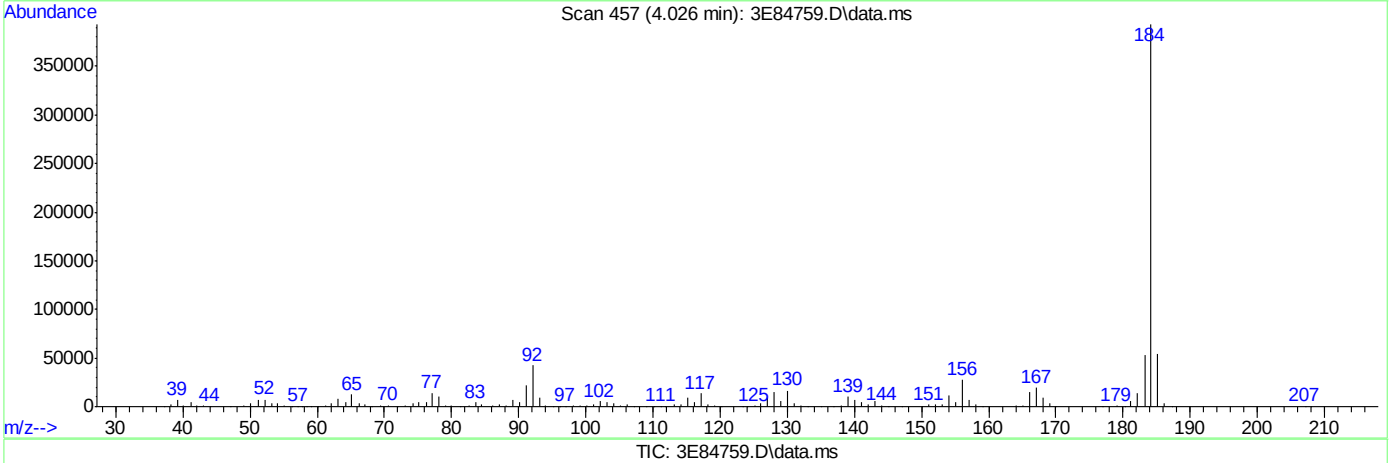
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84759.D
Acq On : 1 Jul 2016 8:09 pm
Operator : seanb1
Sample : dftpp
Misc : op95221,e3e3716
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 01 20:21:08 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Thu Jun 23 15:20:12 2016
QLast Update : Thu Jun 23 15:20:12 2016
Response via : Initial Calibration





TIC: 3E84759.D\data.ms

(2) Benzidine (t)

4.026min (-0.182) 31.16ppb

response 327203

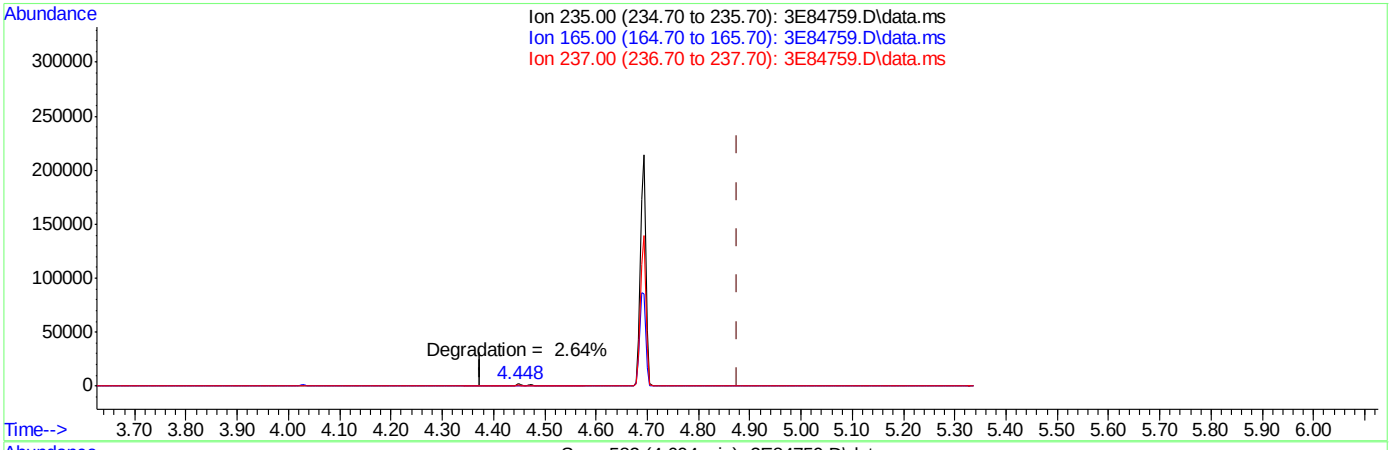
Ion	Exp%	Act%
184.00	100	100
183.00	13.20	13.37
185.00	15.40	13.81
0.00	0.00	0.00

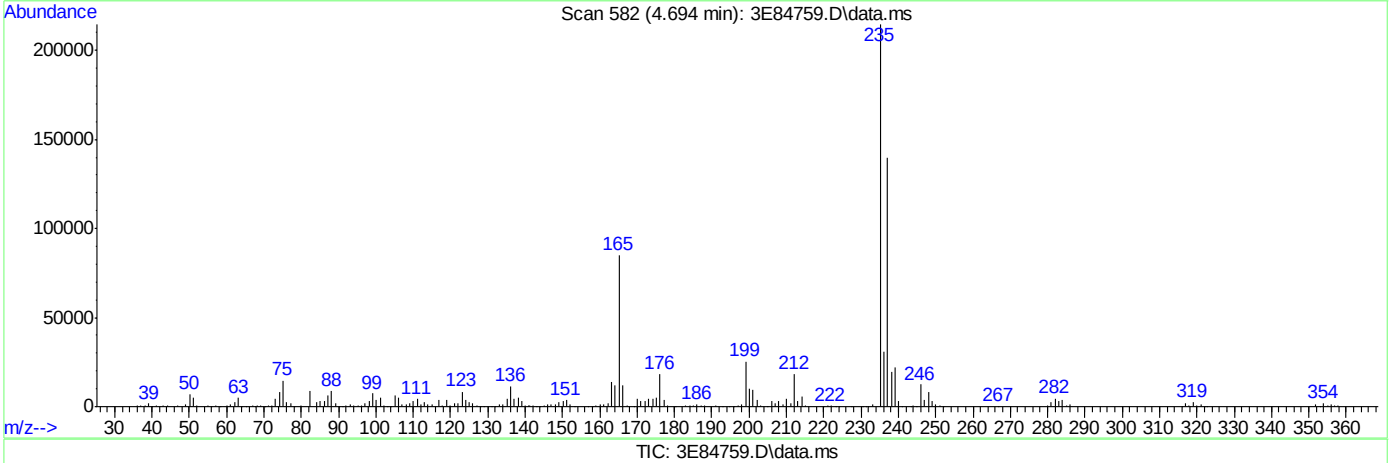
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84759.D
Acq On : 1 Jul 2016 8:09 pm
Operator : seanb1
Sample : dftpp
Misc : op95221,e3e3716
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 01 20:21:08 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Thu Jun 23 15:20:12 2016
QLast Update : Thu Jun 23 15:20:12 2016
Response via : Initial Calibration





TIC: 3E84759.D\data.ms

(3) PP-DDT (t)

4.694min (-0.182) 37.70ppb

response 156520

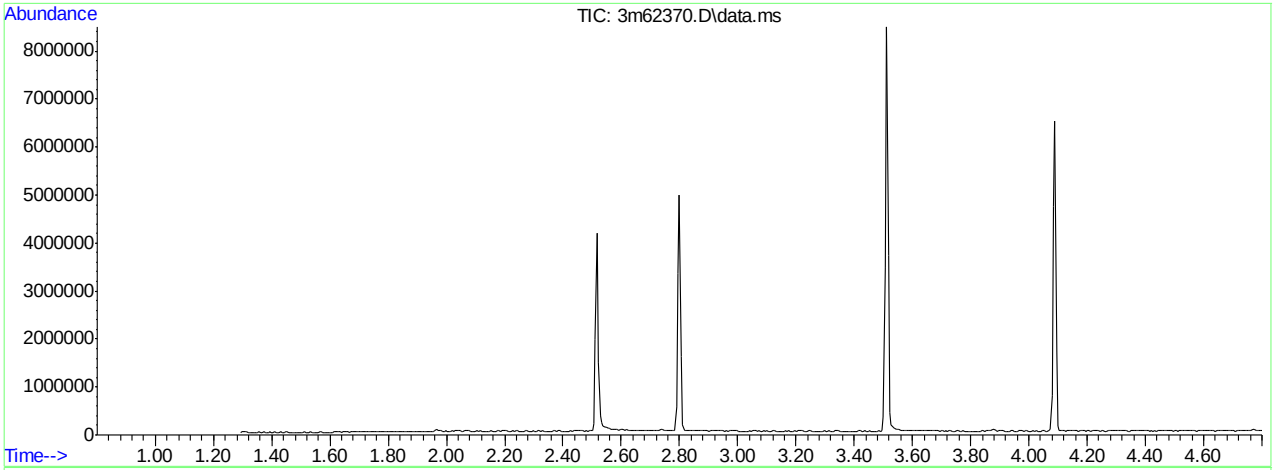
Ion	Exp%	Act%
235.00	100	100
165.00	0.10	44.84#
237.00	0.10	65.32#
0.00	0.00	0.00

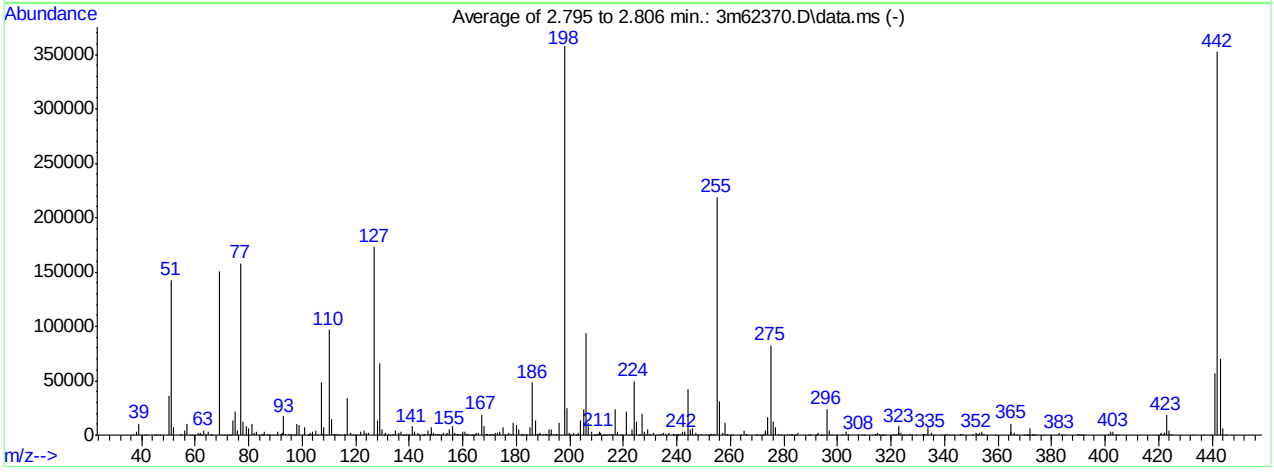
SGS ACCUTEST JC22613

DFTPP

Data File : C:\msdchem\1\DATA\E3M2942\3m62370.D Vial: 1
Acq On : 20 Jun 2016 6:23 pm Operator: ashleyd
Sample : dftpp Inst : MS3M
Misc : op94419a,e3m2942 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 282, 283, 284; Background Corrected with Scan 277

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.9	142639	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.2	150640	PASS
70	69	0.00	2	0.1	131	PASS
127	198	40	60	48.4	172819	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	357376	PASS
199	198	5	9	6.9	24760	PASS
275	198	10	30	23.2	82808	PASS
365	198	1	100	3.0	10751	PASS
441	443	0.10	100	81.1	56707	PASS
442	198	40	100	98.5	352192	PASS
443	442	17	23	19.8	69907	PASS

3m62370.D DFTPP3M.M Tue Jun 21 11:56:21 2016 RPT1

Average of 2.795 to 2.806 min.: 3m62370.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	81	50.95	142639	61.80	123	72.00	164
38.05	2922	52.00	7282	62.05	2203	72.90	318
39.05	10468	54.30	172	62.30	126	73.20	264
39.95	80	54.85	1188	63.00	4616	74.10	13505
41.00	125	56.00	4341	64.15	978	74.95	21173
41.95	215	57.00	9978	64.95	3519	75.95	4041
44.90	34	58.00	490	65.95	893	77.00	157806
45.10	350	59.00	75	66.30	118	78.00	12745
45.80	155	60.00	273	69.00	150640	79.00	8110
46.95	282	61.05	1733	69.95	131	80.00	6362
50.00	36500	61.30	205	70.80	217	81.00	10543

Average of 2.795 to 2.806 min.: 3m62370.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.95	2382	91.95	852	101.00	6995	108.80	180
83.05	3250	92.30	1594	101.95	371	110.00	96445
84.95	1052	92.95	17258	102.70	169	111.00	14291
85.40	450	93.90	826	103.10	1592	111.85	799
86.00	2956	94.95	823	103.40	230	112.10	1251
87.00	635	96.00	826	103.95	3589	113.05	901
87.65	336	96.80	245	105.00	3670	113.60	114
87.95	435	97.20	170	105.75	1045	114.20	134
89.00	214	98.00	10067	107.00	48177	115.90	1394
90.30	76	98.95	9073	107.70	689	117.00	33889
90.90	2732	99.95	15	108.05	7306	117.95	2512

Average of 2.795 to 2.806 min.: 3m62370.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
119.05	167	129.95	5599	138.95	725	148.05	7136
119.90	211	130.60	88	140.00	961	148.80	217
120.20	257	131.00	1608	141.05	7966	149.10	1948
121.25	400	132.10	601	141.90	3111	150.10	561
122.00	2792	132.75	457	143.05	2082	150.90	591
122.95	4336	133.95	1189	143.80	445	151.10	711
124.00	2571	134.95	4348	144.70	347	152.00	1233
124.95	2035	136.00	2369	145.20	502	152.90	2618
127.00	172819	137.00	2942	145.85	1117	153.80	286
128.05	13667	137.70	305	146.95	4290	154.10	1957
129.00	66066	137.90	79	147.70	640	155.05	5168

Average of 2.795 to 2.806 min.: 3m62370.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
156.10	8110	162.90	210	169.80	187	177.10	2491
157.10	1726	163.10	303	170.00	459	177.85	1074
157.80	730	163.70	88	170.75	846	178.95	11672
158.00	436	164.00	439	171.30	398	180.05	9127
158.20	210	164.75	115	171.90	1708	181.00	5190
158.95	1578	165.05	2525	172.95	1779	181.80	204
160.05	2767	165.95	2407	173.70	639	182.10	587
160.90	3348	167.00	18778	173.95	3084	182.70	380
161.10	278	167.95	8389	175.05	7672	183.10	260
161.60	631	168.95	1056	175.90	1518	183.70	87
162.05	918	169.20	1080	176.70	556	184.00	1025

Average of 2.795 to 2.806 min.: 3m62370.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
185.05	7416	192.60	247	201.50	2448	210.05	683
186.00	48421	193.00	5254	202.10	153	210.30	854
187.05	13505	193.90	1480	203.00	2366	210.65	1549
187.90	607	194.60	368	203.20	472	211.05	3549

188.20	790	195.05	977	204.05	13105	211.30	1823
188.90	821	196.05	11875	205.00	24095	212.15	257
189.05	1597	197.95	357376	206.00	93416	212.90	129
189.95	964	198.95	24760	207.00	11298	213.10	150
190.90	685	199.95	1680	208.00	3223	213.40	124
191.25	1360	200.20	167	209.00	483	213.80	101
192.00	4726	200.80	512	209.25	427	214.95	916

Average of 2.795 to 2.806 min.: 3m62370.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
215.70	1394	225.00	12558	232.75	352	240.50	159
216.10	637	225.80	277	233.90	583	241.10	1312
216.95	23913	226.20	371	234.10	992	242.05	3028
217.95	2968	227.00	19756	234.95	1813	242.85	2728
219.00	623	227.90	3006	235.95	1256	243.10	563
219.60	337	228.10	382	236.85	1605	244.00	42307
221.00	21331	229.00	4780	238.70	181	244.95	4791
221.85	333	229.90	172	238.85	621	246.00	6683
223.00	5497	230.05	920	239.20	460	247.05	1964
223.20	775	231.00	1729	239.85	662	247.85	674
224.00	49685	231.95	198	240.20	104	249.00	1582

Average of 2.795 to 2.806 min.: 3m62370.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
250.85	593	258.70	190	271.75	357	281.85	336
251.90	328	258.95	1528	272.10	256	282.60	104
252.10	193	260.05	255	272.90	1815	283.00	888
252.50	178	260.85	350	273.10	4651	283.75	329
253.10	782	263.90	365	273.90	16215	284.20	204
253.40	181	264.95	4564	275.00	82808	285.05	1855
254.00	719	265.90	365	276.00	11994	289.10	161
255.00	218565	266.10	1406	277.00	7442	289.70	216
256.00	31285	269.60	146	278.00	1153	290.00	289
257.00	2298	269.90	293	279.00	298	291.80	390
258.00	11532	270.90	505	281.00	258	292.20	109

Average of 2.795 to 2.806 min.: 3m62370.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
292.95	2121	307.90	591	318.00	75	327.05	1322
294.00	131	309.05	376	320.90	632	327.90	1184
294.20	396	309.80	385	321.20	188	329.20	156
294.95	353	312.80	210	322.20	636	332.05	954
296.00	23883	314.00	1059	322.90	2035	332.75	743
296.95	3927	314.20	294	323.05	7794	333.10	463
297.80	323	314.85	1132	323.95	1940	334.00	7000
301.95	577	315.10	2317	324.70	166	334.95	2391
303.05	3200	315.85	1506	325.20	115	336.10	100
303.90	348	316.70	105	325.90	121	338.70	110
304.20	662	317.05	238	326.80	488	340.10	119

Average of 2.795 to 2.806 min.: 3m62370.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
341.00	1084	353.80	798	371.20	212	389.65	320
341.85	394	353.95	2689	371.95	5975	390.15	684
342.90	93	354.90	1057	372.80	328	390.70	314
345.80	212	358.80	84	373.05	1402	391.15	438
346.00	1441	364.80	2816	373.50	151	391.75	391
346.90	696	365.00	10751	374.10	201	392.10	177
350.75	364	365.90	1840	376.80	157	401.05	704
351.90	2565	366.90	257	382.95	2052	402.00	2958
352.10	851	369.85	248	383.80	448	403.05	3479
352.50	89	370.80	176	384.15	260	404.00	993
352.95	2361	371.00	447	384.95	183	405.00	151

Average of 2.795 to 2.806 min.: 3m62370.D\data.ms

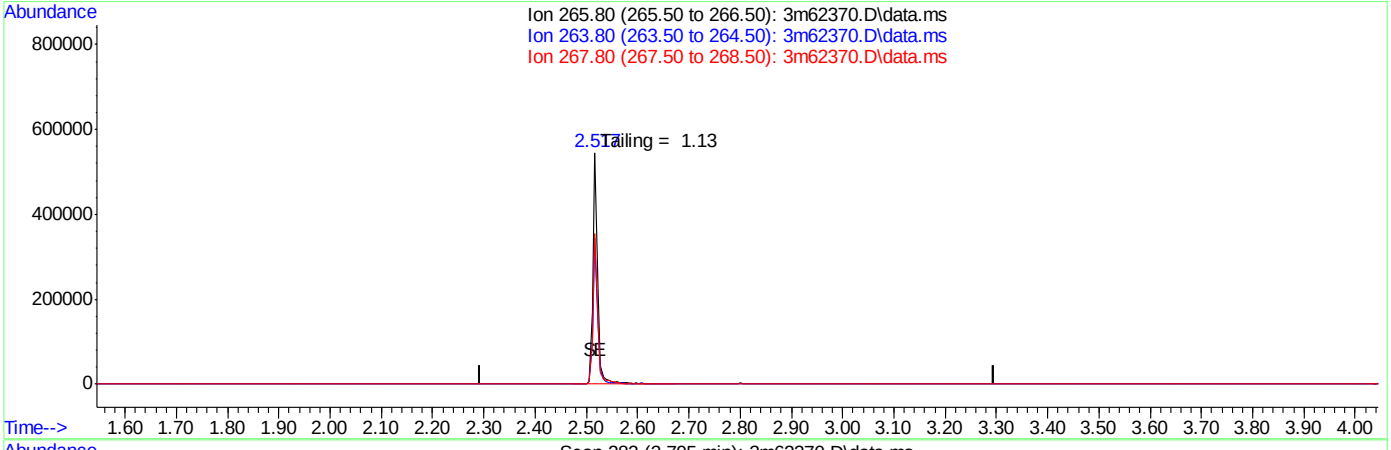
dftpp
Modified:subtracted

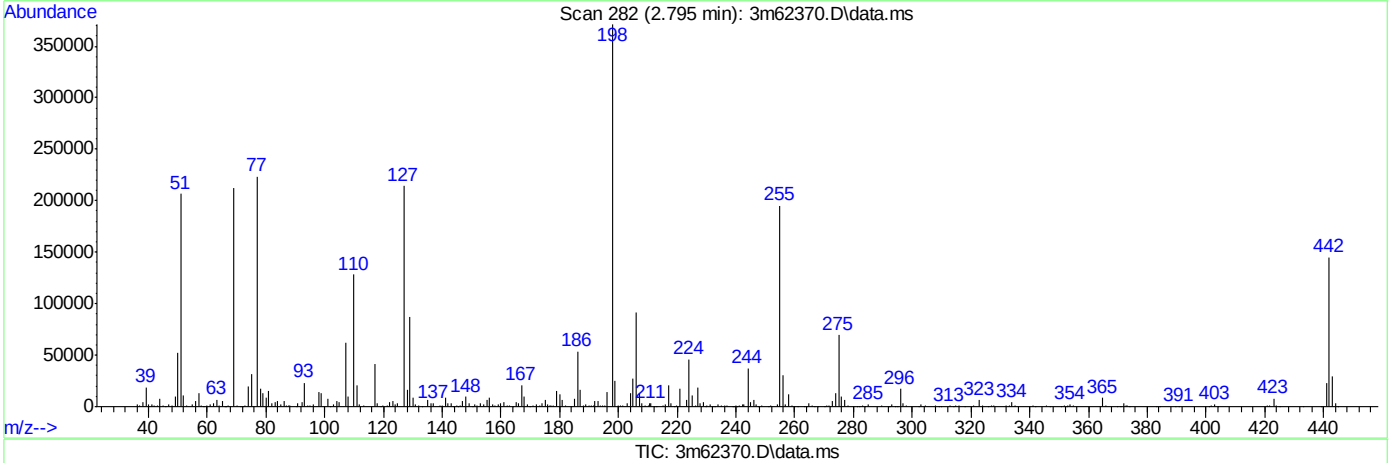
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
420.85	1860	442.00	352192				
421.10	944	443.00	69907				
421.80	317	444.05	6076				
422.05	2008	445.05	531				
423.00	18110						
424.05	3856						
424.90	624						
433.10	106						
436.90	81						
439.20	110						
441.00	56707						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62370.D
Acq On : 20 Jun 2016 6:23 pm
Operator : ashleyd
Sample : dftpp
Misc : op94419a,e3m2942
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 21 11:56:18 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: 3m62370.D\data.ms

(1) Pentachlorophenol (t)

2.795min 0.00ppb d

response 0

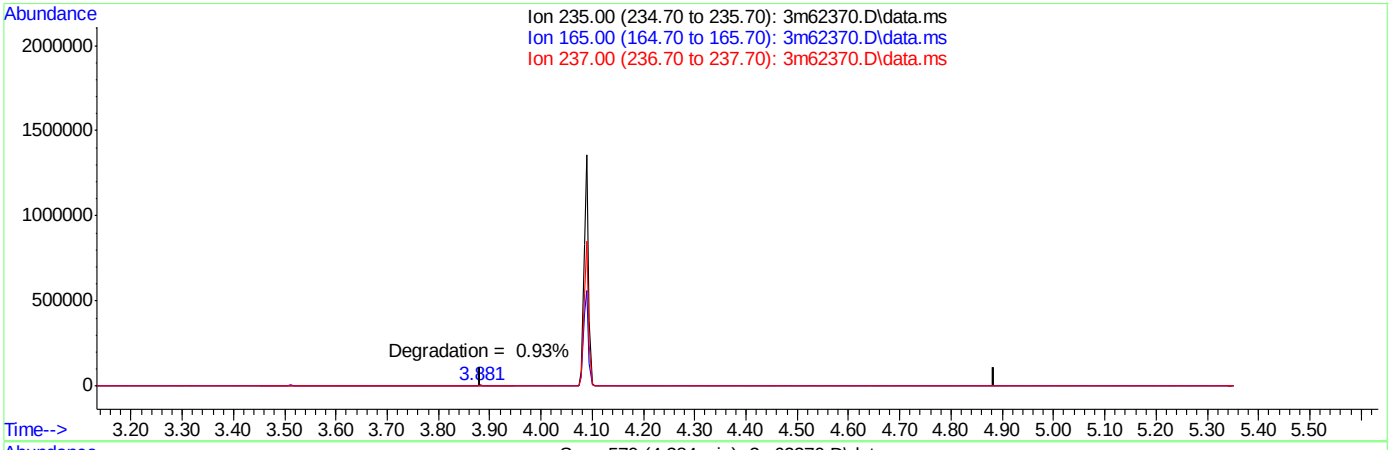
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.80	0.00
267.80	64.10	0.00
0.00	0.00	0.00

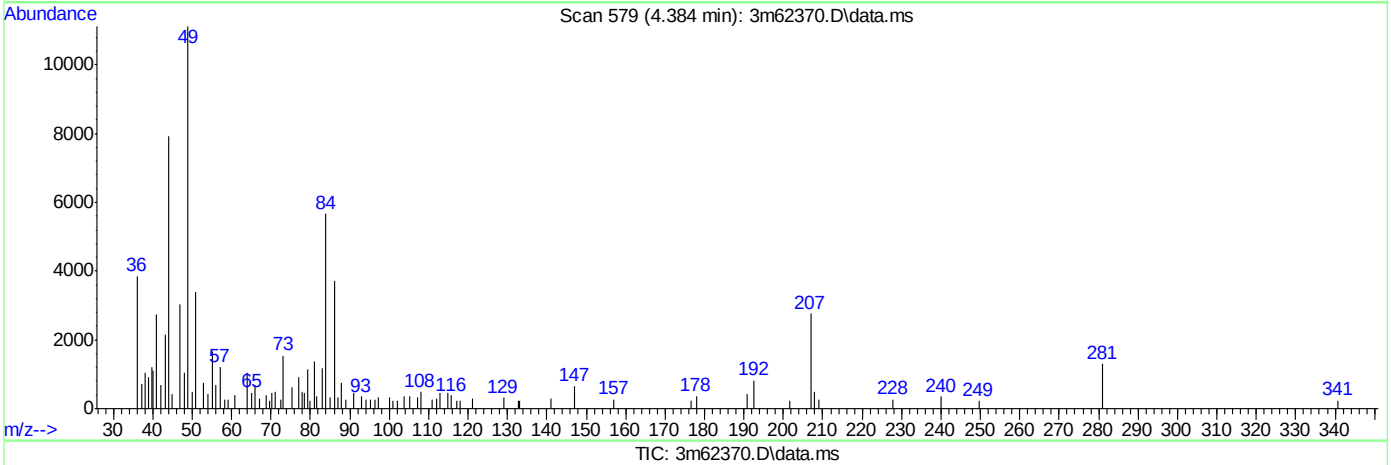
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62370.D
Acq On : 20 Jun 2016 6:23 pm
Operator : ashleyd
Sample : dftpp
Misc : op94419a,e3m2942
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 21 11:56:18 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: 3m62370.D\data.ms

(3) PP-DDT (t)

4.384min (-4.384) 0.00ppb

response 0

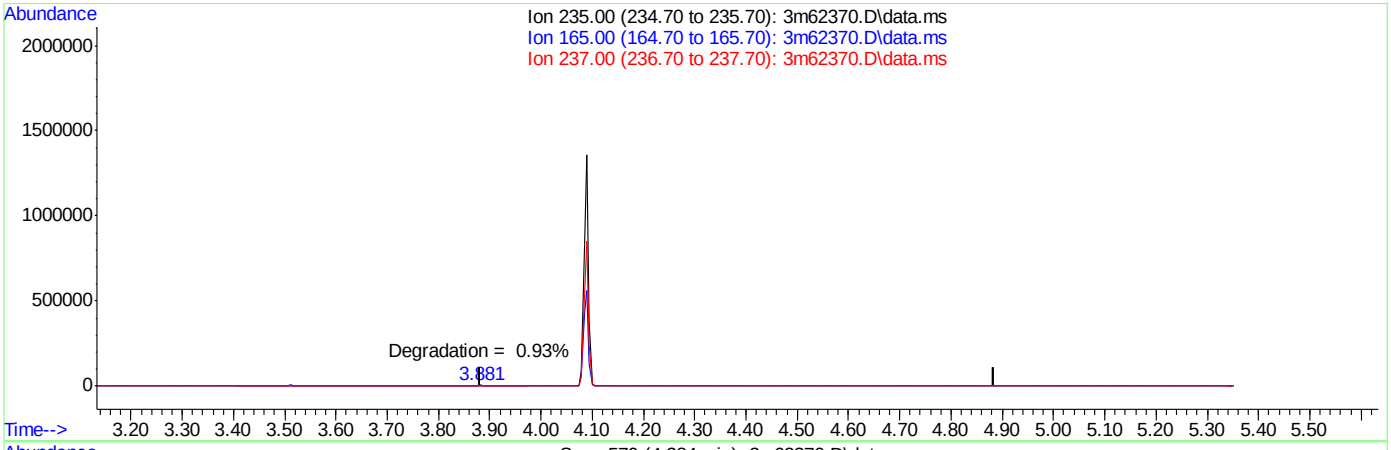
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
237.00	0.00	0.00
0.00	0.00	0.00

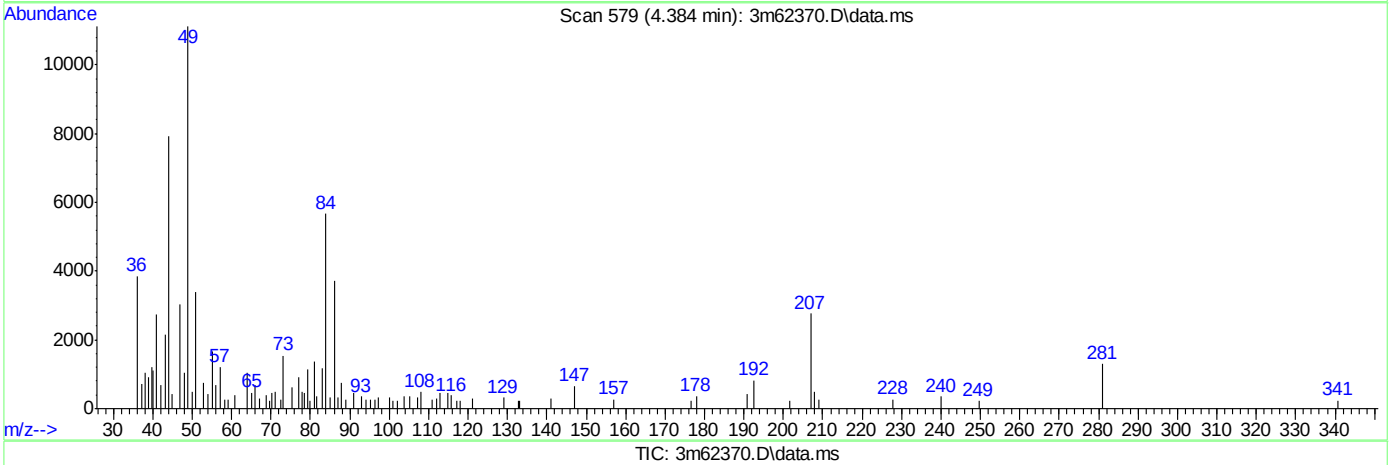
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62370.D
Acq On : 20 Jun 2016 6:23 pm
Operator : ashleyd
Sample : dftpp
Misc : op94419a,e3m2942
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 21 11:56:18 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: 3m62370.D\data.ms

(3) PP-DDT (t)

4.384min (-4.384) 0.00ppb

response 0

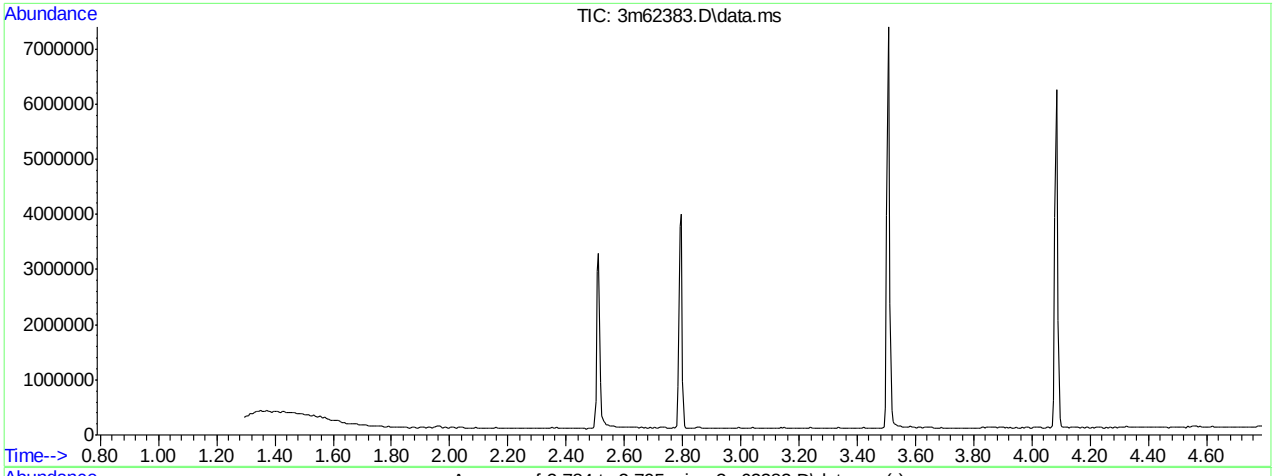
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
237.00	0.00	0.00
0.00	0.00	0.00

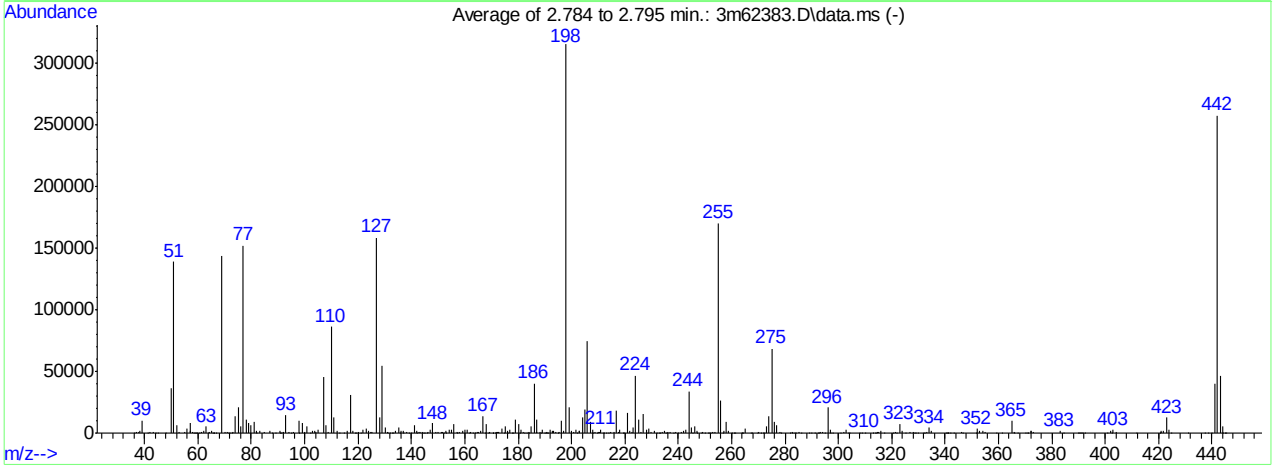
SGS ACCUTEST JC22613

DFTPP

Data File : C:\msdchem\1\DATA\E3M2943\3m62383.D Vial: 1
Acq On : 21 Jun 2016 9:06 am Operator: linseyk
Sample : dftpp Inst : MS3M
Misc : op94419a,e3m2943 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 280, 281, 282; Background Corrected with Scan 276

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.1	139176	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.7	143977	PASS
70	69	0.00	2	0.6	932	PASS
127	198	40	60	50.3	158565	PASS
197	198	0.00	1	0.6	1950	PASS
198	198	100	100	100.0	315368	PASS
199	198	5	9	6.7	21167	PASS
275	198	10	30	21.7	68458	PASS
365	198	1	100	3.2	9982	PASS
441	443	0.10	100	86.4	40278	PASS
442	198	40	100	81.7	257583	PASS
443	442	17	23	18.1	46645	PASS

3m62383.D DFTPP3M.M Tue Jun 21 12:00:52 2016 RPT1

Average of 2.784 to 2.795 min.: 3m62383.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	158	50.00	36845	59.00	259	66.10	102
36.80	620	50.95	139176	59.80	160	66.85	100
37.80	732	52.10	6334	60.60	317	68.95	143977
38.05	1836	53.05	661	61.10	1218	70.05	932
39.00	10430	55.00	680	61.95	2060	71.00	770
41.00	224	55.90	3417	63.05	5144	71.40	152
41.95	971	56.90	1778	63.70	91	71.85	470
43.20	1060	57.05	8471	64.05	515	72.80	289
44.00	349	57.90	726	65.10	2154	72.95	983
44.90	163	58.40	198	65.70	111	74.00	13648
47.90	453	58.70	100	65.90	94	75.05	20664

Average of 2.784 to 2.795 min.: 3m62383.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
76.10	5702	87.90	97	97.70	426	107.95	6504
77.05	152235	88.90	463	98.00	9895	108.90	599
78.10	10624	90.70	427	98.95	7962	110.00	86011
79.05	8180	90.90	1887	100.05	948	110.95	13153
80.00	6858	91.30	345	100.90	5310	112.00	1441
80.90	9553	91.85	1129	101.90	462	112.85	272
81.80	243	92.10	1225	102.95	2134	114.80	283
82.10	1948	93.00	14841	103.80	1735	115.90	1446
83.00	2239	94.00	1294	104.00	876	117.00	31419
85.00	1107	95.00	446	104.90	3013	117.95	1864
86.95	1944	95.95	697	107.00	45741	118.95	260

Average of 2.784 to 2.795 min.: 3m62383.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
119.30	157	130.00	4265	136.95	1850	145.00	326
120.10	1022	130.90	146	138.10	808	145.70	79
120.80	488	131.10	521	138.90	190	146.05	1308
122.00	2800	132.05	373	139.90	352	147.00	3094
123.05	3643	132.80	96	141.05	6687	148.00	8177
123.85	1976	133.30	404	141.80	224	149.05	1334
124.95	1145	133.95	1777	142.05	2273	150.00	570
125.20	748	135.05	4351	142.80	779	151.05	1104
127.00	158565	135.70	293	143.10	824	151.65	1063
128.00	12696	136.00	1705	144.05	722	152.10	286
128.95	54803	136.80	362	144.70	223	152.70	224

Average of 2.784 to 2.795 min.: 3m62383.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
152.90	2013	161.95	938	170.40	225	176.15	2028
154.00	2323	162.80	307	170.60	342	176.95	2697
155.00	3003	163.90	182	171.30	323	177.70	287
156.00	7610	164.80	993	171.80	594	178.10	81
157.00	410	165.00	1177	172.10	719	179.00	11220
157.20	623	165.80	2288	172.60	614	180.00	7048
157.95	917	166.95	14095	172.80	505	180.80	479
159.10	1545	167.70	458	173.95	3411	181.00	2937
159.90	2680	168.10	6898	174.80	415	181.90	503
161.05	2909	168.90	194	175.00	5857	182.30	300
161.80	332	169.15	1191	176.00	74	183.15	311

Average of 2.784 to 2.795 min.: 3m62383.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
183.90	270	190.60	87	197.95	315368	207.00	8927
184.10	601	190.85	938	199.00	21167	207.80	178
185.00	5439	191.20	454	199.95	1858	207.95	2519
186.00	40353	191.95	2908	200.75	507	208.90	857

186.90	1043	192.90	2125	201.50	2813	209.55	281
187.05	10716	193.10	1882	202.10	207	209.90	632
188.05	1251	193.90	850	202.80	1526	210.30	839
188.80	321	194.90	483	203.00	1508	211.05	2831
189.05	2343	195.20	677	204.05	12403	211.80	451
189.80	79	196.15	9631	205.00	18716	212.00	426
190.20	244	196.80	1950	206.00	74707	213.00	307

Average of 2.784 to 2.795 min.: 3m62383.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
214.00	124	223.00	4807	232.90	401	241.00	1124
214.85	753	224.00	46842	233.20	113	242.15	1759
215.90	1229	225.00	11356	233.95	1366	243.00	2927
216.95	18685	226.10	900	234.90	1489	244.05	33998
217.80	792	227.00	15932	235.20	94	244.95	4470
218.05	2461	227.95	2529	235.60	309	245.30	274
219.10	368	228.60	173	236.15	637	246.05	5386
219.80	127	228.95	3943	237.05	1258	246.85	1529
221.00	16059	229.90	714	238.05	214	247.10	405
221.90	1656	231.05	1475	239.05	667	248.60	317
222.80	553	231.90	304	240.00	457	249.00	1107

Average of 2.784 to 2.795 min.: 3m62383.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
250.10	354	258.95	1855	270.10	631	282.00	212
251.10	423	259.90	297	271.15	401	282.50	103
251.70	140	260.90	265	271.60	400	282.90	711
252.00	341	261.20	219	272.00	410	283.70	85
252.95	656	263.60	338	272.90	5346	284.15	298
253.90	792	263.85	1	274.05	13469	285.05	943
255.00	170349	264.20	432	275.00	68458	286.00	326
256.00	26099	265.05	3502	276.05	9161	289.00	211
256.80	220	267.20	116	276.95	6165	289.75	188
257.10	1778	267.70	274	277.95	1099	291.30	79
258.00	8832	269.60	97	278.70	94	292.20	73

Average of 2.784 to 2.795 min.: 3m62383.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
292.80	107	303.80	155	317.00	175	329.80	156
293.15	1237	304.00	322	320.60	232	331.80	311
293.95	585	308.05	292	321.15	848	332.10	184
294.95	383	308.90	214	321.80	122	333.10	650
295.95	20889	310.00	436	323.05	7420	334.05	4444
296.80	105	313.00	255	324.05	1502	335.00	1439
297.00	3009	313.90	334	325.10	164	340.10	111
297.90	220	314.20	247	326.85	1102	340.60	202
300.80	132	314.70	1068	327.95	496	340.90	260
302.00	684	315.00	924	328.30	165	341.15	384
303.00	2375	316.00	1435	329.10	109	341.80	174

Average of 2.784 to 2.795 min.: 3m62383.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
343.10	76	365.80	934	389.75	437	411.50	75
346.00	1359	366.10	318	390.20	157	420.50	82
346.75	335	367.10	103	390.50	142	420.80	712
351.80	120	370.20	95	391.05	336	421.00	1655
352.00	3238	370.80	99	391.50	90	421.95	1459
353.00	1894	371.10	443	392.15	467	423.05	12517
353.95	2127	372.00	1733	400.80	410	424.05	2598
355.15	595	372.20	2160	402.10	1541	424.85	424
359.10	163	372.95	1034	402.60	164	430.80	171
361.20	130	383.00	1589	402.95	2543	437.20	175
364.90	9982	384.20	237	404.05	847	438.70	123

Average of 2.784 to 2.795 min.: 3m62383.D\data.ms

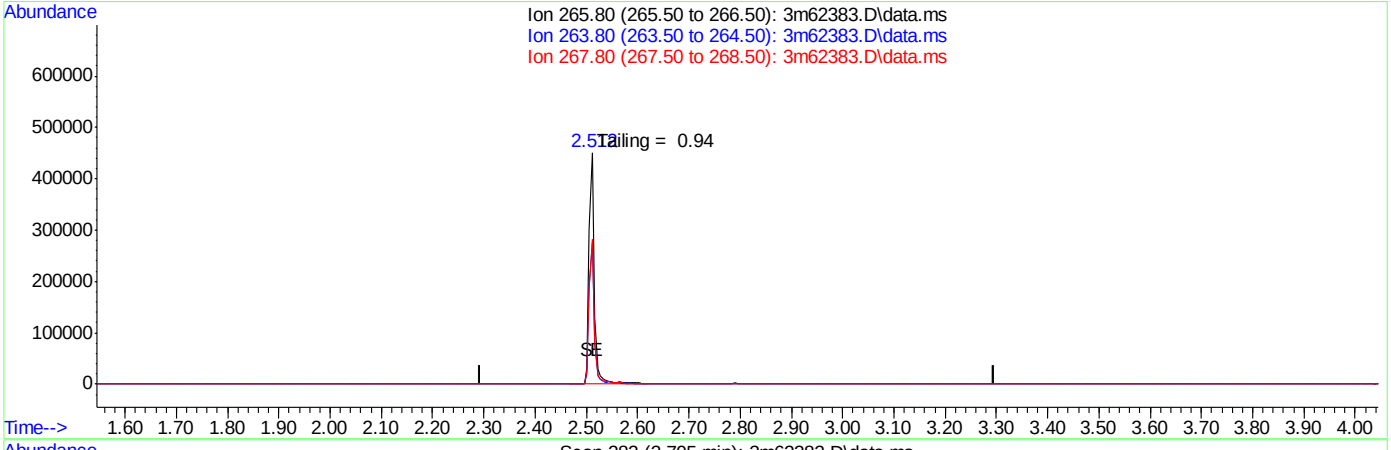
dftpp
Modified:subtracted

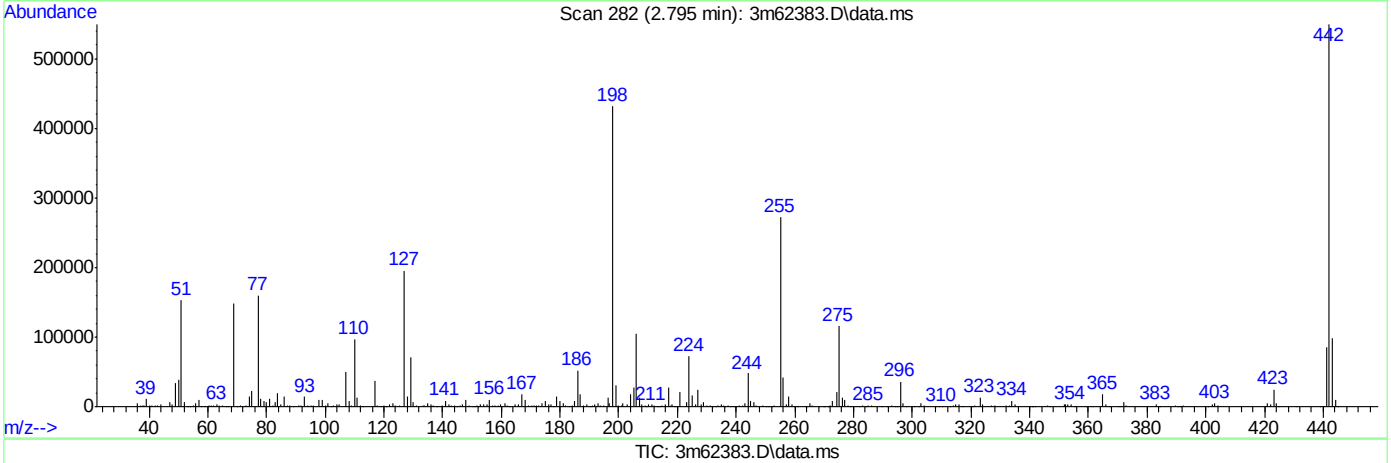
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
440.00	182						
441.00	40278						
442.00	257583						
443.00	46645						
443.90	101						
444.10	5040						
444.80	123						
445.10	286						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2943\
Data File : 3m62383.D
Acq On : 21 Jun 2016 9:06 am
Operator : linseyk
Sample : dftpp
Misc : op94419a,e3m2943
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 21 09:10:17 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: 3m62383.D\data.ms

(1) Pentachlorophenol (t)

2.795min 0.00ppb d

response 0

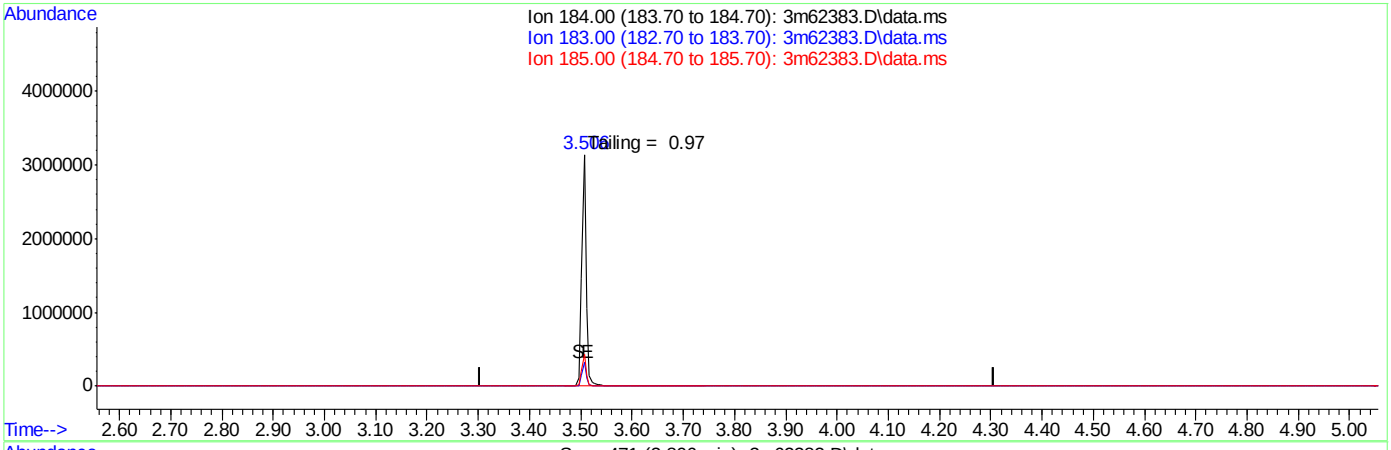
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.80	0.00
267.80	64.10	0.00
0.00	0.00	0.00

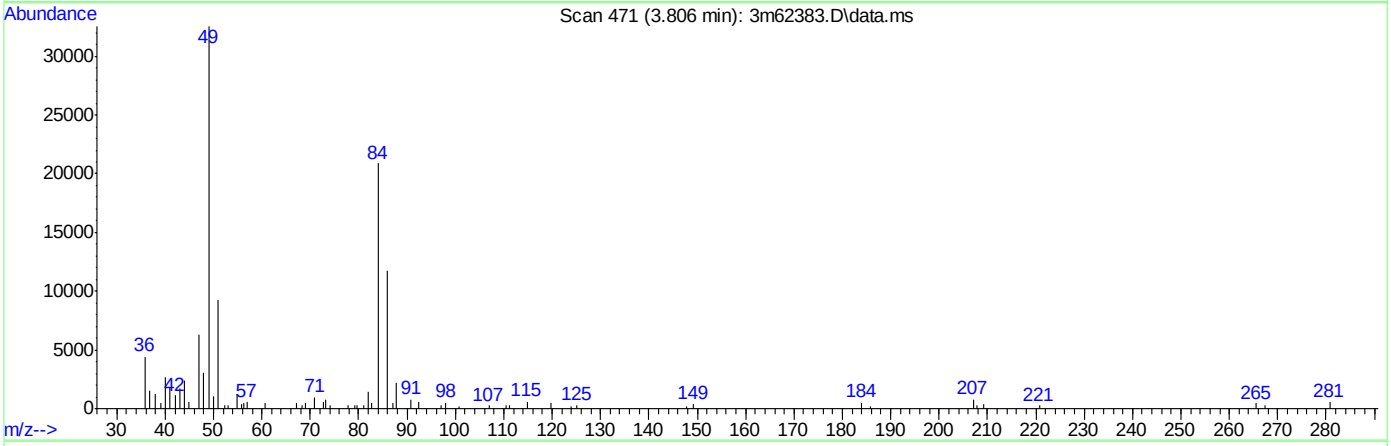
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2943\
Data File : 3m62383.D
Acq On : 21 Jun 2016 9:06 am
Operator : linseyk
Sample : dftpp
Misc : op94419a,e3m2943
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 21 09:10:17 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: 3m62383.D\data.ms

(2) Benzidine (t)

3.806min 0.00ppb d

response 0

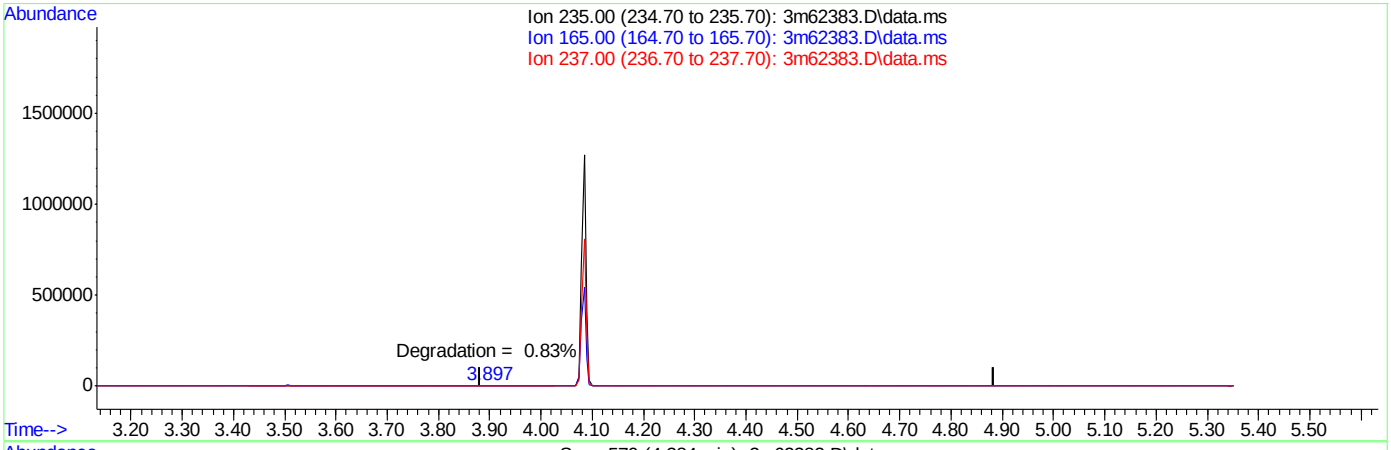
Ion	Exp%	Act%
184.00	100	0.00
183.00	11.50	0.00
185.00	14.40	0.00
0.00	0.00	0.00

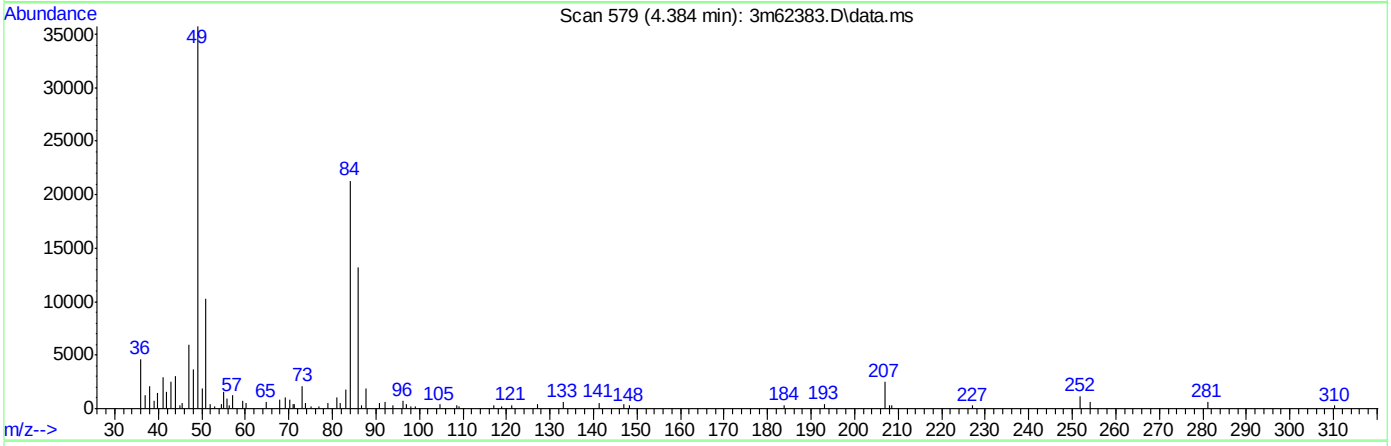
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3M2943\
Data File : 3m62383.D
Acq On    : 21 Jun 2016   9:06 am
Operator  : linseyk
Sample    : dftpp
Misc      : op94419a,e3m2943
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Jun 21 09:10:17 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: 3m62383.D\data.ms

(3) PP-DDT (t)

4.384min (-4.384) 0.00ppb

response 0

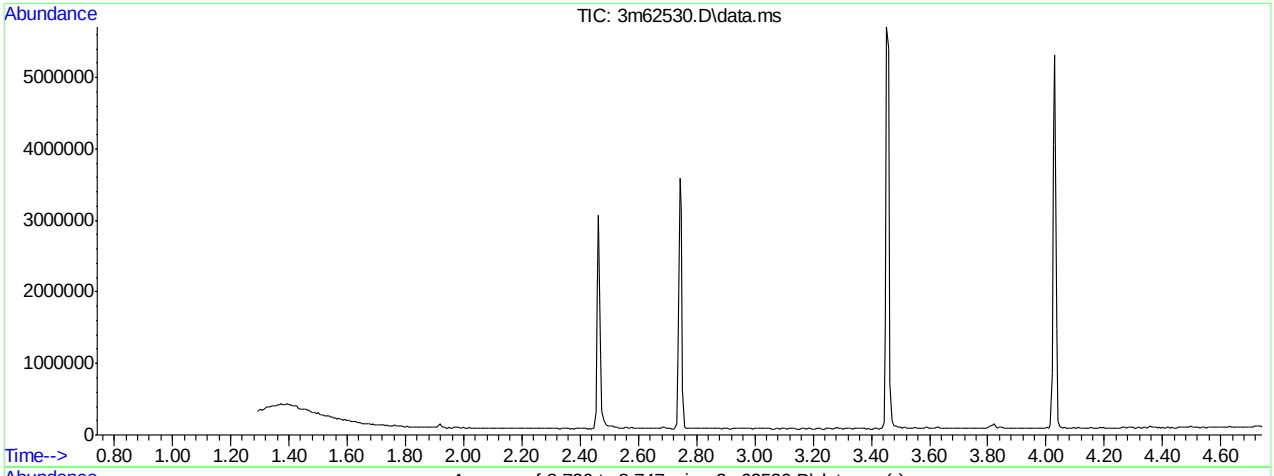
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
237.00	0.00	0.00
0.00	0.00	0.00

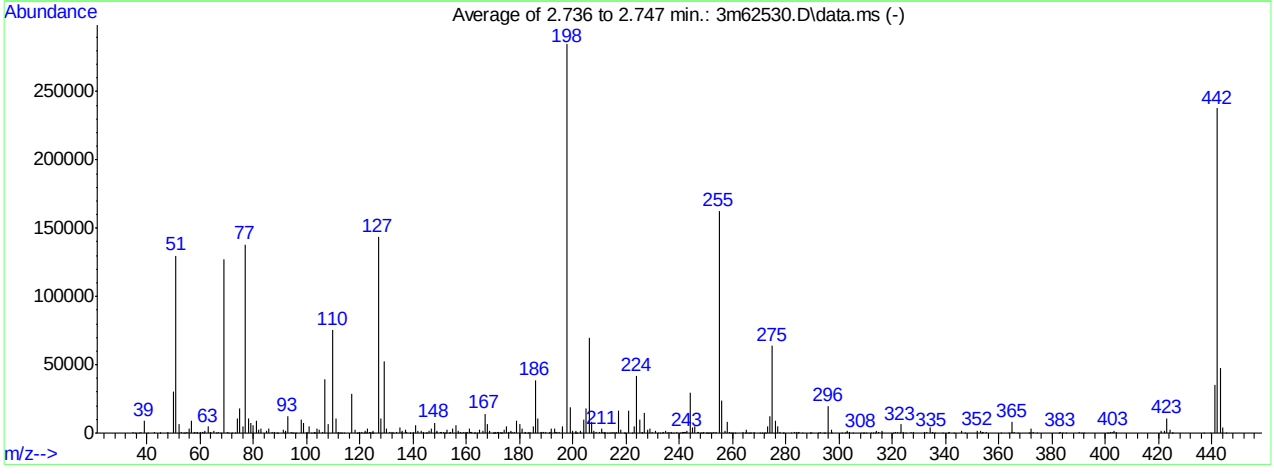
SGS ACCUTEST JC22613

DFTPP

Data File : C:\msdchem\1\DATA\e3m2951\3m62530.D Vial: 1
Acq On : 26 Jun 2016 3:56 pm Operator: ariellec
Sample : dftpp Inst : MS3M
Misc : op94697,e3m2951 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 271, 272, 273; Background Corrected with Scan 267

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.7	130049	PASS
68	69	0.00	2	0.2	240	PASS
69	198	0.00	100	44.6	126838	PASS
70	69	0.00	2	0.7	835	PASS
127	198	40	60	50.4	143488	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	284509	PASS
199	198	5	9	6.7	19099	PASS
275	198	10	30	22.4	63839	PASS
365	198	1	100	2.8	7977	PASS
441	443	0.10	100	74.8	35465	PASS
442	198	40	100	83.6	237733	PASS
443	442	17	23	19.9	47402	PASS

3m62530.D DFTPP3M.M Mon Jun 27 11:50:31 2016 RPT1

Average of 2.736 to 2.747 min.: 3m62530.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	737	51.00	130049	59.00	475	67.05	529
35.90	345	52.00	6887	60.10	458	67.90	240
36.95	327	53.05	757	60.95	619	68.95	126838
37.95	839	53.85	22	61.20	473	70.10	835
39.00	8785	54.20	85	61.60	353	70.80	109
40.20	423	55.00	507	62.00	1578	71.85	365
42.95	875	55.95	3494	63.05	4573	73.15	110
44.90	271	57.00	9054	63.90	237	74.00	10380
45.10	177	57.70	197	64.15	458	75.00	18493
47.80	550	57.95	614	65.05	2007	76.15	4693
50.05	30267	58.70	154	66.20	105	76.95	138212

Average of 2.736 to 2.747 min.: 3m62530.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
78.05	10345	89.10	130	100.00	173	107.95	6872
79.05	7071	91.10	2357	100.15	659	110.00	75232
79.90	5877	91.80	407	100.95	4667	111.00	11013
81.00	9209	92.00	1878	101.95	335	111.90	1099
81.90	2157	92.95	12526	102.80	227	112.30	92
83.05	2930	94.10	448	103.00	1016	112.80	399
84.90	1688	94.85	368	103.20	223	113.20	131
85.90	3119	95.10	193	103.95	3132	114.00	161
87.00	503	95.95	357	104.95	2747	117.00	28487
87.85	913	98.05	9583	105.95	842	118.05	2300
88.80	280	99.00	7435	107.00	39509	118.95	103

Average of 2.736 to 2.747 min.: 3m62530.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
119.20	211	125.05	1821	136.05	1447	145.10	109
119.90	667	127.00	143488	137.00	2424	145.95	1295
120.95	456	128.05	10689	137.80	697	146.95	3620
121.60	278	129.00	52792	138.70	147	147.95	7654
121.95	1587	130.00	3444	139.00	209	148.80	536
122.50	235	131.10	1023	139.95	619	148.95	1541
122.95	3424	131.95	524	141.00	5615	150.10	742
123.70	827	132.65	226	141.95	2045	150.80	542
124.05	1245	133.95	1201	143.00	1474	151.35	928
124.50	173	134.95	4405	144.10	619	152.00	121
124.90	179	135.70	139	144.80	236	152.20	267

Average of 2.736 to 2.747 min.: 3m62530.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
152.90	2166	160.15	1084	168.90	1355	175.00	5119
153.80	203	161.00	3248	170.10	352	175.80	833
154.05	1239	161.80	751	170.30	104	176.10	702
154.95	3232	162.00	516	170.80	308	176.80	1497
155.95	5367	162.75	310	171.05	475	177.10	704
156.90	163	163.10	128	171.75	1089	177.90	491
157.05	1345	164.00	386	172.10	539	179.00	9463
157.85	1195	164.85	2137	172.80	186	179.95	6747
158.10	288	166.05	1405	172.95	1219	180.95	3211
159.05	1072	167.00	13966	173.30	170	181.90	338
159.90	884	168.00	6978	174.05	2384	182.20	449

Average of 2.736 to 2.747 min.: 3m62530.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
182.90	239	190.85	348	199.95	1897	207.05	8302
183.20	145	191.30	621	200.60	239	208.05	1827
183.95	1069	191.95	3118	201.10	206	208.85	792
185.00	4607	192.95	3643	201.30	1667	210.10	1180

186.00	39000	193.75	653	201.60	205	210.85	3125
187.00	10862	194.10	857	202.80	232	211.20	1058
187.90	735	194.90	1023	202.95	1790	211.50	154
188.10	635	195.90	4892	204.10	9993	211.80	251
188.85	925	196.10	3382	205.00	18422	212.15	490
189.10	877	197.90	284509	206.00	69704	213.00	234
189.95	505	199.00	19099	206.90	488	213.90	89

Average of 2.736 to 2.747 min.: 3m62530.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
214.10	74	224.00	41842	233.70	144	241.70	863
214.95	599	225.00	9531	234.00	693	242.00	1227
215.60	83	225.90	465	234.95	1432	242.20	668
216.10	971	226.10	419	235.20	79	243.00	1541
216.95	16644	226.95	15202	236.00	1034	244.00	29831
217.90	2254	227.95	2244	236.85	697	245.00	4221
219.10	255	229.00	3260	237.10	164	245.95	4802
219.60	298	229.85	521	237.95	395	246.90	702
221.00	16532	231.05	1472	238.95	744	247.10	491
222.10	234	231.95	261	240.10	266	247.85	243
222.90	4987	232.90	272	240.95	830	248.10	122

Average of 2.736 to 2.747 min.: 3m62530.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
248.70	343	256.00	24016	265.20	290	275.00	63839
249.00	733	257.00	1632	266.00	408	276.05	8890
249.90	439	257.95	8493	266.20	173	276.95	5180
250.30	77	258.95	1008	266.70	75	277.90	1012
250.90	176	259.20	392	267.90	486	278.90	173
251.10	121	259.80	149	270.20	155	279.10	135
251.80	130	260.10	98	271.05	433	282.00	215
252.20	95	261.00	394	271.80	253	283.05	676
252.95	859	263.95	598	272.10	262	284.05	646
253.80	640	264.70	282	273.00	5178	284.60	316
255.00	162771	264.95	2842	274.05	12078	285.10	829

Average of 2.736 to 2.747 min.: 3m62530.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
286.00	178	300.95	221	312.75	209	323.05	6293
289.00	144	302.05	327	313.70	140	323.95	1143
289.20	148	302.90	1621	314.00	1268	324.80	179
289.70	120	303.10	1021	314.80	1037	327.05	1192
292.05	252	304.05	907	315.00	722	328.00	929
292.80	1191	305.10	119	315.90	159	332.00	595
294.10	236	308.15	301	316.05	1413	332.85	540
294.70	118	308.90	247	320.10	73	334.10	3888
296.00	19949	309.20	98	321.05	777	334.80	91
296.95	2250	310.10	78	322.05	489	335.00	1138
297.30	135	311.90	99	322.90	400	335.90	100

Average of 2.736 to 2.747 min.: 3m62530.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
338.60	144	355.00	537	374.00	82	402.00	785
340.90	134	360.70	154	382.70	123	402.75	775
341.10	825	363.80	88	383.05	1018	403.05	1984
343.00	224	364.80	784	383.95	395	404.00	803
346.05	1518	365.00	7977	385.00	86	420.95	1861
347.00	411	365.80	1219	390.00	491	421.95	1795
352.00	1999	367.00	113	391.10	299	423.00	10712
353.00	1683	371.00	429	392.00	301	424.05	2612
353.50	77	371.80	177	400.70	181	424.90	78
353.90	690	372.05	3127	401.20	144	425.10	253
354.10	1070	372.95	749	401.80	830	436.70	96

Average of 2.736 to 2.747 min.: 3m62530.D\data.ms

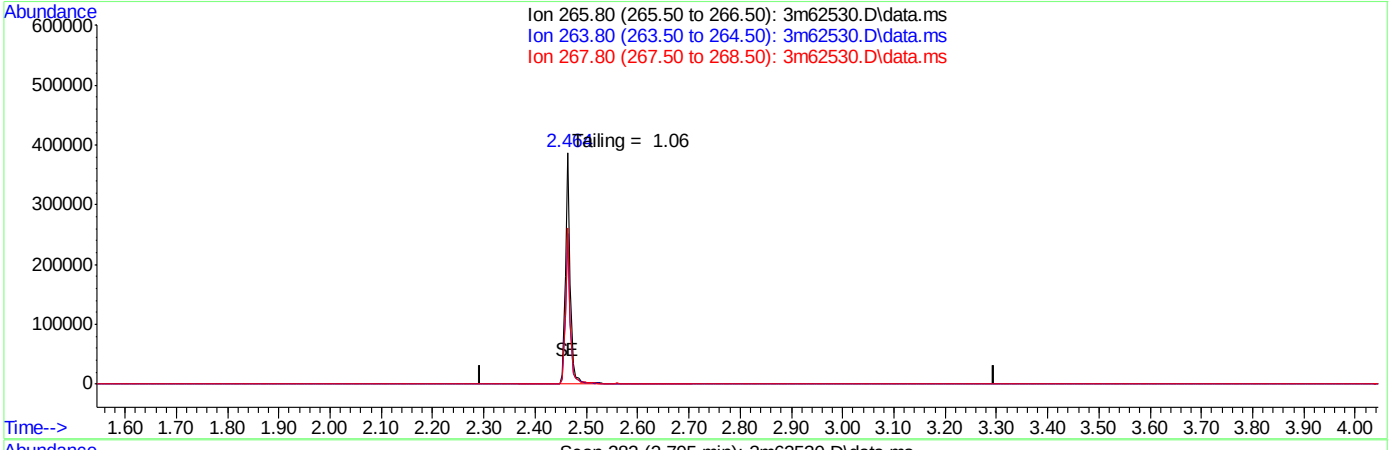
dftpp
Modified:subtracted

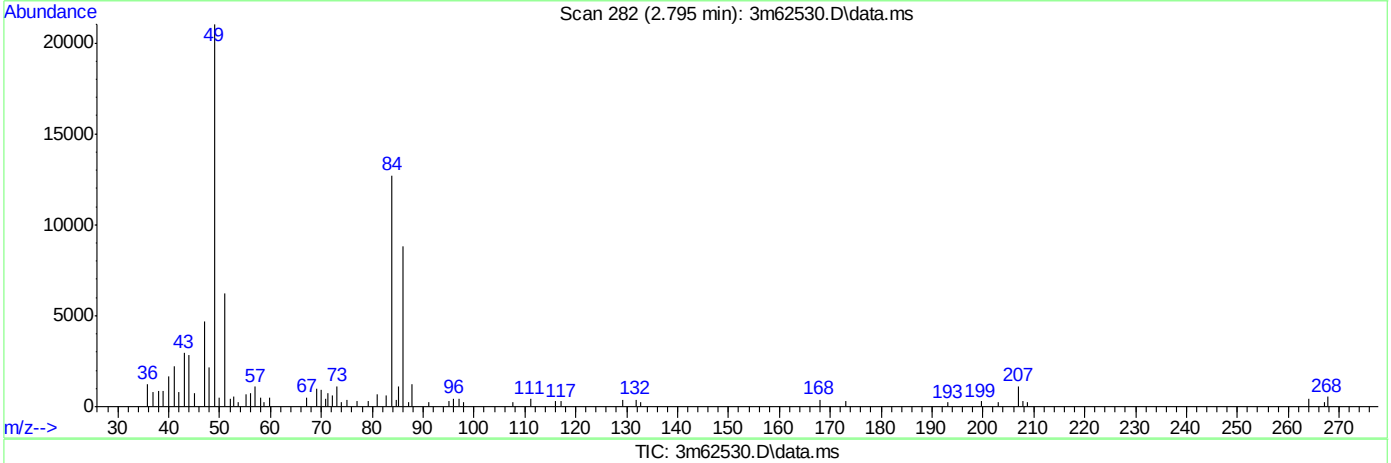
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
439.35	233						
441.00	35465						
442.00	237733						
443.05	47402						
444.10	4358						
445.10	157						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e3m2951\
Data File : 3m62530.D
Acq On : 26 Jun 2016 3:56 pm
Operator : ariellec
Sample : dftpp
Misc : op94697,e3m2951
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 26 16:00:47 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: 3m62530.D\data.ms

(1) Pentachlorophenol (t)

2.795min (-2.795) 0.00ppb

response 0

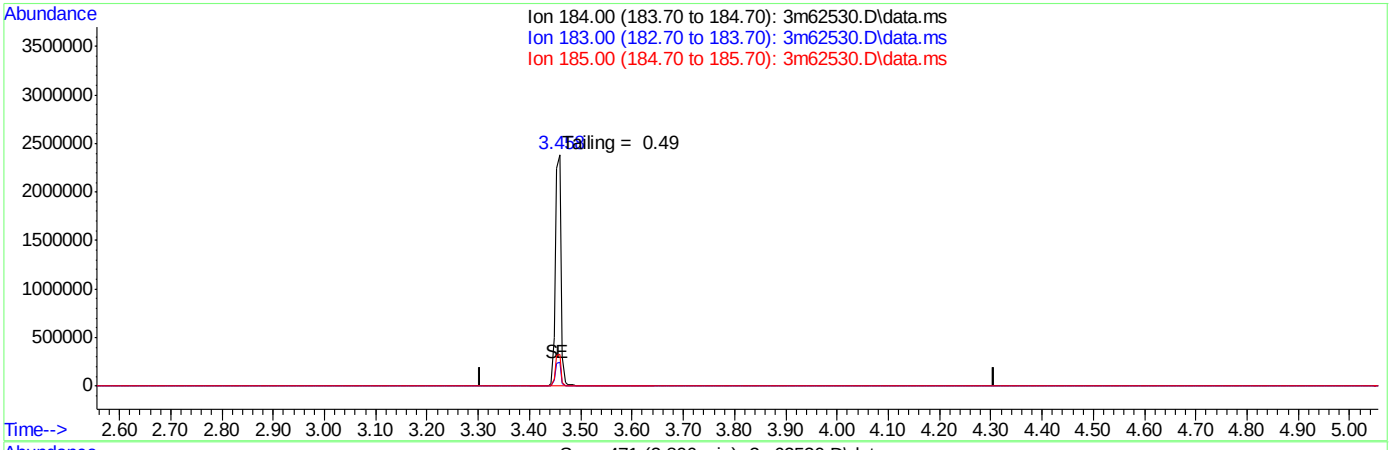
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.80	0.00#
267.80	64.10	0.00#
0.00	0.00	0.00

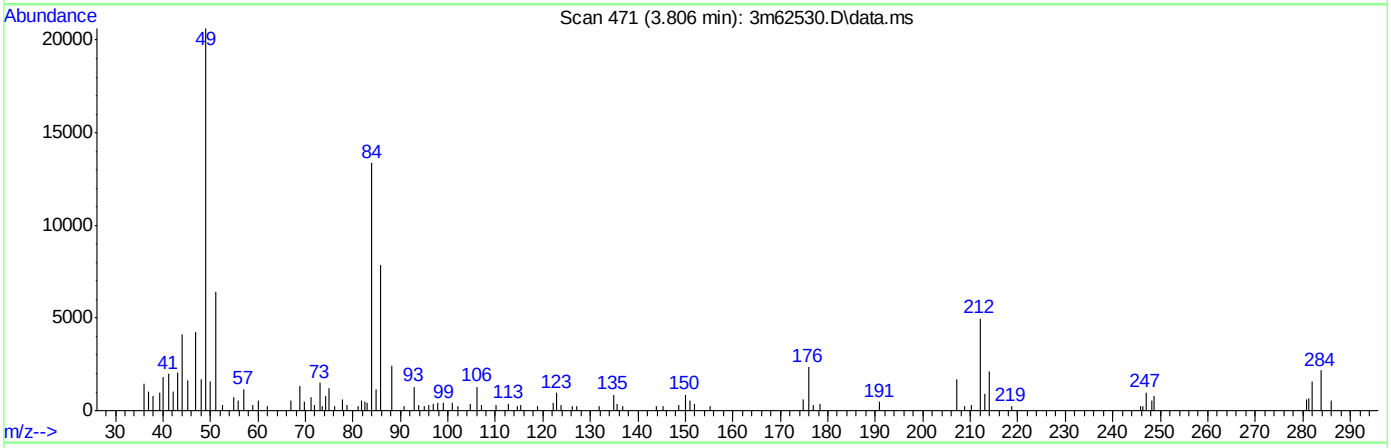
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e3m2951\
Data File : 3m62530.D
Acq On : 26 Jun 2016 3:56 pm
Operator : ariellec
Sample : dftpp
Misc : op94697,e3m2951
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 26 16:00:47 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: 3m62530.D\data.ms

(2) Benzidine (t)

3.806min 0.00ppb d

response 0

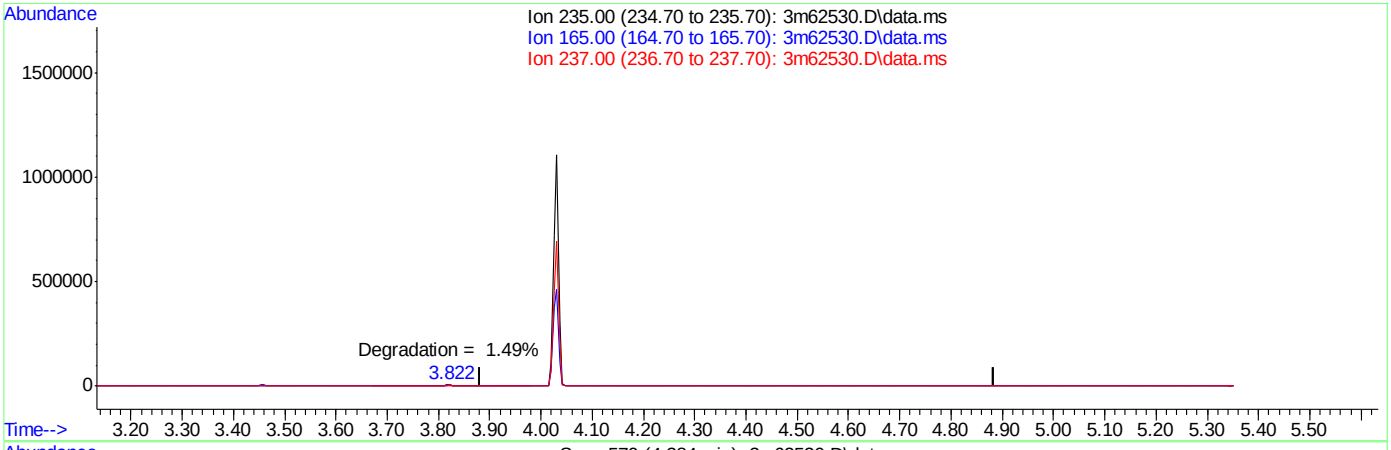
Ion	Exp%	Act%
184.00	100	0.00
183.00	11.50	0.00
185.00	14.40	0.00
0.00	0.00	0.00

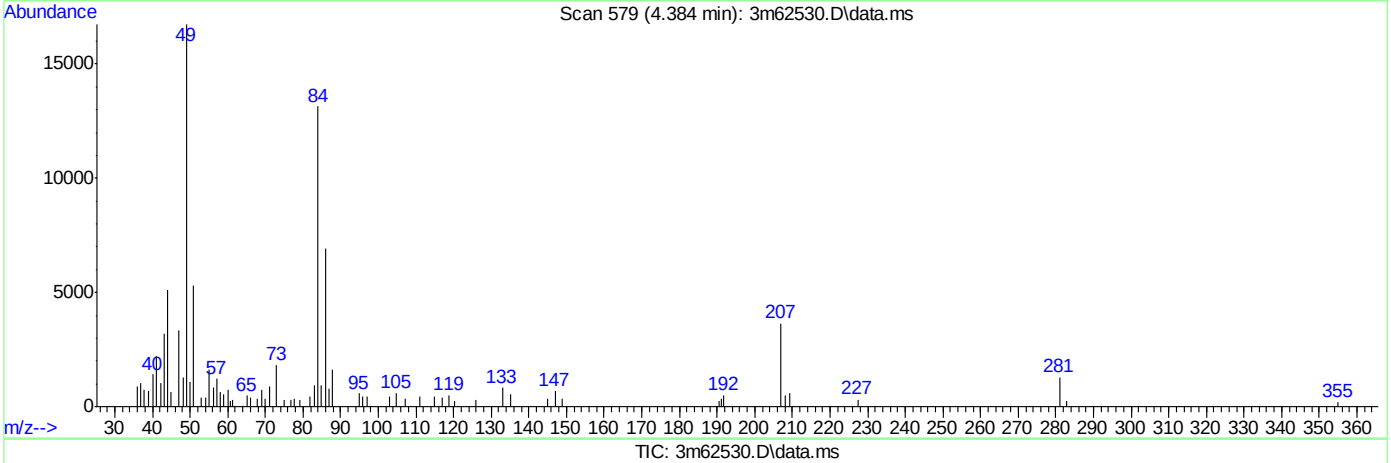
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e3m2951\
Data File : 3m62530.D
Acq On : 26 Jun 2016 3:56 pm
Operator : ariellec
Sample : dftpp
Misc : op94697,e3m2951
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 26 16:00:47 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: 3m62530.D\data.ms

(3) PP-DDT (t)

4.384min (-4.384) 0.00ppb

response 0

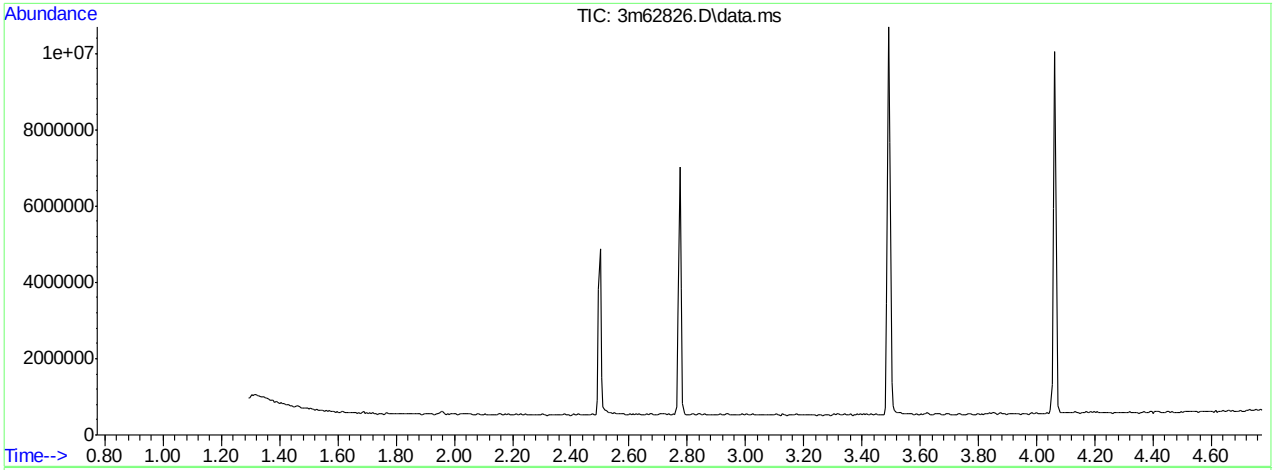
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
237.00	0.00	0.00
0.00	0.00	0.00

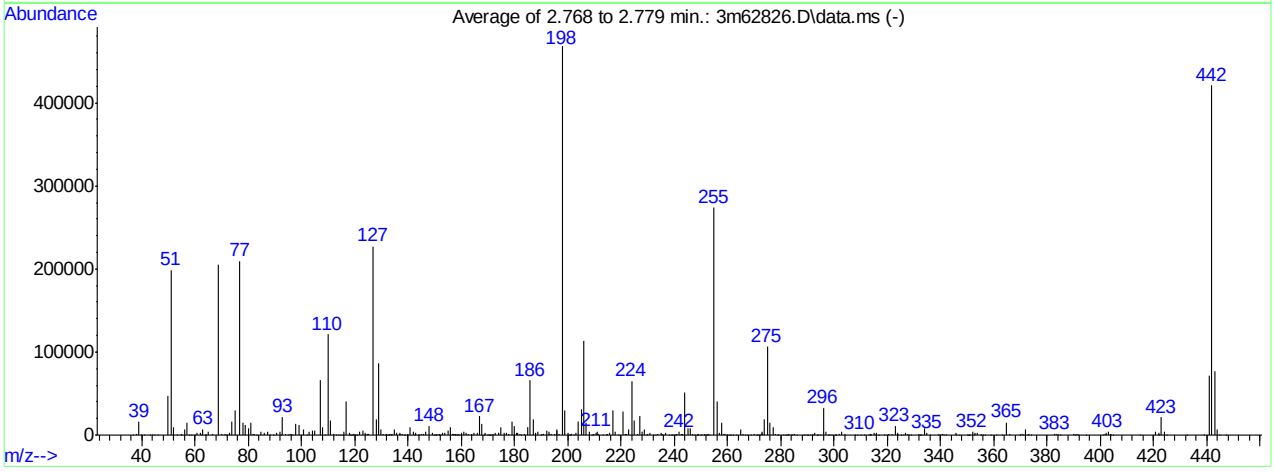
SGS ACCUTEST JC22613

DFTPP

Data File : C:\msdchem\1\DATA\E3M2967\3m62826.D Vial: 1
Acq On : 7 Jul 2016 3:41 pm Operator: linseyk
Sample : dftpp Inst : MS3M
Misc : op95335a,e3m2967 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 277, 278, 279; Background Corrected with Scan 272

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.5	198883	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.8	205131	PASS
70	69	0.00	2	0.6	1229	PASS
127	198	40	60	48.5	227128	PASS
197	198	0.00	1	0.3	1379	PASS
198	198	100	100	100.0	467840	PASS
199	198	5	9	6.4	30091	PASS
275	198	10	30	22.7	106109	PASS
365	198	1	100	3.3	15460	PASS
441	443	0.10	100	92.4	71271	PASS
442	198	40	100	89.9	420664	PASS
443	442	17	23	18.3	77173	PASS

3m62826.D DFTPP3M.M Fri Jul 08 10:01:10 2016 RPT1

Average of 2.768 to 2.779 min.: 3m62826.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	156	52.00	9954	62.30	414	73.10	3084
38.00	1641	53.10	523	63.00	7196	74.05	16554
39.00	15752	54.90	407	63.80	175	75.00	30011
39.95	290	55.10	1175	64.10	616	76.95	209365
40.95	107	56.00	6270	64.95	3895	78.00	15429
42.95	292	57.00	14575	66.85	870	79.00	12137
44.00	220	57.95	652	69.00	205131	80.00	8762
44.75	687	58.80	80	69.95	1229	81.00	14391
45.90	228	60.10	352	71.30	764	81.90	1751
50.00	47137	60.95	2202	71.80	154	82.10	2020
51.00	198883	62.00	2255	72.05	165	83.00	89

Average of 2.768 to 2.779 min.: 3m62826.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.00	3515	95.80	858	107.00	66712	117.00	40709
85.90	2589	96.15	1281	108.00	9155	117.90	2684
87.15	4091	96.80	326	108.70	463	118.20	491
88.00	716	98.00	13426	110.00	120915	118.60	134
89.60	152	99.00	12272	111.05	17062	119.00	167
90.90	2635	100.05	563	112.00	1865	119.20	141
91.95	3651	100.95	7165	112.95	669	119.90	1057
92.20	709	102.10	215	113.85	279	120.10	295
93.00	21694	103.05	3586	114.90	158	120.70	306
94.05	1690	104.00	5114	115.70	302	121.20	370
94.90	347	105.00	4998	115.95	3606	122.05	4693

Average of 2.768 to 2.779 min.: 3m62826.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.00	5248	132.00	785	138.60	78	146.90	4288
123.80	479	132.20	111	138.85	330	148.00	10838
124.00	2324	132.80	597	140.00	970	149.05	2515
124.80	1307	133.05	725	141.00	9145	149.70	367
125.20	1175	133.80	507	142.05	3914	150.00	461
127.00	227128	134.00	1893	142.50	645	150.50	240
128.00	18570	135.00	7430	143.05	2718	151.05	1478
129.05	86024	135.75	2227	143.80	258	151.65	1265
130.00	6703	136.90	901	144.15	474	151.80	390
130.90	1576	137.15	3049	145.00	761	152.00	502
131.70	147	138.00	750	145.90	1644	153.10	2101

Average of 2.768 to 2.779 min.: 3m62826.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
154.00	2884	160.10	3285	170.00	440	177.00	3350
155.00	5697	161.05	3903	170.20	579	178.00	1487
156.05	9747	161.90	2217	170.60	230	178.95	16098
156.90	1123	162.85	868	170.90	531	180.00	11366
157.10	1683	163.80	1224	171.10	271	180.90	2985
157.50	374	164.95	2957	171.90	1945	181.10	2352
157.80	923	166.05	3115	172.90	2506	181.95	1088
158.10	1249	167.00	22386	173.90	2126	182.30	424
158.70	473	167.90	13132	174.10	2390	183.90	1242
159.05	795	168.80	411	175.05	9702	184.95	9274
159.30	205	169.10	2394	176.00	3091	186.00	65661

Average of 2.768 to 2.779 min.: 3m62826.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
186.95	18295	194.95	1061	202.30	330	211.00	4111
188.00	2477	195.85	6024	202.95	2657	211.70	1947
188.95	3812	196.10	7128	204.00	16498	213.10	405
189.90	355	196.90	1379	205.05	31035	214.70	334

190.15	440	197.90	467840	205.95	113528	215.00	2020
190.90	817	198.95	30091	207.00	15536	215.90	2201
191.10	1227	200.00	3282	208.00	3818	216.95	29128
192.00	5829	200.80	494	208.90	509	218.00	4334
192.85	1085	201.20	700	209.60	113	218.95	183
193.05	3670	201.40	1497	209.90	1042	220.95	28312
193.95	2075	201.65	1181	210.60	2675	221.70	1699

Average of 2.768 to 2.779 min.: 3m62826.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
222.00	857	232.05	476	240.10	327	248.50	193
222.95	7079	232.95	706	240.80	619	248.90	834
224.00	64931	234.00	1306	241.00	996	249.20	310
225.00	17808	235.10	2252	241.90	3542	250.05	487
226.10	1304	235.75	1245	242.70	721	250.50	135
226.95	23339	236.05	368	243.00	1580	250.95	311
227.90	3476	236.95	2289	244.00	51211	251.75	931
229.00	6171	238.00	139	245.05	8250	252.10	679
229.80	308	238.75	575	246.00	8790	252.50	211
230.05	875	239.20	404	246.95	1348	252.80	918
231.05	2568	239.75	470	247.90	628	253.15	420

Average of 2.768 to 2.779 min.: 3m62826.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
255.00	273408	262.10	105	272.10	574	281.80	271
256.00	40085	263.50	127	272.90	3048	282.10	81
256.90	2181	264.95	6591	273.10	4129	282.70	232
257.10	813	266.00	1259	274.05	18431	283.05	1056
258.05	14353	266.90	130	275.00	106109	283.95	663
258.90	1233	267.50	132	276.00	14387	284.20	349
259.15	1029	268.90	266	277.05	8954	285.10	2011
259.80	284	270.05	810	278.00	2004	286.30	149
260.10	257	271.00	555	278.80	74	288.80	179
260.70	105	271.40	160	279.05	540	289.10	207
261.25	423	271.70	522	281.00	124	289.80	214

Average of 2.768 to 2.779 min.: 3m62826.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
290.15	304	298.10	395	312.95	268	321.90	921
291.00	404	299.00	185	313.50	438	323.00	11129
291.80	137	300.60	117	313.80	242	323.90	283
292.10	203	300.90	103	314.00	783	324.05	2423
293.00	2181	302.10	878	314.95	3302	325.10	295
293.80	510	303.05	4296	315.70	215	325.95	186
294.00	142	304.05	1381	316.10	2455	326.95	2869
294.80	174	307.80	511	316.95	501	327.90	810
296.00	32694	309.00	109	319.10	125	328.10	308
297.05	4669	309.95	654	319.80	95	329.10	195
297.80	153	311.20	75	320.80	895	331.90	1140

Average of 2.768 to 2.779 min.: 3m62826.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
332.60	288	345.70	204	355.00	242	370.85	819
333.00	688	346.00	2086	355.20	498	371.20	607
334.00	7978	347.05	369	356.10	82	372.00	6925
335.10	2328	349.90	162	356.80	142	372.80	240
336.20	213	350.50	109	359.10	97	373.15	1640
339.05	351	350.80	90	361.00	182	374.20	97
339.70	74	351.00	326	363.30	126	382.80	880
339.90	169	352.00	3927	365.00	15460	383.00	1236
340.80	972	352.60	153	366.05	2008	383.85	850
341.05	250	353.05	2400	369.80	75	384.20	283
341.95	667	353.90	3422	370.00	125	385.05	423

Average of 2.768 to 2.779 min.: 3m62826.D\data.ms

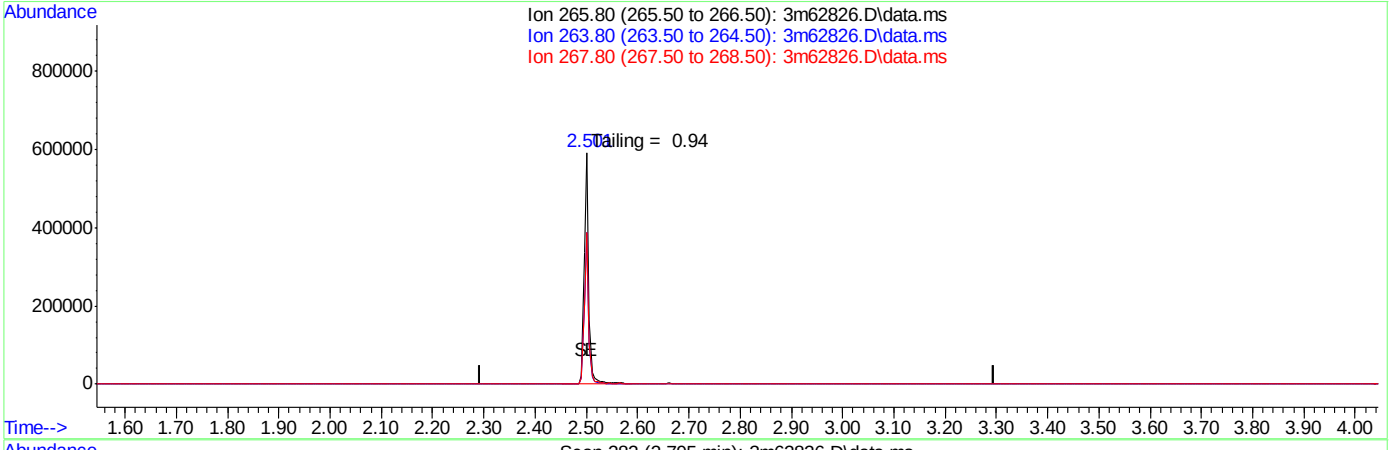
dftpp
Modified:subtracted

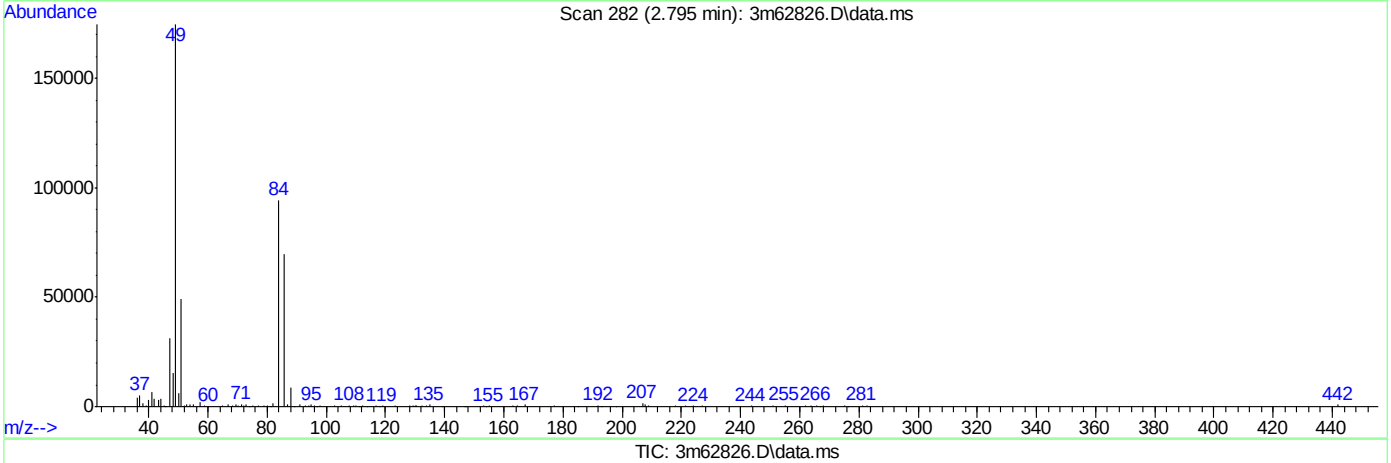
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
390.05	999	405.00	264	442.00	420664		
390.70	114	414.90	114	443.05	77173		
391.20	784	420.95	3689	444.00	7149		
391.90	354	421.90	289	444.90	610		
394.60	248	422.10	2757	447.20	78		
400.90	198	423.05	21491				
401.90	1207	424.05	4096				
402.15	2266	425.10	364				
403.00	3749	432.80	78				
403.80	816	439.00	120				
404.00	718	441.00	71271				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62826.D
Acq On : 7 Jul 2016 3:41 pm
Operator : linseyk
Sample : dftpp
Misc : op95335a,e3m2967
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 07 15:46:02 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: 3m62826.D\data.ms

(1) Pentachlorophenol (t)

2.795min 0.00ppb d

response 0

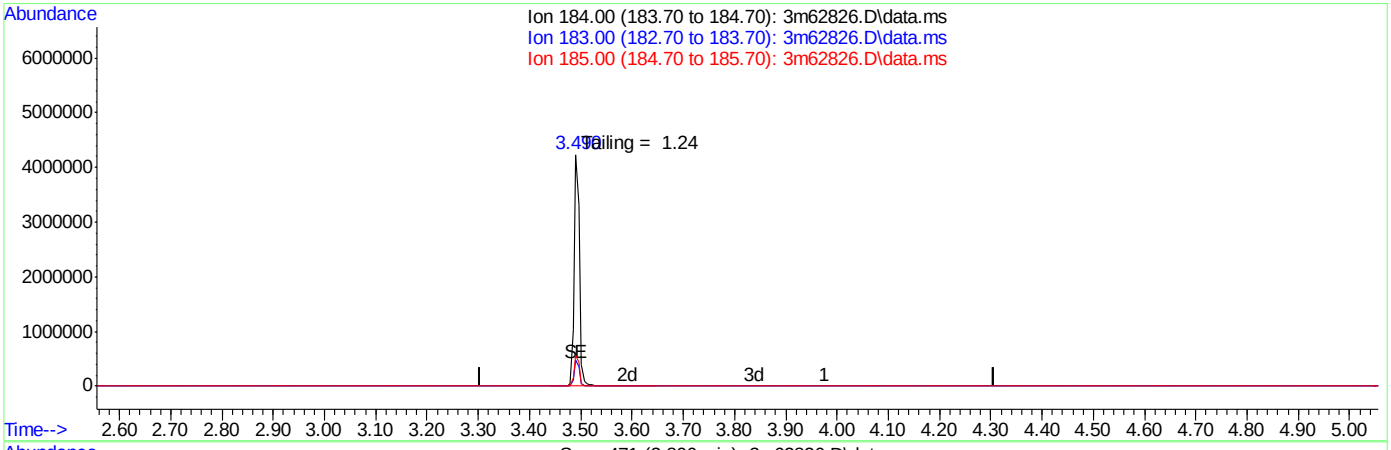
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.80	0.00
267.80	64.10	0.00
0.00	0.00	0.00

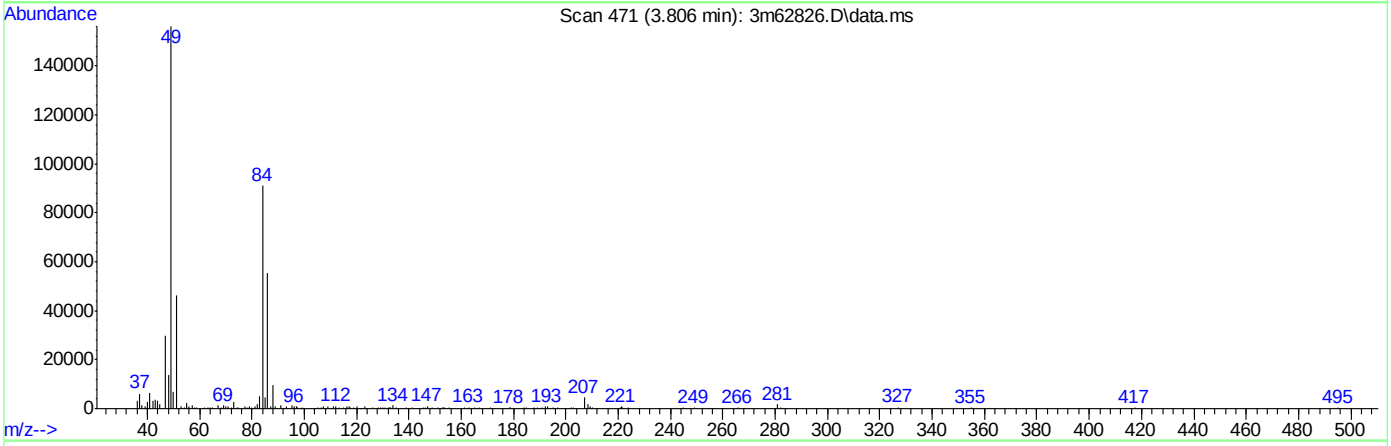
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62826.D
Acq On : 7 Jul 2016 3:41 pm
Operator : linseyk
Sample : dftpp
Misc : op95335a,e3m2967
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 07 15:46:02 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: 3m62826.D\data.ms

(2) Benzidine (t)

3.806min 0.00ppb d

response 0

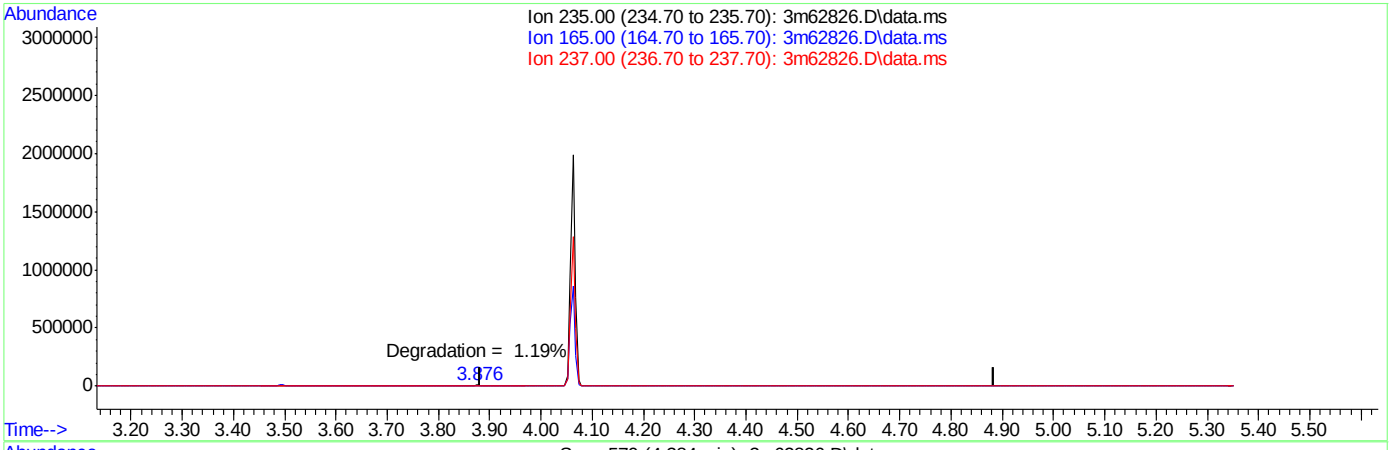
Ion	Exp%	Act%
184.00	100	0.00
183.00	11.50	0.00
185.00	14.40	0.00
0.00	0.00	0.00

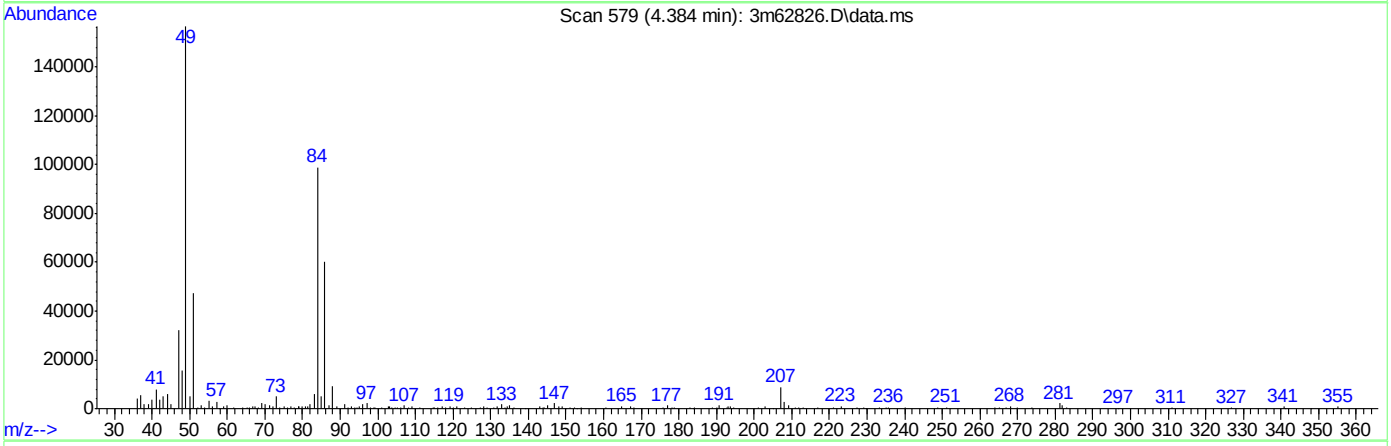
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62826.D
Acq On : 7 Jul 2016 3:41 pm
Operator : linseyk
Sample : dftpp
Misc : op95335a,e3m2967
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 07 15:46:02 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: 3m62826.D\data.ms

(3) PP-DDT (t)

4.384min 0.00ppb d

response 0

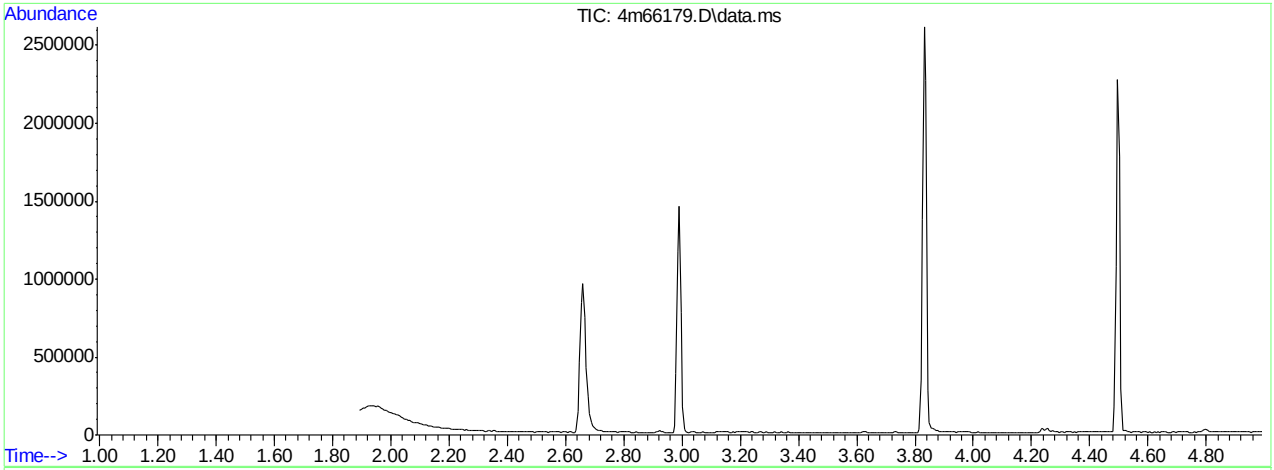
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
237.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST JC22613

DFTPP

Data File : C:\msdchem\1\DATA\E4M2974\4m66179.D Vial: 1
Acq On : 20 Jun 2016 10:06 pm Operator: ashleyd
Sample : dftpp Inst : GCMS4M
Misc : op94799a,e4m2974 Multiplr: 1.00
MS Integration Params: events3.e

Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M (ChemStation Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um



AutoFind: Scans 192, 193, 194; Background Corrected with Scan 187

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.7	58020	PASS
68	69	0.00	2	0.9	561	PASS
69	198	0.00	100	44.3	61706	PASS
70	69	0.00	2	0.4	274	PASS
127	198	40	60	50.0	69656	PASS
197	198	0.00	1	0.3	387	PASS
198	198	100	100	100.0	139197	PASS
199	198	5	9	6.6	9146	PASS
275	198	10	30	20.6	28704	PASS
365	198	1	100	2.4	3401	PASS
441	443	0.01	100	76.6	15333	PASS
442	198	40	100	72.8	101275	PASS
443	442	17	23	19.8	20015	PASS

4m66179.D DFTPP4M.M Tue Jun 21 07:51:45 2016 MANAGER

Average of 2.986 to 2.997 min.: 4m66179.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	15050	62.05	815	74.05	5262	85.00	663
51.05	58020	63.05	2325	75.00	8692	86.00	482
52.00	3099	64.10	428	76.10	3223	87.05	590
52.95	188	65.00	1155	77.05	63527	87.90	16
54.10	85	66.90	213	78.10	4774	89.00	69
55.10	356	67.20	127	79.00	3877	91.00	970
56.00	1758	68.00	561	80.00	2995	92.00	1263
57.00	3953	68.95	61706	81.00	4713	93.00	6468
57.90	312	70.00	274	82.00	899	93.95	419
60.05	246	71.05	13	82.95	969	94.95	346
61.00	760	72.95	342	84.00	339	96.05	393

Average of 2.986 to 2.997 min.: 4m66179.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.00	13	108.00	3005	119.95	217	132.95	167
98.00	4455	110.00	36653	122.00	1075	134.00	734
99.00	3735	111.00	5105	123.00	1822	135.00	1922
100.00	412	111.95	656	124.00	723	136.00	808
101.00	2476	112.90	67	125.00	952	137.00	972
101.80	88	113.10	85	127.00	69656	137.70	118
103.00	876	115.00	194	128.00	5317	140.00	316
104.00	1542	116.05	1067	129.00	25164	141.00	2818
105.00	1487	117.00	10735	130.00	1825	142.05	1018
106.10	434	117.95	891	131.00	461	143.00	729
107.00	17644	118.90	187	132.05	308	144.00	230

Average of 2.986 to 2.997 min.: 4m66179.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
145.05	166	153.00	580	162.95	161	174.00	1182
145.90	166	154.00	654	163.90	267	175.05	2222
146.05	350	155.05	1787	164.95	1144	176.00	814
147.00	1398	156.00	2581	166.00	843	176.95	1132
148.00	2948	157.00	637	167.00	5850	178.00	467
148.95	690	157.90	555	168.05	2419	179.00	4345
149.90	95	158.90	319	168.95	516	180.00	2995
151.00	491	159.10	105	170.00	190	181.00	1534
151.60	133	160.00	826	171.00	357	182.00	304
152.00	180	160.95	1212	171.90	560	182.90	168
152.80	309	162.00	489	173.00	732	184.00	357

Average of 2.986 to 2.997 min.: 4m66179.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
185.00	2069	194.80	100	203.05	525	212.20	69
186.05	16713	195.10	143	204.05	4544	213.10	69
187.00	4736	196.00	4173	205.05	6989	215.05	235
187.95	447	196.70	387	206.10	31419	216.00	513
188.95	924	198.00	139197	207.10	4195	217.00	7273
190.00	74	199.00	9146	207.90	338	218.05	997
190.95	443	200.00	690	208.10	801	219.80	68
191.20	154	201.20	161	209.00	381	221.10	7656
192.00	1122	201.55	850	210.00	146	223.00	1988
192.95	1559	202.15	298	210.95	1200	224.10	16877
194.05	411	202.90	233	212.00	93	225.10	3938

Average of 2.986 to 2.997 min.: 4m66179.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
226.00	573	240.00	104	250.80	75	259.90	68
227.00	6296	240.95	287	252.00	100	264.00	72
228.00	1005	242.00	980	252.30	89	265.05	1111
229.00	1373	243.00	345	252.50	130	265.85	278

M4M2973SIM.M Mon Jun 20 21:06:02 2016 MANAGER Page: 0

229.95	233	243.15	806	253.05	222	270.05	144
231.10	691	244.10	13582	253.30	320	272.00	93
234.00	443	245.05	1807	255.00	64309	273.00	2154
234.85	439	246.00	2074	256.00	9152	274.05	5590
235.95	216	246.90	138	257.05	809	275.00	28704
236.95	529	247.05	387	258.05	3317	276.05	4067
239.10	117	249.00	506	259.00	500	277.05	1922

Average of 2.986 to 2.997 min.: 4m66179.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
278.00	290	303.05	860	326.95	433	355.20	68
283.05	200	304.00	109	327.90	241	365.00	3401
284.10	82	308.10	76	332.10	77	366.00	467
285.10	388	309.90	69	333.10	314	371.05	308
291.90	83	314.00	406	334.00	1393	372.05	1423
293.00	680	315.00	824	335.05	470	373.00	368
294.70	69	315.95	478	341.00	450	382.95	300
295.05	330	321.05	335	346.00	599	383.90	70
296.05	6825	322.05	192	352.10	813	390.00	98
297.05	1078	323.05	2675	353.10	566	402.05	546
301.00	67	324.00	445	354.10	844	403.05	855

Average of 2.986 to 2.997 min.: 4m66179.D\data.ms
dftpp
Modified:subtracted

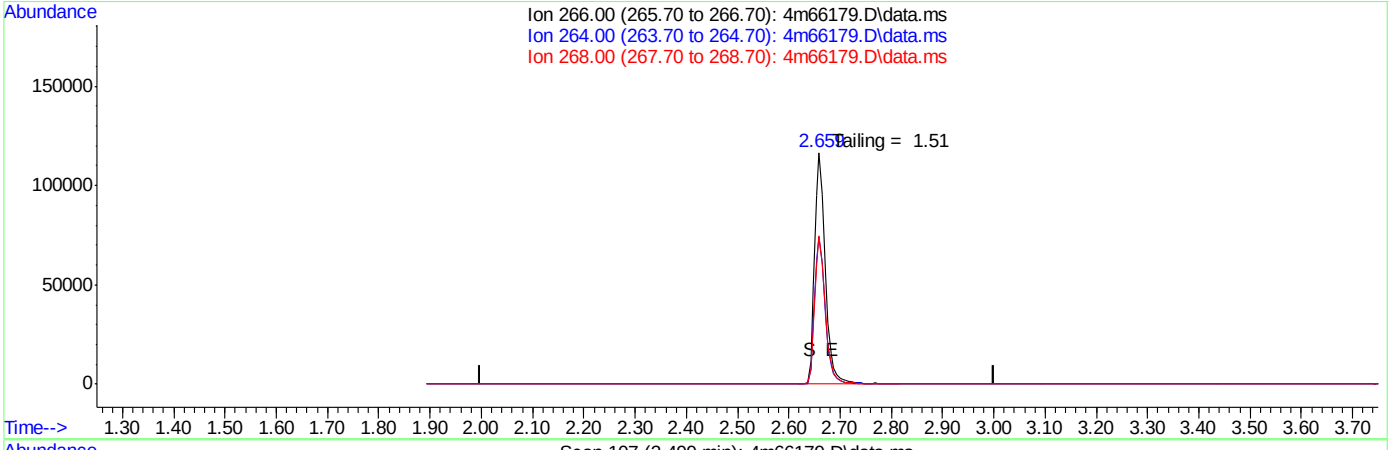
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
403.95	329	441.10	15333				
421.05	716	442.10	101275				
422.05	759	443.10	20015				
423.10	5222	444.10	1759				
424.05	1108						
433.80	68						
434.20	68						
437.70	114						
438.20	121						
438.55	354						
439.15	193						

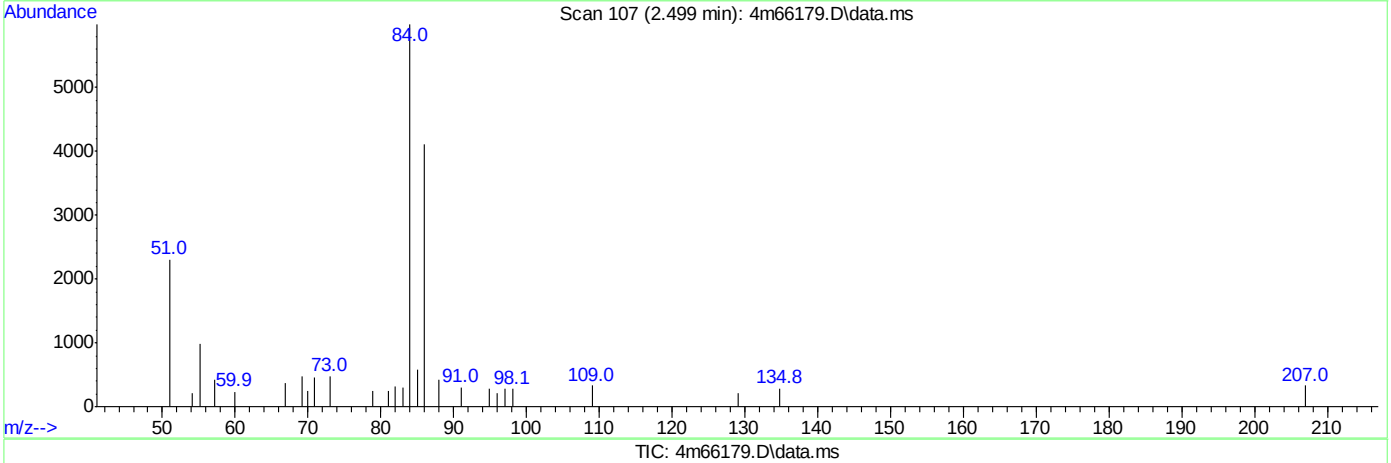
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66179.D
Acq On : 20 Jun 2016 10:06 pm
Operator : ashleyd
Sample : dftpp
Misc : op94799a,e4m2974
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 20 22:11:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m66179.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

response 0

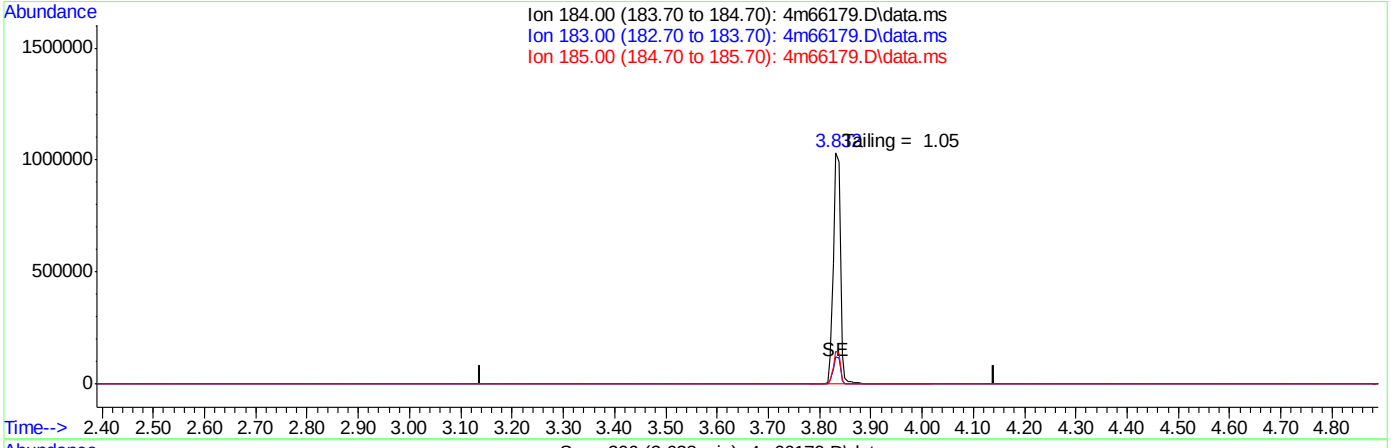
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

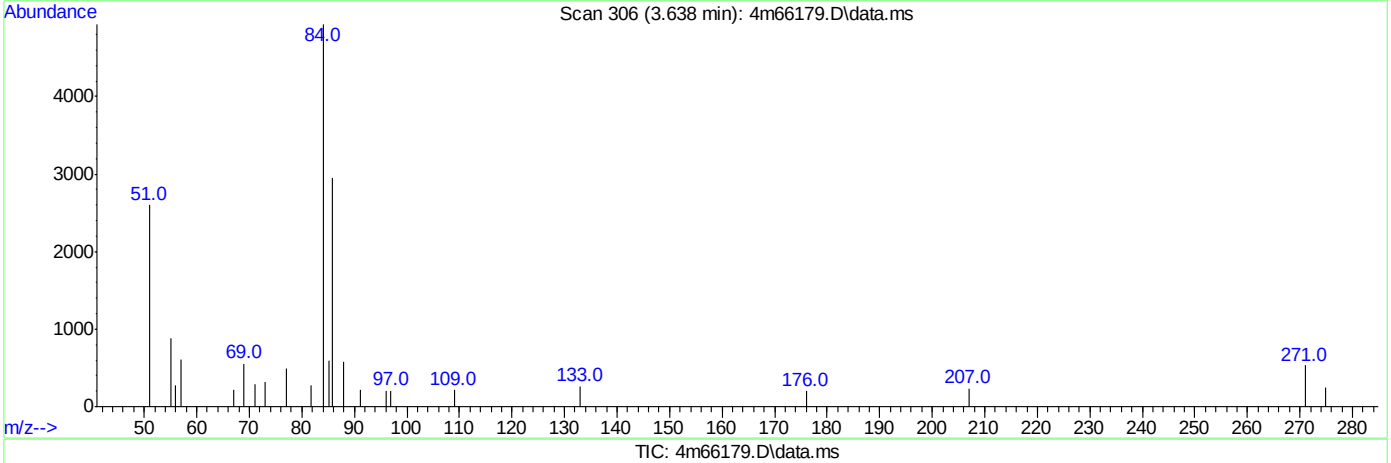
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66179.D
Acq On : 20 Jun 2016 10:06 pm
Operator : ashleyd
Sample : dftpp
Misc : op94799a,e4m2974
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 20 22:11:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m66179.D\data.ms

(2) benzidine (t)

3.640min (-3.640) 0.00ppb

response 0

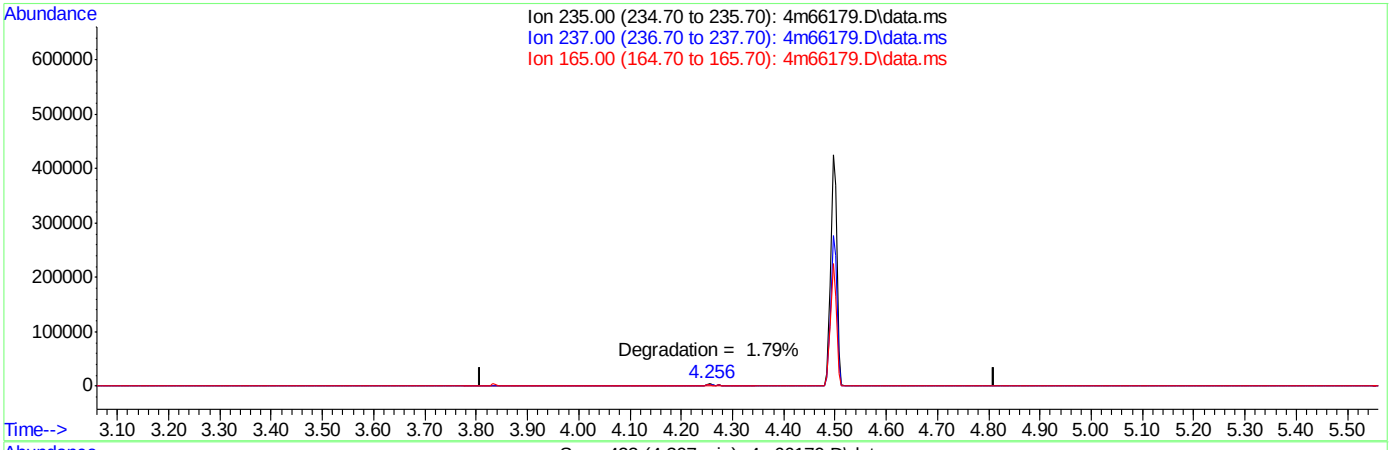
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

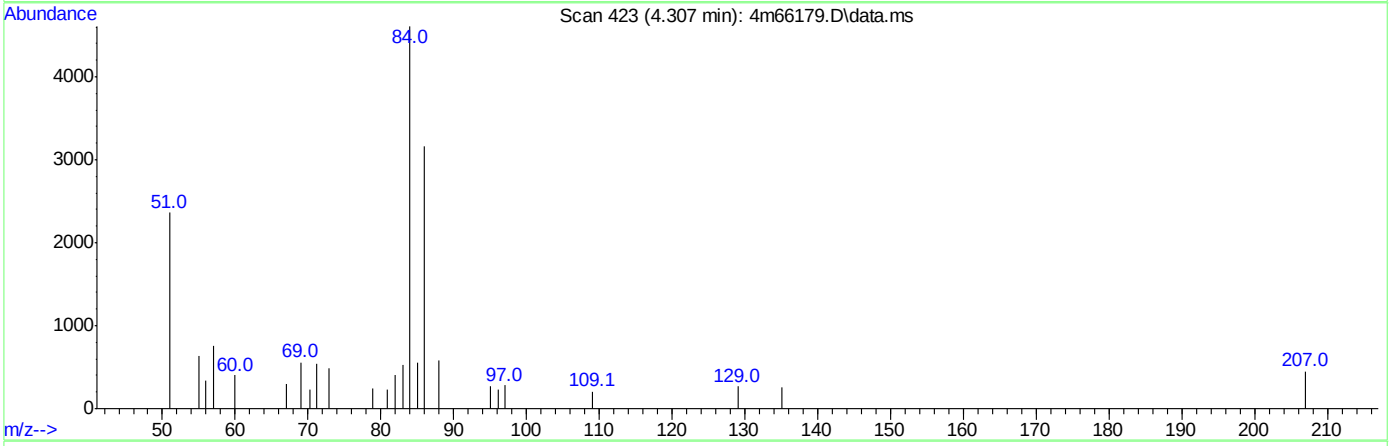
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66179.D
Acq On : 20 Jun 2016 10:06 pm
Operator : ashleyd
Sample : dftpp
Misc : op94799a,e4m2974
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 20 22:11:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m66179.D\data.ms

(3) ddt (t)

4.310min (-4.310) 0.00ppb

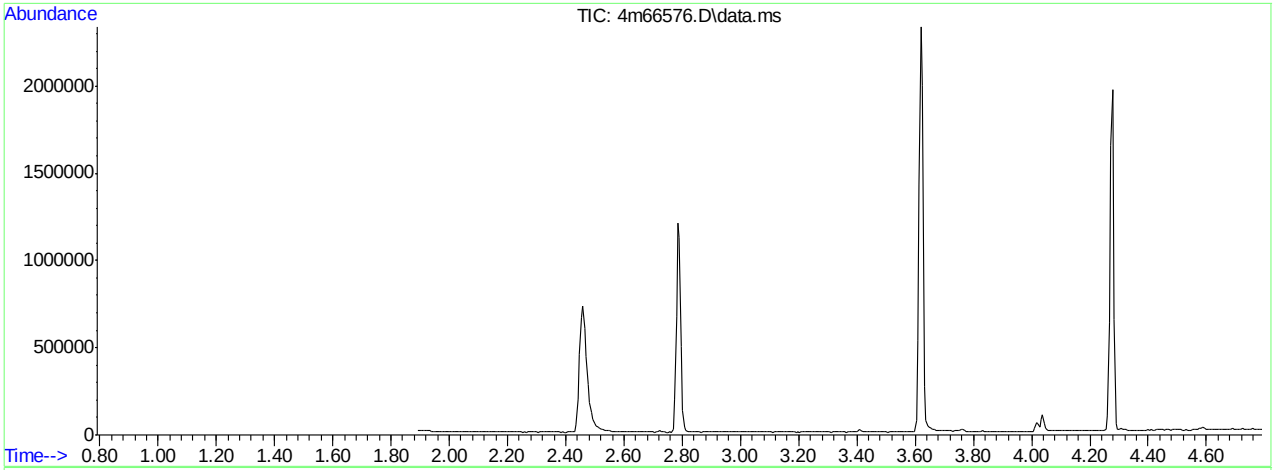
response 0

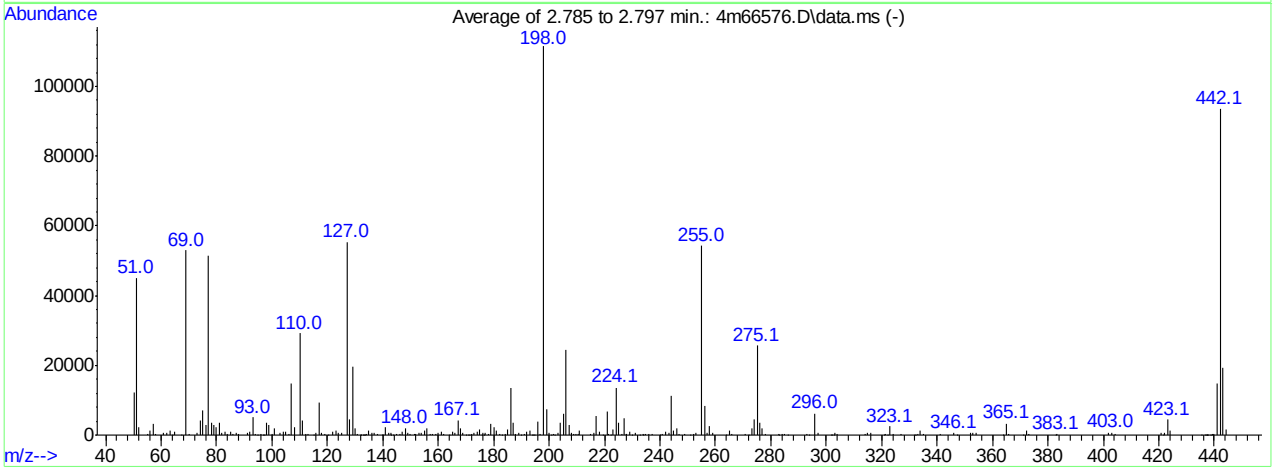
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\E4M2995\4m66576.D Vial: 1
Acq On : 5 Jul 2016 9:58 am Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op94994a,e4m2995 Multiplr: 1.00
MS Integration Params: events3.e

Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M (ChemStation Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um





AutoFind: Scans 157, 158, 159; Background Corrected with Scan 152

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.5	45180	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.5	52997	PASS
70	69	0.00	2	0.7	355	PASS
127	198	40	60	49.7	55376	PASS
197	198	0.00	1	0.2	237	PASS
198	198	100	100	100.0	111456	PASS
199	198	5	9	6.7	7452	PASS
275	198	10	30	23.0	25649	PASS
365	198	1	100	2.9	3219	PASS
441	443	0.01	100	77.6	14893	PASS
442	198	40	100	83.8	93435	PASS
443	442	17	23	20.6	19202	PASS

4m66576.D DFTPP4M.M Tue Jul 05 15:28:25 2016 MANAGER

Average of 2.785 to 2.797 min.: 4m66576.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	12232	65.00	1029	80.00	2257	93.00	5120
51.05	45180	67.30	115	80.95	3415	94.00	262
52.05	2375	69.00	52997	81.95	661	94.90	135
55.00	191	70.00	355	83.00	1111	96.00	256
56.00	1326	73.00	522	84.00	217	96.80	71
57.00	3146	74.00	4161	85.05	854	97.20	76
58.00	229	75.00	7070	85.90	358	98.00	3686
61.00	648	76.10	3020	86.95	542	99.00	3000
62.00	700	77.10	51344	87.90	230	100.05	254
63.05	1418	78.10	3653	91.00	781	101.00	1806
64.00	132	79.00	2987	92.10	818	103.05	782

Average of 2.785 to 2.797 min.: 4m66576.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
104.00	1026	117.00	9326	130.00	1805	138.00	183
105.00	1049	118.00	714	130.95	282	139.80	96
106.10	255	119.00	217	131.80	84	140.10	102
107.00	14707	120.10	90	132.10	77	141.00	2192
108.00	2312	122.00	909	132.70	114	142.00	790
110.00	29160	122.95	1336	133.05	158	142.80	118
111.00	4318	123.95	583	133.80	76	143.05	539
112.00	492	125.05	658	134.05	484	143.90	80
112.85	262	127.00	55376	135.00	1397	144.90	184
115.00	170	128.05	4591	136.10	587	146.00	353
115.95	577	129.00	19676	137.00	750	147.05	1117

Average of 2.785 to 2.797 min.: 4m66576.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
148.00	2096	159.05	265	170.80	83	179.00	3298
149.00	615	159.95	624	171.10	118	180.00	2197
149.95	283	161.00	1096	171.95	352	180.95	1217
151.25	399	162.00	317	172.95	619	182.00	243
151.95	307	164.00	136	174.00	942	183.00	86
153.05	660	165.05	819	175.05	1757	184.15	227
154.00	589	166.00	751	175.80	113	185.00	1681
155.05	1211	167.05	4239	176.05	691	186.10	13672
156.00	2018	168.00	2018	176.70	99	187.05	3662
157.00	491	169.00	596	177.00	796	188.00	357
158.05	443	169.90	73	178.10	381	188.95	779

Average of 2.785 to 2.797 min.: 4m66576.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
189.85	158	200.00	611	209.80	235	223.00	1573
191.00	381	200.85	167	210.30	176	224.10	13556
192.00	940	201.60	485	211.00	1189	225.05	3394
193.00	1160	202.10	87	214.95	279	226.10	407
194.00	104	203.00	722	216.00	623	227.00	4857
194.30	118	204.05	3471	217.00	5623	227.90	219
194.90	106	205.05	6181	218.00	838	228.05	409
196.00	3730	206.10	24571	219.45	156	228.90	978
196.70	237	207.05	3052	221.00	6643	229.85	153
198.00	111456	208.00	676	221.60	285	231.00	551
199.00	7452	209.00	286	222.10	131	232.90	71

Average of 2.785 to 2.797 min.: 4m66576.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
233.85	205	246.00	2053	263.70	69	282.90	146
234.10	126	247.00	387	265.00	1146	283.05	187
234.95	455	248.95	332	265.95	180	284.00	211
236.00	287	251.10	107	270.90	199	285.10	405

M4M2974SIM.M Tue Jul 05 08:52:36 2016 MANAGER Page: 0

SGS ACCUTEST JC22613

237.05	361	252.05	180	271.80	118	286.00	70
239.90	93	252.90	554	273.00	1926	292.90	411
240.95	263	255.00	54224	274.05	4623	294.00	71
242.05	958	256.00	8324	275.10	25649	296.00	6227
243.10	588	257.00	701	276.05	3697	297.00	792
244.10	11372	258.00	2663	277.00	1872	301.90	87
245.05	1450	258.95	559	278.00	284	302.10	95

Average of 2.785 to 2.797 min.: 4m66576.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
302.80	148	326.95	463	354.05	802	404.10	268
303.05	595	331.90	83	363.95	166	420.95	609
304.05	307	332.10	117	365.05	3219	421.80	85
314.05	316	332.95	208	365.95	472	422.15	502
315.00	719	334.05	1426	371.20	75	423.10	4352
316.05	499	335.00	265	372.10	1188	424.05	1197
321.00	76	341.05	368	373.05	320	435.20	81
321.15	216	346.05	520	382.70	75	436.60	90
322.00	78	347.10	67	383.10	282	437.00	84
323.05	2442	352.05	728	401.95	535	437.30	88
324.00	351	353.05	512	403.00	738	437.60	89

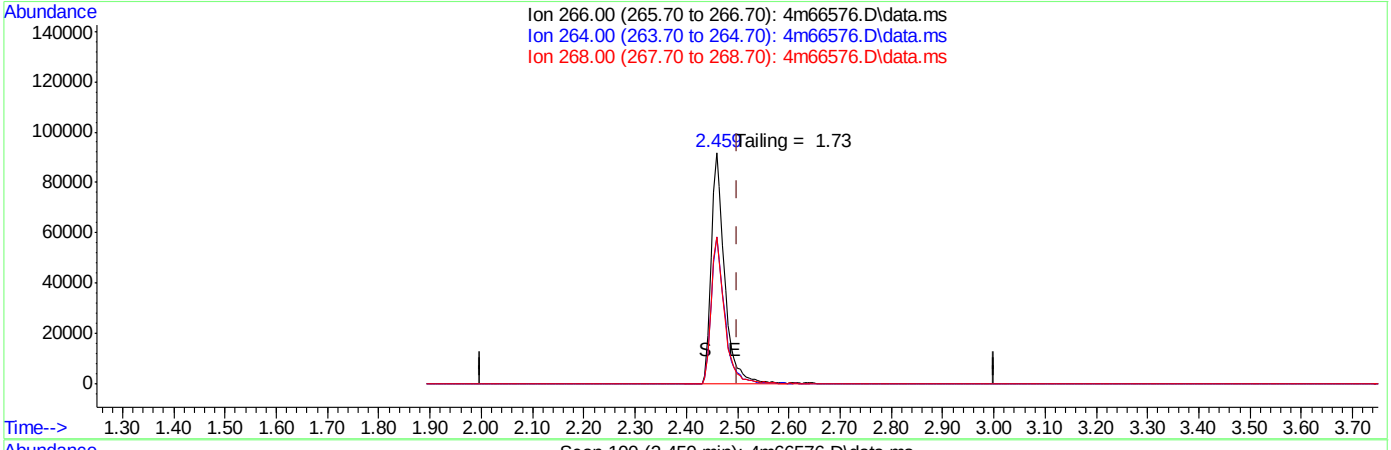
Average of 2.785 to 2.797 min.: 4m66576.D\data.ms
dftpp
Modified:subtracted

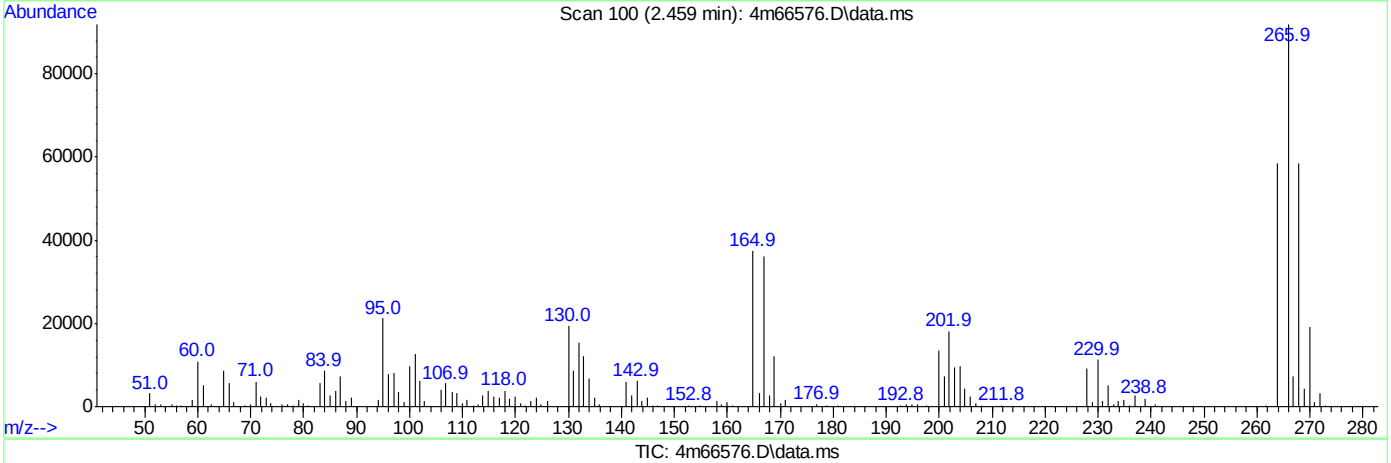
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
438.00	146						
438.70	164						
438.90	100						
439.40	178						
439.75	381						
441.10	14893						
442.10	93435						
443.10	19202						
444.10	1667						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66576.D
Acq On : 5 Jul 2016 9:58 am
Operator : linseyk
Sample : dftpp
Misc : op94994a,e4m2995
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 10:04:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m66576.D\data.ms

(1) pentachlorophenol (t)

2.461min (-0.039) 101.96ppb

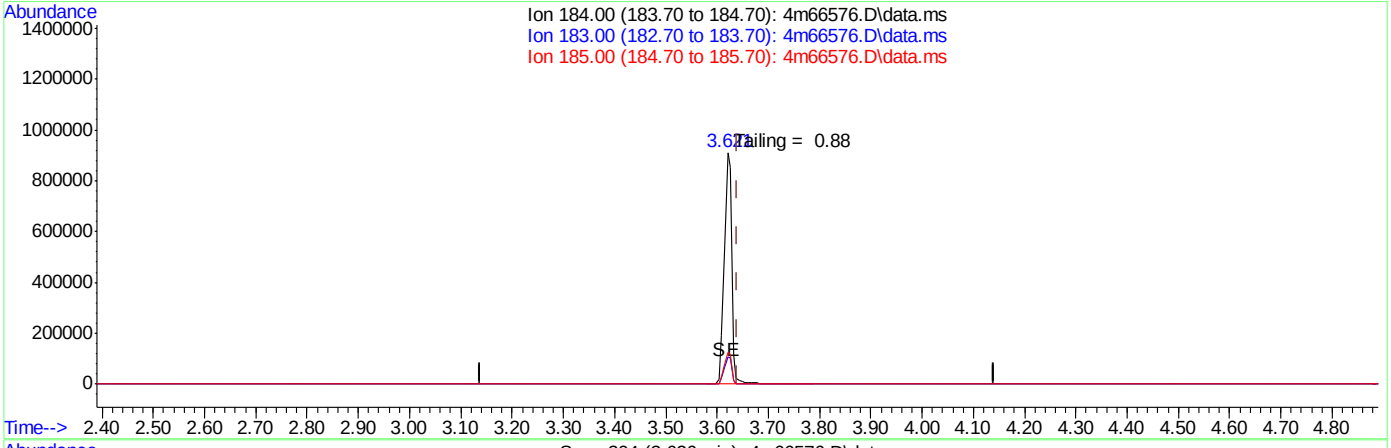
response 1682361

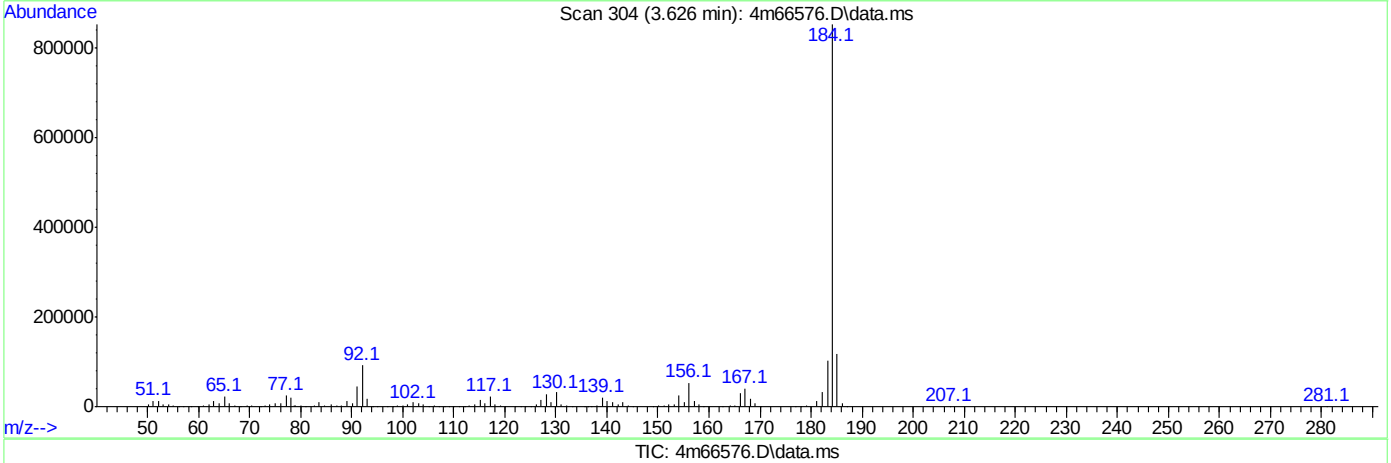
Ion	Exp%	Act%
266.00	100	100
264.00	58.00	64.05
268.00	62.00	62.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66576.D
Acq On : 5 Jul 2016 9:58 am
Operator : linseyk
Sample : dftpp
Misc : op94994a,e4m2995
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 10:04:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





(2) benzidine (t)

3.625min (-0.015) 154.38ppb

response 9214111

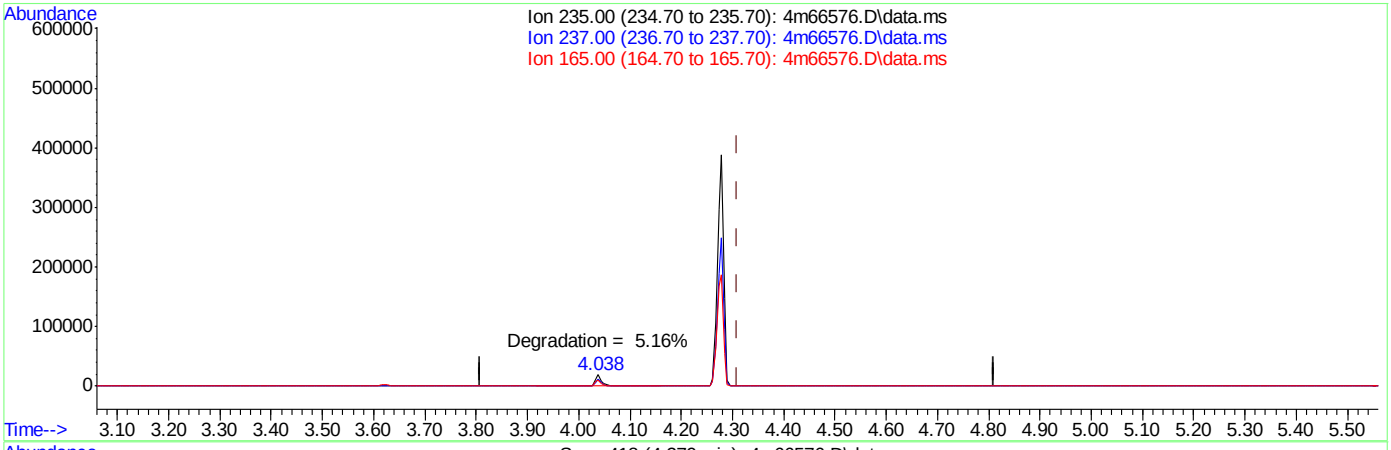
Ion	Exp%	Act%
184.00	100	100
183.00	10.60	12.13
185.00	13.40	13.95
0.00	0.00	0.00

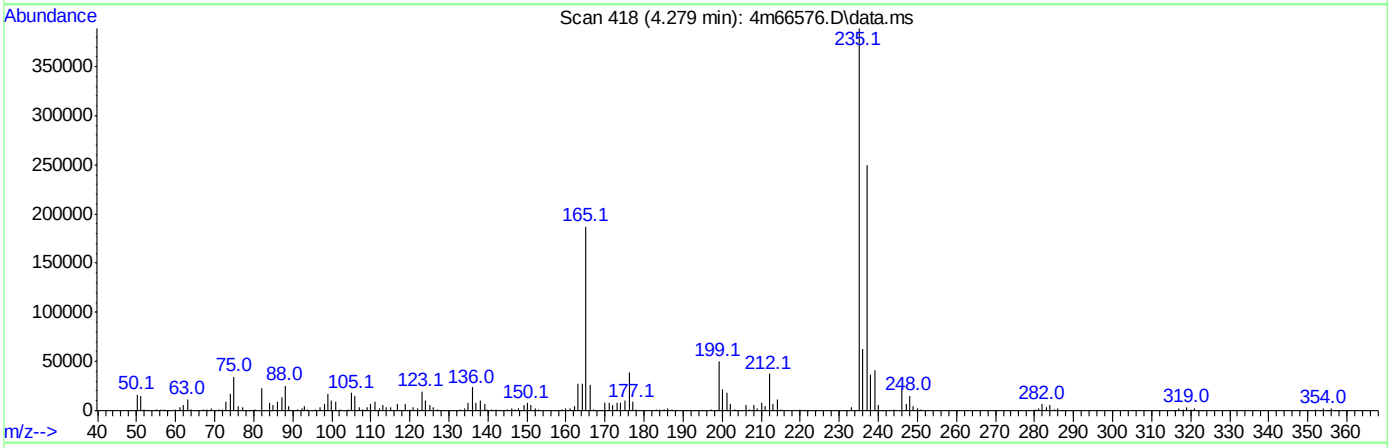
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66576.D
Acq On : 5 Jul 2016 9:58 am
Operator : linseyk
Sample : dftpp
Misc : op94994a,e4m2995
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 10:04:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m66576.D\data.ms

(3) ddt (t)

4.279min (-0.031) 119.30ppb

response 3301778

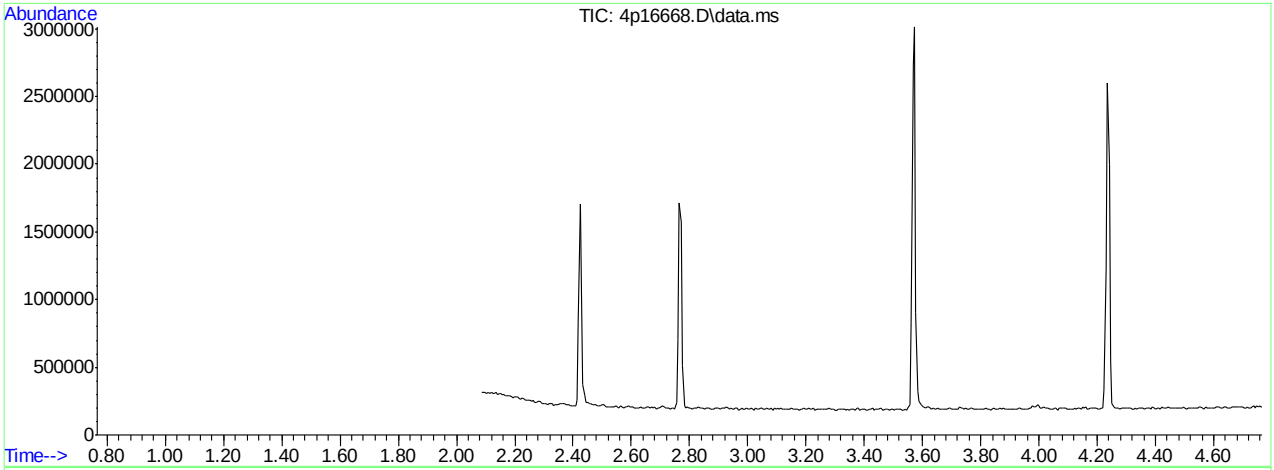
Ion	Exp%	Act%
235.00	100	100
237.00	63.70	63.77
165.00	48.70	50.27
0.00	0.00	0.00

SGS ACCUTEST JC22613

DFTPPR

Data File : C:\msdchem\1\DATA\E4P887\4p16668.D Vial: 1
Acq On : 6 Jun 2016 9:57 am Operator: linseyk
Sample : dftpp Inst : MS4P
Misc : op94376a,e4p887 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 127, 128, 129; Background Corrected with Scan 120

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.4	65770	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	52.9	75046	PASS
70	69	0.00	2	0.5	350	PASS
127	198	40	60	52.8	74929	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	141872	PASS
199	198	5	9	6.6	9305	PASS
275	198	10	30	18.4	26127	PASS
365	198	1	100	1.7	2425	PASS
441	443	0.10	100	83.1	12236	PASS
442	198	40	100	55.8	79101	PASS
443	442	17	23	18.6	14730	PASS

4p16668.D DFTPP4P.M Mon Jun 06 14:51:51 2016

Average of 2.761 to 2.771 min.: 4p16668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	351	49.00	197	58.15	153	66.15	504
38.15	1264	50.05	16136	58.70	118	67.10	207
39.05	5055	51.10	65770	59.80	108	69.00	75046
40.10	148	52.15	3110	61.05	942	70.05	350
41.05	827	52.90	182	61.50	223	71.15	173
42.05	298	53.10	158	62.05	1042	72.20	68
43.05	140	53.80	122	63.05	2754	74.00	5844
45.00	255	55.10	93	63.80	92	75.05	9909
47.00	653	56.00	2297	64.10	84	76.05	624
47.90	985	57.05	4622	64.30	325	77.05	78430
48.15	2188	57.90	110	65.10	1544	78.05	5567

Average of 2.761 to 2.771 min.: 4p16668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
79.00	4179	91.05	858	102.10	458	112.10	1175
80.05	3529	92.10	207	102.40	95	113.05	30
81.05	5031	93.00	6570	103.00	506	113.85	91
82.10	1935	93.90	129	103.80	428	115.10	68
84.00	96	94.15	415	104.00	1539	115.40	169
86.00	210	94.70	104	105.00	2139	116.00	1194
86.90	629	96.00	62	106.00	535	117.05	9969
87.20	274	98.05	4681	107.10	18596	117.95	521
87.90	779	99.05	4664	108.05	3344	118.60	139
88.90	294	99.95	394	110.00	42712	119.00	229
89.65	46	101.05	3011	111.05	5838	119.20	237

Average of 2.761 to 2.771 min.: 4p16668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
119.70	202	127.10	74929	136.00	670	143.00	598
119.80	68	128.05	6043	136.30	179	143.85	78
120.30	39	129.00	25782	136.60	247	144.40	423
121.10	224	129.85	226	137.00	552	145.20	325
121.50	186	130.10	1771	137.15	514	145.60	180
122.05	935	130.50	132	138.15	18	146.15	563
123.05	2041	131.10	260	139.10	40	146.40	138
124.05	902	131.95	482	139.70	137	147.05	1253
124.55	67	132.95	181	139.95	318	148.00	2710
125.00	559	134.20	672	140.95	3255	148.90	288
125.25	268	135.00	2196	142.05	940	149.20	335

Average of 2.761 to 2.771 min.: 4p16668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
149.90	105	158.20	77	165.80	254	171.40	294
150.20	28	159.15	815	166.10	682	172.00	618
150.90	206	159.80	169	167.05	5466	172.70	236
151.15	309	160.05	818	167.85	371	173.15	503
152.80	183	161.05	1633	168.05	2426	173.55	58
153.05	789	161.95	546	169.05	529	174.05	1342
153.90	972	162.60	124	169.50	212	175.05	2072
155.10	1560	162.80	21	169.80	97	175.70	65
156.15	2146	163.15	103	170.15	301	176.15	846
157.20	1176	163.90	182	170.40	118	176.70	143
157.90	283	165.05	1244	170.90	58	177.00	1099

Average of 2.761 to 2.771 min.: 4p16668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
179.00	4118	189.05	1199	200.05	776	207.70	293
180.10	2878	190.10	110	200.80	198	208.10	306
181.05	1129	191.05	1150	201.30	100	208.50	187
181.90	180	192.05	1801	201.55	1117	209.10	694

182.10	321	193.05	1480	202.85	157	209.70	202
182.95	374	194.10	299	203.20	1120	210.10	111
184.00	728	194.40	143	204.10	4273	210.40	10
185.15	2439	195.05	419	204.90	913	210.65	563
186.05	17084	196.10	4921	205.10	6099	211.10	1079
187.05	5715	198.00	141872	206.10	32564	211.80	162
188.20	246	199.00	9305	207.10	4159	212.30	256

Average of 2.761 to 2.771 min.: 4p16668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
213.50	84	224.10	16208	231.90	122	238.05	150
214.60	80	225.05	4199	232.20	183	238.60	92
215.05	472	225.95	500	232.85	192	239.20	52
216.20	143	227.10	5201	233.30	81	240.05	206
217.05	6301	227.70	83	233.75	182	240.35	242
218.05	1178	228.10	884	234.00	144	240.80	110
219.20	89	228.90	800	234.95	284	241.00	143
219.85	631	229.10	428	235.25	290	241.60	221
221.05	7389	230.20	156	236.15	493	242.15	1164
222.15	1170	230.80	152	237.00	623	242.80	283
223.00	1045	231.25	676	237.80	89	244.05	11461

Average of 2.761 to 2.771 min.: 4p16668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
245.00	324	251.25	42	259.00	602	265.90	280
245.15	1665	251.60	20	259.80	136	266.10	61
246.05	1821	251.80	194	260.10	171	266.40	188
246.70	71	252.30	65	260.90	41	266.90	106
247.05	414	252.60	89	261.25	187	267.70	29
247.90	155	252.80	433	261.70	159	268.00	105
248.40	128	253.30	796	262.15	261	268.30	24
248.95	414	255.05	54641	262.65	8	268.70	2
249.50	75	256.05	7982	263.30	22	269.10	41
250.00	214	257.05	891	263.95	443	269.60	52
250.80	567	258.05	2428	265.00	984	270.10	130

Average of 2.761 to 2.771 min.: 4p16668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
270.60	22	279.85	194	286.55	78	296.05	5334
270.80	87	280.45	97	288.85	125	296.70	56
271.10	371	281.40	247	289.20	11	296.95	174
271.70	172	281.60	97	289.75	147	297.20	228
273.15	2417	282.10	82	291.10	234	297.60	138
274.05	5207	282.60	126	291.70	79	298.10	190
275.10	26127	283.05	203	292.10	49	298.75	67
276.10	3217	283.80	48	292.50	142	300.80	136
276.95	1344	285.00	256	293.05	438	301.20	69
278.00	134	285.80	73	294.05	52	302.20	102
279.00	80	286.00	36	294.50	91	303.10	863

Average of 2.761 to 2.771 min.: 4p16668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
304.15	214	311.05	128	316.85	87	325.40	145
305.05	100	311.30	49	317.40	50	326.90	262
305.30	33	311.70	73	317.80	163	327.35	132
305.80	17	312.05	116	319.10	52	328.05	417
306.05	79	312.60	35	319.95	74	328.90	93
306.90	18	313.00	37	320.70	38	329.20	39
307.80	94	313.30	40	320.95	292	329.80	64
308.10	137	314.05	222	323.10	2361	330.00	71
308.90	132	314.50	47	324.15	128	330.30	126
310.00	72	314.80	254	324.60	42	331.00	60
310.20	193	316.10	511	324.80	76	331.90	348

Average of 2.761 to 2.771 min.: 4p16668.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
332.95	231	342.20	140	350.65	75	357.00	20
334.00	1382	342.40	48	351.75	246	357.25	116
335.10	277	342.70	41	352.10	468	357.80	26
336.40	157	343.75	84	352.95	288	359.70	57
337.10	75	345.20	53	353.10	479	360.10	60
338.30	208	345.95	471	353.40	87	360.50	224
339.15	180	346.70	96	354.00	779	362.20	39
339.80	129	347.80	164	354.70	53	363.15	280
340.50	39	348.30	74	355.15	133	363.90	91
340.80	133	349.40	58	356.10	65	365.00	2425
341.30	107	350.10	217	356.75	137	365.70	59

Average of 2.761 to 2.771 min.: 4p16668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
365.95	77	372.90	78	379.45	96	387.80	137
367.05	378	373.50	59	379.95	42	388.10	42
367.60	52	373.70	53	380.80	25	388.30	79
368.10	155	374.00	83	382.70	72	388.60	70
369.00	148	374.20	21	382.95	202	389.30	49
369.70	20	374.70	44	383.85	98	389.95	23
370.30	60	375.45	80	384.60	34	390.80	68
371.10	287	376.05	84	385.70	55	391.05	96
371.70	142	376.50	18	386.20	97	391.65	169
372.10	704	376.80	48	386.70	34	392.85	86
372.50	37	379.00	26	387.20	60	393.80	3

Average of 2.761 to 2.771 min.: 4p16668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
394.20	23	402.10	372	408.10	91	416.80	167
395.35	66	403.05	547	409.05	18	417.10	53
396.00	24	403.70	34	409.85	100	417.60	48
396.90	30	404.20	53	410.70	47	418.55	106
397.75	66	404.40	155	411.20	82	419.30	106
398.50	69	405.15	81	412.30	80	419.50	120
398.75	122	405.90	64	413.00	161	420.50	120
399.55	86	406.20	62	413.30	52	420.80	532
399.80	96	407.10	25	413.80	60	421.20	155
400.80	91	407.35	138	414.65	90	421.50	84
401.70	164	407.80	76	416.30	24	422.05	187

Average of 2.761 to 2.771 min.: 4p16668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
422.40	177	429.40	109	434.50	187	443.80	99
423.05	4167	430.15	374	435.15	135	444.05	1291
424.10	1032	430.55	28	436.10	219	444.30	114
424.90	33	430.90	34	436.55	194	445.15	164
425.15	4	431.20	186	437.50	313	446.00	42
425.70	41	431.60	60	437.80	116	446.45	126
427.10	139	432.30	215	438.25	183	447.10	55
428.00	128	432.50	229	438.85	329	447.40	58
428.35	205	433.10	199	441.05	12236	447.80	69
428.70	70	433.30	154	442.10	79101	448.00	47
429.10	2	433.60	259	443.05	14730	448.30	85

Average of 2.761 to 2.771 min.: 4p16668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
448.95	58	461.45	146	470.25	42	479.60	104
449.20	31	462.05	56	470.85	35	479.80	36
451.00	17	464.00	34	471.40	9	481.10	37
452.60	82	464.60	26	471.70	62	481.80	138
453.20	26	464.85	69	473.65	100	482.40	102

453.45	9	465.35	72	474.60	50	482.65	49
453.80	68	465.90	70	475.40	67	483.85	177
454.90	22	466.20	33	476.30	74	484.60	102
458.80	61	467.70	86	477.40	61	485.90	22
459.30	52	468.50	3	478.20	33	486.10	64
459.70	21	469.35	120	478.40	104	487.25	66

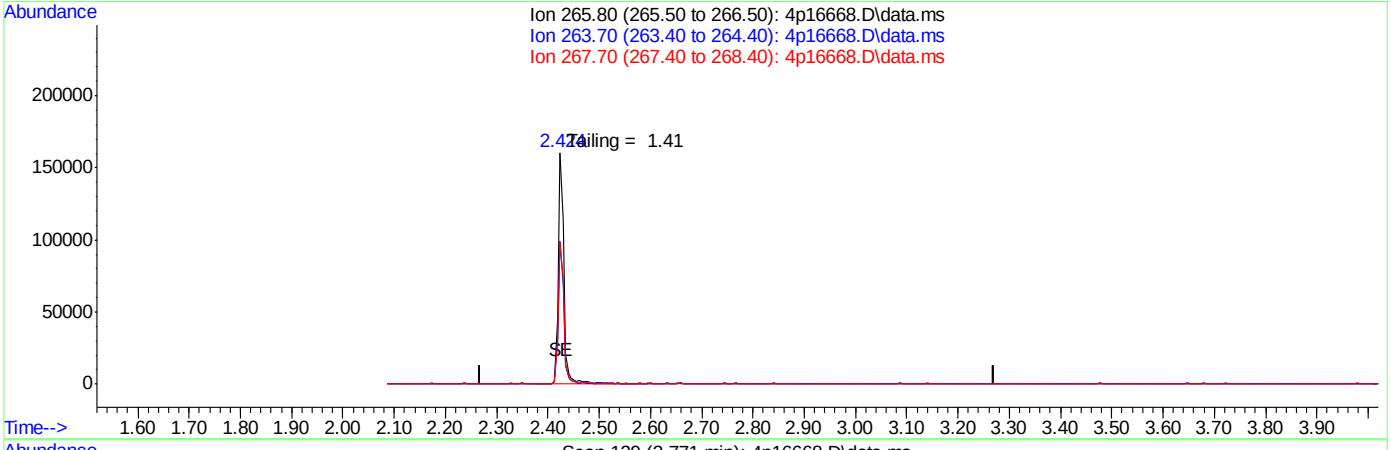
Average of 2.761 to 2.771 min.: 4p16668.D\data.ms
dftpp
Modified:subtracted

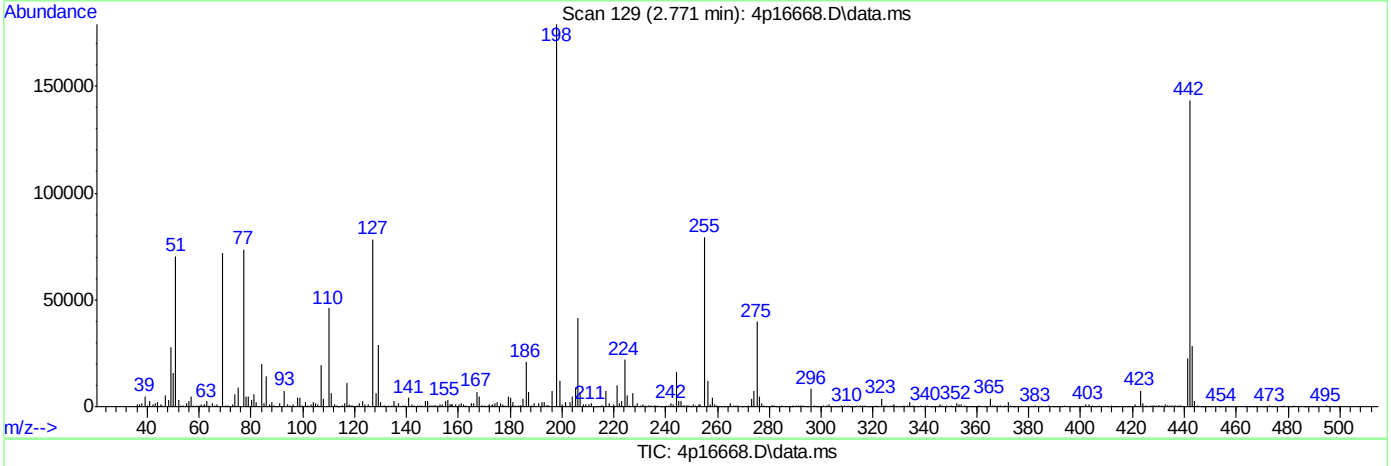
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
487.85	18	499.40	32				
489.15	63	499.80	103				
489.40	27						
490.15	89						
490.80	21						
492.90	94						
494.70	102						
495.45	32						
495.80	37						
496.10	59						
497.55	48						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16668.D
Acq On : 6 Jun 2016 9:57 am
Operator : linseyk
Sample : dftpp
Misc : op94376a,e4p887
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 06 10:03:31 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: 4p16668.D\data.ms

(1) Pentachlorophenol (MC)

2.770min (-2.770) 0.00ng

response 0

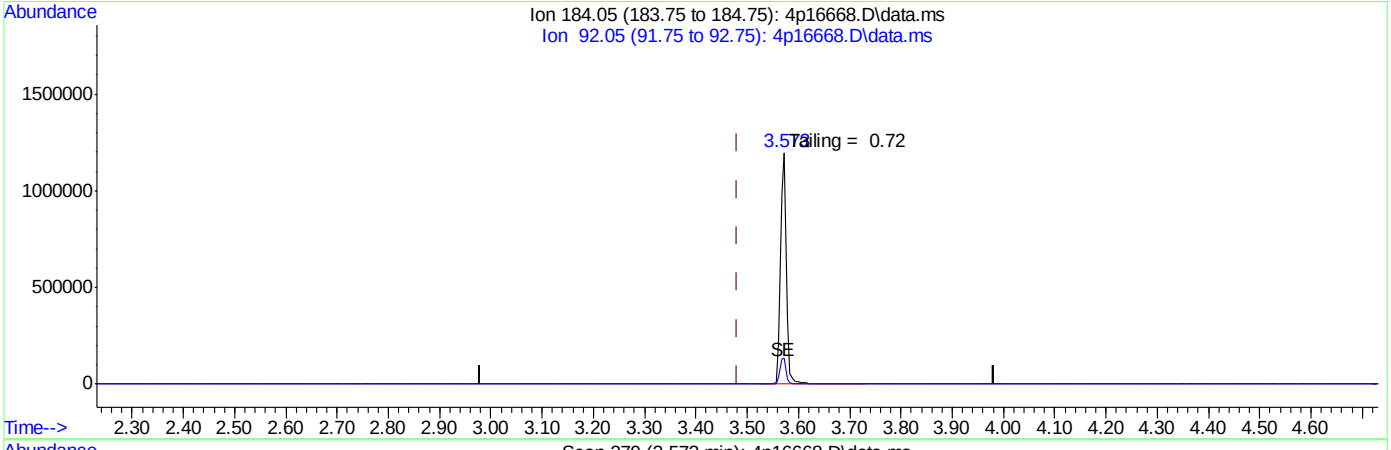
Ion	Exp%	Act%
265.80	100	0.00
263.70	64.70	0.00#
267.70	64.60	0.00#
0.00	0.00	0.00

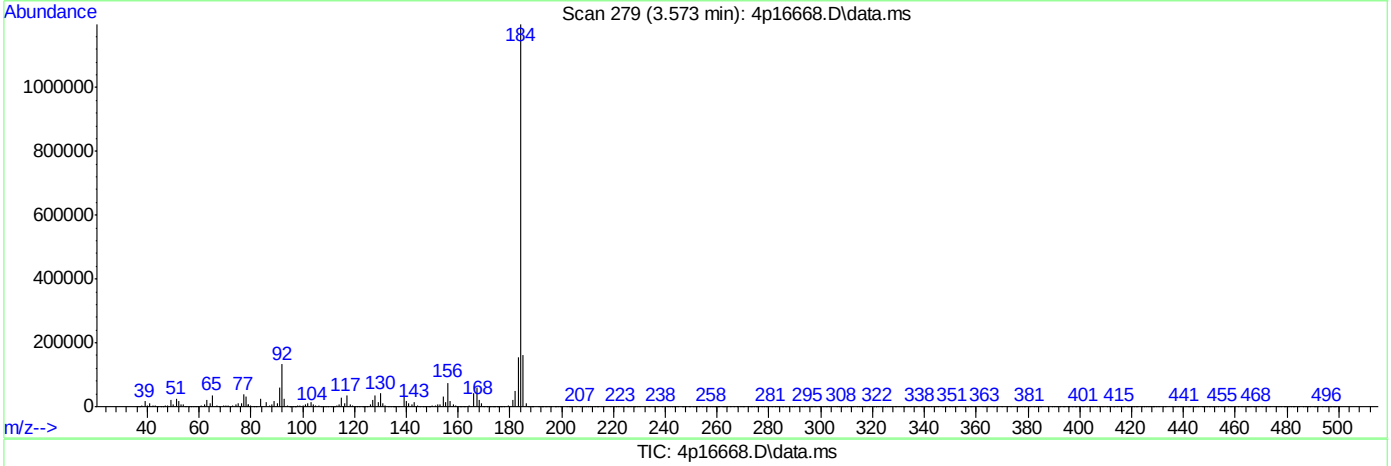
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16668.D
Acq On : 6 Jun 2016 9:57 am
Operator : linseyk
Sample : dftpp
Misc : op94376a,e4p887
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 06 10:03:31 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: 4p16668.D\data.ms

(2) Benzidine (M)

3.573min (+0.091) 199.02ng

response 926851

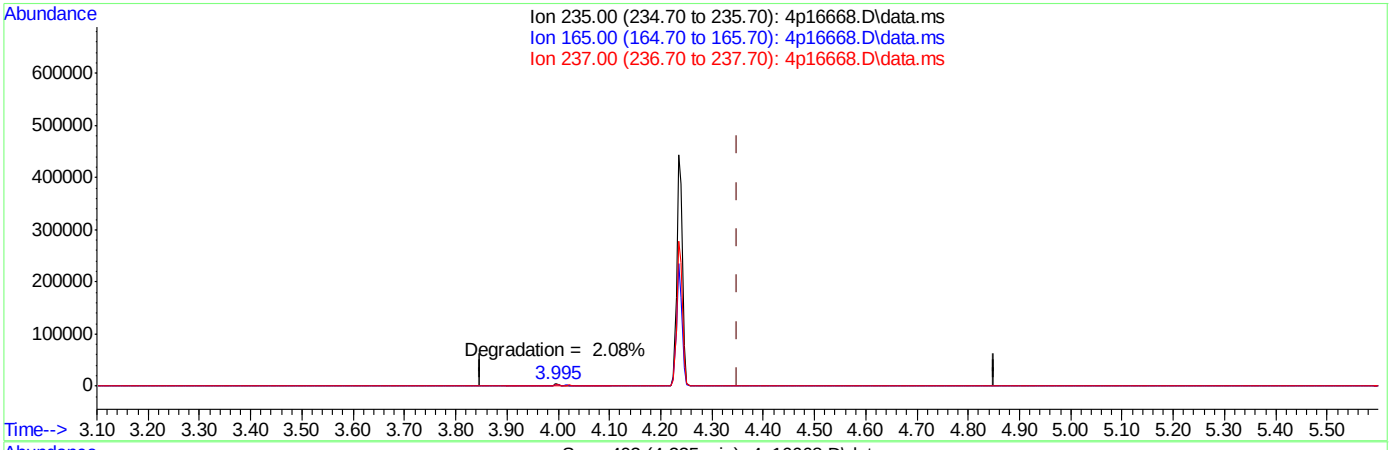
Ion	Exp%	Act%
184.05	100	100
92.05	11.10	11.08
0.00	0.00	0.00
0.00	0.00	0.00

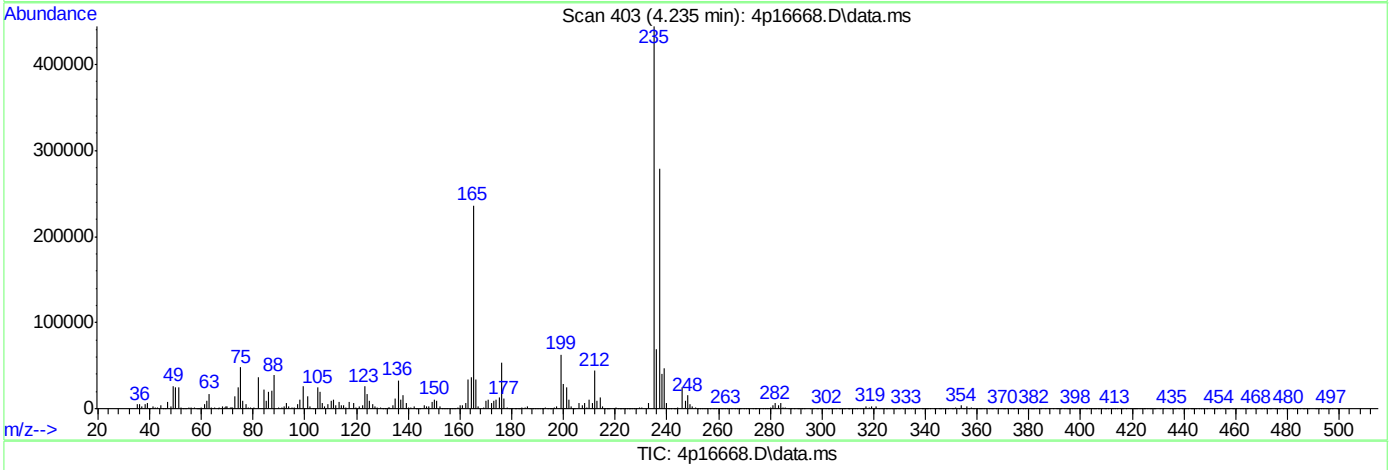
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16668.D
Acq On : 6 Jun 2016 9:57 am
Operator : linseyk
Sample : dftpp
Misc : op94376a,e4p887
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 06 10:03:31 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: 4p16668.D\data.ms

(3) PP-DDT (MC)

4.235min (-0.115) 189.42ppb

response 354185

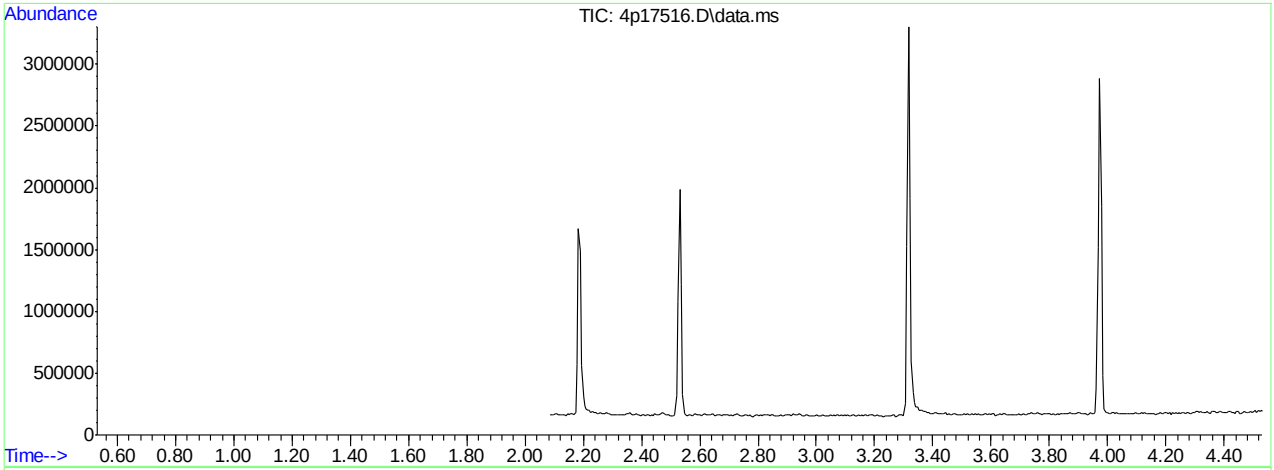
Ion	Exp%	Act%
235.00	100	100
165.00	58.00	52.95
237.00	62.20	62.67
0.00	0.00	0.00

SGS ACCUTEST JC22613

DFTPPR

Data File : C:\msdchem\1\DATA\E4P933\4p17516.D Vial: 1
Acq On : 5 Jul 2016 3:33 pm Operator: linseyk
Sample : dftpp Inst : MS4P
Misc : op94634a,e4p933 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 83, 84, 85; Background Corrected with Scan 79

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.0	63527	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.1	71115	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	50.1	75743	PASS
197	198	0.00	1	0.8	1280	PASS
198	198	100	100	100.0	151143	PASS
199	198	5	9	7.0	10509	PASS
275	198	10	30	22.7	34261	PASS
365	198	1	100	2.0	3013	PASS
441	443	0.10	100	36.8	8045	PASS
442	198	40	100	74.8	113034	PASS
443	442	17	23	19.4	21880	PASS

4p17516.D DFTPP4P.M Tue Jul 05 23:03:02 2016

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.50	155	43.40	292	53.20	265	60.40	227
35.90	166	44.00	1931	53.80	70	61.10	1115
36.00	49	44.95	322	54.40	162	62.00	1013
37.05	528	45.30	141	55.10	321	62.20	477
37.40	423	45.55	197	56.05	1967	63.15	2693
38.20	493	46.95	1807	57.05	3813	64.30	483
39.05	5750	48.20	381	57.95	417	65.10	1889
40.15	467	50.05	15813	58.20	199	65.95	199
41.00	2	51.10	63527	59.10	273	66.30	104
42.20	414	52.10	3459	59.30	50	69.00	71115
43.10	239	52.85	597	60.15	389	70.90	75

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
71.55	240	82.00	1135	91.00	1241	99.90	563
72.00	16	83.20	1276	93.05	6853	100.95	2573
73.00	1183	84.00	712	93.90	474	102.95	608
74.15	5441	85.00	1307	94.25	412	103.30	174
75.05	10533	85.30	764	95.30	300	103.50	264
76.05	2629	86.00	1086	95.85	368	104.10	2102
77.10	71361	87.05	1070	96.30	224	104.90	1961
78.10	4552	88.10	227	96.70	266	107.05	19582
79.00	3895	88.85	283	97.20	269	107.95	3475
80.10	3304	89.30	293	98.05	5999	110.05	43338
81.00	5782	89.90	100	99.00	3812	111.05	5777

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
111.90	796	121.10	91	128.15	4788	135.80	250
112.85	372	121.35	260	129.05	27530	136.10	321
113.40	193	122.05	1378	129.90	872	136.50	286
113.95	74	122.95	1802	130.10	2037	137.10	1037
114.30	183	123.20	70	130.90	392	138.00	139
115.25	321	123.95	1148	131.95	118	138.30	147
116.05	825	124.30	59	132.30	90	138.80	209
117.05	10453	125.00	683	132.75	342	139.20	48
118.05	1364	125.45	530	133.50	234	141.10	3169
120.15	538	127.10	75743	134.00	396	141.90	661
120.50	128	127.95	1684	135.00	1344	142.20	945

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
142.70	325	150.90	178	157.05	346	162.10	424
143.10	340	151.40	203	157.60	144	162.65	242
143.70	104	151.65	543	157.90	248	163.10	193
144.05	192	152.50	63	158.10	535	163.90	727
144.30	248	152.90	418	158.30	66	165.10	953
145.15	421	153.10	898	158.70	75	165.80	523
146.10	481	153.50	199	159.00	471	166.00	1244
147.00	1877	153.90	372	159.25	113	166.20	264
148.05	3493	154.15	727	159.95	1205	167.00	5192
148.90	428	155.15	1492	161.00	1415	168.00	2728
150.00	547	156.10	2429	161.85	469	169.00	360

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
169.20	189	174.20	674	182.60	98	190.05	253
169.70	110	175.10	1052	182.90	64	190.50	64
170.05	525	175.30	763	183.20	178	191.15	729
170.50	97	176.15	902	183.40	155	192.00	2028

170.80	305	176.95	1104	184.30	345	193.05	1375
171.00	69	177.20	326	185.10	1034	193.90	196
171.25	265	178.10	676	186.10	19908	194.30	465
171.85	635	179.05	4087	187.05	4060	195.70	1160
172.10	125	180.00	3516	188.25	812	196.10	6101
173.05	957	181.05	1725	188.95	1068	196.90	1280
174.00	858	182.20	655	189.65	125	198.00	151143

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
199.05	10509	209.65	267	215.70	348	226.05	837
199.85	383	210.30	286	217.05	7958	227.00	7529
200.20	235	210.70	709	217.90	122	227.80	414
201.45	1111	211.10	2083	218.00	1320	228.00	784
203.00	1757	211.85	419	218.90	340	228.70	495
204.15	4380	212.70	12	219.15	321	229.05	954
205.05	9724	213.20	237	221.05	9919	230.00	143
206.10	37291	214.30	102	221.90	1094	230.60	353
207.05	3744	214.65	199	223.05	1275	231.05	570
208.15	922	215.00	31	224.10	18553	231.65	330
208.95	615	215.30	124	225.10	4979	232.20	133

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
233.10	252	237.70	321	245.90	1220	250.70	335
233.45	206	238.80	612	246.10	1020	251.00	227
233.75	21	239.90	133	246.90	157	251.10	255
234.25	660	240.50	432	247.10	544	252.10	559
234.45	84	241.05	297	248.10	262	253.25	936
234.90	192	242.05	1274	248.60	110	253.90	691
235.15	523	243.10	1320	249.15	722	255.00	71299
236.05	735	244.05	15549	249.60	136	256.00	10295
236.55	123	245.00	567	249.90	56	257.30	708
236.90	422	245.20	1797	250.20	146	258.10	3100
237.20	346	245.70	350	250.40	99	258.95	326

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
259.20	297	265.90	134	273.25	582	282.15	338
259.80	164	266.15	462	273.85	897	282.85	293
261.10	67	266.60	43	274.10	6643	283.35	665
261.40	128	267.35	209	275.05	34261	284.15	396
262.05	160	269.60	54	276.00	5264	284.50	193
262.95	132	269.90	67	277.05	3068	285.05	893
263.60	145	270.20	106	277.95	251	286.90	61
264.05	502	270.40	106	278.85	203	288.15	319
264.40	191	270.75	426	279.20	92	288.75	19
264.90	233	272.00	359	279.50	173	289.20	201
265.05	905	272.95	2086	280.30	257	290.10	164

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
290.50	119	297.70	77	307.05	102	315.20	537
291.00	161	298.10	245	308.30	258	315.85	519
291.35	66	299.20	30	308.70	116	316.50	172
292.00	154	299.90	230	309.00	64	316.90	133
293.05	797	300.15	19	309.75	66	317.15	320
293.30	171	300.75	299	310.10	428	317.60	136
294.10	299	302.00	79	310.80	36	317.85	152
294.40	98	303.10	1346	311.25	94	318.85	252
294.80	238	305.00	206	313.60	448	319.30	131
296.00	8539	305.50	41	314.20	387	319.60	282
297.05	1467	306.70	159	314.95	826	320.10	154

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
320.40	219	327.15	211	332.90	202	341.00	214
321.00	287	328.20	195	333.85	458	341.95	343
321.45	225	328.80	120	334.20	1276	342.65	200
322.05	310	329.30	19	334.85	386	343.00	95
323.05	3341	329.70	27	335.35	331	344.30	91
324.00	180	329.95	238	336.05	157	344.60	129
324.65	207	330.40	2	336.30	71	344.90	80
325.65	284	331.55	177	338.40	155	345.65	76
326.10	104	331.90	95	338.85	109	346.10	784
326.55	220	332.10	100	339.50	101	346.90	233
326.95	391	332.60	257	340.10	66	348.45	203

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
349.20	125	356.10	53	363.00	171	372.05	1500
349.55	22	356.40	69	364.95	3013	372.30	498
350.40	145	357.15	315	365.20	430	372.95	808
350.80	213	357.60	33	365.70	73	373.60	122
351.05	223	358.20	63	365.90	331	374.45	98
351.65	285	358.75	295	367.05	197	375.85	126
352.10	663	359.25	231	367.50	165	376.45	187
353.10	860	360.90	361	367.85	224	376.85	63
353.80	47	361.60	6	368.80	178	377.40	136
354.10	560	362.00	146	370.40	71	378.40	71
354.90	137	362.70	136	371.30	239	379.10	189

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
379.40	128	388.30	202	395.50	146	401.65	92
379.90	61	389.05	47	396.00	73	402.00	454
381.05	142	389.30	90	396.20	34	402.70	68
381.70	316	389.90	270	396.85	172	402.95	991
382.20	26	390.30	126	397.60	41	403.15	330
382.70	108	391.05	471	398.60	44	404.00	457
383.00	397	391.65	369	399.30	80	404.60	96
383.90	85	392.15	271	399.50	88	405.50	100
384.15	309	393.00	44	400.20	225	406.20	251
387.10	146	393.60	28	400.60	22	407.45	446
387.45	61	395.20	110	400.95	75	408.30	28

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
408.70	24	415.40	158	424.15	2164	430.80	284
409.30	41	415.80	105	425.00	466	431.65	238
409.65	236	416.35	33	425.30	343	432.05	387
410.30	56	417.55	408	425.60	186	432.50	112
410.70	90	418.80	56	426.25	15	433.25	460
411.40	66	419.50	221	426.65	44	433.90	92
411.80	183	420.10	173	427.15	285	434.10	369
412.70	123	420.60	261	427.95	282	434.90	225
413.00	53	421.15	1324	429.40	110	435.10	67
414.50	91	421.95	1223	429.70	151	435.50	158
415.20	157	423.10	6760	430.10	87	435.70	327

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
436.10	120	443.10	21880	449.85	16	459.10	77
436.95	425	444.15	2052	450.60	53	459.40	192
437.30	251	444.80	94	451.05	77	459.60	55
437.80	289	445.35	120	452.35	210	459.90	74
438.10	211	446.05	285	453.10	217	460.60	66

438.35	772	446.40	106	454.50	166	460.95	148
438.90	725	447.60	67	455.30	34	461.80	145
439.50	396	448.45	139	456.80	76	463.20	153
440.00	660	449.00	83	457.40	72	463.35	124
441.10	8045	449.30	59	458.05	64	464.10	68
442.10	113034	449.50	25	458.40	11	464.70	58

Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
466.15	152	475.40	34	482.60	163	489.00	193
467.10	41	476.35	198	482.80	31	490.20	169
467.30	80	476.90	102	483.20	69	491.50	211
468.40	28	477.10	59	484.40	223	492.20	69
469.25	86	478.00	33	484.75	263	492.80	51
469.60	56	478.75	30	485.00	18	493.00	58
470.70	19	479.20	59	485.60	18	493.45	10
471.30	68	480.10	126	486.65	69	494.10	82
472.00	63	480.45	28	487.30	78	495.50	93
473.20	64	481.20	274	487.50	155	495.70	153
475.00	163	481.65	26	488.30	35	496.40	30

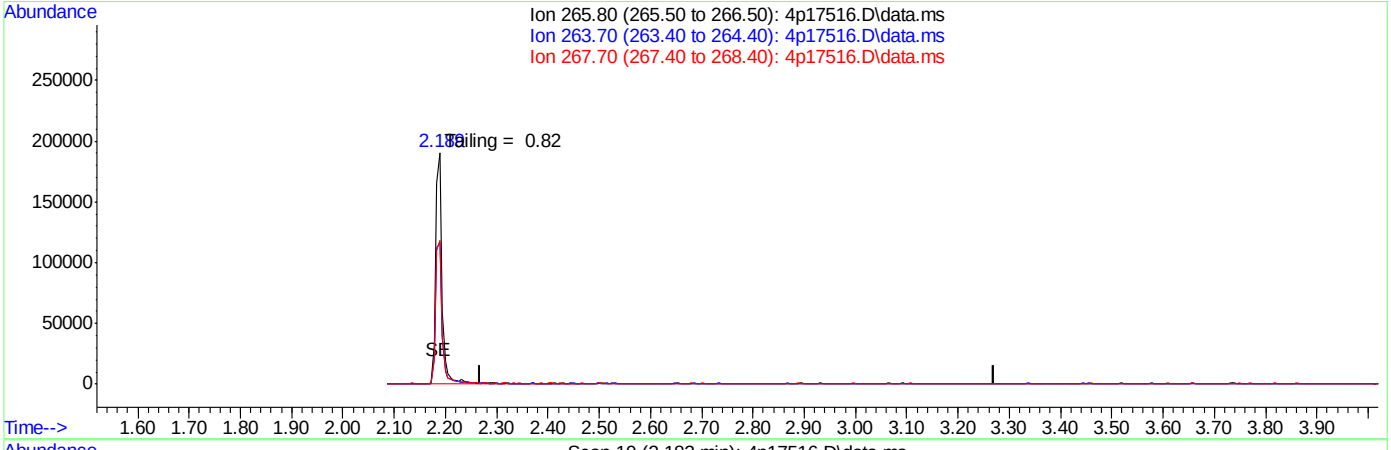
Average of 2.525 to 2.536 min.: 4p17516.D\data.ms
dftpp
Modified:subtracted

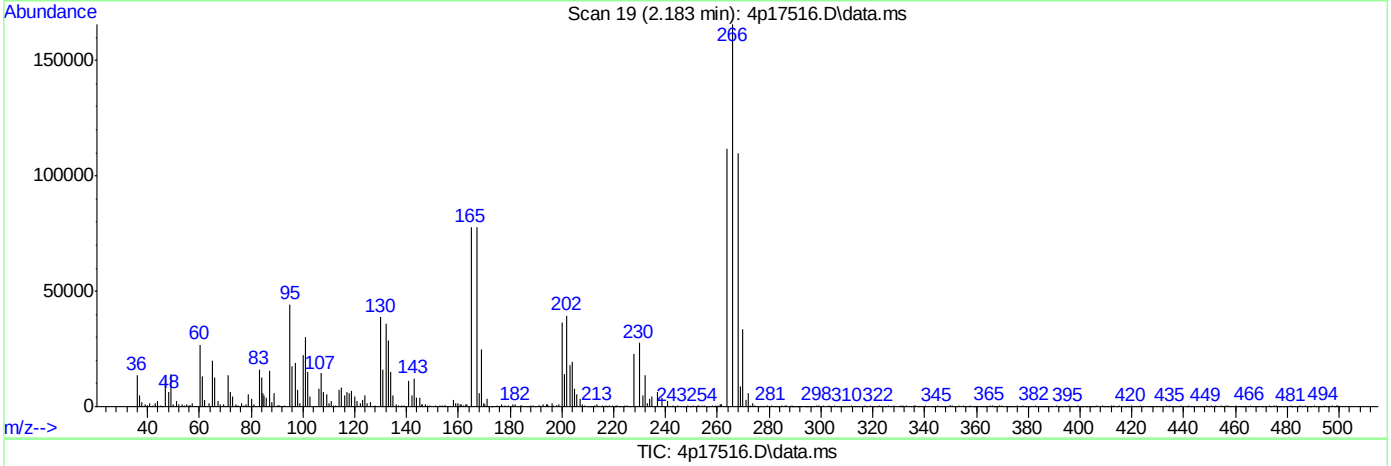
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
497.10	33						
497.50	48						
498.90	208						
499.60	58						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P933\
Data File : 4p17516.D
Acq On : 5 Jul 2016 3:33 pm
Operator : linseyk
Sample : dftpp
Misc : op94634a,e4p933
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 15:38:44 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 0.00ng d

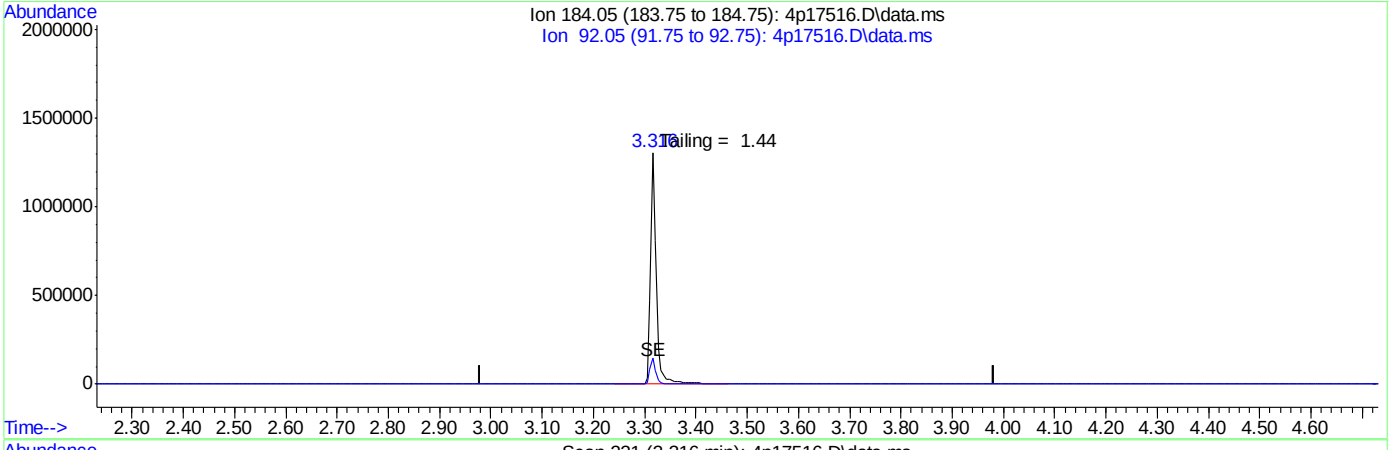
response 0

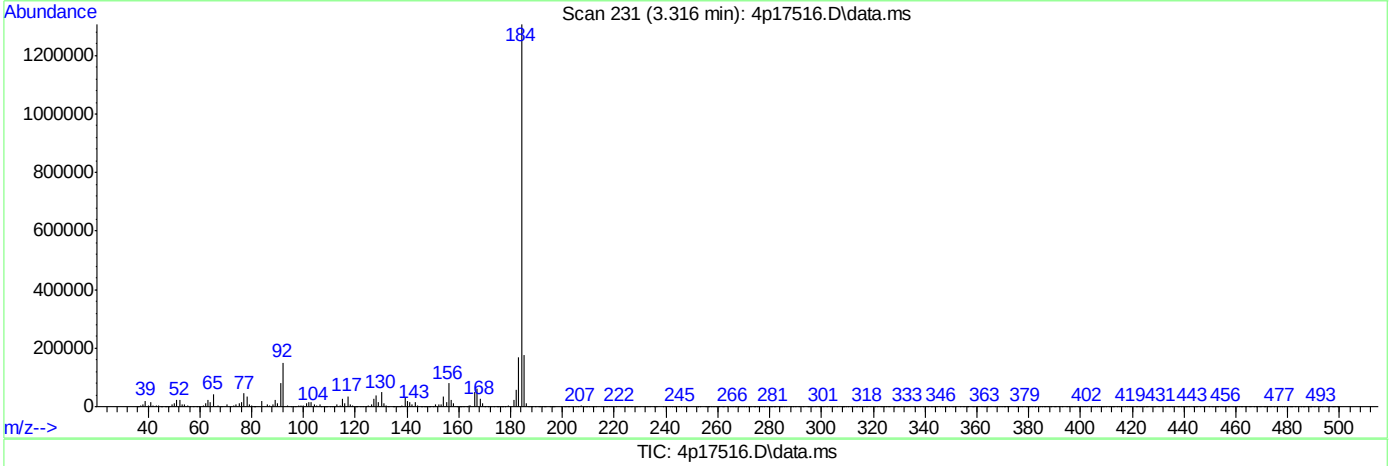
Ion	Exp%	Act%
265.80	100	0.00
263.70	64.70	0.00
267.70	64.60	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P933\
Data File : 4p17516.D
Acq On : 5 Jul 2016 3:33 pm
Operator : linseyk
Sample : dftpp
Misc : op94634a,e4p933
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 15:38:44 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: 4p17516.D\data.ms

(2) Benzidine (M)

3.481min 0.00ng d

response 0

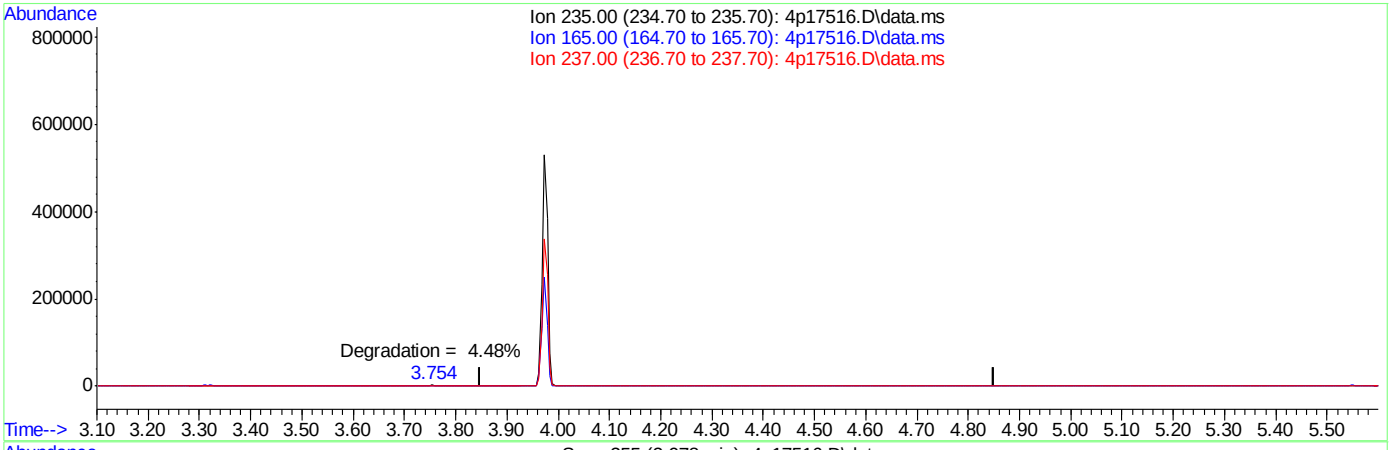
Ion	Exp%	Act%
184.05	100	0.00
92.05	11.10	0.00
0.00	0.00	0.00
0.00	0.00	0.00

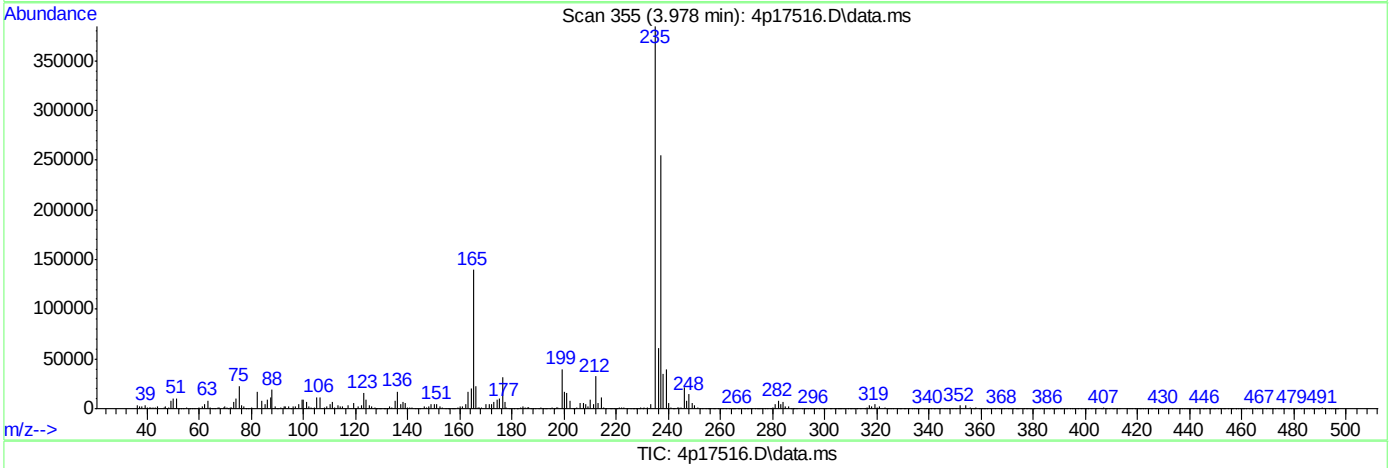
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P933\
Data File : 4p17516.D
Acq On : 5 Jul 2016 3:33 pm
Operator : linseyk
Sample : dftpp
Misc : op94634a,e4p933
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 05 15:38:44 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: 4p17516.D\data.ms

(3) PP-DDT (MC)

4.350min (-4.350) 0.00ppb

response 0

Ion	Exp%	Act%
235.00	100	0.00
165.00	58.00	0.00#
237.00	62.20	0.00#
0.00	0.00	0.00

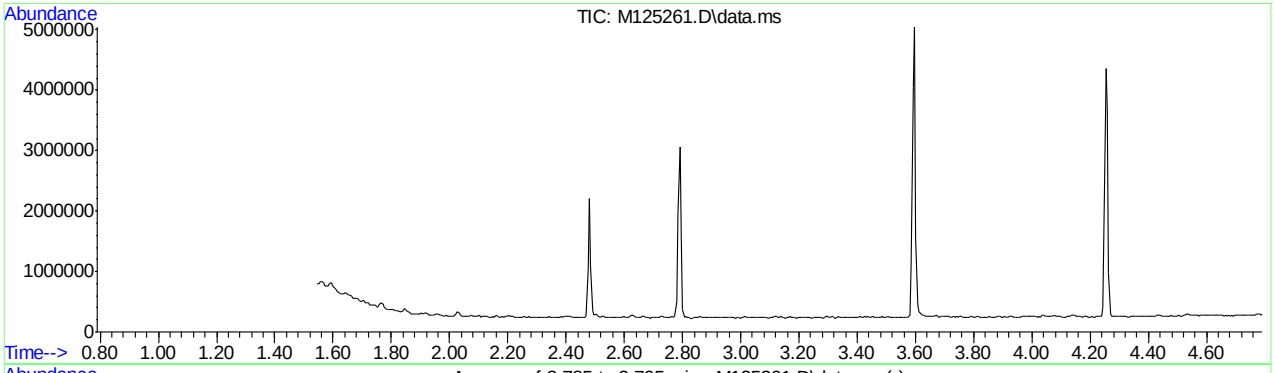
SGS ACCUTEST JC22613

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125261.D
Acq On : 16 Jun 2016 12:28 pm
Operator : ashleyd
Sample : dftpp
Misc : op94571,em5307
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Jun 19 08:52:32 2016
Last Update : Sun Jun 19 08:52:32 2016



AutoFind: Scans 233, 234, 235; Background Corrected with Scan 225

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.6	86768	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.1	107379	PASS
70	69	0.00	2	0.9	937	PASS
127	198	40	60	47.9	116545	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	243434	PASS
199	198	5	9	6.6	16038	PASS
275	198	10	30	23.3	56832	PASS
365	198	1	100	2.4	5769	PASS
441	443	0.10	100	74.3	20436	PASS
442	198	40	100	58.9	143365	PASS
443	442	17	23	19.2	27519	PASS

Average of 2.785 to 2.795 min.: M125261.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	761	53.15	599	62.15	1491	71.20	28
38.10	1201	53.85	70	63.10	3506	73.20	854
39.15	6118	54.15	244	64.05	205	74.10	9969
40.05	247	55.15	381	64.25	315	75.05	15824
44.10	9	56.10	2910	65.05	2014	76.15	2440
45.10	215	57.05	5201	66.15	61	77.10	109072
47.05	384	58.15	351	66.45	87	78.10	7555
48.10	1179	59.05	152	66.75	67	79.05	6884
50.10	22806	60.05	110	67.35	345	80.15	5562
51.10	86768	60.25	99	69.05	107379	81.05	6858
52.15	4381	61.15	957	70.10	937	82.10	1496

Average of 2.785 to 2.795 min.: M125261.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
83.15	3854	96.05	659	104.05	2159	118.05	1504
85.05	907	97.25	241	105.00	1928	118.95	509
86.05	906	98.05	7124	107.00	31041	120.05	615
87.00	1055	99.10	6633	108.00	4455	120.85	146
88.95	168	100.05	273	110.05	58142	121.35	158
89.45	78	100.20	743	111.05	9357	122.10	1841
91.05	1218	101.10	4283	112.00	531	123.05	2053
92.15	949	101.95	316	113.00	451	123.95	989
93.05	10365	102.65	101	114.15	302	125.05	1108
94.05	571	103.05	781	116.10	1610	127.05	116545
95.15	441	103.35	141	117.05	22107	128.05	8154

Average of 2.785 to 2.795 min.: M125261.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
129.05	44165	140.00	814	150.05	610	159.15	931
130.05	4367	141.00	4685	150.85	225	160.05	2671
131.05	534	142.00	963	151.40	621	161.00	2483
132.10	635	142.75	376	151.95	312	161.75	236
133.15	5	143.10	1289	152.15	290	162.05	619
133.90	1304	144.05	97	153.05	2016	162.90	210
135.10	3706	145.05	723	154.05	735	164.00	579
136.05	1118	146.05	981	155.05	3783	165.00	1899
137.05	1505	147.05	3055	156.10	4122	166.05	1993
138.10	397	148.05	5925	157.10	1399	167.05	10960
138.65	154	149.05	1339	157.95	635	168.05	6056

Average of 2.785 to 2.795 min.: M125261.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
168.95	282	177.00	1552	185.05	4541	194.00	801
170.00	411	177.65	246	186.05	31901	196.05	8408
170.55	162	177.85	101	187.10	8256	198.05	243434
171.10	206	178.25	325	187.80	373	199.05	16038
171.65	294	179.05	8259	188.15	488	200.00	1344
171.90	484	180.05	5261	189.10	2026	201.25	229
173.05	763	181.05	1932	190.05	514	201.50	1121
174.05	2372	182.10	695	191.05	759	202.00	337
175.10	4598	183.10	316	191.85	477	202.25	389
175.75	502	183.35	83	192.10	2514	203.05	1161
176.00	1268	184.00	1076	193.05	2458	204.10	7889

Average of 2.785 to 2.795 min.: M125261.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
205.05	15332	212.95	402	222.05	597	232.45	178
206.05	57461	213.85	69	223.10	3988	232.65	128
207.05	6244	214.85	263	224.05	32200	232.95	89
208.00	2068	215.10	562	225.05	7460	233.45	222

DFTPPM.M Mon Jun 20 08:45:35 2016 MSM Page: 2

209.05	508	216.25	1114	226.00	560	234.05	654
210.45	380	217.05	13889	227.05	10883	235.10	1340
210.65	373	218.05	1809	228.00	2013	236.00	875
210.95	2587	219.05	291	229.00	2345	236.35	102
211.65	360	219.45	225	230.10	356	237.10	1231
211.95	199	221.05	12248	231.05	1067	237.85	256
212.20	282	221.65	848	232.15	181	238.15	189

Average of 2.785 to 2.795 min.: M125261.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
238.45	73	246.05	4203	253.15	395	264.05	194
239.00	786	247.05	721	253.55	306	265.05	3130
239.55	90	247.85	145	255.05	125469	266.00	760
240.05	550	248.10	244	256.05	19947	267.05	286
241.05	654	249.00	1015	257.00	1601	267.90	232
241.25	104	250.05	217	258.00	6880	268.90	257
242.05	1934	251.05	250	259.05	1127	270.15	115
242.25	234	251.30	236	260.00	274	270.45	107
243.10	2278	251.90	281	260.75	77	271.05	118
244.00	25822	252.15	100	262.65	213	271.25	349
245.10	3846	252.80	832	263.55	122	271.95	223

Average of 2.785 to 2.795 min.: M125261.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
272.20	650	282.55	85	290.45	83	298.20	166
273.05	3879	283.15	378	291.05	174	300.75	117
274.05	11407	283.75	198	292.05	470	300.95	124
275.05	56832	284.10	284	293.15	1275	301.35	120
276.05	7114	285.10	722	294.00	282	302.00	403
277.05	3765	286.05	101	294.15	168	303.00	2266
278.10	735	287.85	97	294.35	132	304.05	450
279.00	246	288.35	148	294.85	270	304.75	183
279.85	77	288.85	216	296.05	13839	307.95	152
281.00	176	289.85	185	297.00	1779	309.05	412
281.90	252	290.25	193	297.95	83	309.85	241

Average of 2.785 to 2.795 min.: M125261.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
311.65	95	320.85	327	328.00	492	339.05	118
312.05	89	321.15	73	329.05	150	340.65	96
312.75	71	321.50	204	331.05	156	341.00	280
314.05	908	322.10	441	331.80	319	342.05	122
315.00	1512	323.10	4422	332.05	175	342.85	102
315.85	268	324.00	979	332.75	86	343.05	121
316.10	625	324.75	78	333.15	213	343.55	97
316.75	126	325.85	88	334.00	3535	343.85	153
316.95	75	326.15	141	334.85	312	345.90	1292
318.05	116	326.85	436	335.05	362	347.10	321
318.95	73	327.05	636	336.05	262	348.55	91

Average of 2.785 to 2.795 min.: M125261.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
349.55	99	358.45	86	369.75	83	384.05	273
349.95	100	359.65	130	370.95	621	385.45	82
350.75	154	359.95	73	372.10	2247	389.05	90
351.15	128	360.35	79	372.75	192	389.75	454
352.10	1612	362.45	90	373.10	574	390.05	72
353.05	771	362.75	77	374.95	73	390.95	67
354.05	1769	364.95	5769	376.95	175	391.15	346
354.95	81	366.00	1317	377.65	85	392.85	179
355.35	249	366.75	77	380.55	106	393.35	77
357.15	81	367.05	122	382.85	158	394.95	95
357.85	115	367.25	90	383.00	787	398.05	93

Average of 2.785 to 2.795 min.: M125261.D\data.ms

DFTPPM.M Mon Jun 20 08:45:35 2016 MSM

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
400.95	175	414.95	91	424.95	187	431.20	261
402.10	1322	415.35	127	425.35	83	431.95	79
402.95	1588	418.15	106	425.55	72	432.60	256
404.05	385	418.45	78	426.45	113	433.05	71
404.85	71	418.65	74	427.05	156	433.15	409
405.15	79	418.95	77	427.35	73	433.60	186
405.55	113	421.10	1347	427.65	100	434.10	193
406.05	97	422.10	1387	428.45	100	434.45	101
409.95	119	423.05	8035	428.85	181	434.85	109
410.45	71	424.00	1682	429.85	79	435.45	358
411.85	101	424.70	210	430.55	74	435.75	94

Average of 2.785 to 2.795 min.: M125261.D\data.ms
dftpp
Modified:subtracted

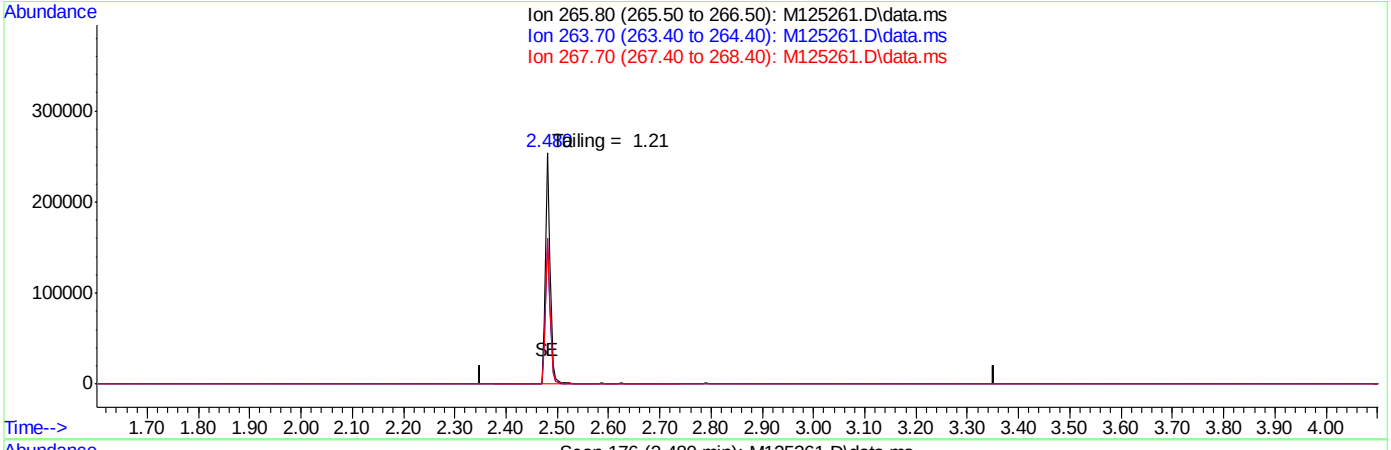
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
436.55	85	445.00	241	487.40	201		
436.85	128	447.15	103	490.35	93		
437.25	84	450.45	86				
437.55	114	452.85	129				
437.85	224	454.55	83				
438.55	93	460.95	104				
439.55	182	467.95	137				
441.05	20436	469.05	67				
442.05	143365	478.95	78				
443.05	27519	479.25	84				
444.05	2217	482.95	85				

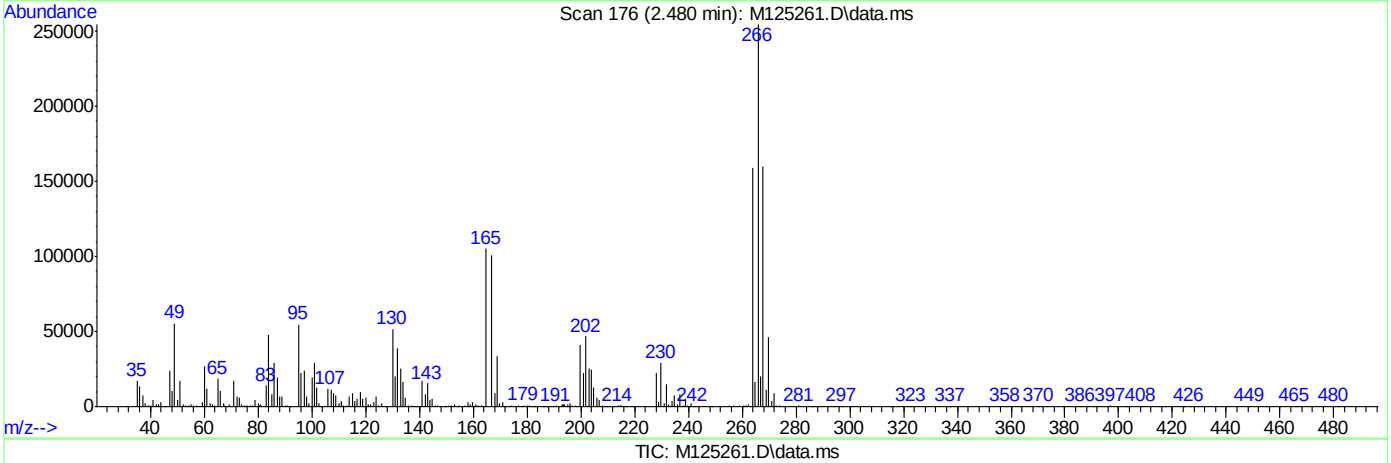
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125261.D
Acq On : 16 Jun 2016 12:28 pm
Operator : ashleyd
Sample : dftpp
Misc : op94571,em5307
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 16 12:33:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mThu May 12 09:34:28 2016
QLast Update : Thu May 12 09:34:28 2016
Response via : Continuing Cal File:





TIC: M125261.D\data.ms

(1) Pentachlorophenol (MC)

2.852min 0.00ppm d

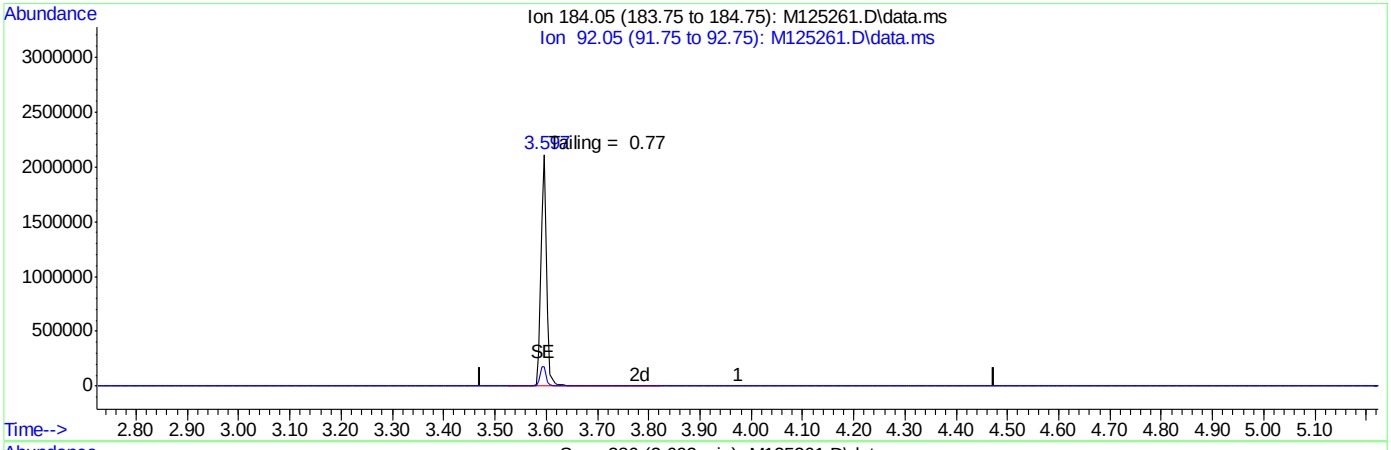
response 0

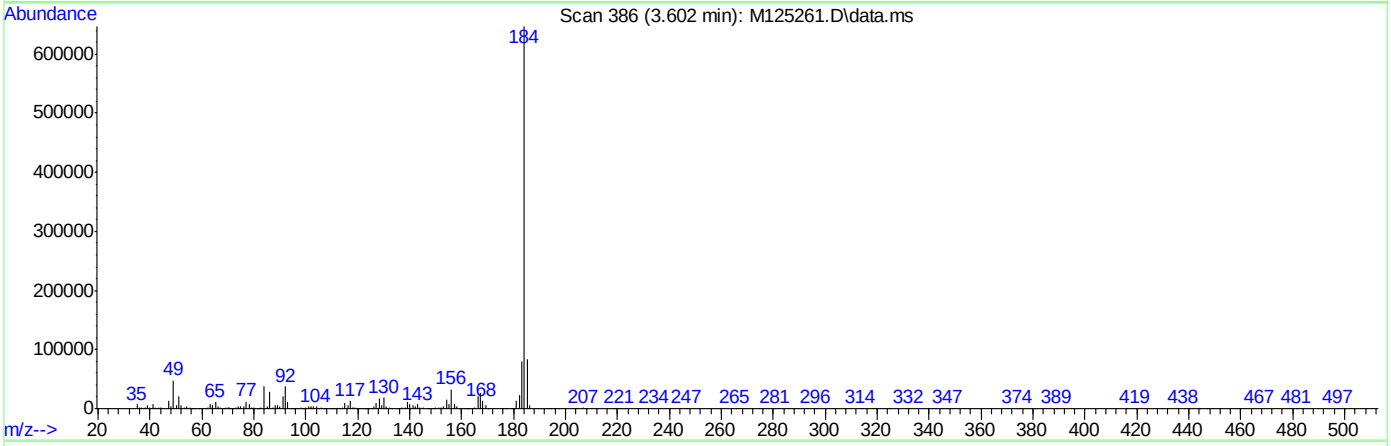
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00
267.70	61.70	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125261.D
Acq On : 16 Jun 2016 12:28 pm
Operator : ashleyd
Sample : dftpp
Misc : op94571,em5307
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 16 12:33:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mThu May 12 09:34:28 2016
QLast Update : Thu May 12 09:34:28 2016
Response via : Continuing Cal File:





(2) Benzidine (M)

3.973min 0.00ppm d

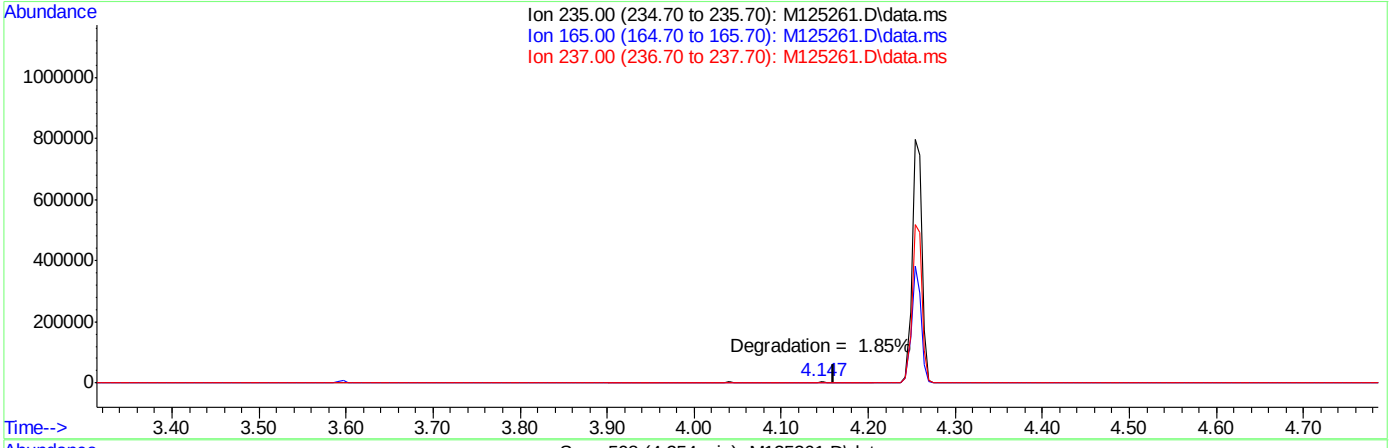
response 0

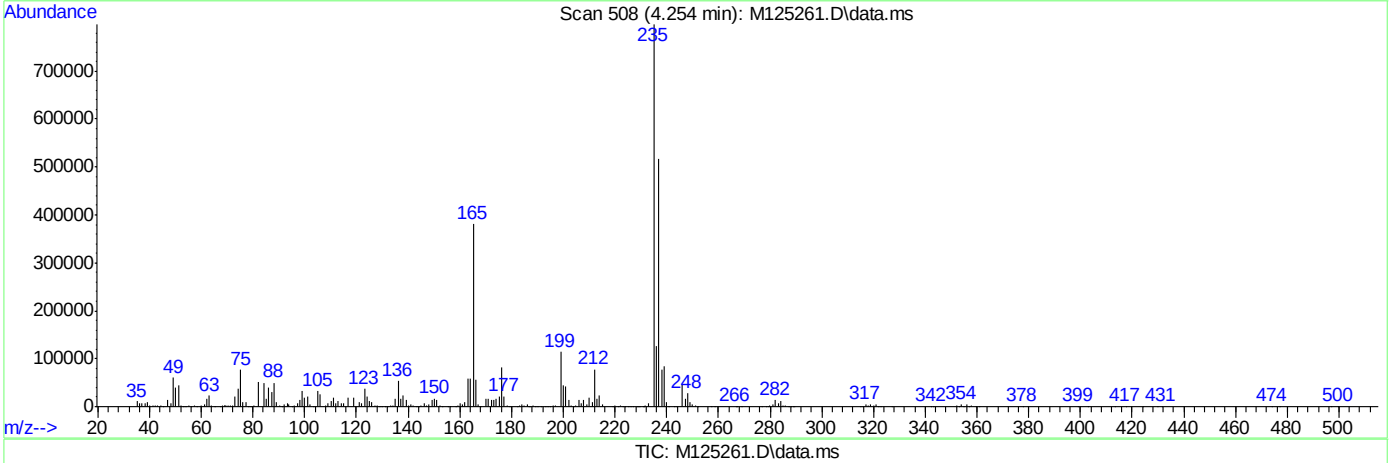
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125261.D
Acq On : 16 Jun 2016 12:28 pm
Operator : ashleyd
Sample : dftpp
Misc : op94571,em5307
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 16 12:33:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mThu May 12 09:34:28 2016
QLast Update : Thu May 12 09:34:28 2016
Response via : Continuing Cal File:





TIC: M125261.D\data.ms

(3) PP-DDT (MC)

3.660min (-3.660) 0.00ppm

response 0

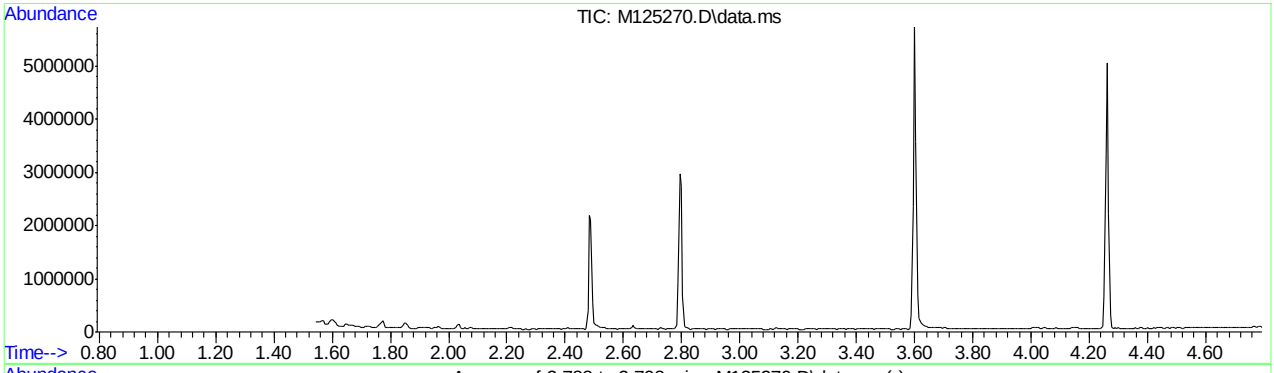
Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00#
237.00	64.20	0.00#
0.00	0.00	0.00

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125270.D
Acq On : 16 Jun 2016 5:01 pm
Operator : juliusj
Sample : dftpp
Misc : op94571,em5308
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Jun 19 08:52:32 2016
Last Update : Sun Jun 19 08:52:32 2016



AutoFind: Scans 234, 235, 236; Background Corrected with Scan 229

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.2	100016	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.6	127904	PASS
70	69	0.00	2	0.5	633	PASS
127	198	40	60	51.6	138621	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	268738	PASS
199	198	5	9	7.2	19323	PASS
275	198	10	30	21.1	56652	PASS
365	198	1	100	2.5	6675	PASS
441	443	0.10	100	87.0	20921	PASS
442	198	40	100	52.6	141453	PASS
443	442	17	23	17.0	24057	PASS

Average of 2.788 to 2.798 min.: M125270.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.05	263	47.05	80	58.15	168	66.75	248
36.05	225	49.10	1408	59.10	292	67.25	343
36.85	133	50.10	26849	60.10	271	69.05	127904
37.10	28	51.10	100016	60.95	147	70.10	633
38.10	932	52.10	5317	61.10	815	71.15	514
39.10	9550	52.95	145	62.10	1639	71.80	196
40.05	17	53.10	285	63.10	4095	73.15	372
41.15	455	54.05	84	63.75	191	74.10	10929
41.95	162	54.25	107	64.05	422	75.05	17961
43.10	102	56.05	2454	64.30	603	77.15	123830
45.15	328	57.05	7261	65.10	2282	78.15	8259

Average of 2.788 to 2.798 min.: M125270.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
79.10	7853	93.05	13810	103.10	1813	114.90	215
80.05	5982	93.75	281	104.10	3223	116.05	1770
81.05	8049	94.00	820	105.10	2823	117.05	24604
82.10	1539	94.35	77	105.95	335	117.95	469
83.10	1558	95.05	762	107.00	35165	118.10	1262
85.05	1754	96.05	1192	108.05	5615	118.80	596
86.00	2511	97.20	275	110.00	70570	119.30	191
87.05	900	98.00	8227	111.05	10783	120.20	738
87.95	503	99.05	7576	112.00	1408	121.25	185
91.00	1843	100.05	912	113.10	600	122.00	2169
92.05	2381	101.05	4878	114.10	233	123.05	3421

Average of 2.788 to 2.798 min.: M125270.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
124.00	1767	135.05	4150	144.60	175	152.85	467
125.00	1614	136.10	1721	145.15	108	153.05	1386
127.05	138621	137.10	1702	145.95	325	153.95	712
128.10	10394	138.20	490	146.10	1106	154.15	827
129.05	50248	139.15	191	147.10	2705	155.00	3966
130.05	3851	139.95	461	148.05	6240	156.05	4610
131.05	850	141.05	5596	149.00	1129	157.05	595
131.75	166	141.95	1211	150.15	738	157.35	114
132.00	131	142.15	904	150.95	156	158.15	1108
133.00	66	142.95	1055	151.20	603	158.95	752
133.95	1314	144.20	377	151.80	626	160.05	1801

Average of 2.788 to 2.798 min.: M125270.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
161.10	2986	170.35	104	180.05	6659	188.90	1812
162.15	539	171.00	897	181.05	2894	190.05	387
163.00	342	171.90	359	182.05	241	190.75	433
164.20	493	172.15	534	182.90	493	191.05	144
164.55	69	173.00	1712	183.15	191	192.05	2857
164.95	1222	174.10	2518	183.75	295	193.00	3578
166.05	2320	175.10	3995	184.05	406	193.75	219
167.05	11771	176.00	1716	185.15	4762	194.15	475
168.05	7503	177.00	2115	186.05	36139	194.35	233
169.05	1053	178.05	359	187.00	8986	195.10	818
169.90	418	179.00	9249	188.10	1097	195.95	8517

Average of 2.788 to 2.798 min.: M125270.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
198.05	268738	206.95	7372	214.45	257	225.05	8722
199.05	19323	208.10	2573	215.05	900	226.05	149
200.00	1988	208.95	727	217.05	16489	227.05	12955
201.15	240	209.25	144	217.75	195	228.05	2143

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201.45	1418	210.35	302	218.00	1661	228.75	420
202.05	375	210.60	1908	218.65	211	229.00	3068
202.45	97	211.05	2422	219.00	271	230.05	324
203.00	1693	212.15	223	221.05	15707	231.00	925
204.05	9304	212.45	113	221.85	1224	232.10	222
205.05	14628	213.00	213	223.10	4008	232.80	241
206.05	60106	213.55	177	224.05	34141	234.00	858

Average of 2.788 to 2.798 min.: M125270.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
234.85	223	243.05	432	251.05	142	261.15	261
235.15	1021	244.05	26796	251.75	257	262.95	67
235.85	391	245.05	3088	252.05	653	263.75	344
236.05	442	245.95	4946	253.15	1338	265.00	2558
237.00	961	247.05	340	255.05	135696	266.05	560
238.05	169	248.00	215	256.00	18166	266.85	230
238.75	147	249.00	860	257.05	1827	268.65	151
239.05	353	249.75	130	257.55	148	269.35	136
240.05	420	250.15	247	258.05	6104	269.55	108
241.05	848	250.65	99	259.00	1688	270.10	253
242.10	1993	250.85	109	259.95	306	270.45	106

Average of 2.788 to 2.798 min.: M125270.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
270.85	214	281.25	164	287.75	150	295.15	373
272.05	821	281.75	88	287.95	171	296.05	14282
273.00	4588	282.05	68	288.95	583	297.00	1941
274.05	11999	282.25	114	289.75	86	297.85	95
275.05	56652	283.00	406	290.85	70	298.15	203
276.05	7663	284.00	477	291.05	2	299.65	121
277.00	4314	284.35	91	292.00	207	300.75	155
277.85	133	284.85	68	292.95	976	302.05	192
278.05	878	285.00	1385	293.85	155	302.95	1934
279.15	220	286.05	111	294.10	310	304.10	622
280.35	97	287.35	136	294.65	202	306.05	76

Average of 2.788 to 2.798 min.: M125270.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
307.25	68	316.35	112	327.00	1139	334.90	959
309.00	199	316.65	109	328.10	705	335.65	74
309.45	71	319.65	107	329.15	79	336.05	193
310.05	543	319.95	83	329.85	71	337.60	185
311.15	116	320.95	624	330.95	102	339.15	70
311.85	122	321.95	226	332.15	99	341.15	676
312.90	222	323.05	5152	332.35	95	341.85	86
313.75	391	323.85	150	332.95	216	342.05	215
314.15	485	324.10	706	333.15	216	343.85	102
314.95	1684	325.45	69	333.85	176	346.05	1101
316.00	1099	326.05	73	334.05	2968	346.95	268

Average of 2.788 to 2.798 min.: M125270.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
348.05	107	359.10	238	370.65	126	390.10	247
349.65	78	360.20	146	370.95	499	390.95	349
350.85	116	360.75	115	372.00	3492	391.95	90
351.05	114	362.05	110	373.00	1056	393.05	131
352.05	1666	362.65	71	373.85	80	393.95	75
352.45	82	363.25	79	378.75	83	394.35	75
353.05	1041	363.80	313	382.90	655	394.95	117
353.95	1509	364.95	6675	384.05	189	396.65	97
354.95	107	365.95	797	385.95	86	397.95	277
355.20	272	369.60	181	387.55	72	401.05	435
357.55	90	370.05	89	388.15	83	402.10	644

Average of 2.788 to 2.798 min.: M125270.D\data.ms

DFTPPM.M Mon Jun 20 09:01:57 2016 MSM

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dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
403.05	1261	414.95	76	424.95	139	431.95	193
404.05	749	418.35	74	425.85	152	432.65	233
404.85	95	419.15	202	426.55	67	432.95	88
407.45	78	419.85	72	426.75	133	433.25	107
407.75	90	420.20	152	427.15	227	433.55	134
408.25	75	420.85	121	428.35	135	434.15	290
410.05	178	421.05	936	428.95	110	434.80	306
410.95	78	422.10	1249	429.60	186	435.05	294
411.35	68	423.05	9128	429.95	120	435.65	110
412.75	71	424.05	1637	430.55	187	435.95	105
414.25	67	424.75	99	431.35	318	436.50	167

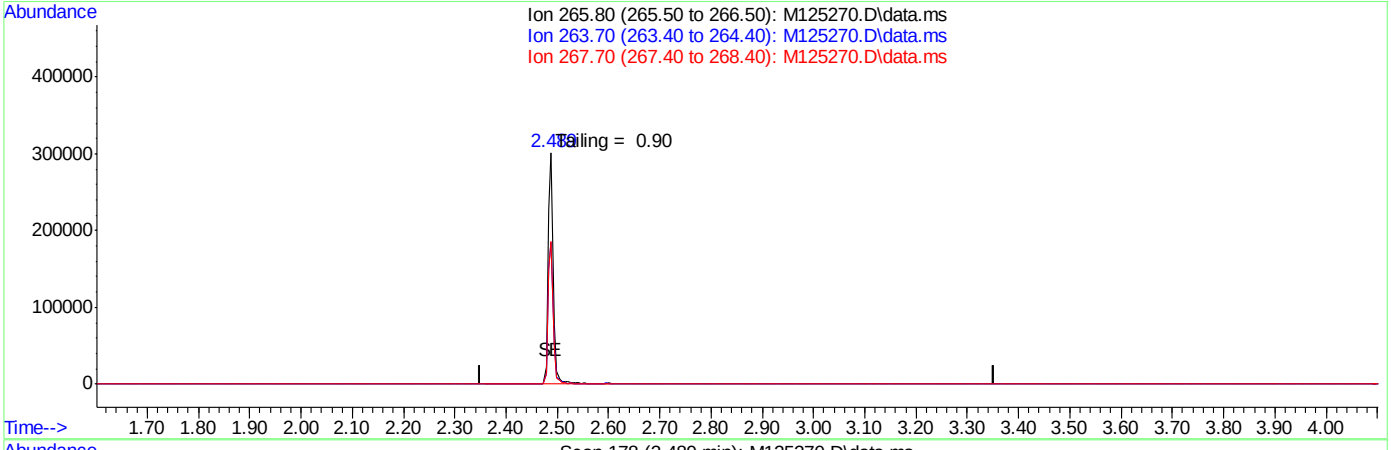
Average of 2.788 to 2.798 min.: M125270.D\data.ms
dftpp
Modified:subtracted

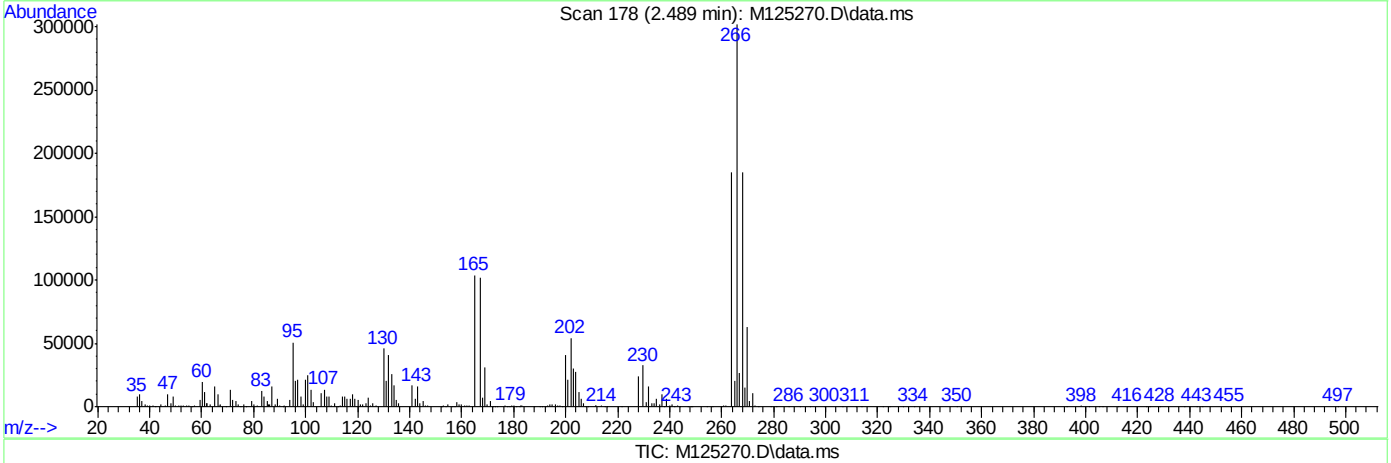
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
437.25	106	445.10	39	475.45	122	495.85	75
437.55	197	449.45	98	476.85	69	498.05	91
437.95	126	451.10	163	479.05	74		
438.35	131	452.75	88	481.05	69		
438.55	152	461.05	100	487.35	72		
438.80	32	462.65	109	487.85	155		
439.95	203	462.95	101	488.55	102		
441.05	20921	465.05	156	488.85	79		
442.05	141453	465.75	148	489.85	71		
443.05	24057	466.35	87	490.85	111		
444.05	2356	471.95	70	493.65	85		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125270.D
Acq On : 16 Jun 2016 5:01 pm
Operator : juliusj
Sample : dftpp
Misc : op94571,em5308
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 16 17:07:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mThu May 12 09:34:28 2016
QLast Update : Thu May 12 09:34:28 2016
Response via : Continuing Cal File:





TIC: M125270.D\data.ms

(1) Pentachlorophenol (MC)

2.852min (-2.852) 0.00ppm

response 0

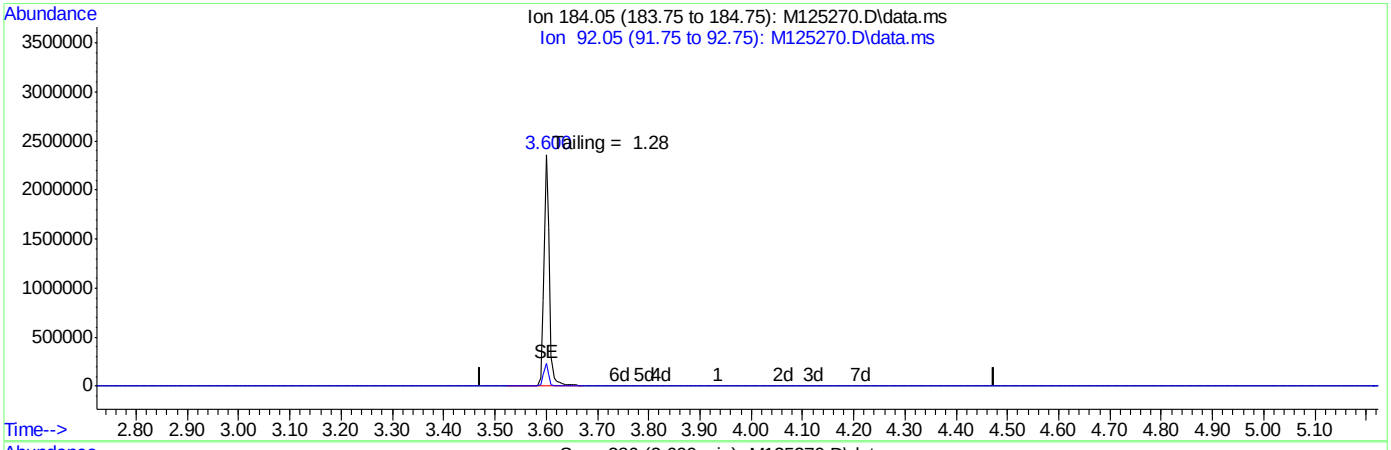
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

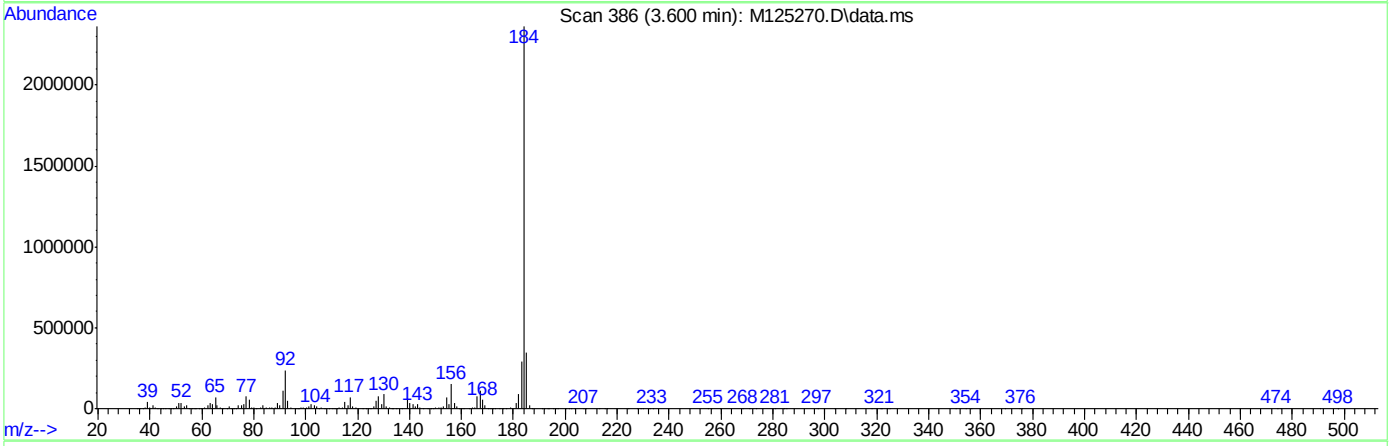
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125270.D
Acq On : 16 Jun 2016 5:01 pm
Operator : juliusj
Sample : dftpp
Misc : op94571,em5308
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 16 17:07:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mThu May 12 09:34:28 2016
QLast Update : Thu May 12 09:34:28 2016
Response via : Continuing Cal File:





(2) Benzidine (M)

3.973min 0.00ppm d

response 0

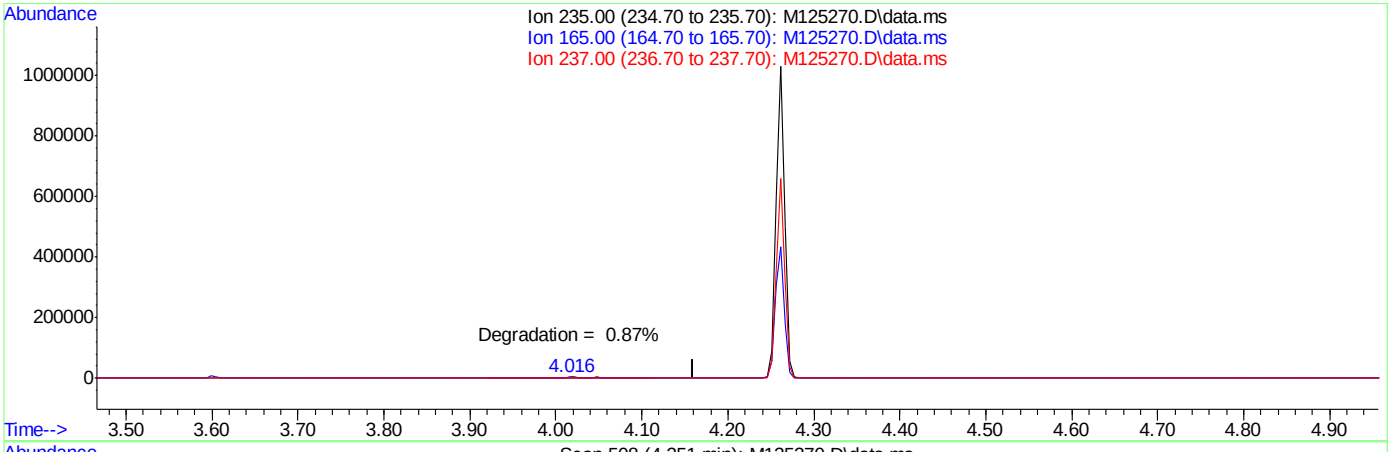
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

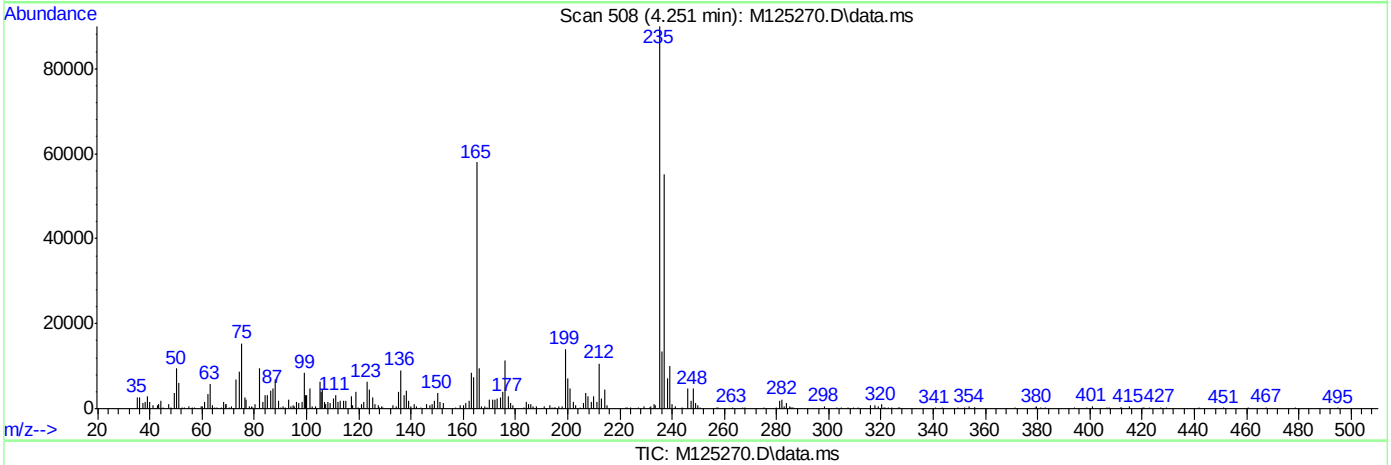
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125270.D
Acq On : 16 Jun 2016 5:01 pm
Operator : juliusj
Sample : dftpp
Misc : op94571,em5308
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 16 17:07:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mThu May 12 09:34:28 2016
QLast Update : Thu May 12 09:34:28 2016
Response via : Continuing Cal File:





TIC: M125270.D\data.ms

(3) PP-DDT (MC)

3.660min (-3.660) 0.00ppm

response 0

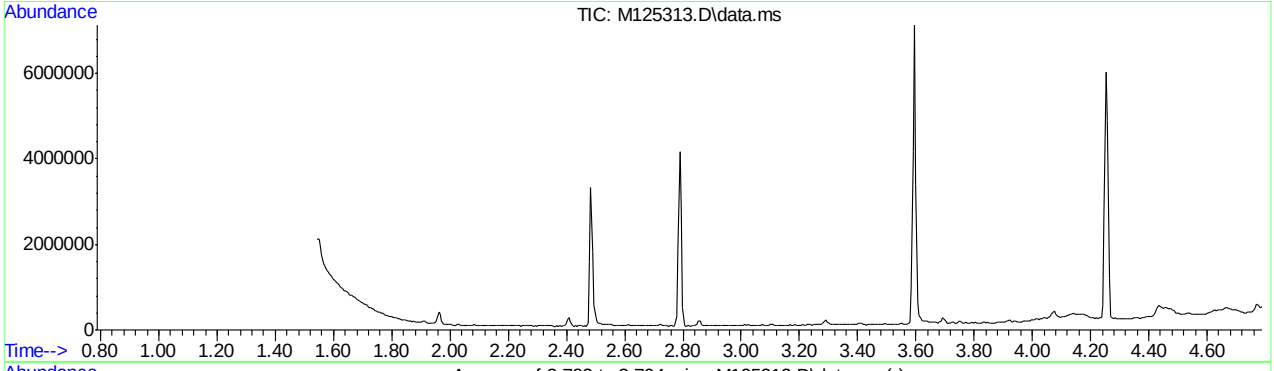
Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00#
237.00	64.20	0.00#
0.00	0.00	0.00

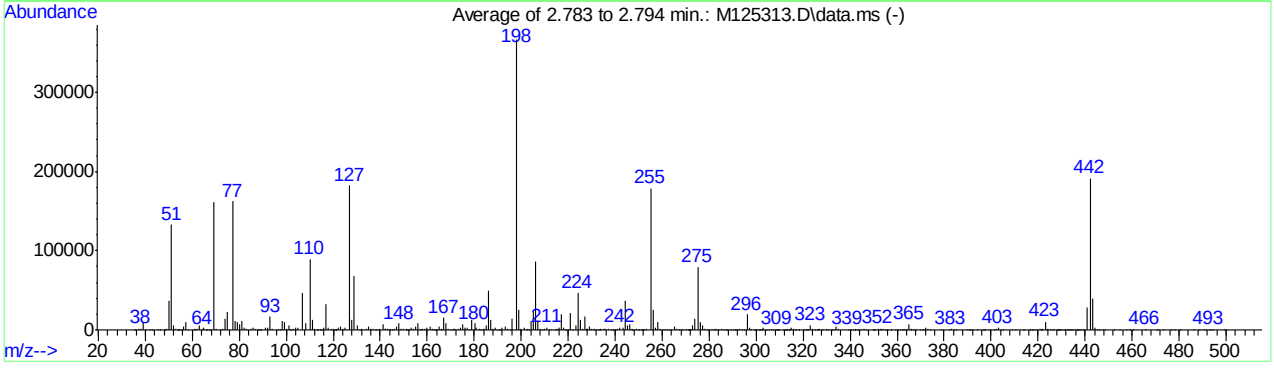
DFTPPR

Data Path : C:\msdchem\1\DATA\EM5310\
Data File : M125313.D
Acq On : 19 Jun 2016 7:53 am
Operator : kristis
Sample : dftpp
Misc : op94571,em5310,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Jun 19 08:52:32 2016
Last Update : Sun Jun 19 08:52:32 2016





AutoFind: Scans 233, 234, 235; Background Corrected with Scan 228

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.2	132663	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.2	161863	PASS
70	69	0.00	2	0.6	964	PASS
127	198	40	60	49.7	182271	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	366592	PASS
199	198	5	9	6.8	24856	PASS
275	198	10	30	21.8	79949	PASS
365	198	1	100	2.1	7748	PASS
441	443	0.10	100	70.4	27910	PASS
442	198	40	100	52.3	191608	PASS
443	442	17	23	20.7	39663	PASS

Average of 2.783 to 2.794 min.: M125313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.05	294	48.25	71	57.15	9349	67.45	336
35.95	187	49.20	2052	58.10	635	69.05	161863
37.05	946	50.15	36388	60.95	394	70.10	964
38.10	1766	51.10	132663	61.20	1347	72.10	370
39.10	10487	52.15	5916	62.10	1824	73.10	810
40.05	359	53.00	867	63.15	5452	74.10	13622
42.10	318	53.85	99	64.15	909	75.05	23203
43.15	228	54.05	242	65.10	3086	77.15	162527
45.15	296	54.45	164	66.00	148	78.10	12048
46.15	97	55.15	568	66.35	149	79.10	10655
48.00	191	56.15	4497	67.10	290	80.10	7454

Average of 2.783 to 2.794 min.: M125313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.10	11222	92.10	2207	103.05	2134	114.65	103
82.05	3112	93.05	16632	104.05	2491	115.10	494
83.10	1911	94.05	922	105.05	2624	116.10	2663
85.10	918	96.15	534	107.05	46744	117.05	31946
86.05	2703	97.25	454	108.10	7878	118.05	2267
87.00	1041	98.05	10903	110.05	89547	119.10	815
87.75	206	99.05	10062	111.05	12827	120.10	884
88.05	224	100.10	974	112.15	1855	120.65	82
88.95	185	101.05	6004	113.10	730	121.00	135
89.25	71	101.80	302	113.65	93	121.35	329
91.05	2563	102.10	52	114.35	151	122.05	2916

Average of 2.783 to 2.794 min.: M125313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.05	4733	136.05	1574	144.25	127	153.05	2335
124.05	1895	137.10	2175	145.00	39	154.05	1391
125.10	2930	137.95	201	146.10	1642	155.00	3586
127.00	182271	138.35	161	147.10	3669	156.05	8236
128.05	12496	139.25	80	148.00	8350	157.10	1551
129.00	68617	139.95	911	149.05	1729	157.35	295
130.05	5378	141.05	7630	150.00	768	158.05	1630
131.05	714	141.95	1390	151.00	1014	159.05	939
132.15	1012	142.15	1230	151.25	206	159.75	336
134.05	1450	143.05	1808	151.60	554	160.05	2354
135.05	4735	143.95	440	152.00	66	161.10	4127

Average of 2.783 to 2.794 min.: M125313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
162.10	1052	170.05	444	180.10	8091	190.05	23
162.75	79	170.75	117	181.00	3252	190.75	282
163.00	281	171.15	1397	182.10	831	191.05	695
163.85	153	171.95	1644	182.95	672	192.00	3486
164.00	314	173.15	1150	183.45	268	193.10	3766
165.05	3848	174.05	2961	184.00	1119	194.00	1359
165.90	380	175.10	6934	185.05	6149	195.05	314
166.10	1806	176.10	2304	186.05	49464	196.05	13584
167.05	15553	177.05	2915	187.05	12689	198.05	366592
168.10	8350	178.00	675	188.15	1715	199.05	24856
169.10	1173	179.00	12375	189.05	2650	200.00	1841

Average of 2.783 to 2.794 min.: M125313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
201.55	2312	211.05	2868	219.75	81	228.85	467
202.05	41	211.75	220	221.00	20914	229.05	3602
202.90	1093	212.90	219	222.05	223	230.10	804
203.15	608	214.05	100	223.05	5482	230.95	428

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204.00	10764	215.00	974	224.05	46304	231.10	902
205.05	22739	215.25	247	225.05	12206	232.00	575
206.05	86498	216.10	2236	226.10	1399	232.75	109
207.05	11786	217.00	19657	227.05	17182	233.10	479
207.95	2096	218.05	3037	227.75	236	233.85	217
209.10	526	218.75	117	227.95	1049	234.00	1093
210.15	1711	219.10	390	228.15	853	235.10	1578

Average of 2.783 to 2.794 min.: M125313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
235.85	1060	245.10	5562	252.55	500	263.65	227
237.05	1486	246.05	6622	253.10	1043	265.05	4024
238.10	402	246.95	883	255.05	178693	266.00	1013
238.85	259	247.15	435	256.05	25441	267.05	174
239.00	751	248.05	239	257.10	2202	268.05	76
239.85	240	248.90	1300	258.05	9445	268.65	169
240.10	427	249.85	225	259.00	1940	270.05	462
241.10	1372	250.10	259	260.15	556	270.85	293
242.05	3173	251.05	582	261.05	477	271.30	483
243.15	2322	251.25	250	262.05	104	271.85	220
244.05	36186	252.05	379	262.95	323	272.10	486

Average of 2.783 to 2.794 min.: M125313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
273.05	5637	283.10	798	291.55	99	301.00	240
274.05	14579	283.85	103	292.15	528	301.55	182
275.05	79949	284.00	445	293.05	1465	301.95	126
276.05	10227	285.10	1379	294.05	627	302.25	251
277.05	5777	286.05	68	294.95	74	303.05	2672
278.00	848	287.00	207	296.05	19464	303.95	169
278.90	431	287.85	112	297.05	2426	304.15	308
280.25	112	289.10	302	297.85	85	305.15	82
281.15	467	289.90	372	299.05	97	306.25	126
282.15	144	290.85	102	299.80	285	307.45	132
282.45	130	291.15	116	300.25	107	308.05	133

Average of 2.783 to 2.794 min.: M125313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
308.45	110	314.45	141	323.05	6390	332.15	245
308.95	245	314.95	2383	324.00	1452	333.00	661
309.15	127	316.05	1259	324.85	156	334.05	4307
309.85	132	316.65	207	325.90	364	335.15	1355
311.45	80	317.00	179	326.25	141	339.15	184
312.15	92	318.05	91	327.00	1615	339.95	287
312.55	118	318.35	143	327.85	323	340.95	528
312.85	83	319.90	237	328.05	267	341.85	242
313.15	73	321.05	670	329.85	103	342.05	111
313.95	464	321.65	136	330.70	207	343.15	97
314.15	486	321.85	121	331.95	307	343.75	73

Average of 2.783 to 2.794 min.: M125313.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
344.45	116	355.65	90	365.05	7748	378.75	98
346.05	1404	355.85	90	365.75	296	382.15	89
347.05	381	357.15	76	366.00	1413	382.95	880
349.55	72	357.55	121	367.00	382	384.05	82
350.25	73	359.10	260	367.95	78	384.85	67
350.65	73	360.30	214	369.95	115	390.00	367
352.05	2133	361.10	151	370.85	78	390.65	102
352.95	362	362.05	141	371.10	452	390.95	101
353.10	1550	362.60	156	372.05	3159	391.20	267
354.05	2082	363.15	121	373.15	854	391.95	287
354.85	117	363.85	248	374.15	132	393.95	110

Average of 2.783 to 2.794 min.: M125313.D\data.ms

DFTPPM.M Mon Jun 20 09:20:15 2016 MSM

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
396.35	87	413.55	77	423.05	10528	429.65	191
397.05	67	413.95	229	423.85	139	430.70	391
397.45	165	416.35	209	424.05	1954	431.50	270
399.55	111	416.75	127	425.10	313	432.15	121
401.15	239	417.35	94	425.85	129	432.55	255
402.00	2019	417.85	127	426.65	106	433.15	301
403.05	2278	418.95	170	427.85	196	433.55	261
404.05	555	420.95	1041	428.35	151	433.95	206
405.30	232	421.15	696	428.65	79	434.85	352
408.65	73	421.65	104	428.85	115	435.70	541
410.35	117	422.00	1064	429.35	175	436.40	326

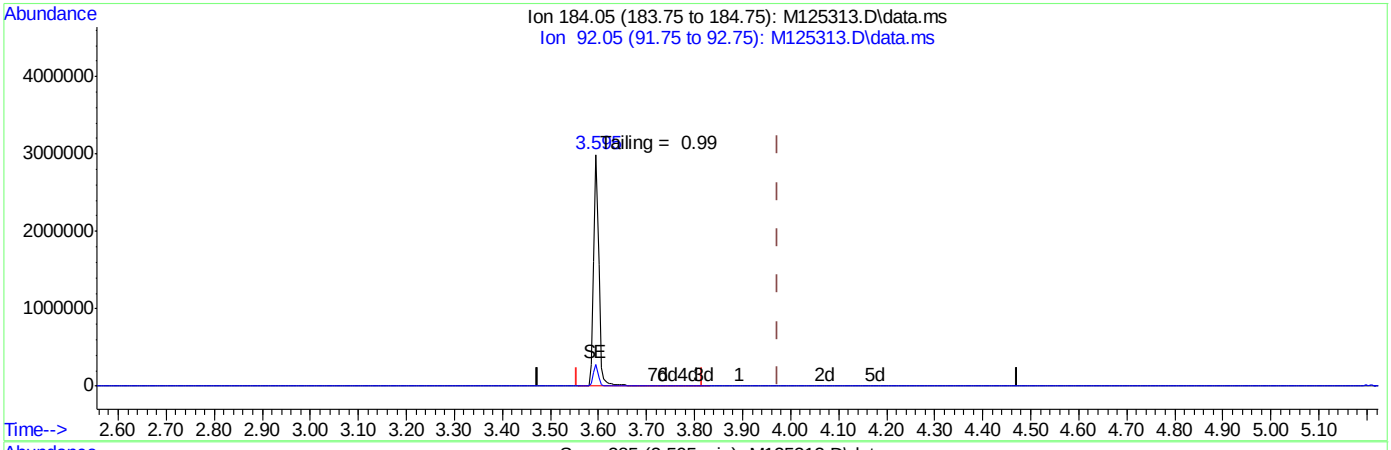
Average of 2.783 to 2.794 min.: M125313.D\data.ms
dftpp
Modified:subtracted

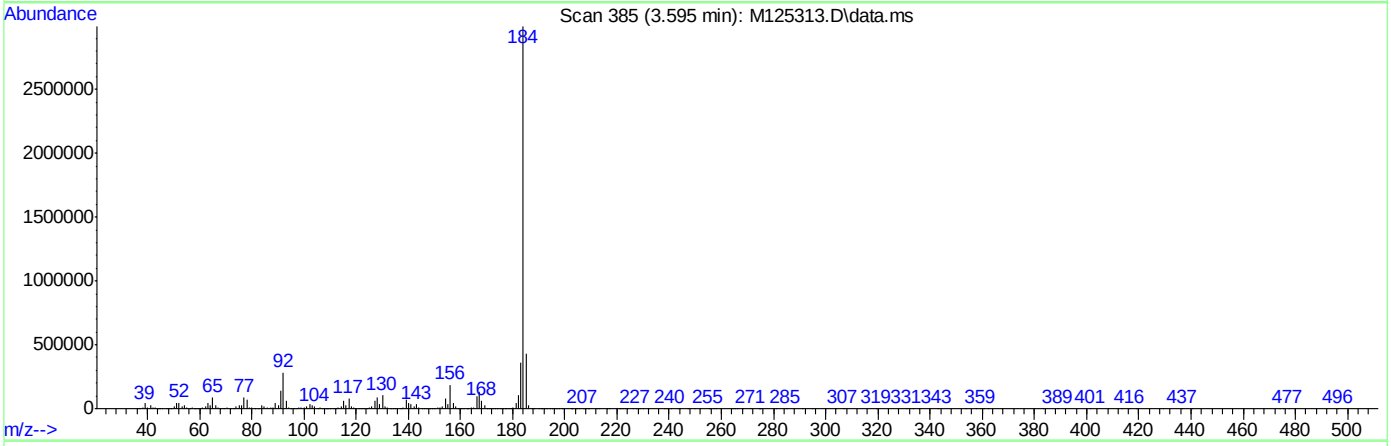
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
436.65	84	446.15	135	473.35	108	498.85	143
436.95	236	447.65	115	476.55	70	499.85	139
437.45	92	448.55	85	478.05	83		
437.85	146	452.15	138	480.45	147		
438.80	421	454.85	73	485.95	73		
439.55	146	457.35	92	488.65	94		
441.05	27910	459.15	67	490.65	71		
442.05	191608	460.35	71	491.55	91		
443.05	39663	465.65	128	492.85	160		
444.05	3283	470.35	108	493.45	84		
444.95	158	470.85	119	494.25	72		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5310\
Data File : M125313.D
Acq On : 19 Jun 2016 7:53 am
Operator : kristis
Sample : dftpp
Misc : op94571,em5310,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 19 07:58:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mThu May 12 09:34:28 2016
QLast Update : Thu May 12 09:34:28 2016
Response via : Continuing Cal File:





TIC: M125313.D\data.ms

(2) Benzidine (M)

3.595min (-0.378) 0.00ppm m

response 2290399

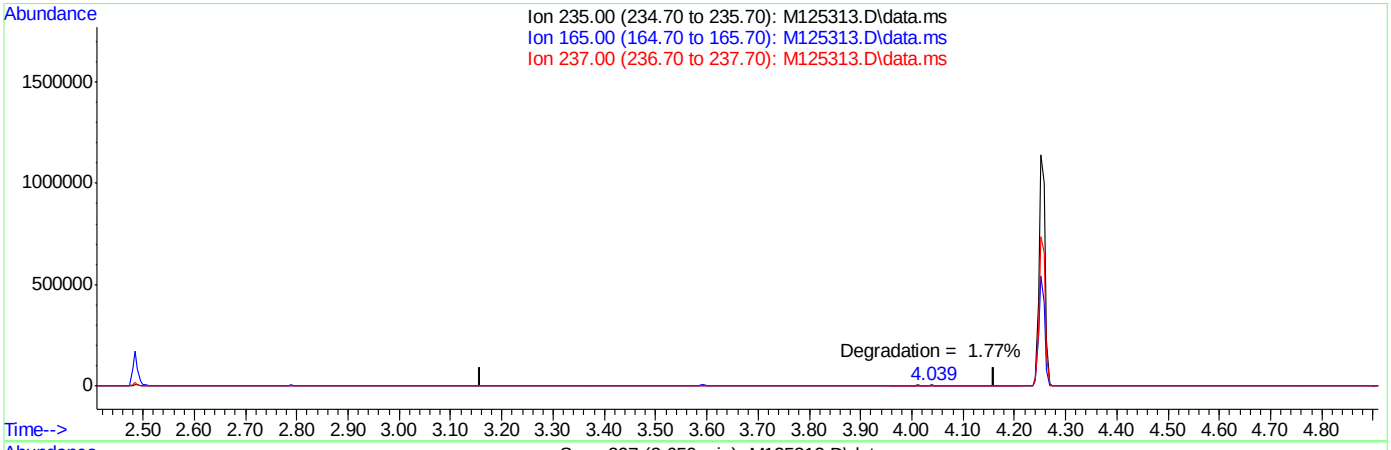
Ion	Exp%	Act%
184.05	100	100
92.05	10.70	9.49
0.00	0.00	0.00
0.00	0.00	0.00

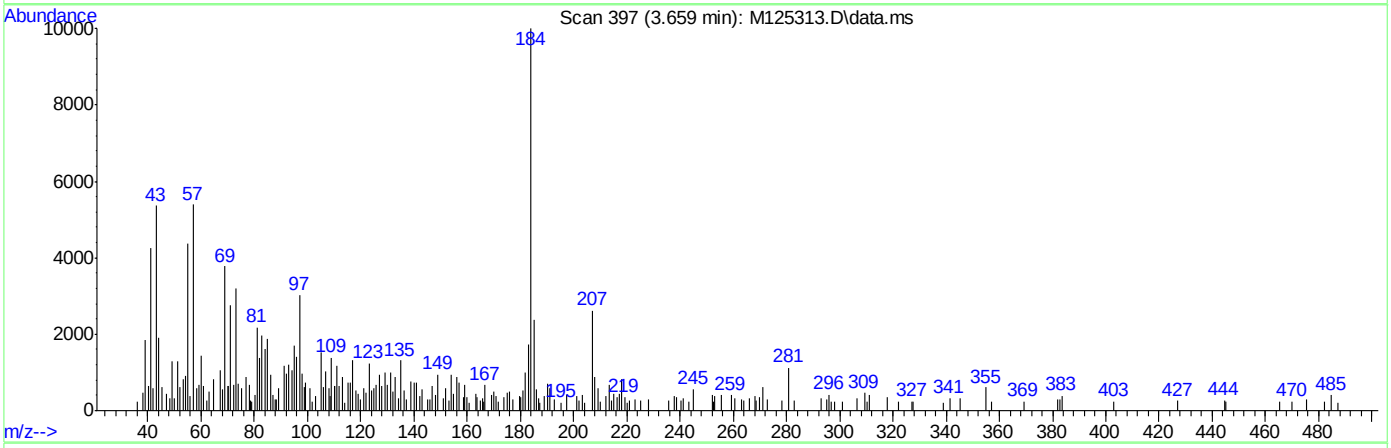
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5310\
Data File : M125313.D
Acq On : 19 Jun 2016 7:53 am
Operator : kristis
Sample : dftpp
Misc : op94571,em5310,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 19 07:58:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mThu May 12 09:34:28 2016
QLast Update : Thu May 12 09:34:28 2016
Response via : Continuing Cal File:





TIC: M125313.D\data.ms

(3) PP-DDT (MC)

3.660min (-3.660) 0.00ppm

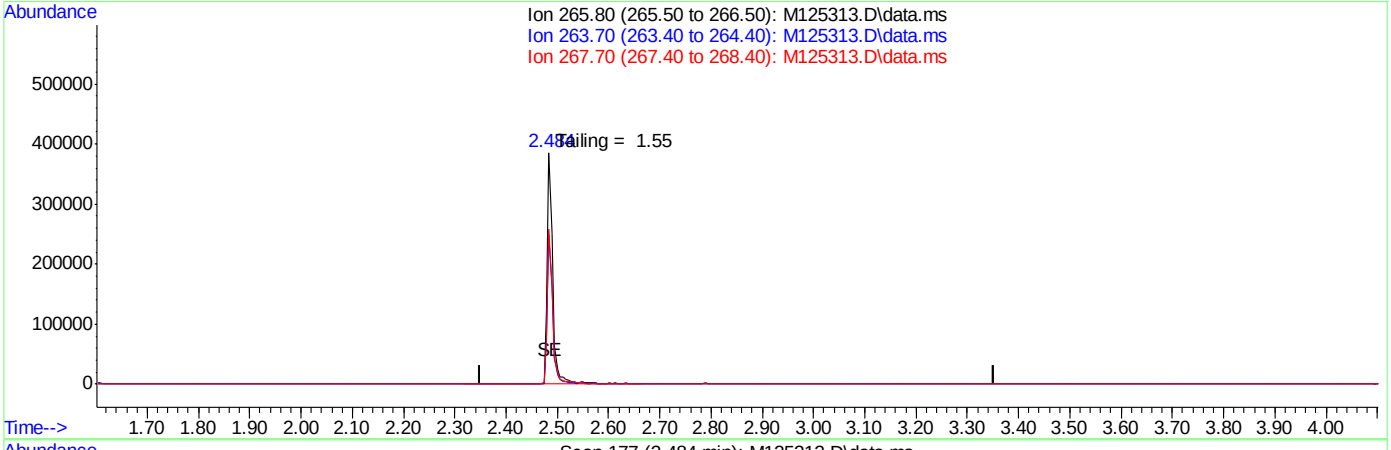
response 0

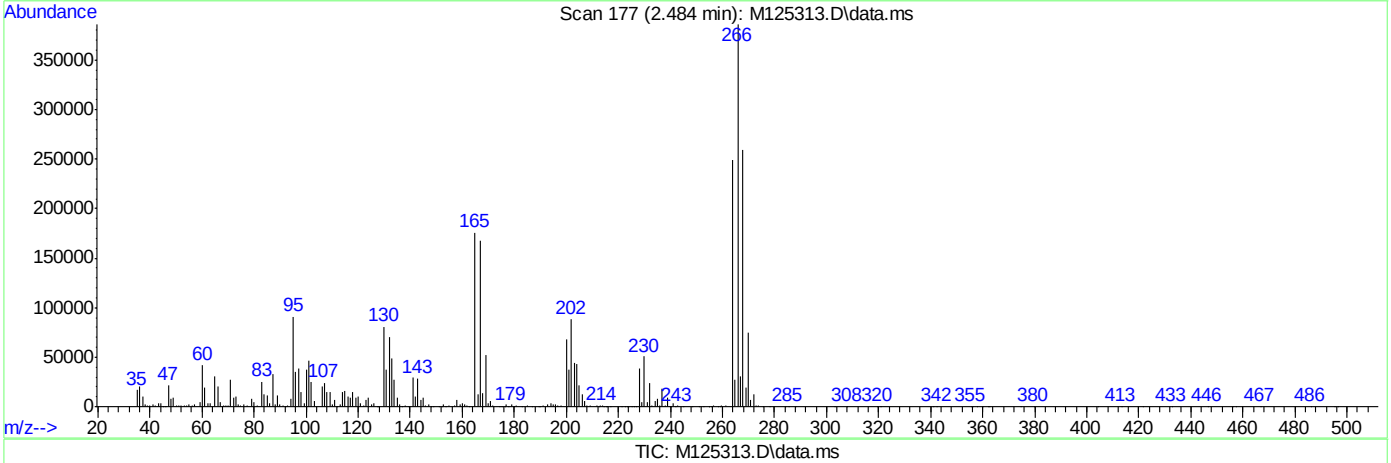
Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00#
237.00	64.20	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5310\
Data File : M125313.D
Acq On : 19 Jun 2016 7:53 am
Operator : kristis
Sample : dftpp
Misc : op94571,em5310,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 19 07:58:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mThu May 12 09:34:28 2016
QLast Update : Thu May 12 09:34:28 2016
Response via : Continuing Cal File:





TIC: M125313.D\data.ms

(1) Pentachlorophenol (MC)

2.852min 0.00ppm d

response 0

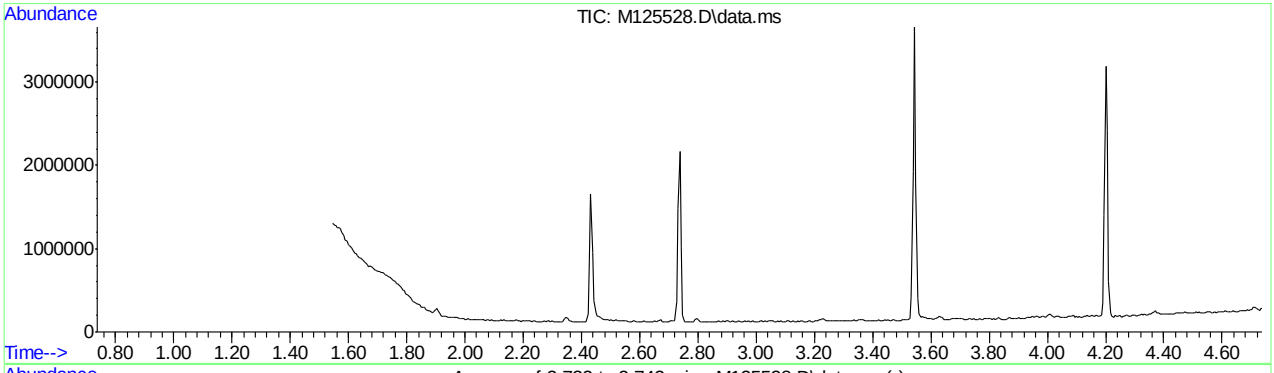
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00
267.70	61.70	0.00
0.00	0.00	0.00

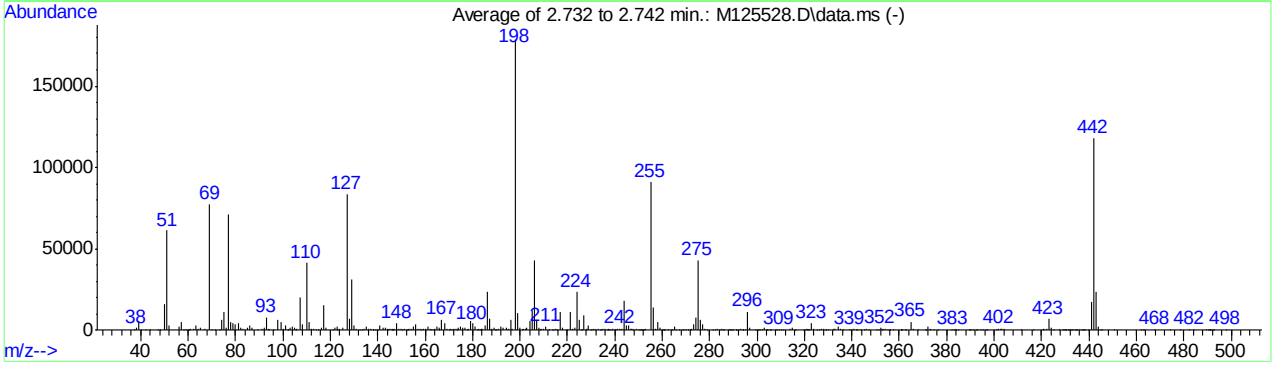
DFTPPR

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125528.D
Acq On : 23 Jun 2016 9:32 pm
Operator : seanb1
Sample : dftpp
Misc : op94571,em5319
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Jun 19 08:52:32 2016
Last Update : Sun Jun 19 08:52:32 2016





AutoFind: Scans 223, 224, 225; Background Corrected with Scan 218

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.3	61309	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.4	77459	PASS
70	69	0.00	2	0.4	306	PASS
127	198	40	60	46.8	83642	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	178632	PASS
199	198	5	9	5.9	10521	PASS
275	198	10	30	24.0	42805	PASS
365	198	1	100	2.8	4922	PASS
441	443	0.10	100	75.8	17575	PASS
442	198	40	100	66.1	118057	PASS
443	442	17	23	19.6	23195	PASS

SGS ACCUTEST JC22613

Average of 2.732 to 2.742 min.: M125528.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.10	343	56.10	2420	66.95	535	80.05	3597
38.20	1339	57.10	4859	69.00	77459	81.05	4457
39.10	5358	58.15	232	70.05	306	82.05	1061
40.10	107	59.15	126	71.10	273	83.05	1031
42.10	188	60.00	37	73.05	364	85.10	1150
44.05	122	60.35	130	74.15	6154	86.05	2690
47.05	107	61.05	692	75.05	10853	87.05	1400
48.05	43	62.15	943	76.15	1435	89.15	1
50.10	15874	63.15	2816	77.15	71023	91.10	796
51.10	61309	64.05	594	78.15	4935	92.10	1230
52.05	3035	65.15	1245	79.10	4264	93.05	7903

Average of 2.732 to 2.742 min.: M125528.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.95	305	105.00	1246	116.15	1568	129.05	31083
94.15	420	105.25	321	117.05	15540	130.05	2957
95.95	216	105.75	369	118.05	1366	130.90	526
98.05	6071	107.05	19733	120.75	186	132.45	153
99.00	4736	108.05	3645	122.05	1603	133.05	334
100.20	452	110.05	41208	122.65	147	134.00	1006
101.05	2458	111.10	4620	123.05	1885	135.05	2425
101.95	92	112.05	966	124.05	1029	136.00	933
102.15	123	113.10	381	125.15	1252	137.10	879
103.00	1152	114.00	164	127.05	83642	137.85	191
104.05	1783	114.85	99	128.05	6594	138.15	118

Average of 2.732 to 2.742 min.: M125528.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
138.75	110	147.05	1010	156.15	3137	165.05	1838
139.75	150	148.05	4279	157.05	825	165.85	87
141.05	2508	149.10	905	157.90	436	166.05	1174
142.05	1301	150.05	596	158.25	213	167.00	6439
143.05	1437	150.45	82	159.10	823	168.05	4105
144.10	468	151.10	478	160.05	873	169.05	831
144.35	95	152.05	299	161.05	1898	169.95	237
145.00	495	152.45	235	161.95	465	170.85	390
145.95	342	153.05	809	162.75	91	171.15	66
146.10	765	154.05	810	163.65	92	171.95	546
146.55	241	155.00	2185	164.10	416	173.00	938

Average of 2.732 to 2.742 min.: M125528.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
173.35	133	182.35	444	189.75	150	200.05	1365
174.10	1468	182.85	316	190.15	175	200.70	2
175.00	2423	183.45	175	190.95	637	201.40	842
176.00	1195	183.70	413	192.05	1888	202.20	517
177.00	1107	184.00	394	193.00	1061	203.00	1588
177.85	311	185.10	2609	194.05	1059	204.00	5598
178.25	505	186.05	23471	195.05	525	205.05	11782
179.05	5869	187.05	6774	196.05	6233	206.05	43104
180.05	4036	187.85	282	196.65	803	207.00	6303
181.05	1761	188.15	419	198.05	178632	208.10	1273
181.95	221	189.05	1561	198.95	10521	208.65	96

Average of 2.732 to 2.742 min.: M125528.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
209.10	508	221.05	10889	229.85	185	237.45	115
209.95	425	222.15	810	230.15	117	237.95	120
211.00	2116	223.05	1446	231.05	647	238.85	69
212.10	281	224.05	23181	231.85	243	239.10	617

DFTPPM.M Fri Jun 24 11:52:49 2016 MSM Page: 2

213.75	105	225.05	6476	233.05	458	239.95	143
214.15	111	225.85	142	233.80	333	240.05	14
215.15	389	226.15	335	234.05	320	240.95	799
215.35	272	227.00	9053	234.95	884	242.15	973
216.95	11334	227.75	321	236.05	903	242.90	873
218.00	1443	228.10	780	236.90	239	244.05	18259
219.75	248	229.00	2665	237.15	466	245.10	2697

Average of 2.732 to 2.742 min.: M125528.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
246.00	3072	253.05	786	263.95	170	273.05	3604
246.85	482	255.05	90714	264.15	166	274.05	7776
247.10	449	256.00	14041	265.05	2391	275.05	42805
247.75	124	257.00	679	265.85	318	276.05	5936
248.95	945	258.00	4513	267.10	237	277.00	3342
249.85	77	259.05	1131	268.45	89	278.00	650
250.35	79	260.05	88	268.85	80	279.05	243
250.85	200	260.45	120	269.80	283	281.25	146
251.30	280	260.75	120	270.85	308	282.00	58
252.05	108	261.05	200	271.95	223	283.10	758
252.35	216	262.25	98	272.30	399	283.95	158

Average of 2.732 to 2.742 min.: M125528.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
285.05	814	293.00	774	303.10	1147	313.85	492
285.75	99	293.85	73	303.75	94	315.00	1332
286.05	68	294.05	170	304.00	346	315.85	203
287.85	107	294.85	203	304.65	106	316.10	345
288.25	78	296.00	11106	305.35	150	319.35	162
288.85	83	297.05	1746	306.05	71	320.25	83
289.15	128	299.05	107	307.85	117	321.05	404
289.75	84	300.00	142	308.15	78	321.20	219
291.00	235	300.75	67	309.35	225	321.65	94
291.25	95	301.10	172	309.95	75	321.95	71
291.95	141	302.20	177	311.25	136	323.10	4145

Average of 2.732 to 2.742 min.: M125528.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
324.05	725	335.10	812	350.55	77	360.95	67
325.05	323	336.05	69	351.35	113	361.35	129
326.20	192	339.05	201	352.00	1217	362.55	77
326.95	749	340.05	102	352.75	267	362.75	81
328.00	532	341.05	672	353.00	646	364.95	4922
328.85	78	341.75	162	354.00	1032	366.00	913
329.05	68	342.05	150	355.00	166	367.75	123
329.95	167	343.85	69	356.05	82	371.05	192
332.15	385	344.95	92	356.20	160	371.25	216
332.95	492	346.00	845	357.35	71	372.00	1884
334.05	2395	346.85	114	360.75	84	372.95	416

Average of 2.732 to 2.742 min.: M125528.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
373.15	246	391.05	189	404.00	633	429.35	82
374.35	80	392.25	223	411.25	103	429.55	223
376.55	71	392.75	70	416.75	67	430.05	126
381.95	91	394.15	67	420.75	155	430.35	92
382.95	170	395.05	155	421.00	920	431.05	70
383.25	158	396.45	105	422.00	809	431.55	209
384.05	153	396.95	70	423.05	6707	432.25	69
384.65	71	400.75	136	424.05	1481	432.70	307
389.35	87	402.05	1032	425.05	89	433.30	235
389.75	69	402.80	651	427.35	109	433.95	70
390.00	251	403.05	566	428.95	91	434.40	326

Average of 2.732 to 2.742 min.: M125528.D\data.ms

DFTPPM.M Fri Jun 24 11:52:49 2016 MSM Page: 3

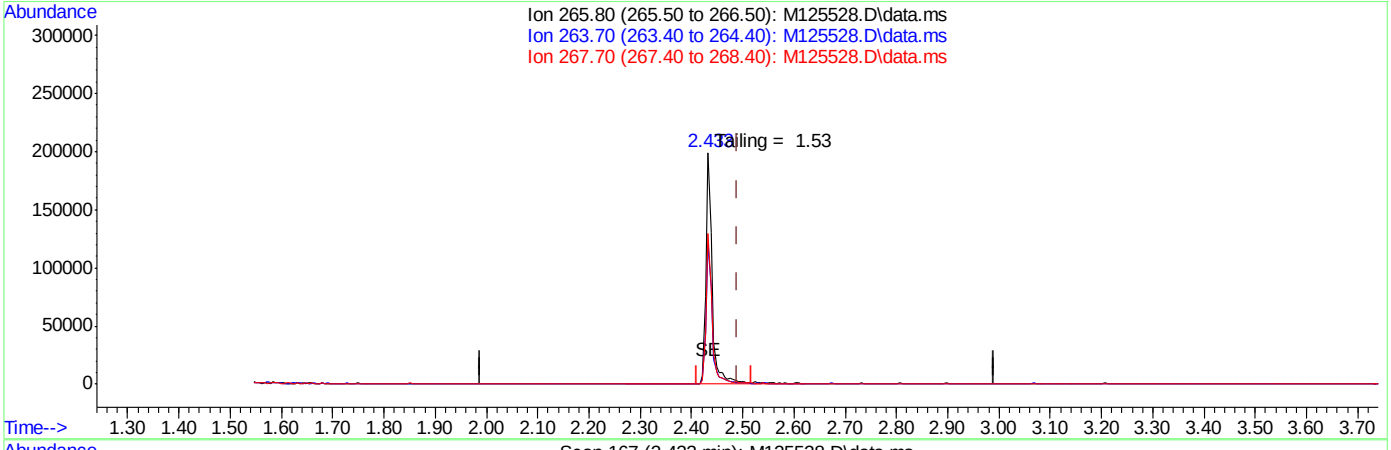
dftpp
Modified:subtracted

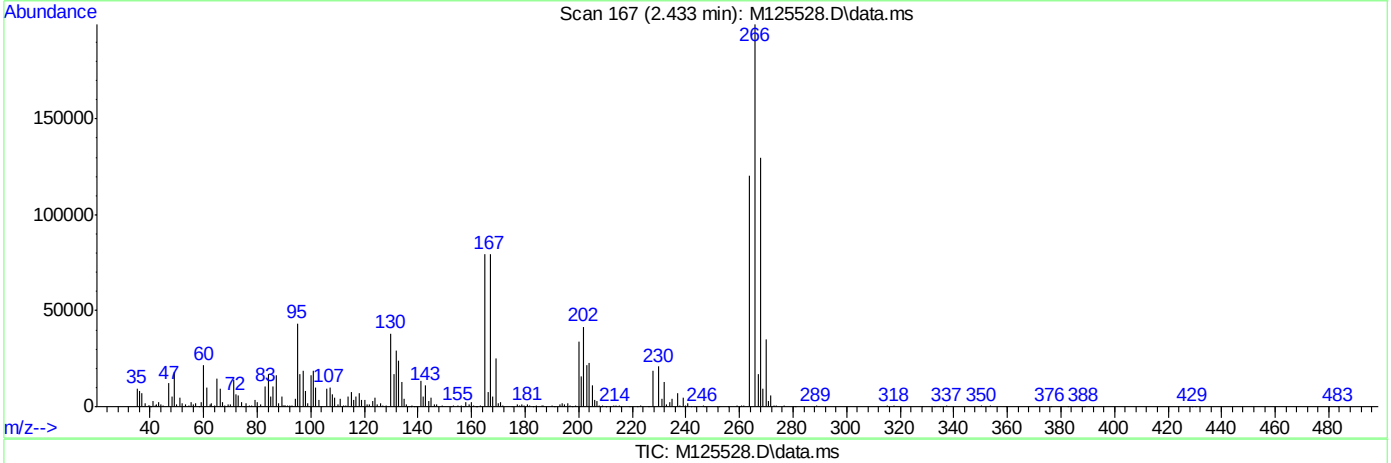
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
434.95	76	444.95	109	489.55	77		
435.85	104	445.25	85	490.25	94		
436.85	97	450.55	68	490.55	75		
437.15	84	462.15	117	491.05	72		
437.85	97	463.05	90	491.35	74		
438.35	177	463.55	89	491.95	82		
439.55	76	467.75	144	492.65	67		
441.05	17575	474.25	87	497.65	78		
442.00	118057	478.35	74				
443.05	23195	482.40	146				
444.05	1757	484.35	81				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125528.D
Acq On : 23 Jun 2016 9:32 pm
Operator : seanb1
Sample : dftpp
Misc : op94571,em5319
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 21:37:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Jun 19 08:52:32 2016
QLast Update : Sun Jun 19 08:52:32 2016
Response via : Continuing Cal File:





TIC: M125528.D\data.ms

(1) Pentachlorophenol (MC)

2.433min (-0.057) 0.00ppm

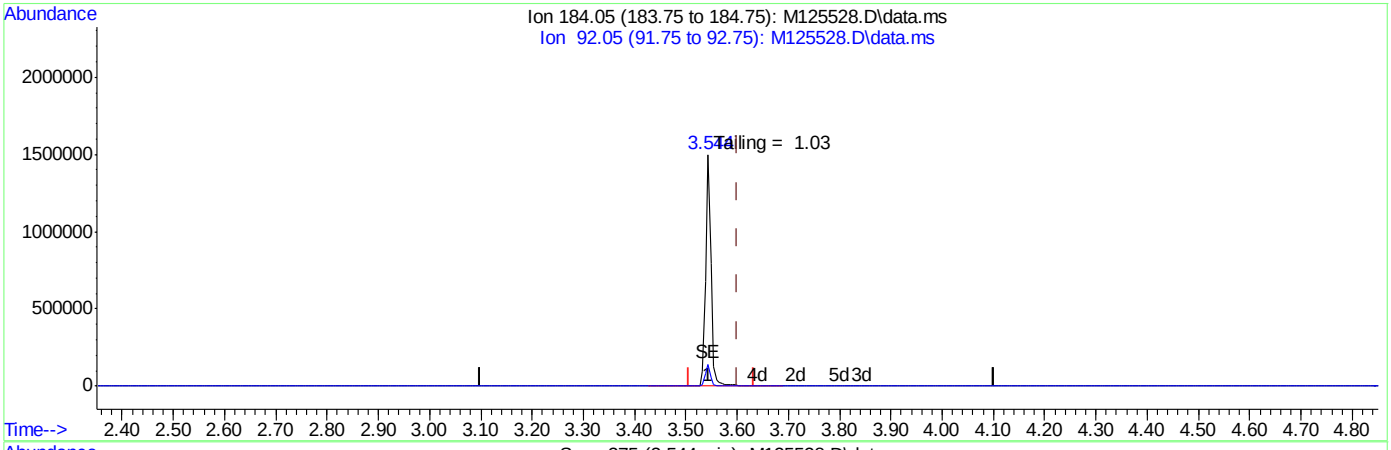
response 165848

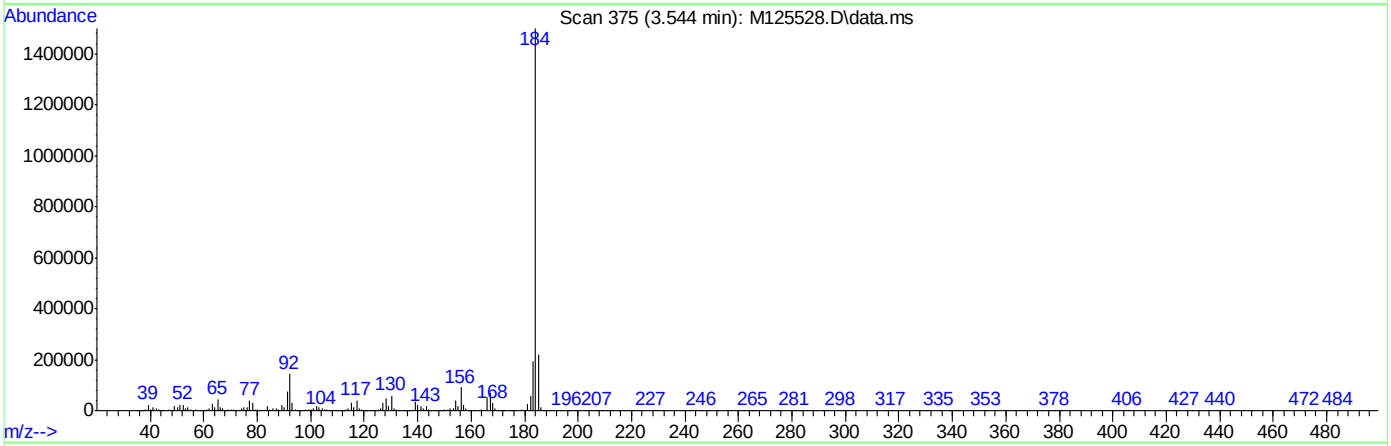
Ion	Exp%	Act%
265.80	100	100
263.70	61.60	60.21
267.70	61.70	64.90
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125528.D
Acq On : 23 Jun 2016 9:32 pm
Operator : seanb1
Sample : dftpp
Misc : op94571,em5319
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 21:37:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Jun 19 08:52:32 2016
QLast Update : Sun Jun 19 08:52:32 2016
Response via : Continuing Cal File:





TIC: M125528.D\data.ms

(2) Benzidine (M)

3.544min (-0.057) 0.00ppm

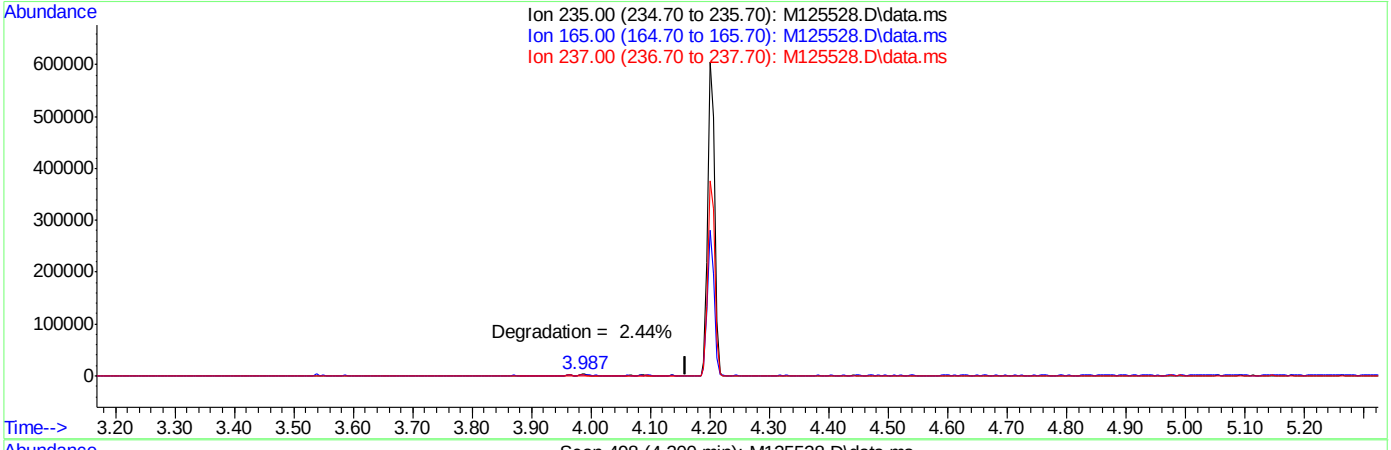
response 1074660

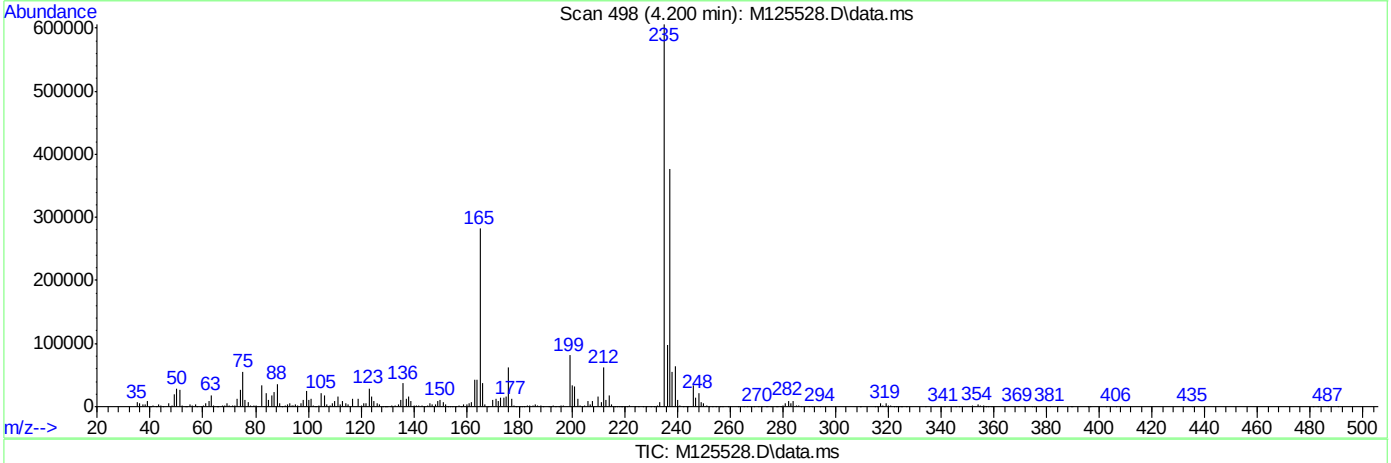
Ion	Exp%	Act%
184.05	100	100
92.05	10.70	9.54
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125528.D
Acq On : 23 Jun 2016 9:32 pm
Operator : seanb1
Sample : dftpp
Misc : op94571,em5319
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jun 23 21:37:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Jun 19 08:52:32 2016
QLast Update : Sun Jun 19 08:52:32 2016
Response via : Continuing Cal File:





(3) PP-DDT (MC)

3.660min (-3.660) 0.00ppm

response 0

Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00#
237.00	64.20	0.00#
0.00	0.00	0.00

SGS ACCUTEST JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/09/16 08:50

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84433.D
Acq On : 7 Jun 2016 9:32 am
Operator : ashleyn
Sample : ic3720-2
Misc : op94122,e2m3720
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 07 12:16:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:13:52 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.916	152	211897	40.00	ppm	-0.03
24) Naphthalene-d8	6.056	136	840853	40.00	ppm	-0.03
47) Acenaphthene-d10	8.184	164	489816	40.00	ppm	-0.04
69) Phenanthrene-d10	10.404	188	827082	40.00	ppm	-0.03
83) Chrysene-d12	14.624	240	724531	40.00	ppm	-0.03
91) Perylene-d12	16.769	264	556967	40.00	ppm	-0.02
101) 1,4-Dichlorobenzene-d4a	4.916	152	211897	40.00	ppm	-0.02
103) Acenaphthene-d10a	8.184	164	489816	40.00	ppm	-0.03
105) Chrysene-d12a	14.624	240	724531	40.00	ppm	-0.02
108) Phenanthrene-d10a	10.404	188	827082	40.00	ppm	-0.03
111) Naphthalene-d8a	6.056	136	840853	40.00	ppm	-0.03
113) Chrysene-d12b	14.624	240	724531	40.00	ppm	-0.02

System Monitoring Compounds						
5) 2-Fluorophenol	3.954	112	14797	1.97	ppm	-0.02
Spiked Amount 50.000			Recovery	=	3.94%	
8) Phenol-d5	4.670	99	20713	2.42	ppm	-0.02
Spiked Amount 50.000			Recovery	=	4.84%	
25) Nitrobenzene-d5	5.382	82	18285	2.14	ppm	-0.03
Spiked Amount 50.000			Recovery	=	4.28%	
51) 2-Fluorobiphenyl	7.280	172	33481	2.28	ppm	-0.04
Spiked Amount 50.000			Recovery	=	4.56%	
73) 2,4,6-Tribromophenol	9.350	330	4744	2.00	ppm	-0.03
Spiked Amount 50.000			Recovery	=	4.00%	
85) Terphenyl-d14	12.966	244	34932	2.10	ppm	-0.03
Spiked Amount 50.000			Recovery	=	4.20%	
107) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds							Qvalue
2) 1,4-Dioxane	2.499	88	7009	2.64	ppm		78
6) Indene	5.120	116	30965	2.54	ppm		95
7) Cumene	4.296	105	44735	2.36	ppm		96
9) Phenol	4.681	94	24678	2.30	ppm		95
10) Aniline	4.665	93	25379	2.51	ppm	#	55
11) bis(2-Chloroethyl)ether	4.702	93	16608	2.21	ppm		95
12) 2-Chlorophenol	4.767	128	17217	2.62	ppm		82
13) Decane	4.761	43	19260	3.15	ppm		99
14) 1,3-Dichlorobenzene	4.868	146	18916	2.33	ppm		98
15) 1,4-Dichlorobenzene	4.927	146	19104	2.32	ppm		97
16) Benzyl alcohol	5.034	108	10986	2.36	ppm		87
17) 1,2-Dichlorobenzene	5.050	146	17856	2.40	ppm		96
18) Acetophenone	5.243	105	24753	2.45	ppm		94
19) 2-Methylphenol	5.141	108	16441	2.28	ppm		95
20) 2,2'-oxybis(1-Chloropr...	5.125	45	23450	2.80	ppm		86
21) 3&4-Methylphenol	5.269	108	17610	2.26	ppm		96
22) n-Nitroso-di-n-propyla...	5.232	70	14280	2.62	ppm		98
23) Hexachloroethane	5.328	201	5824	2.17	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84433.D
Acq On : 7 Jun 2016 9:32 am
Operator : ashleyn
Sample : ic3720-2
Misc : op94122,e2m3720
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 07 12:16:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:13:52 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
26) Nitrobenzene	5.398	77	19991	2.28	ppm		84
27) Quinoline	6.435	129	32701	2.23	ppm		97
28) Isophorone	5.601	82	34457	2.31	ppm		96
29) 2-Nitrophenol	5.686	139	9201	2.40	ppm		89
30) 2,4-Dimethylphenol	5.729	107	16413	2.11	ppm		91
31) Benzoic acid	5.831	105	8367	1.54	ppm		79
32) bis(2-Chloroethoxy)met...	5.799	93	19602	2.33	ppm		95
33) 2,4-Dichlorophenol	5.938	162	12754	2.17	ppm		94
34) 2,6-Dichlorophenol	6.146	162	12827	2.27	ppm		88
35) 1,3,5-Trichlorobenzene	5.686	180	15357	2.38	ppm		96
36) 1,2,4-Trichlorobenzene	5.997	180	14628	2.28	ppm		92
37) 1,2,3-Trichlorobenzene	6.221	180	13900	2.20	ppm		98
38) Naphthalene	6.077	128	49603	2.38	ppm		99
39) 4-Chloroaniline	6.141	127	19304	2.43	ppm		91
40) 2,3-Dichloroaniline	7.189	161	17261	2.43	ppm		90
41) Caprolactam	6.489	55	7459	2.06	ppm		92
42) Hexachlorobutadiene	6.184	225	7922	2.23	ppm		98
43) 4-Chloro-3-methylphenol	6.692	107	15580	2.22	ppm		91
44) 2-Methylnaphthalene	6.836	141	28327	2.43	ppm		93
45) 1-Methylnaphthalene	6.954	141	29751	2.44	ppm		96
46) Dimethylnaphthalene	7.617	156	30341	2.38	ppm		92
48) Hexachlorocyclopentadiene	7.013	237	326m	0.12	ppm		
49) 2,4,6-Trichlorophenol	7.200	196	9460	2.18	ppm		93
50) 2,4,5-Trichlorophenol	7.270	196	9548	2.13	ppm		94
52) 2-Chloronaphthalene	7.441	162	29620	2.25	ppm		94
53) Biphenyl	7.414	154	40238	2.28	ppm		99
54) 2-Nitroaniline	7.596	65	11519	2.17	ppm		84
55) Dimethylphthalate	7.821	163	34057	2.24	ppm		96
56) Acenaphthylene	7.992	152	50755	2.29	ppm		100
57) 2,6-Dinitrotoluene	7.917	165	7111	1.96	ppm		91
58) 3-Nitroaniline	8.163	138	7987	1.90	ppm		94
59) Acenaphthene	8.232	153	30361	2.25	ppm		98
60) 2,4-Dinitrophenol	8.361	184	1773	0.96	ppm	#	70
61) 4-Nitrophenol	8.516	109	3247	1.46	ppm	#	1
62) Dibenzofuran	8.478	168	43488	2.35	ppm		81
63) 2,4-Dinitrotoluene	8.505	165	10574	2.15	ppm		80
64) 2,3,4,6-Tetrachlorophenol	8.687	232	5816	1.96	ppm		85
65) Diethylphthalate	8.831	149	34916	2.22	ppm		97
66) Fluorene	8.976	166	33884	2.30	ppm		93
67) 4-Chlorophenyl-phenyle...	8.987	204	15675	2.25	ppm		92
68) 4-Nitroaniline	9.051	138	8945	2.09	ppm		87
70) 4,6-Dinitro-2-methylph...	9.120	198	2197	0.78	ppm		75
71) n-Nitrosodiphenylamine	9.174	169	22960	2.22	ppm		96
72) 1,2-Diphenylhydrazine	9.222	77	38500	2.11	ppm		94
74) 4-Bromophenyl-phenylether	9.719	248	9153	2.10	ppm		96
75) Hexachlorobenzene	9.805	284	10443	2.06	ppm		93
76) Pentachlorophenol	10.147	266	3593	1.92	ppm		99
77) Phenanthrene	10.436	178	50862	2.26	ppm		97
78) Anthracene	10.516	178	51549	2.26	ppm		97
79) Carbazole	10.805	167	46042	2.18	ppm		96

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84433.D
Acq On : 7 Jun 2016 9:32 am
Operator : ashleyn
Sample : ic3720-2
Misc : op94122,e2m3720
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 07 12:16:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:13:52 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) Di-n-butylphthalate	11.388	149	61063	2.24 ppm	99
81) Fluoranthene	12.319	202	51912	2.20 ppm	95
82) Octadecane	10.292	57	25377	2.47 ppm	96
84) Pyrene	12.677	202	52832	2.13 ppm	98
86) Butylbenzylphthalate	13.784	149	27045	2.24 ppm	85
87) Benzo[a]anthracene	14.603	228	48887	2.27 ppm	94
88) 3,3'-Dichlorobenzidine	14.603	252	16324	1.87 ppm	97
89) Chrysene	14.661	228	45084	2.24 ppm	100
90) bis(2-Ethylhexyl)phtha...	14.731	149	36113	2.62 ppm	97
92) Di-n-octylphthalate	15.726	149	47514	2.06 ppm	91
93) Benzo[b]fluoranthene	16.229	252	38069	2.04 ppm	95
94) Benzo[k]fluoranthene	16.261	252	34310	2.10 ppm	98
95) Benzo[a]pyrene	16.683	252	31733	2.07 ppm	93
96) Indeno[1,2,3-cd]pyrene	18.518	276	38363	2.03 ppm	94
97) Dibenz(a,h)acridine	18.106	279	29141	2.08 ppm	99
98) Dibenz[a,h]anthracene	18.550	278	32091	1.92 ppm	98
99) 7,12-Dimethylbenz(a)an...	16.207	256	15826	1.89 ppm	97
100) Benzo[g,h,i]perylene	19.026	276	32670	2.07 ppm	98

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

7.6.1

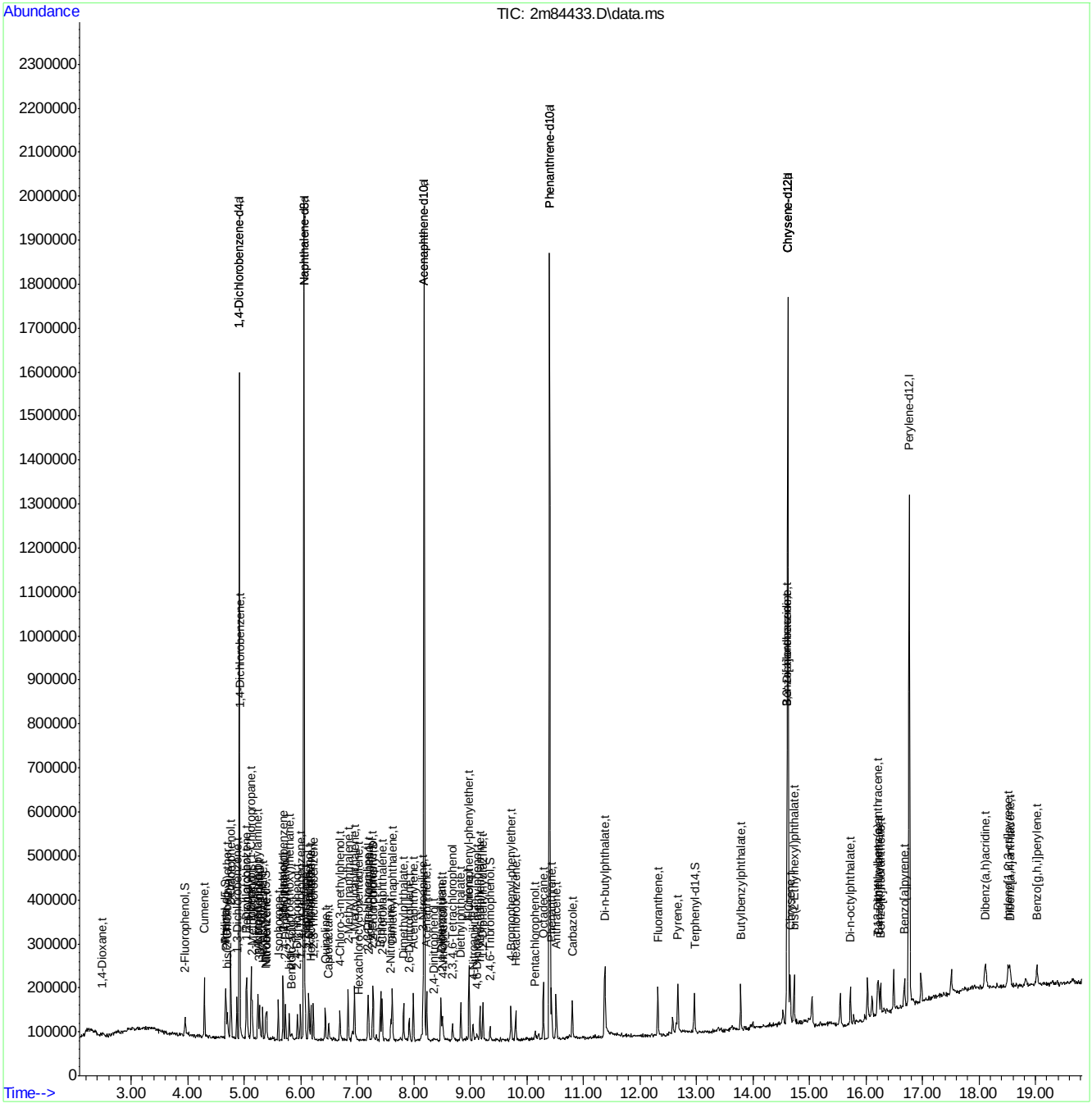
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84433.D
Acq On : 7 Jun 2016 9:32 am
Operator : ashleyn
Sample : ic3720-2
Misc : op94122,e2m3720
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 07 12:16:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:13:52 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Manual Integration Approval Summary

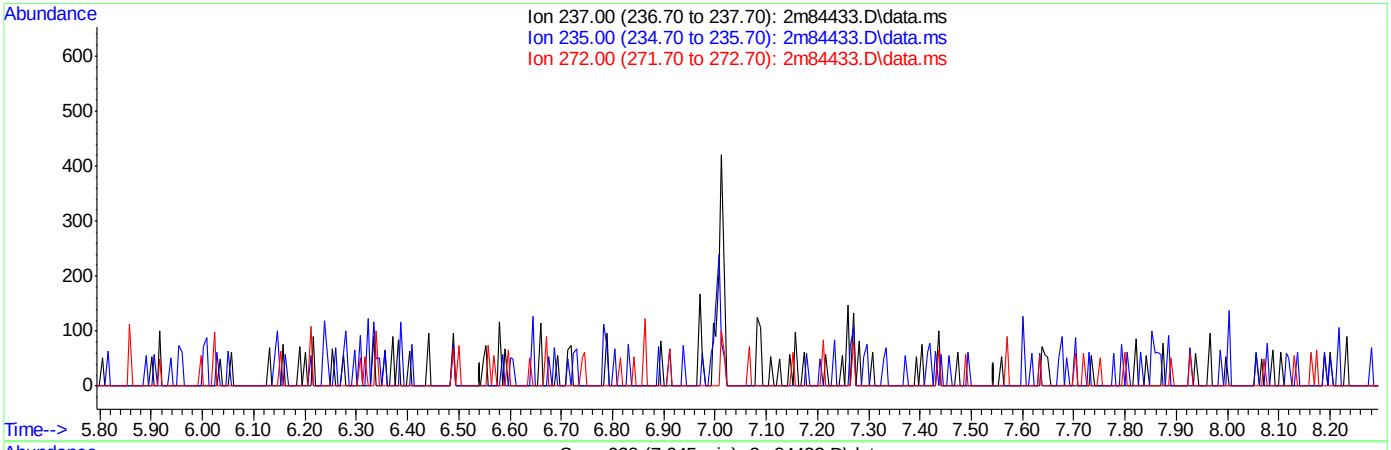
Sample Number:	E2M3720-IC3720	**Method:**	SW846 8270D
Lab FileID:	2M84433.D	**Analyst approved:**	06/07/16 15:49 Ashley Noble
Injection Time:	06/07/16 09:32	**Supervisor approved:**	06/09/16 08:50 Kristi Schollenberger

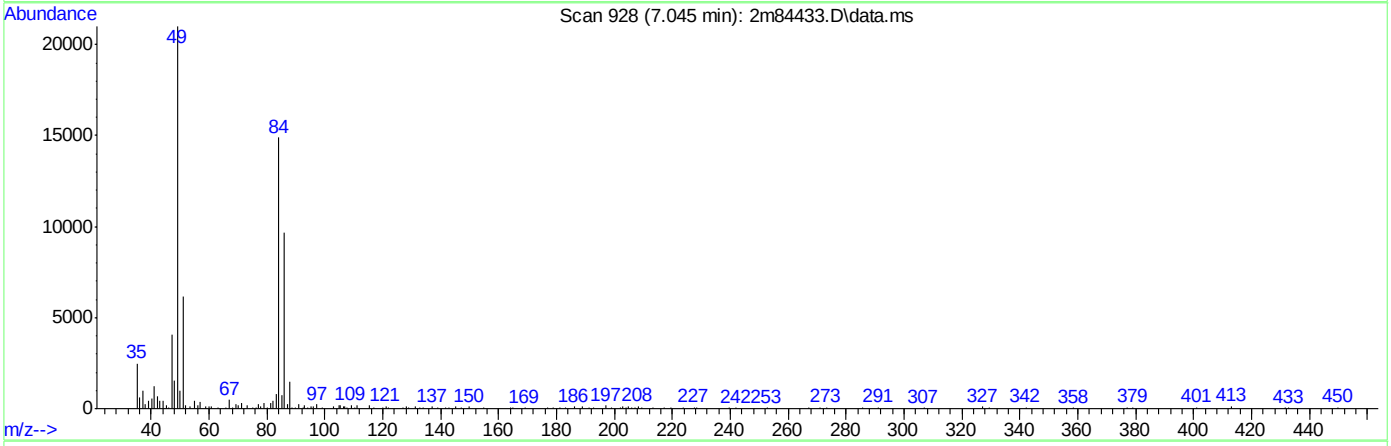
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexachlorocyclopentadiene	77-47-4		7.01	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84433.D
Acq On : 7 Jun 2016 9:32 am
Operator : ashleyn
Sample : ic3720-2
Misc : op94122,e2m3720
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 07 12:15:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:13:52 2016
Response via : Initial Calibration





TIC: 2m84433.D\data.ms

(48) Hexachlorocyclopentadiene (t)

7.044min (-7.044) 0.00ppm

response 0

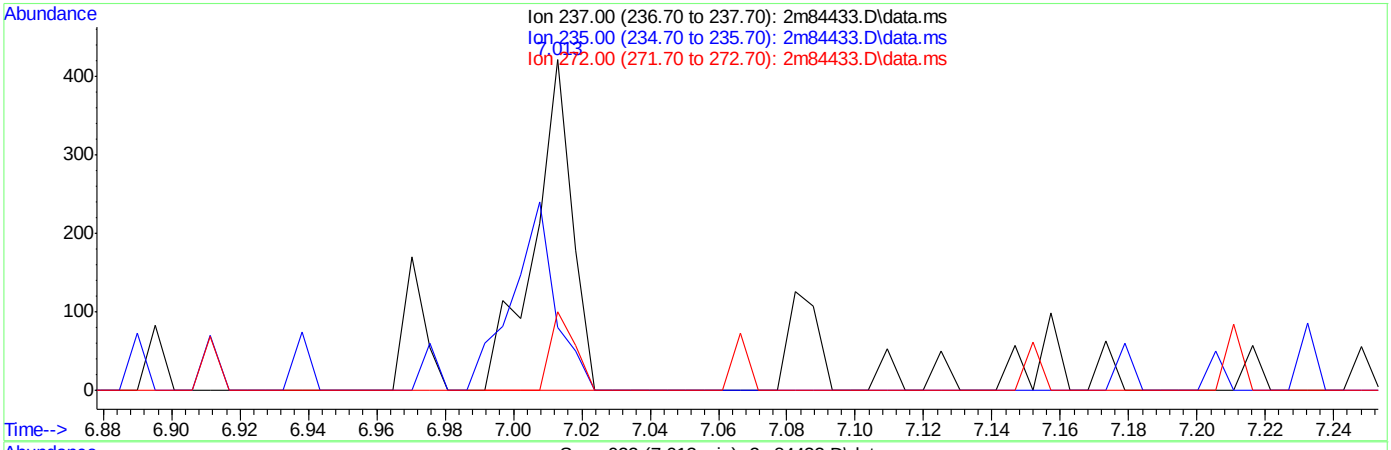
Ion	Exp%	Act%
237.00	100	0.00
235.00	64.30	0.00#
272.00	13.20	0.00
0.00	0.00	0.00

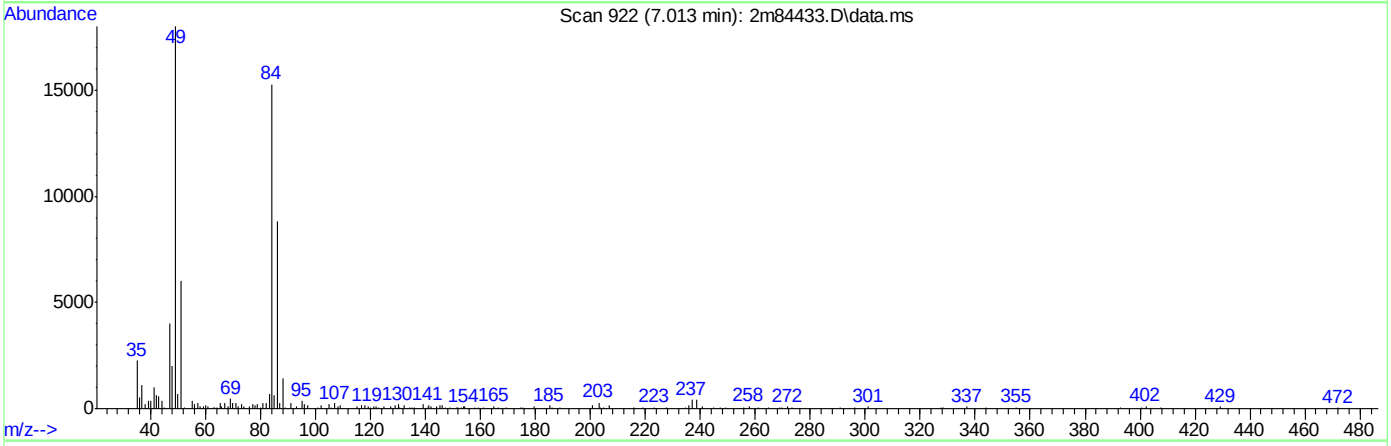
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84433.D
Acq On : 7 Jun 2016 9:32 am
Operator : ashleyn
Sample : ic3720-2
Misc : op94122,e2m3720
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 07 12:15:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:13:52 2016
Response via : Initial Calibration





TIC: 2m84433.D\data.ms

(48) Hexachlorocyclopentadiene (t)

7.013min (-0.031) 0.12ppm m

response 326

Ion	Exp%	Act%
237.00	100	100
235.00	64.30	19.00#
272.00	13.20	23.75
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/09/16 08:50

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84434.D
Acq On : 7 Jun 2016 9:59 am
Operator : ashleyn
Sample : ic3720-1
Misc : op94122,e2m3720
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 07 12:19:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:17:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.911	152	209238	40.00	ppm	-0.03
24) Naphthalene-d8	6.055	136	837459	40.00	ppm	-0.03
47) Acenaphthene-d10	8.184	164	485439	40.00	ppm	-0.04
69) Phenanthrene-d10	10.399	188	830898	40.00	ppm	-0.04
83) Chrysene-d12	14.624	240	766719	40.00	ppm	-0.03
91) Perylene-d12	16.769	264	562472	40.00	ppm	-0.02
101) 1,4-Dichlorobenzene-d4a	4.911	152	209238	40.00	ppm	-0.03
103) Acenaphthene-d10a	8.184	164	485439	40.00	ppm	-0.03
105) Chrysene-d12a	14.624	240	766719	40.00	ppm	-0.02
108) Phenanthrene-d10a	10.399	188	830898	40.00	ppm	-0.03
111) Naphthalene-d8a	6.055	136	837459	40.00	ppm	-0.03
113) Chrysene-d12b	14.624	240	767099	40.00	ppm	-0.02

System Monitoring Compounds						
5) 2-Fluorophenol	3.953	112	7269	0.99	ppm	-0.02
Spiked Amount 50.000			Recovery = 1.98%			
8) Phenol-d5	4.670	99	9948	1.07	ppm	-0.02
Spiked Amount 50.000			Recovery = 2.14%			
25) Nitrobenzene-d5	5.382	82	10864	1.23	ppm	-0.03
Spiked Amount 50.000			Recovery = 2.46%			
51) 2-Fluorobiphenyl	7.280	172	17154	1.10	ppm	-0.04
Spiked Amount 50.000			Recovery = 2.20%			
73) 2,4,6-Tribromophenol	9.350	330	2212	0.93	ppm	-0.03
Spiked Amount 50.000			Recovery = 1.86%			
85) Terphenyl-d14	12.961	244	19450	1.08	ppm	-0.04
Spiked Amount 50.000			Recovery = 2.16%			
107) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.499	88	2769	0.91	ppm		70
6) Indene	5.119	116	15729	1.15	ppm		95
7) Cumene	4.296	105	21970	1.08	ppm		91
9) Phenol	4.681	94	12011	1.06	ppm		92
10) Aniline	4.665	93	12212	1.08	ppm	#	42
11) bis(2-Chloroethyl)ether	4.702	93	9447	1.21	ppm		89
12) 2-Chlorophenol	4.766	128	8923	1.19	ppm		78
13) Decane	4.761	43	10829	1.39	ppm		94
14) 1,3-Dichlorobenzene	4.868	146	9513	1.10	ppm		98
15) 1,4-Dichlorobenzene	4.927	146	8821	1.01	ppm		91
16) Benzyl alcohol	5.039	108	5342	1.07	ppm		95
17) 1,2-Dichlorobenzene	5.050	146	9012	1.11	ppm		93
18) Acetophenone	5.248	105	12180	1.10	ppm		96
19) 2-Methylphenol	5.141	108	7547	0.99	ppm		92
20) 2,2'-oxybis(1-Chloropr...	5.125	45	11662	1.18	ppm		88
21) 3&4-Methylphenol	5.269	108	8548	1.04	ppm		88
22) n-Nitroso-di-n-propyla...	5.232	70	6990	1.12	ppm		99
23) Hexachloroethane	5.328	201	2762	1.00	ppm		83

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84434.D
Acq On : 7 Jun 2016 9:59 am
Operator : ashleyn
Sample : ic3720-1
Misc : op94122,e2m3720
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 07 12:19:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:17:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
26) Nitrobenzene	5.398	77	9972	1.07 ppm		89
27) Quinoline	6.435	129	16759	1.09 ppm		94
28) Isophorone	5.601	82	17213	1.08 ppm		96
29) 2-Nitrophenol	5.686	139	4273	1.02 ppm		94
30) 2,4-Dimethylphenol	5.729	107	9072	1.14 ppm		97
31) Benzoic acid	5.836	105	3447	0.72 ppm		83
32) bis(2-Chloroethoxy)met...	5.799	93	10060	1.11 ppm		98
33) 2,4-Dichlorophenol	5.938	162	6805	1.12 ppm		85
34) 2,6-Dichlorophenol	6.146	162	6657	1.11 ppm		92
35) 1,3,5-Trichlorobenzene	5.686	180	7871	1.12 ppm		82
36) 1,2,4-Trichlorobenzene	5.991	180	7714	1.13 ppm		96
37) 1,2,3-Trichlorobenzene	6.221	180	7443	1.13 ppm		96
38) Naphthalene	6.077	128	25944	1.14 ppm		95
39) 4-Chloroaniline	6.141	127	9224	1.05 ppm		88
40) 2,3-Dichloroaniline	7.189	161	8513	1.09 ppm		92
41) Caprolactam	6.494	55	5033	1.37 ppm	#	77
42) Hexachlorobutadiene	6.184	225	4493	1.20 ppm		91
43) 4-Chloro-3-methylphenol	6.692	107	7588	1.03 ppm		93
44) 2-Methylnaphthalene	6.836	141	14283	1.11 ppm		96
45) 1-Methylnaphthalene	6.954	141	14562	1.08 ppm		97
46) Dimethylnaphthalene	7.617	156	14894	1.07 ppm		92
49) 2,4,6-Trichlorophenol	7.200	196	4914	1.09 ppm		82
50) 2,4,5-Trichlorophenol	7.270	196	5030	1.10 ppm		98
52) 2-Chloronaphthalene	7.441	162	15680	1.13 ppm		96
53) Biphenyl	7.409	154	20861	1.12 ppm		97
54) 2-Nitroaniline	7.591	65	6285	1.15 ppm	#	73
55) Dimethylphthalate	7.821	163	17156	1.07 ppm		96
56) Acenaphthylene	7.992	152	25557	1.08 ppm		96
57) 2,6-Dinitrotoluene	7.922	165	3838	1.08 ppm		81
58) 3-Nitroaniline	8.163	138	4224	1.04 ppm	#	68
59) Acenaphthene	8.227	153	16196	1.14 ppm		93
61) 4-Nitrophenol	8.521	109	1704	0.90 ppm	#	1
62) Dibenzofuran	8.478	168	22311	1.12 ppm		91
63) 2,4-Dinitrotoluene	8.505	165	5250	1.04 ppm		88
64) 2,3,4,6-Tetrachlorophenol	8.687	232	2884	0.99 ppm		91
65) Diethylphthalate	8.831	149	18871	1.15 ppm		96
66) Fluorene	8.976	166	17602	1.12 ppm		93
67) 4-Chlorophenyl-phenyle...	8.987	204	8032	1.09 ppm		95
68) 4-Nitroaniline	9.051	138	4161	0.96 ppm		86
70) 4,6-Dinitro-2-methylph...	9.120	198	855m	0.43 ppm		
71) n-Nitrosodiphenylamine	9.168	169	11816	1.08 ppm		89
72) 1,2-Diphenylhydrazine	9.222	77	19374	1.03 ppm		94
74) 4-Bromophenyl-phenylether	9.719	248	4885	1.09 ppm		93
75) Hexachlorobenzene	9.805	284	5527	1.07 ppm		94
76) Pentachlorophenol	10.153	266	1374	0.99 ppm	#	68
77) Phenanthrene	10.436	178	26867	1.12 ppm		96
78) Anthracene	10.516	178	26167	1.07 ppm		98
79) Carbazole	10.805	167	24654	1.11 ppm		98
80) Di-n-butylphthalate	11.383	149	30267	1.04 ppm		98
81) Fluoranthene	12.319	202	25825	1.04 ppm		89

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84434.D
Acq On : 7 Jun 2016 9:59 am
Operator : ashleyn
Sample : ic3720-1
Misc : op94122,e2m3720
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 07 12:19:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:17:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
82) Octadecane	10.292	57	12654	1.10 ppm	95
84) Pyrene	12.672	202	28266	1.04 ppm	97
86) Butylbenzylphthalate	13.784	149	13866	1.02 ppm	87
87) Benzo[a]anthracene	14.608	228	28621	1.18 ppm	98
88) 3,3'-Dichlorobenzidine	14.597	252	9701	1.09 ppm	92
89) Chrysene	14.661	228	25486	1.13 ppm	97
90) bis(2-Ethylhexyl)phtha...	14.726	149	19890	1.18 ppm	90
92) Di-n-octylphthalate	15.720	149	26452	1.12 ppm	95
93) Benzo[b]fluoranthene	16.223	252	20455	1.08 ppm	92
94) Benzo[k]fluoranthene	16.261	252	18018	1.06 ppm	95
95) Benzo[a]pyrene	16.683	252	17265	1.10 ppm	93
96) Indeno[1,2,3-cd]pyrene	18.512	276	19733	1.03 ppm	94
97) Dibenz(a,h)acridine	18.101	279	14511	1.01 ppm	100
98) Dibenz[a,h]anthracene	18.550	278	16802	1.02 ppm	96
99) 7,12-Dimethylbenz(a)an...	16.207	256	7886	0.96 ppm	96
100) Benzo[g,h,i]perylene	19.026	276	16832	1.04 ppm	95

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

7.6.2

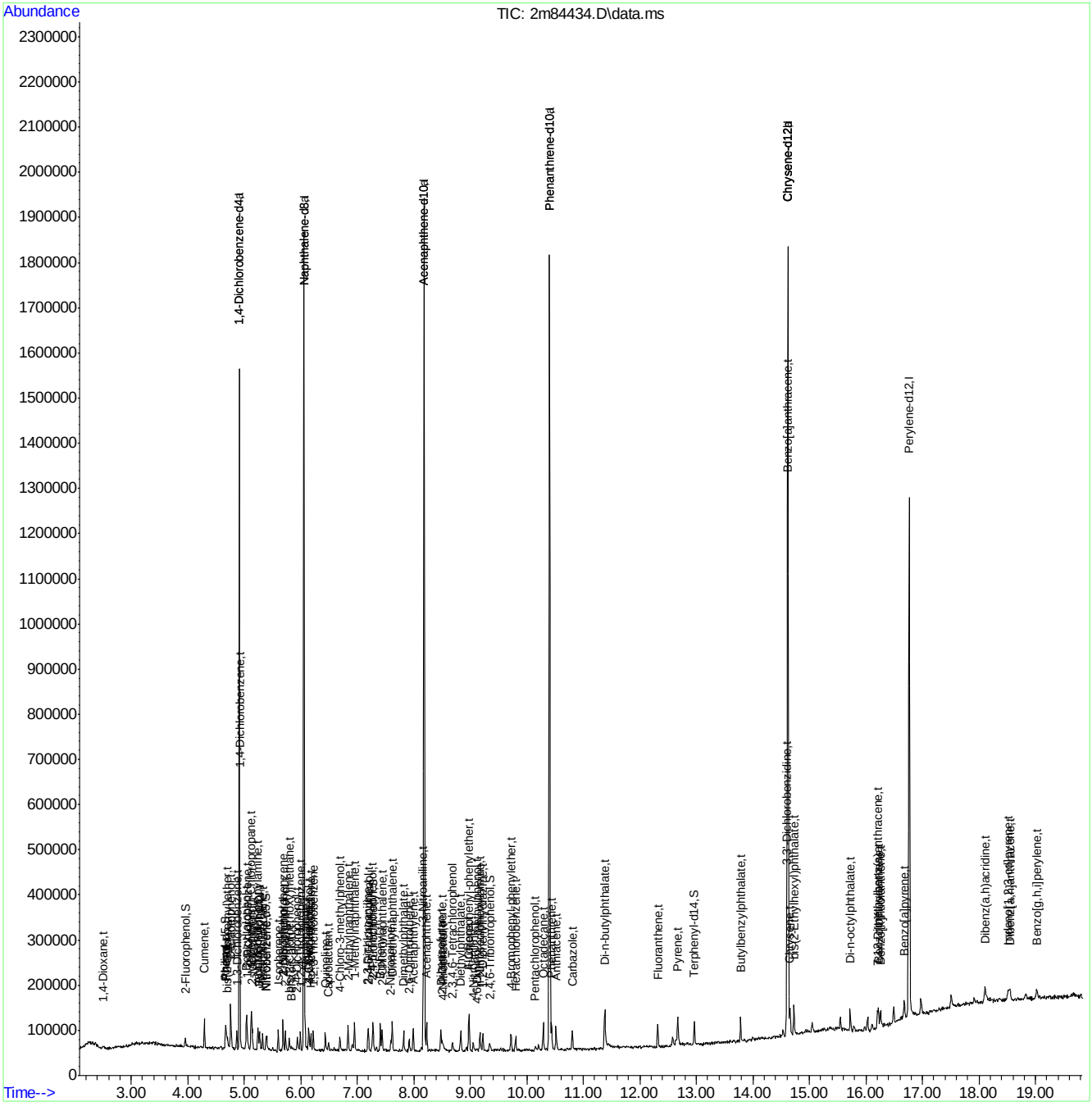
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84434.D
Acq On : 7 Jun 2016 9:59 am
Operator : ashleyn
Sample : ic3720-1
Misc : op94122,e2m3720
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 07 12:19:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:17:59 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Manual Integration Approval Summary

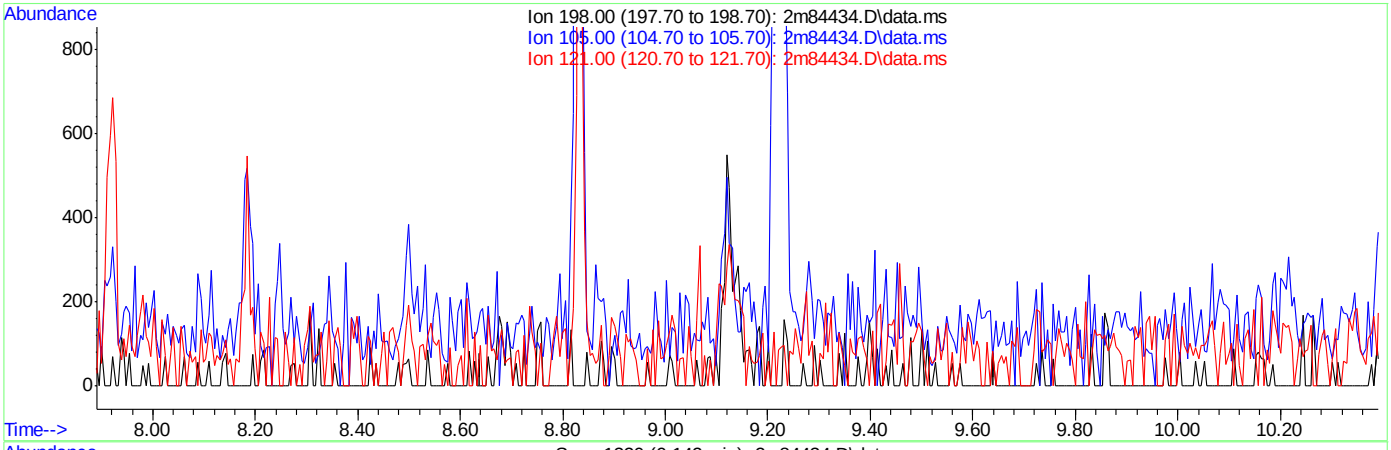
Sample Number:	E2M3720-IC3720	**Method:**	SW846 8270D
Lab FileID:	2M84434.D	**Analyst approved:**	06/07/16 15:49 Ashley Noble
Injection Time:	06/07/16 09:59	**Supervisor approved:**	06/09/16 08:50 Kristi Schollenberger

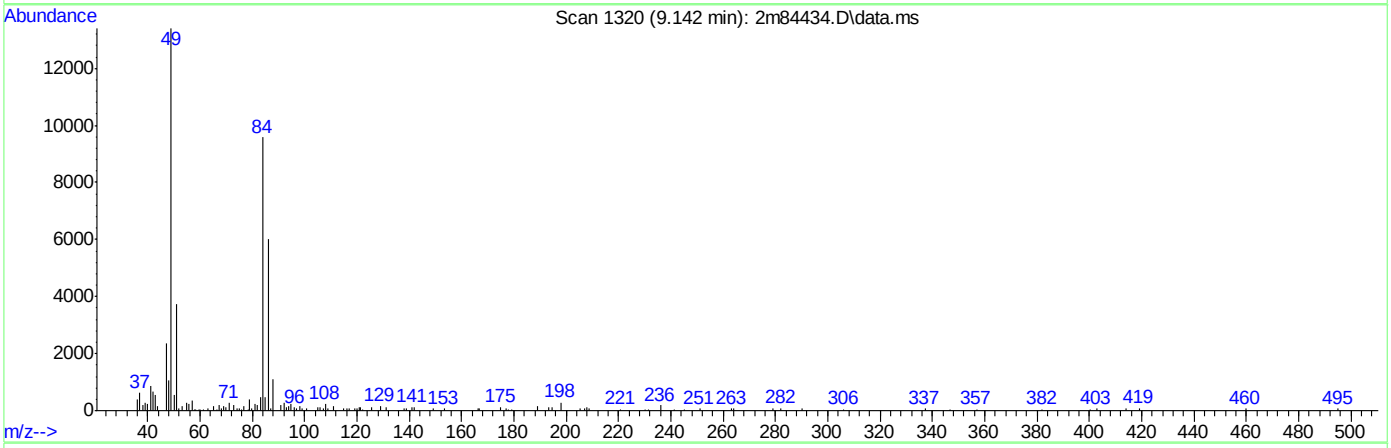
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,6-Dinitro-o-cresol	534-52-1		9.12	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84434.D
Acq On : 7 Jun 2016 9:59 am
Operator : ashleyn
Sample : ic3720-1
Misc : op94122,e2m3720
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 07 12:18:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:17:59 2016
Response via : Initial Calibration





TIC: 2m84434.D\data.ms

(70) 4,6-Dinitro-2-methylphenol (t)

9.141min (-9.141) 0.00ppm

response 0

Ion	Exp%	Act%
198.00	100	0.00
105.00	56.40	0.00#
121.00	48.90	0.00#
0.00	0.00	0.00

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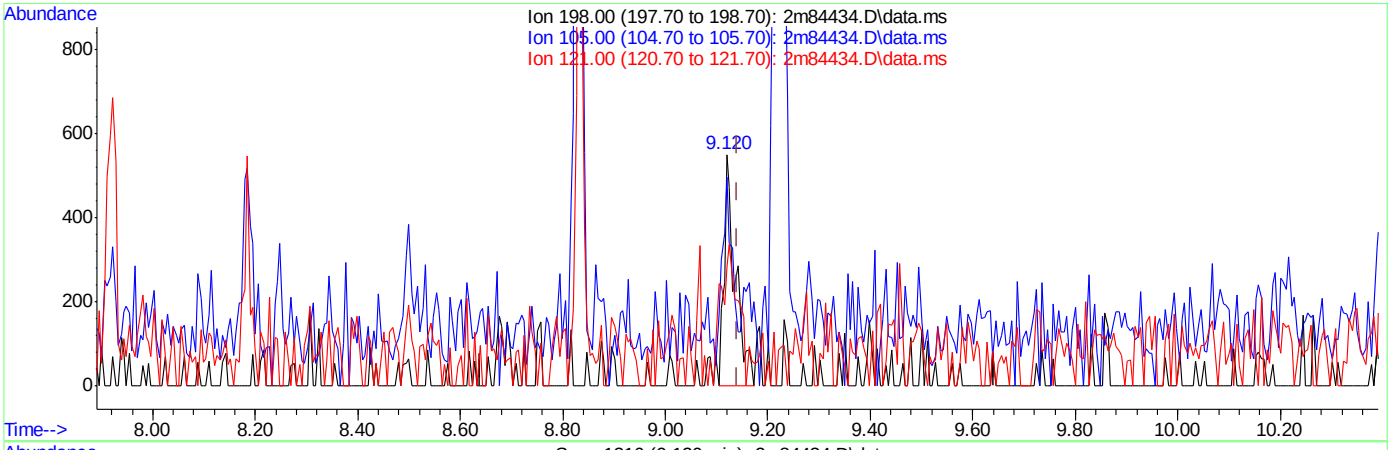
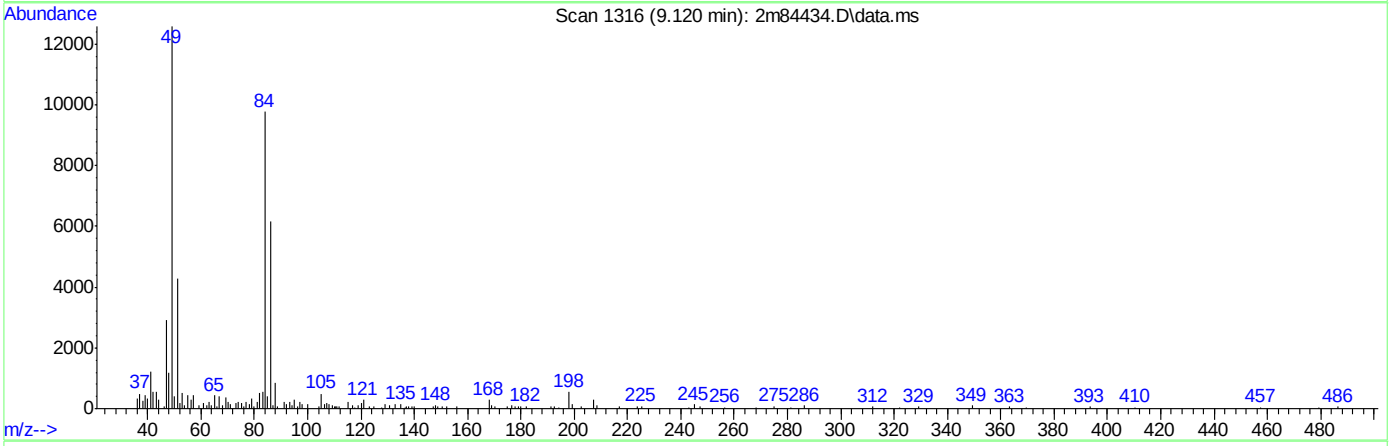
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84434.D
Acq On : 7 Jun 2016 9:59 am
Operator : ashleyn
Sample : ic3720-1
Misc : op94122,e2m3720
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 07 12:18:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:17:59 2016
Response via : Initial Calibration





TIC: 2m84434.D\data.ms

(70) 4,6-Dinitro-2-methylphenol (t)

9.120min (-0.021) 0.43ppm m

response 855

Ion	Exp%	Act%
198.00	100	100
105.00	56.40	90.00#
121.00	48.90	51.45
0.00	0.00	0.00

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84435.D
Acq On : 7 Jun 2016 10:26 am
Operator : ashleyn
Sample : ic3720-100
Misc : op94122,e2m3720
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 07 12:14:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:13:52 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.916	152	187400	40.00	ppm	-0.03
24) Naphthalene-d8	6.056	136	761743	40.00	ppm	-0.03
47) Acenaphthene-d10	8.190	164	438011	40.00	ppm	-0.03
69) Phenanthrene-d10	10.409	188	737628	40.00	ppm	-0.03
83) Chrysene-d12	14.635	240	637918	40.00	ppm	-0.02
91) Perylene-d12	16.774	264	485474	40.00	ppm	-0.02
101) 1,4-Dichlorobenzene-d4a	4.916	152	187400	40.00	ppm	-0.02
103) Acenaphthene-d10a	8.190	164	438011	40.00	ppm	-0.03
105) Chrysene-d12a	14.635	240	637918	40.00	ppm	-0.01
108) Phenanthrene-d10a	10.409	188	737628	40.00	ppm	-0.02
111) Naphthalene-d8a	6.056	136	761743	40.00	ppm	-0.03
113) Chrysene-d12b	14.635	240	638050	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	3.948	112	663064	100.00	ppm	-0.03
Spiked Amount 50.000			Recovery	=	200.00%	
8) Phenol-d5	4.670	99	755598	100.00	ppm	-0.02
Spiked Amount 50.000			Recovery	=	200.00%	
25) Nitrobenzene-d5	5.387	82	775708	100.00	ppm	-0.03
Spiked Amount 50.000			Recovery	=	200.00%	
51) 2-Fluorobiphenyl	7.286	172	1313244	100.00	ppm	-0.03
Spiked Amount 50.000			Recovery	=	200.00%	
73) 2,4,6-Tribromophenol	9.356	330	211760	100.00	ppm	-0.03
Spiked Amount 50.000			Recovery	=	200.00%	
85) Terphenyl-d14	12.971	244	1463502	100.00	ppm	-0.03
Spiked Amount 50.000			Recovery	=	200.00%	
107) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds							Qvalue
2) 1,4-Dioxane	2.483	88	234710	100.00	ppm		92
6) Indene	5.125	116	1077025	100.00	ppm		100
7) Cumene	4.296	105	1679549	100.00	ppm		98
9) Phenol	4.681	94	947178	100.00	ppm		96
10) Aniline	4.665	93	894326	100.00	ppm	#	53
11) bis(2-Chloroethyl)ether	4.708	93	663232	100.00	ppm		95
12) 2-Chlorophenol	4.767	128	580098	100.00	ppm		87
13) Decane	4.767	43	540114	100.00	ppm		93
14) 1,3-Dichlorobenzene	4.868	146	719352	100.00	ppm		99
15) 1,4-Dichlorobenzene	4.927	146	726949	100.00	ppm		99
16) Benzyl alcohol	5.039	108	410995	100.00	ppm		93
17) 1,2-Dichlorobenzene	5.050	146	659300	100.00	ppm		99
18) Acetophenone	5.248	105	894056	100.00	ppm		93
19) 2-Methylphenol	5.146	108	638854	100.00	ppm		99
20) 2,2'-oxybis(1-Chloropr...	5.130	45	739818	100.00	ppm		84
21) 3&4-Methylphenol	5.269	108	687628	100.00	ppm		99
22) n-Nitroso-di-n-propyla...	5.248	70	482277	100.00	ppm		91
23) Hexachloroethane	5.328	201	237315	100.00	ppm		90

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84435.D
Acq On : 7 Jun 2016 10:26 am
Operator : ashleyn
Sample : ic3720-100
Misc : op94122,e2m3720
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 07 12:14:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:13:52 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
26) Nitrobenzene	5.403	77	795833	100.00	ppm		93
27) Quinoline	6.457	129	1327136	100.00	ppm		97
28) Isophorone	5.612	82	1351436	100.00	ppm		94
29) 2-Nitrophenol	5.687	139	346605	100.00	ppm		99
30) 2,4-Dimethylphenol	5.735	107	705705	100.00	ppm		97
31) Benzoic acid	5.895	105	492053	100.00	ppm		91
32) bis(2-Chloroethoxy)met...	5.804	93	761320	100.00	ppm		98
33) 2,4-Dichlorophenol	5.938	162	531447	100.00	ppm		94
34) 2,6-Dichlorophenol	6.152	162	512948	100.00	ppm		96
35) 1,3,5-Trichlorobenzene	5.692	180	584333	100.00	ppm		99
36) 1,2,4-Trichlorobenzene	5.997	180	582111	100.00	ppm		98
37) 1,2,3-Trichlorobenzene	6.227	180	572483	100.00	ppm		98
38) Naphthalene	6.082	128	1885185	100.00	ppm		99
39) 4-Chloroaniline	6.141	127	721044	100.00	ppm		95
40) 2,3-Dichloroaniline	7.189	161	643651	100.00	ppm		94
41) Caprolactam	6.553	55	328340	100.00	ppm		90
42) Hexachlorobutadiene	6.184	225	321808	100.00	ppm		99
43) 4-Chloro-3-methylphenol	6.703	107	636377	100.00	ppm		94
44) 2-Methylnaphthalene	6.842	141	1058083	100.00	ppm		99
45) 1-Methylnaphthalene	6.959	141	1105077	100.00	ppm		99
46) Dimethylnaphthalene	7.628	156	1153306	100.00	ppm		97
48) Hexachlorocyclopentadiene	7.013	237	470704	200.00	ppm		98
49) 2,4,6-Trichlorophenol	7.206	196	387546	100.00	ppm		98
50) 2,4,5-Trichlorophenol	7.270	196	399975	100.00	ppm		99
52) 2-Chloronaphthalene	7.446	162	1178710	100.00	ppm		99
53) Biphenyl	7.419	154	1575350	100.00	ppm		100
54) 2-Nitroaniline	7.601	65	475090	100.00	ppm		87
55) Dimethylphthalate	7.831	163	1359047	100.00	ppm		100
56) Acenaphthylene	7.997	152	1985425	100.00	ppm		100
57) 2,6-Dinitrotoluene	7.933	165	324818	100.00	ppm		90
58) 3-Nitroaniline	8.174	138	375992	100.00	ppm		83
59) Acenaphthene	8.238	153	1206449	100.00	ppm		99
60) 2,4-Dinitrophenol	8.339	184	329862	200.00	ppm		91
61) 4-Nitrophenol	8.495	109	198312	100.00	ppm	#	29
62) Dibenzofuran	8.484	168	1657258	100.00	ppm		92
63) 2,4-Dinitrotoluene	8.511	165	439998	100.00	ppm		94
64) 2,3,4,6-Tetrachlorophenol	8.687	232	265857	100.00	ppm		98
65) Diethylphthalate	8.848	149	1405422	100.00	ppm		99
66) Fluorene	8.987	166	1320233	100.00	ppm		98
67) 4-Chlorophenyl-phenyle...	8.992	204	623331	100.00	ppm		100
68) 4-Nitroaniline	9.072	138	382202	100.00	ppm		96
70) 4,6-Dinitro-2-methylph...	9.126	198	252805	100.00	ppm	#	57
71) n-Nitrosodiphenylamine	9.185	169	923024	100.00	ppm		99
72) 1,2-Diphenylhydrazine	9.233	77	1628154	100.00	ppm		90
74) 4-Bromophenyl-phenylether	9.730	248	387868	100.00	ppm		97
75) Hexachlorobenzene	9.816	284	453129	100.00	ppm		95
76) Pentachlorophenol	10.147	266	334430	200.00	ppm		98
77) Phenanthrene	10.447	178	2004078	100.00	ppm		99
78) Anthracene	10.527	178	2036423	100.00	ppm		100
79) Carbazole	10.810	167	1883897	100.00	ppm		100

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84435.D
Acq On : 7 Jun 2016 10:26 am
Operator : ashleyn
Sample : ic3720-100
Misc : op94122,e2m3720
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 07 12:14:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:13:52 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
80) Di-n-butylphthalate	11.394	149	2425786	100.00	ppm	100
81) Fluoranthene	12.330	202	2100618	100.00	ppm	93
82) Octadecane	10.297	57	916063	100.00	ppm	93
84) Pyrene	12.683	202	2184526	100.00	ppm	99
86) Butylbenzylphthalate	13.790	149	1064244	100.00	ppm	87
87) Benzo[a]anthracene	14.619	228	1897872	100.00	ppm	99
88) 3,3'-Dichlorobenzidine	14.608	252	766840	100.00	ppm	99
89) Chrysene	14.678	228	1772403	100.00	ppm	99
90) bis(2-Ethylhexyl)phtha...	14.731	149	1212703	100.00	ppm	98
92) Di-n-octylphthalate	15.731	149	2009072	100.00	ppm	93
93) Benzo[b]fluoranthene	16.250	252	1623093	100.00	ppm	96
94) Benzo[k]fluoranthene	16.288	252	1425857	100.00	ppm	97
95) Benzo[a]pyrene	16.699	252	1336705	100.00	ppm	95
96) Indeno[1,2,3-cd]pyrene	18.550	276	1643935	100.00	ppm	91
97) Dibenz(a,h)acridine	18.127	279	1219459	100.00	ppm	99
98) Dibenz[a,h]anthracene	18.577	278	1453509	100.00	ppm	97
99) 7,12-Dimethylbenz(a)an...	16.229	256	729697	100.00	ppm	97
100) Benzo[g,h,i]perylene	19.063	276	1376824	100.00	ppm	95

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

7.6.3

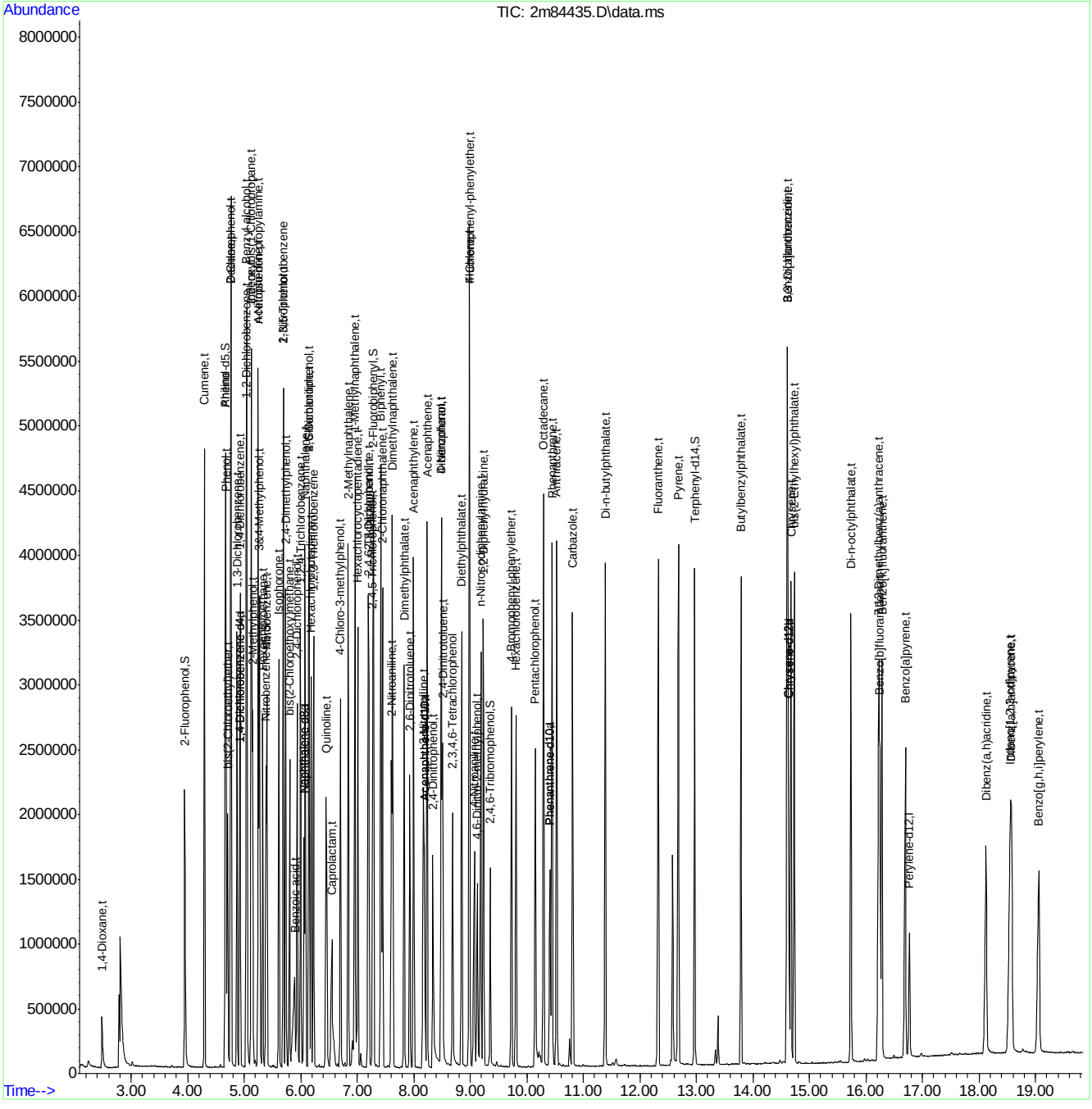
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84435.D
Acq On : 7 Jun 2016 10:26 am
Operator : ashleyn
Sample : ic3720-100
Misc : op94122,e2m3720
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 07 12:14:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:13:52 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84436.D
Acq On : 7 Jun 2016 10:52 am
Operator : ashleyn
Sample : ic3720-80
Misc : op94122,e2m3720
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 07 12:23:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:20:10 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.916	152	198404	40.00	ppm	-0.03
24) Naphthalene-d8	6.055	136	794410	40.00	ppm	-0.03
47) Acenaphthene-d10	8.189	164	458355	40.00	ppm	-0.03
69) Phenanthrene-d10	10.404	188	774117	40.00	ppm	-0.03
83) Chrysene-d12	14.629	240	687353	40.00	ppm	-0.02
91) Perylene-d12	16.769	264	504606	40.00	ppm	-0.02
101) 1,4-Dichlorobenzene-d4a	4.916	152	198404	40.00	ppm	-0.02
103) Acenaphthene-d10a	8.189	164	458355	40.00	ppm	-0.03
105) Chrysene-d12a	14.629	240	687353	40.00	ppm	-0.02
108) Phenanthrene-d10a	10.404	188	774117	40.00	ppm	-0.03
111) Naphthalene-d8a	6.055	136	794410	40.00	ppm	-0.03
113) Chrysene-d12b	14.629	240	687353	40.00	ppm	-0.02

System Monitoring Compounds						
5) 2-Fluorophenol	3.948	112	564429	81.25	ppm	-0.03
Spiked Amount 50.000			Recovery = 162.50%			
8) Phenol-d5	4.665	99	651252	72.02	ppm	-0.03
Spiked Amount 50.000			Recovery = 144.04%			
25) Nitrobenzene-d5	5.387	82	652883	72.45	ppm	-0.03
Spiked Amount 50.000			Recovery = 144.90%			
51) 2-Fluorobiphenyl	7.286	172	1110188	73.03	ppm	-0.03
Spiked Amount 50.000			Recovery = 146.06%			
73) 2,4,6-Tribromophenol	9.350	330	174847	80.66	ppm	-0.03
Spiked Amount 50.000			Recovery = 161.32%			
85) Terphenyl-d14	12.966	244	1255851	75.69	ppm	-0.03
Spiked Amount 50.000			Recovery = 151.38%			
107) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.482	88	200379	71.63	ppm		91
6) Indene	5.125	116	946605	69.58	ppm		99
7) Cumene	4.296	105	1444495	72.76	ppm		97
9) Phenol	4.675	94	818147	74.44	ppm		97
10) Aniline	4.665	93	778524	70.93	ppm	#	58
11) bis(2-Chloroethyl)ether	4.708	93	577030	72.87	ppm		94
12) 2-Chlorophenol	4.766	128	508993	67.38	ppm		86
13) Decane	4.766	43	482301	57.87	ppm		95
14) 1,3-Dichlorobenzene	4.868	146	610938	71.90	ppm		99
15) 1,4-Dichlorobenzene	4.927	146	617533	74.09	ppm		99
16) Benzyl alcohol	5.039	108	366542	75.52	ppm		98
17) 1,2-Dichlorobenzene	5.050	146	563723	70.80	ppm		99
18) Acetophenone	5.248	105	782650	72.02	ppm		92
19) 2-Methylphenol	5.146	108	544690	75.59	ppm		98
20) 2,2'-oxybis(1-Chloropr...	5.130	45	653671	65.65	ppm		82
21) 3&4-Methylphenol	5.269	108	591013	75.03	ppm		99
22) n-Nitroso-di-n-propyla...	5.248	70	422369	68.79	ppm		94
23) Hexachloroethane	5.328	201	201729	77.01	ppm		92

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84436.D
Acq On : 7 Jun 2016 10:52 am
Operator : ashleyn
Sample : ic3720-80
Misc : op94122,e2m3720
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 07 12:23:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:20:10 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
26) Nitrobenzene	5.403	77	688824	75.97	ppm		92
27) Quinoline	6.451	129	1125096	74.70	ppm		98
28) Isophorone	5.611	82	1162944	74.71	ppm		95
29) 2-Nitrophenol	5.686	139	299911	74.89	ppm		99
30) 2,4-Dimethylphenol	5.734	107	600005	75.89	ppm		95
31) Benzoic acid	5.884	105	407084	98.86	ppm		94
32) bis(2-Chloroethoxy)met...	5.804	93	654469	73.42	ppm		98
33) 2,4-Dichlorophenol	5.938	162	453686	75.52	ppm		93
34) 2,6-Dichlorophenol	6.152	162	443111	75.00	ppm		95
35) 1,3,5-Trichlorobenzene	5.692	180	505486	72.86	ppm		98
36) 1,2,4-Trichlorobenzene	5.997	180	496050	73.31	ppm		98
37) 1,2,3-Trichlorobenzene	6.227	180	483203	73.97	ppm		99
38) Naphthalene	6.077	128	1626985	72.09	ppm		99
39) 4-Chloroaniline	6.141	127	632409	74.73	ppm		95
40) 2,3-Dichloroaniline	7.189	161	546518	71.47	ppm		95
41) Caprolactam	6.547	55	277537	71.03	ppm		89
42) Hexachlorobutadiene	6.184	225	269499	71.17	ppm		98
43) 4-Chloro-3-methylphenol	6.703	107	543268	76.90	ppm		93
44) 2-Methylnaphthalene	6.836	141	911556	72.03	ppm		99
45) 1-Methylnaphthalene	6.959	141	950974	72.42	ppm		99
46) Dimethylnaphthalene	7.623	156	991511	73.47	ppm		98
48) Hexachlorocyclopentadiene	7.013	237	393304	309.80	ppm		98
49) 2,4,6-Trichlorophenol	7.205	196	324451	74.18	ppm		96
50) 2,4,5-Trichlorophenol	7.270	196	337952	75.65	ppm		99
52) 2-Chloronaphthalene	7.446	162	1010658	73.95	ppm		99
53) Biphenyl	7.419	154	1346264	73.42	ppm		100
54) 2-Nitroaniline	7.601	65	404546	74.48	ppm		84
55) Dimethylphthalate	7.831	163	1145858	74.16	ppm		99
56) Acenaphthylene	7.997	152	1701144	74.33	ppm		99
57) 2,6-Dinitrotoluene	7.927	165	272609	79.02	ppm		96
58) 3-Nitroaniline	8.168	138	320295	82.41	ppm		80
59) Acenaphthene	8.238	153	1036454	73.82	ppm		99
60) 2,4-Dinitrophenol	8.339	184	267496	249.92	ppm		87
61) 4-Nitrophenol	8.494	109	164925	95.09	ppm	#	23
62) Dibenzofuran	8.484	168	1424852	72.75	ppm		91
63) 2,4-Dinitrotoluene	8.510	165	376135	77.77	ppm		88
64) 2,3,4,6-Tetrachlorophenol	8.687	232	220357	80.36	ppm		98
65) Diethylphthalate	8.847	149	1199821	73.67	ppm		98
66) Fluorene	8.981	166	1142130	74.02	ppm		99
67) 4-Chlorophenyl-phenyle...	8.986	204	538251	75.31	ppm		98
68) 4-Nitroaniline	9.067	138	326719	80.91	ppm		96
70) 4,6-Dinitro-2-methylph...	9.120	198	210099	140.76	ppm	#	56
71) n-Nitrosodiphenylamine	9.184	169	784542	74.86	ppm		99
72) 1,2-Diphenylhydrazine	9.232	77	1392923	78.62	ppm		90
74) 4-Bromophenyl-phenylether	9.725	248	329924	76.70	ppm		99
75) Hexachlorobenzene	9.810	284	387760	78.64	ppm		99
76) Pentachlorophenol	10.147	266	269652	250.01	ppm		98
77) Phenanthrene	10.447	178	1715919	73.68	ppm		99
78) Anthracene	10.527	178	1746299	74.98	ppm		99
79) Carbazole	10.810	167	1591589	74.27	ppm		100

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84436.D
Acq On : 7 Jun 2016 10:52 am
Operator : ashleyn
Sample : ic3720-80
Misc : op94122,e2m3720
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 07 12:23:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:20:10 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) Di-n-butylphthalate	11.393	149	2069074	75.48 ppm	99
81) Fluoranthene	12.324	202	1792212	76.37 ppm	93
82) Octadecane	10.297	57	798689	72.00 ppm	95
84) Pyrene	12.682	202	1845881	74.90 ppm	99
86) Butylbenzylphthalate	13.790	149	913243	74.60 ppm	85
87) Benzo[a]anthracene	14.613	228	1654123	71.61 ppm	100
88) 3,3'-Dichlorobenzidine	14.608	252	666257	80.91 ppm	98
89) Chrysene	14.672	228	1534658	72.70 ppm	98
90) bis(2-Ethylhexyl)phtha...	14.731	149	1071269	66.92 ppm	98
92) Di-n-octylphthalate	15.731	149	1671853	75.84 ppm	94
93) Benzo[b]fluoranthene	16.245	252	1328307	75.95 ppm	96
94) Benzo[k]fluoranthene	16.282	252	1236849	79.75 ppm	97
95) Benzo[a]pyrene	16.694	252	1115909	76.51 ppm	96
96) Indeno[1,2,3-cd]pyrene	18.544	276	1365966	78.55 ppm	92
97) Dibenz(a,h)acridine	18.122	279	1016875	78.43 ppm	98
98) Dibenz[a,h]anthracene	18.571	278	1201037	80.57 ppm	96
99) 7,12-Dimethylbenz(a)an...	16.223	256	605197	83.18 ppm	98
100) Benzo[g,h,i]perylene	19.058	276	1150183	78.05 ppm	95

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

7.6.4

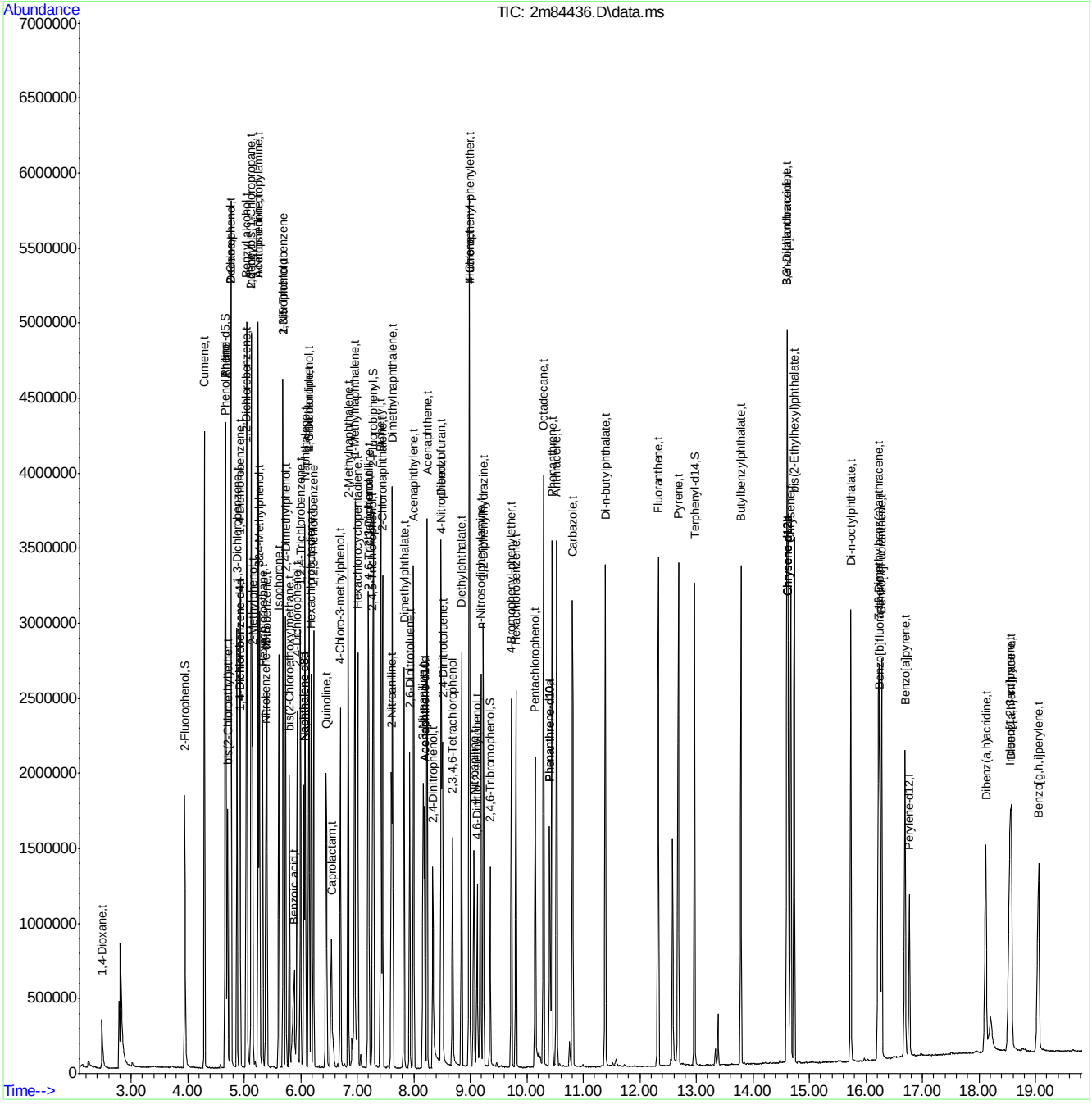
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84436.D
Acq On : 7 Jun 2016 10:52 am
Operator : ashleyn
Sample : ic3720-80
Misc : op94122,e2m3720
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 07 12:23:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:20:10 2016
Response via : Initial Calibration



M2M3720.M Tue Jun 07 12:23:18 2016 Page: 4

SGS 448 of 1048 ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84437.D
Acq On : 7 Jun 2016 11:18 am
Operator : ashleyn
Sample : icc3720-50
Misc : op94122,e2m3720
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 07 12:24:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:23:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.911	152	199484	40.00	ppm	-0.03
24) Naphthalene-d8	6.056	136	799622	40.00	ppm	-0.03
47) Acenaphthene-d10	8.184	164	465905	40.00	ppm	-0.04
69) Phenanthrene-d10	10.404	188	788910	40.00	ppm	-0.03
83) Chrysene-d12	14.624	240	724302	40.00	ppm	-0.03
91) Perylene-d12	16.769	264	518225	40.00	ppm	-0.02
101) 1,4-Dichlorobenzene-d4a	4.911	152	199484	40.00	ppm	-0.03
103) Acenaphthene-d10a	8.184	164	465905	40.00	ppm	-0.03
105) Chrysene-d12a	14.624	240	724302	40.00	ppm	-0.02
108) Phenanthrene-d10a	10.404	188	788910	40.00	ppm	-0.03
111) Naphthalene-d8a	6.056	136	799622	40.00	ppm	-0.03
113) Chrysene-d12b	14.624	240	724302	40.00	ppm	-0.02

System Monitoring Compounds						
5) 2-Fluorophenol	3.948	112	354083	50.50	ppm	-0.03
Spiked Amount 50.000			Recovery = 101.00%			
8) Phenol-d5	4.665	99	432579	48.79	ppm	-0.03
Spiked Amount 50.000			Recovery = 97.58%			
25) Nitrobenzene-d5	5.382	82	428039	48.33	ppm	-0.03
Spiked Amount 50.000			Recovery = 96.66%			
51) 2-Fluorobiphenyl	7.280	172	710492	47.00	ppm	-0.04
Spiked Amount 50.000			Recovery = 94.00%			
73) 2,4,6-Tribromophenol	9.350	330	108421	48.98	ppm	-0.03
Spiked Amount 50.000			Recovery = 97.96%			
85) Terphenyl-d14	12.966	244	803088	46.56	ppm	-0.03
Spiked Amount 50.000			Recovery = 93.12%			
107) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.488	88	124555	45.47	ppm		91
6) Indene	5.119	116	626054	47.31	ppm		100
7) Cumene	4.296	105	930232	47.68	ppm		97
9) Phenol	4.676	94	533928	49.17	ppm		98
10) Aniline	4.660	93	518480	48.35	ppm	#	56
11) bis(2-Chloroethyl)ether	4.702	93	369571	47.48	ppm		96
12) 2-Chlorophenol	4.766	128	345228	47.32	ppm		85
13) Decane	4.761	43	346083	44.37	ppm		98
14) 1,3-Dichlorobenzene	4.868	146	394064	47.32	ppm		99
15) 1,4-Dichlorobenzene	4.927	146	398032	48.39	ppm		100
16) Benzyl alcohol	5.034	108	243841	50.68	ppm		97
17) 1,2-Dichlorobenzene	5.050	146	375286	48.27	ppm		99
18) Acetophenone	5.248	105	520611	48.86	ppm		90
19) 2-Methylphenol	5.141	108	345278	48.32	ppm		99
20) 2,2'-oxybis(1-Chloropr...	5.125	45	453692	47.45	ppm		89
21) 3&4-Methylphenol	5.264	108	377403	48.41	ppm		99
22) n-Nitroso-di-n-propyla...	5.242	70	281942	47.33	ppm		93
23) Hexachloroethane	5.328	201	127887	49.02	ppm		88

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84437.D
Acq On : 7 Jun 2016 11:18 am
Operator : ashleyn
Sample : icc3720-50
Misc : op94122,e2m3720
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 07 12:24:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:23:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
26) Nitrobenzene	5.398	77	440144	48.84	ppm		93
27) Quinoline	6.441	129	713828	47.88	ppm		98
28) Isophorone	5.606	82	745239	48.36	ppm		95
29) 2-Nitrophenol	5.686	139	200921	50.65	ppm		95
30) 2,4-Dimethylphenol	5.729	107	383780	48.85	ppm		97
31) Benzoic acid	5.863	105	246470	56.15	ppm		89
32) bis(2-Chloroethoxy)met...	5.799	93	417891	47.55	ppm		98
33) 2,4-Dichlorophenol	5.932	162	292971	49.14	ppm		95
34) 2,6-Dichlorophenol	6.146	162	285519	48.78	ppm		96
35) 1,3,5-Trichlorobenzene	5.686	180	331187	48.51	ppm		99
36) 1,2,4-Trichlorobenzene	5.991	180	317547	47.62	ppm		96
37) 1,2,3-Trichlorobenzene	6.227	180	310197	48.08	ppm		98
38) Naphthalene	6.077	128	1053153	47.54	ppm		99
39) 4-Chloroaniline	6.141	127	414236	49.44	ppm		92
40) 2,3-Dichloroaniline	7.189	161	355039	47.39	ppm		92
41) Caprolactam	6.532	55	174363	45.61	ppm		89
42) Hexachlorobutadiene	6.184	225	170639	46.04	ppm		100
43) 4-Chloro-3-methylphenol	6.697	107	346404	49.19	ppm		91
44) 2-Methylnaphthalene	6.836	141	585868	47.17	ppm		99
45) 1-Methylnaphthalene	6.954	141	609979	47.27	ppm		100
46) Dimethylnaphthalene	7.623	156	636232	47.81	ppm		97
48) Hexachlorocyclopentadiene	7.013	237	212268	125.37	ppm		98
49) 2,4,6-Trichlorophenol	7.200	196	207635	47.57	ppm		100
50) 2,4,5-Trichlorophenol	7.264	196	214891	47.97	ppm		98
52) 2-Chloronaphthalene	7.441	162	644365	47.28	ppm		99
53) Biphenyl	7.414	154	860423	47.13	ppm		99
54) 2-Nitroaniline	7.596	65	258023	47.55	ppm		85
55) Dimethylphthalate	7.826	163	730489	47.37	ppm		99
56) Acenaphthylene	7.992	152	1084888	47.48	ppm		99
57) 2,6-Dinitrotoluene	7.922	165	170769	48.85	ppm		93
58) 3-Nitroaniline	8.163	138	204281	51.32	ppm		82
59) Acenaphthene	8.232	153	656775	46.92	ppm		98
60) 2,4-Dinitrophenol	8.334	184	148746	115.15	ppm		89
61) 4-Nitrophenol	8.489	109	100837	54.62	ppm	#	41
62) Dibenzofuran	8.478	168	913264	46.94	ppm		88
63) 2,4-Dinitrotoluene	8.505	165	240819	49.33	ppm		88
64) 2,3,4,6-Tetrachlorophenol	8.682	232	136269	48.83	ppm		97
65) Diethylphthalate	8.842	149	766188	47.21	ppm		97
66) Fluorene	8.981	166	747063	48.54	ppm		99
67) 4-Chlorophenyl-phenyle...	8.987	204	351400	49.09	ppm		98
68) 4-Nitroaniline	9.056	138	205316	49.88	ppm		97
70) 4,6-Dinitro-2-methylph...	9.115	198	125306	69.23	ppm		88
71) n-Nitrosodiphenylamine	9.179	169	504817	48.04	ppm		99
72) 1,2-Diphenylhydrazine	9.227	77	896183	49.85	ppm		92
74) 4-Bromophenyl-phenylether	9.725	248	207475	47.82	ppm		96
75) Hexachlorobenzene	9.805	284	242717	48.51	ppm		98
76) Pentachlorophenol	10.142	266	148718	118.62	ppm		95
77) Phenanthrene	10.441	178	1101861	47.36	ppm		100
78) Anthracene	10.522	178	1105833	47.33	ppm		99
79) Carbazole	10.805	167	1015719	47.36	ppm		99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84437.D
Acq On : 7 Jun 2016 11:18 am
Operator : ashleyn
Sample : icc3720-50
Misc : op94122,e2m3720
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 07 12:24:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:23:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) Di-n-butylphthalate	11.388	149	1318979	47.89 ppm	100
81) Fluoranthene	12.319	202	1142372	48.32 ppm	95
82) Octadecane	10.292	57	530288	48.11 ppm	95
84) Pyrene	12.677	202	1183754	46.32 ppm	100
86) Butylbenzylphthalate	13.784	149	588467	46.40 ppm	87
87) Benzo[a]anthracene	14.608	228	1069161	45.11 ppm	99
88) 3,3'-Dichlorobenzidine	14.603	252	430896	49.52 ppm	98
89) Chrysene	14.667	228	1010604	46.49 ppm	98
90) bis(2-Ethylhexyl)phtha...	14.731	149	745481	46.07 ppm	98
92) Di-n-octylphthalate	15.726	149	1068481	47.82 ppm	94
93) Benzo[b]fluoranthene	16.239	252	824172	46.48 ppm	94
94) Benzo[k]fluoranthene	16.277	252	737529	46.34 ppm	98
95) Benzo[a]pyrene	16.689	252	694022	46.84 ppm	96
96) Indeno[1,2,3-cd]pyrene	18.529	276	831366	46.76 ppm	93
97) Dibenz(a,h)acridine	18.111	279	625905	47.24 ppm	98
98) Dibenz[a,h]anthracene	18.561	278	721097	47.02 ppm	96
99) 7,12-Dimethylbenz(a)an...	16.218	256	368192	48.79 ppm	96
100) Benzo[g,h,i]perylene	19.042	276	707275	47.02 ppm	93

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

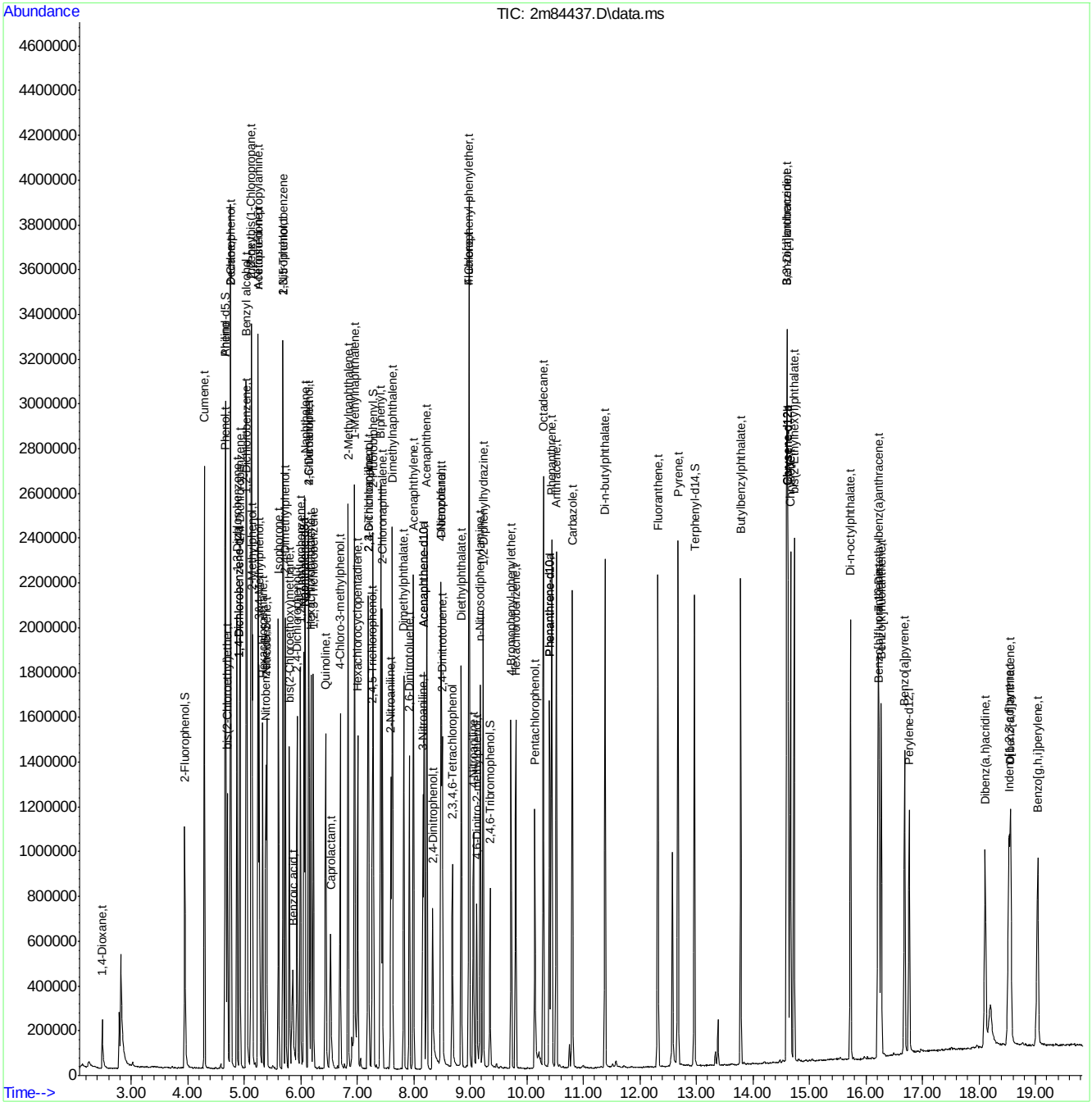
7.6.5

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84437.D
Acq On : 7 Jun 2016 11:18 am
Operator : ashleyn
Sample : icc3720-50
Misc : op94122,e2m3720
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 07 12:24:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:23:29 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84438.D
Acq On : 7 Jun 2016 11:45 am
Operator : ashleyn
Sample : ic3720-25
Misc : op94122,e2m3720
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 07 12:25:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:25:11 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.911	152	200990	40.00 ppm	0.00
24) Naphthalene-d8	6.055	136	782001	40.00 ppm	0.00
47) Acenaphthene-d10	8.184	164	449406	40.00 ppm	0.00
69) Phenanthrene-d10	10.399	188	766969	40.00 ppm	0.00
83) Chrysene-d12	14.624	240	713887	40.00 ppm	0.00
91) Perylene-d12	16.763	264	504043	40.00 ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.911	152	200990	40.00 ppm	0.00
103) Acenaphthene-d10a	8.184	164	449406	40.00 ppm	0.00
105) Chrysene-d12a	14.624	240	713887	40.00 ppm	0.00
108) Phenanthrene-d10a	10.399	188	766969	40.00 ppm	0.00
111) Naphthalene-d8a	6.055	136	782001	40.00 ppm	0.00
113) Chrysene-d12b	14.624	240	713882	40.00 ppm	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	3.948	112	175095	24.74 ppm	0.00
Spiked Amount 50.000			Recovery	= 49.48%	
8) Phenol-d5	4.665	99	218538	24.58 ppm	0.00
Spiked Amount 50.000			Recovery	= 49.16%	
25) Nitrobenzene-d5	5.382	82	208103	24.19 ppm	0.00
Spiked Amount 50.000			Recovery	= 48.38%	
51) 2-Fluorobiphenyl	7.280	172	353246	24.52 ppm	0.00
Spiked Amount 50.000			Recovery	= 49.04%	
73) 2,4,6-Tribromophenol	9.345	330	51652	24.10 ppm	0.00
Spiked Amount 50.000			Recovery	= 48.20%	
85) Terphenyl-d14	12.961	244	382217	22.80 ppm	0.00
Spiked Amount 50.000			Recovery	= 45.60%	
107) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
110) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) 1,4-Dioxane	2.488	88	62760	23.16 ppm	96
6) Indene	5.119	116	315801	23.94 ppm	98
7) Cumene	4.296	105	472321	24.25 ppm	99
9) Phenol	4.676	94	271946	24.94 ppm	97
10) Aniline	4.659	93	270281	25.18 ppm	99
11) bis(2-Chloroethyl)ether	4.702	93	182343	23.49 ppm	99
12) 2-Chlorophenol	4.766	128	175634	24.15 ppm	98
13) Decane	4.761	43	190972	24.86 ppm	97
14) 1,3-Dichlorobenzene	4.868	146	197874	23.84 ppm	100
15) 1,4-Dichlorobenzene	4.927	146	201645	24.49 ppm	100
16) Benzyl alcohol	5.034	108	125177	25.75 ppm	94
17) 1,2-Dichlorobenzene	5.050	146	187440	24.09 ppm	100
18) Acetophenone	5.242	105	263503	24.66 ppm	98
19) 2-Methylphenol	5.136	108	175486	24.54 ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.125	45	238409	25.00 ppm	97
21) 3&4-Methylphenol	5.264	108	188496	24.15 ppm	100
22) n-Nitroso-di-n-propyla...	5.237	70	143759	24.21 ppm	99
23) Hexachloroethane	5.328	201	62643	23.92 ppm	97

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84438.D
Acq On : 7 Jun 2016 11:45 am
Operator : ashleyn
Sample : ic3720-25
Misc : op94122,e2m3720
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 07 12:25:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:25:11 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
26) Nitrobenzene	5.398	77	220844	25.17 ppm		96
27) Quinoline	6.430	129	348437	24.10 ppm		98
28) Isophorone	5.601	82	371300	24.80 ppm		99
29) 2-Nitrophenol	5.681	139	99841	25.67 ppm		89
30) 2,4-Dimethylphenol	5.729	107	185711	24.28 ppm		96
31) Benzoic acid	5.842	105	108913	24.76 ppm		99
32) bis(2-Chloroethoxy)met...	5.799	93	213638	25.10 ppm		100
33) 2,4-Dichlorophenol	5.932	162	142893	24.59 ppm		96
34) 2,6-Dichlorophenol	6.146	162	138765	24.36 ppm		99
35) 1,3,5-Trichlorobenzene	5.686	180	162987	24.56 ppm		98
36) 1,2,4-Trichlorobenzene	5.991	180	158623	24.56 ppm		99
37) 1,2,3-Trichlorobenzene	6.221	180	152352	24.33 ppm		96
38) Naphthalene	6.077	128	522279	24.35 ppm		99
39) 4-Chloroaniline	6.136	127	207706	25.41 ppm		99
40) 2,3-Dichloroaniline	7.184	161	172889	23.85 ppm		98
41) Caprolactam	6.510	55	86094	23.44 ppm		98
42) Hexachlorobutadiene	6.184	225	84309	23.63 ppm		97
43) 4-Chloro-3-methylphenol	6.692	107	168009	24.47 ppm		100
44) 2-Methylnaphthalene	6.836	141	292296	24.34 ppm		99
45) 1-Methylnaphthalene	6.954	141	308519	24.72 ppm		98
46) Dimethylnaphthalene	7.617	156	316327	24.52 ppm		99
48) Hexachlorocyclopentadiene	7.008	237	74115	42.67 ppm		96
49) 2,4,6-Trichlorophenol	7.195	196	101613	24.37 ppm		100
50) 2,4,5-Trichlorophenol	7.264	196	104331	24.34 ppm		98
52) 2-Chloronaphthalene	7.441	162	317818	24.44 ppm		98
53) Biphenyl	7.409	154	425052	24.42 ppm		100
54) 2-Nitroaniline	7.591	65	129774	25.04 ppm		96
55) Dimethylphthalate	7.821	163	363246	24.68 ppm		99
56) Acenaphthylene	7.992	152	533977	24.47 ppm		100
57) 2,6-Dinitrotoluene	7.917	165	83810	24.97 ppm		97
58) 3-Nitroaniline	8.157	138	96960	25.12 ppm		99
59) Acenaphthene	8.227	153	322186	24.16 ppm		98
60) 2,4-Dinitrophenol	8.329	184	55128	42.63 ppm		92
61) 4-Nitrophenol	8.489	109	45322	24.99 ppm	#	71
62) Dibenzofuran	8.478	168	448913	24.22 ppm		98
63) 2,4-Dinitrotoluene	8.500	165	113954	24.26 ppm		97
64) 2,3,4,6-Tetrachlorophenol	8.682	232	64901	24.23 ppm		95
65) Diethylphthalate	8.837	149	374494	24.19 ppm		98
66) Fluorene	8.976	166	367908	24.93 ppm		99
67) 4-Chlorophenyl-phenyle...	8.981	204	170023	24.71 ppm		98
68) 4-Nitroaniline	9.045	138	98658	24.86 ppm		99
70) 4,6-Dinitro-2-methylph...	9.110	198	54933	28.99 ppm		94
71) n-Nitrosodiphenylamine	9.174	169	243506	24.02 ppm		98
72) 1,2-Diphenylhydrazine	9.222	77	443413	25.38 ppm		99
74) 4-Bromophenyl-phenylether	9.719	248	100139	23.95 ppm		97
75) Hexachlorobenzene	9.805	284	116571	24.11 ppm		96
76) Pentachlorophenol	10.142	266	58722	46.45 ppm		97
77) Phenanthrene	10.436	178	534395	23.88 ppm		99
78) Anthracene	10.516	178	540761	24.06 ppm		99
79) Carbazole	10.800	167	489435	23.72 ppm		99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84438.D
Acq On : 7 Jun 2016 11:45 am
Operator : ashleyn
Sample : ic3720-25
Misc : op94122,e2m3720
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 07 12:25:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:25:11 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) Di-n-butylphthalate	11.383	149	639834	24.10 ppm	99
81) Fluoranthene	12.319	202	546979	23.96 ppm	99
82) Octadecane	10.292	57	265430	24.96 ppm	99
84) Pyrene	12.672	202	574009	23.13 ppm	100
86) Butylbenzylphthalate	13.784	149	283846	23.04 ppm	100
87) Benzo[a]anthracene	14.603	228	528513	23.07 ppm	98
88) 3,3'-Dichlorobenzidine	14.597	252	211209	24.67 ppm	99
89) Chrysene	14.661	228	500629	23.70 ppm	98
90) bis(2-Ethylhexyl)phtha...	14.726	149	375663	23.93 ppm	99
92) Di-n-octylphthalate	15.720	149	547136	25.40 ppm	99
93) Benzo[b]fluoranthene	16.229	252	379817	22.34 ppm	98
94) Benzo[k]fluoranthene	16.266	252	358815	23.52 ppm	99
95) Benzo[a]pyrene	16.683	252	323014	22.70 ppm	100
96) Indeno[1,2,3-cd]pyrene	18.518	276	392365	22.99 ppm	98
97) Dibenz(a,h)acridine	18.101	279	288272	22.62 ppm	98
98) Dibenz[a,h]anthracene	18.545	278	337554	22.90 ppm	97
99) 7,12-Dimethylbenz(a)an...	16.213	256	172848	23.66 ppm	96
100) Benzo[g,h,i]perylene	19.026	276	335037	23.18 ppm	97

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

7.6.6

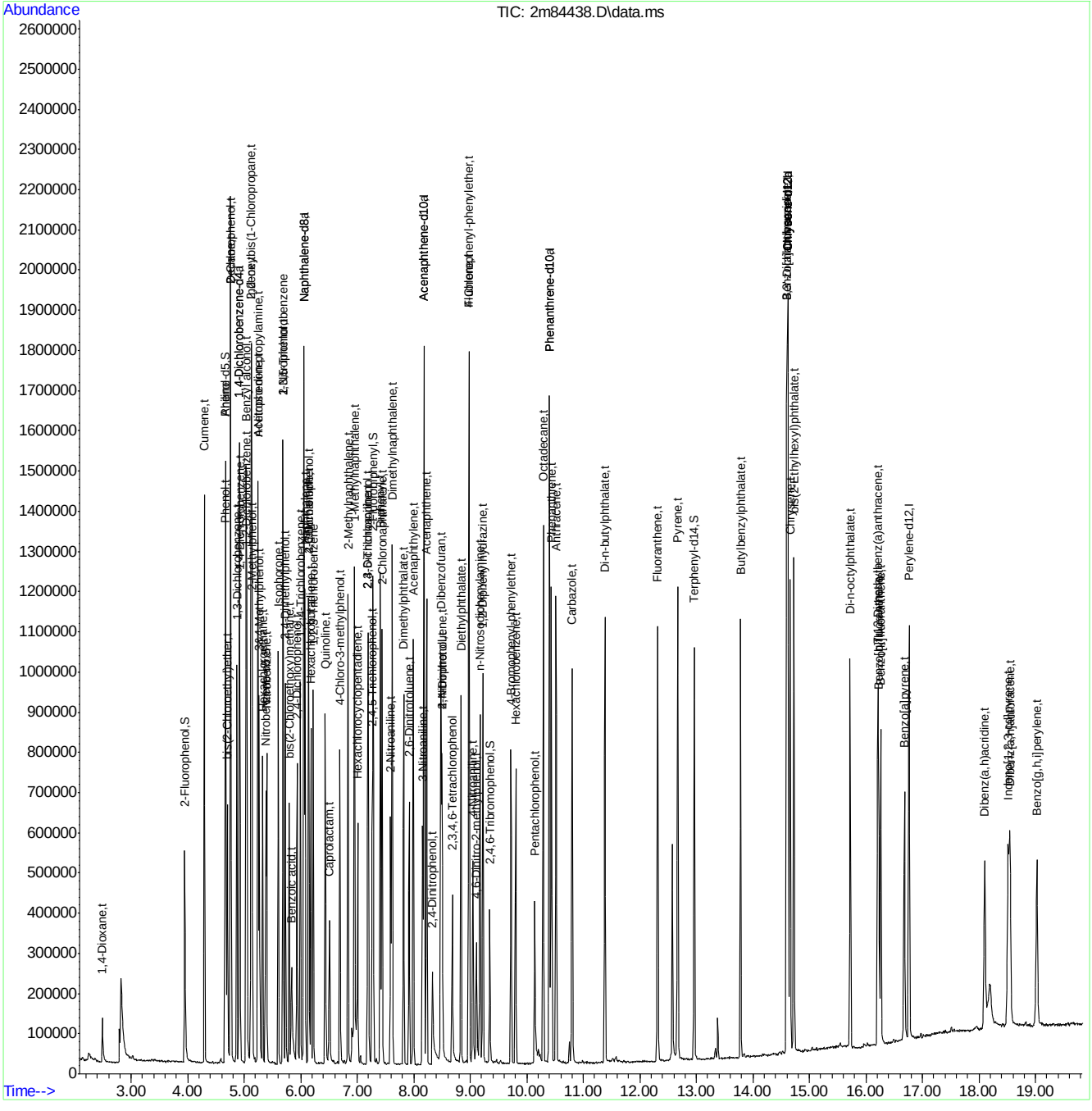
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84438.D
Acq On : 7 Jun 2016 11:45 am
Operator : ashleyn
Sample : ic3720-25
Misc : op94122,e2m3720
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 07 12:25:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:25:11 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84439.D
Acq On : 7 Jun 2016 12:11 pm
Operator : ashleyn
Sample : ic3720-10
Misc : op94122,e2m3720
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 07 12:38:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:26:23 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.911	152	194804	40.00	ppm	0.00
24) Naphthalene-d8	6.050	136	772128	40.00	ppm	0.00
47) Acenaphthene-d10	8.184	164	451145	40.00	ppm	0.00
69) Phenanthrene-d10	10.398	188	766272	40.00	ppm	0.00
83) Chrysene-d12	14.619	240	702566	40.00	ppm	0.00
91) Perylene-d12	16.763	264	485419	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.911	152	194804	40.00	ppm	0.00
103) Acenaphthene-d10a	8.184	164	451145	40.00	ppm	0.00
105) Chrysene-d12a	14.619	240	702566	40.00	ppm	0.00
108) Phenanthrene-d10a	10.398	188	766272	40.00	ppm	0.00
111) Naphthalene-d8a	6.050	136	772128	40.00	ppm	0.00
113) Chrysene-d12b	14.619	240	702566	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	3.948	112	69583	10.16	ppm	0.00
Spiked Amount 50.000			Recovery = 20.32%			
8) Phenol-d5	4.665	99	88959	10.35	ppm	0.00
Spiked Amount 50.000			Recovery = 20.70%			
25) Nitrobenzene-d5	5.376	82	86772	10.27	ppm	0.00
Spiked Amount 50.000			Recovery = 20.54%			
51) 2-Fluorobiphenyl	7.280	172	146257	10.15	ppm	0.00
Spiked Amount 50.000			Recovery = 20.30%			
73) 2,4,6-Tribromophenol	9.345	330	21325	10.02	ppm	0.00
Spiked Amount 50.000			Recovery = 20.04%			
85) Terphenyl-d14	12.960	244	155759	9.58	ppm	0.00
Spiked Amount 50.000			Recovery = 19.16%			
107) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.493	88	23312	8.99	ppm	95
6) Indene	5.119	116	133470	10.51	ppm	100
7) Cumene	4.296	105	191684	10.21	ppm	99
9) Phenol	4.675	94	110868	10.49	ppm	90
10) Aniline	4.659	93	113776	10.92	ppm	98
11) bis(2-Chloroethyl)ether	4.702	93	76008	10.20	ppm	99
12) 2-Chlorophenol	4.766	128	72907	10.40	ppm	99
13) Decane	4.761	43	81997	11.02	ppm	98
14) 1,3-Dichlorobenzene	4.868	146	80666	10.11	ppm	96
15) 1,4-Dichlorobenzene	4.927	146	81423	10.24	ppm	99
16) Benzyl alcohol	5.034	108	51122	10.80	ppm	90
17) 1,2-Dichlorobenzene	5.050	146	76420	10.20	ppm	96
18) Acetophenone	5.242	105	110387	10.68	ppm	99
19) 2-Methylphenol	5.135	108	71944	10.41	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.125	45	102729	11.12	ppm	96
21) 3&4-Methylphenol	5.264	108	77101	10.25	ppm	99
22) n-Nitroso-di-n-propyla...	5.232	70	62426	10.90	ppm	95
23) Hexachloroethane	5.328	201	25491	10.12	ppm	96

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84439.D
Acq On : 7 Jun 2016 12:11 pm
Operator : ashleyn
Sample : ic3720-10
Misc : op94122,e2m3720
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 07 12:38:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:26:23 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
26) Nitrobenzene	5.398	77	89859	10.36	ppm		94
27) Quinoline	6.430	129	142519	10.04	ppm		97
28) Isophorone	5.601	82	153713	10.41	ppm		98
29) 2-Nitrophenol	5.681	139	40395	10.47	ppm		93
30) 2,4-Dimethylphenol	5.724	107	77476	10.31	ppm		97
31) Benzoic acid	5.825	105	37560	8.66	ppm		95
32) bis(2-Chloroethoxy)met...	5.793	93	87235	10.37	ppm		99
33) 2,4-Dichlorophenol	5.932	162	59125	10.33	ppm		98
34) 2,6-Dichlorophenol	6.146	162	58368	10.42	ppm		97
35) 1,3,5-Trichlorobenzene	5.686	180	67162	10.28	ppm		98
36) 1,2,4-Trichlorobenzene	5.991	180	64786	10.19	ppm		99
37) 1,2,3-Trichlorobenzene	6.221	180	62862	10.21	ppm		100
38) Naphthalene	6.071	128	219178	10.39	ppm		99
39) 4-Chloroaniline	6.136	127	86863	10.73	ppm		97
40) 2,3-Dichloroaniline	7.184	161	71604	10.08	ppm		94
41) Caprolactam	6.494	55	36113	10.06	ppm		98
42) Hexachlorobutadiene	6.184	225	34804	9.97	ppm		95
43) 4-Chloro-3-methylphenol	6.692	107	70131	10.38	ppm		99
44) 2-Methylnaphthalene	6.831	141	119170	10.09	ppm		99
45) 1-Methylnaphthalene	6.949	141	129081	10.49	ppm		97
46) Dimethylnaphthalene	7.617	156	131121	10.33	ppm		98
48) Hexachlorocyclopentadiene	7.007	237	16467	9.73	ppm		95
49) 2,4,6-Trichlorophenol	7.195	196	40967	9.83	ppm		98
50) 2,4,5-Trichlorophenol	7.264	196	43195	10.08	ppm		96
52) 2-Chloronaphthalene	7.441	162	131985	10.15	ppm		96
53) Biphenyl	7.409	154	176124	10.12	ppm		99
54) 2-Nitroaniline	7.590	65	52187	10.03	ppm		91
55) Dimethylphthalate	7.820	163	149934	10.17	ppm		100
56) Acenaphthylene	7.986	152	218111	9.99	ppm		99
57) 2,6-Dinitrotoluene	7.917	165	34094	10.12	ppm		95
58) 3-Nitroaniline	8.157	138	40666	10.49	ppm		99
59) Acenaphthene	8.227	153	133746	10.05	ppm		98
60) 2,4-Dinitrophenol	8.339	184	15472	12.28	ppm		83
61) 4-Nitrophenol	8.500	109	17118	9.40	ppm	#	29
62) Dibenzofuran	8.473	168	184058	9.94	ppm		99
63) 2,4-Dinitrotoluene	8.500	165	46353	9.88	ppm		93
64) 2,3,4,6-Tetrachlorophenol	8.682	232	24442	9.14	ppm		95
65) Diethylphthalate	8.831	149	156390	10.12	ppm		98
66) Fluorene	8.976	166	153565	10.37	ppm		99
67) 4-Chlorophenyl-phenyle...	8.981	204	72136	10.47	ppm		95
68) 4-Nitroaniline	9.045	138	41179	10.35	ppm		95
70) 4,6-Dinitro-2-methylph...	9.109	198	19011	9.78	ppm		98
71) n-Nitrosodiphenylamine	9.168	169	100539	9.99	ppm		99
72) 1,2-Diphenylhydrazine	9.222	77	183198	10.47	ppm		99
74) 4-Bromophenyl-phenylether	9.719	248	41432	9.99	ppm		94
75) Hexachlorobenzene	9.799	284	48662	10.13	ppm		98
76) Pentachlorophenol	10.142	266	17210	13.79	ppm		92
77) Phenanthrene	10.436	178	220670	9.94	ppm		96
78) Anthracene	10.516	178	224889	10.08	ppm		99
79) Carbazole	10.800	167	200842	9.83	ppm		98

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84439.D
Acq On : 7 Jun 2016 12:11 pm
Operator : ashleyn
Sample : ic3720-10
Misc : op94122,e2m3720
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 07 12:38:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:26:23 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) Di-n-butylphthalate	11.383	149	260022	9.86 ppm	100
81) Fluoranthene	12.313	202	222926	9.84 ppm	95
82) Octadecane	10.292	57	112438	10.59 ppm	99
84) Pyrene	12.672	202	236523	9.81 ppm	99
86) Butylbenzylphthalate	13.779	149	115950	9.69 ppm	99
87) Benzo[a]anthracene	14.603	228	217401	9.77 ppm	98
88) 3,3'-Dichlorobenzidine	14.597	252	84833	10.09 ppm	96
89) Chrysene	14.656	228	207744	10.08 ppm	98
90) bis(2-Ethylhexyl)phtha...	14.726	149	161516	10.53 ppm	97
92) Di-n-octylphthalate	15.720	149	255439	12.28 ppm	99
93) Benzo[b]fluoranthene	16.223	252	161819	10.06 ppm	98
94) Benzo[k]fluoranthene	16.261	252	152561	10.49 ppm	98
95) Benzo[a]pyrene	16.678	252	132034	9.79 ppm	99
96) Indeno[1,2,3-cd]pyrene	18.512	276	152016	9.37 ppm	99
97) Dibenz(a,h)acridine	18.101	279	111947	9.27 ppm	94
98) Dibenz[a,h]anthracene	18.539	278	127066	9.08 ppm	95
99) 7,12-Dimethylbenz(a)an...	16.202	256	75173	10.78 ppm	97
100) Benzo[g,h,i]perylene	19.020	276	133449	9.70 ppm	98

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

7.6.7

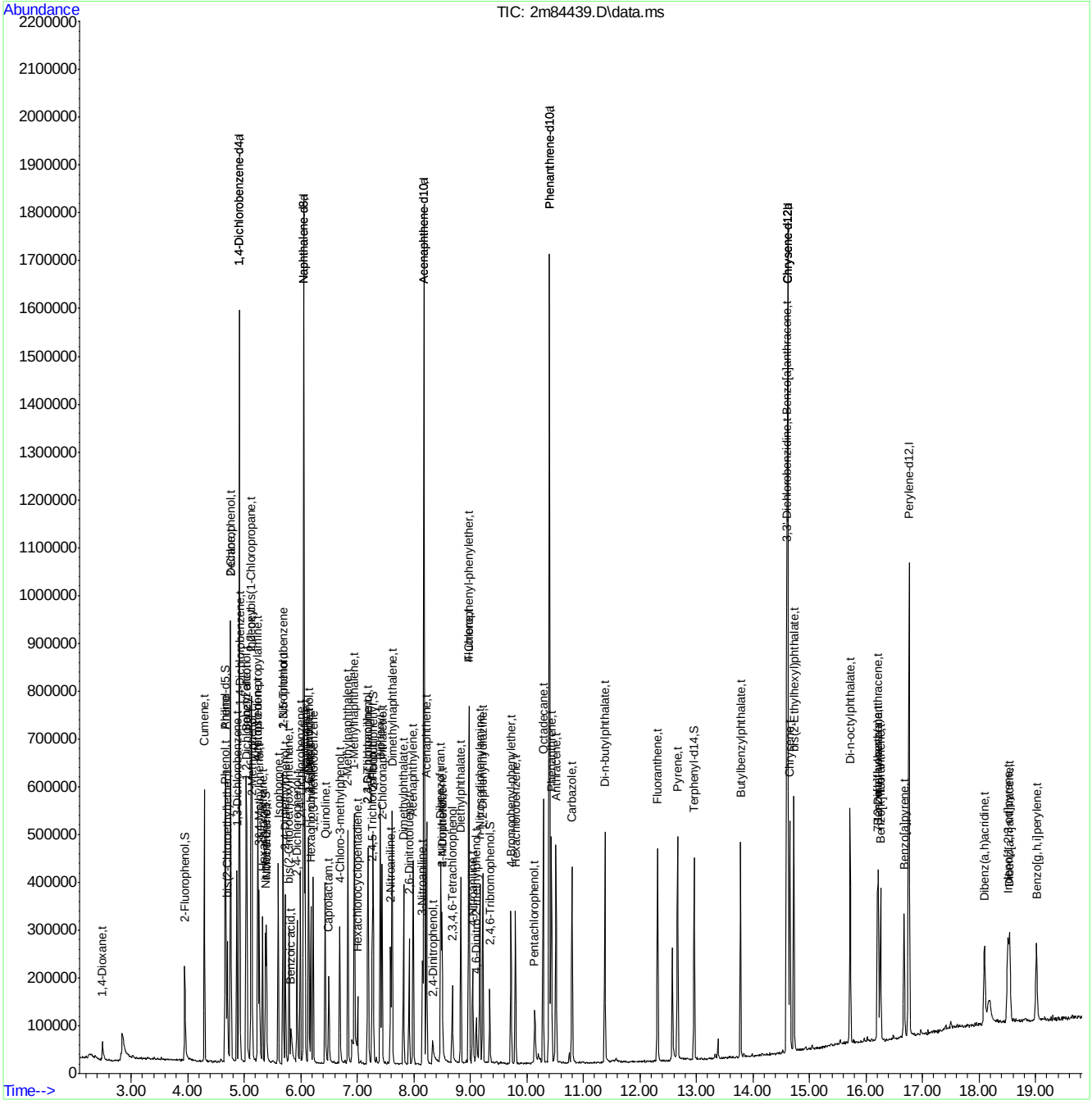
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84439.D
Acq On : 7 Jun 2016 12:11 pm
Operator : ashleyn
Sample : ic3720-10
Misc : op94122,e2m3720
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 07 12:38:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:26:23 2016
Response via : Initial Calibration



M2M3720.M Tue Jun 07 12:39:00 2016 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84440.D
Acq On : 7 Jun 2016 12:37 pm
Operator : ashleyn
Sample : ic3720-5
Misc : op94122,e2m3720
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 07 14:53:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:39:07 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.911	152	204019	40.00 ppm	0.00
24) Naphthalene-d8	6.050	136	822304	40.00 ppm	0.00
47) Acenaphthene-d10	8.184	164	474264	40.00 ppm	0.00
69) Phenanthrene-d10	10.399	188	796033	40.00 ppm	0.00
83) Chrysene-d12	14.619	240	733486	40.00 ppm	0.00
91) Perylene-d12	16.763	264	516361	40.00 ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.911	152	204019	40.00 ppm	0.00
103) Acenaphthene-d10a	8.184	164	474264	40.00 ppm	0.00
105) Chrysene-d12a	14.619	240	733486	40.00 ppm	0.00
108) Phenanthrene-d10a	10.399	188	796033	40.00 ppm	0.00
111) Naphthalene-d8a	6.050	136	822304	40.00 ppm	0.00
113) Chrysene-d12b	14.619	240	733486	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	3.948	112	37255	5.18 ppm	0.00
Spiked Amount 50.000			Recovery	= 10.36%	
8) Phenol-d5	4.665	99	49088	5.43 ppm	0.00
Spiked Amount 50.000			Recovery	= 10.86%	
25) Nitrobenzene-d5	5.376	82	46725	5.17 ppm	0.00
Spiked Amount 50.000			Recovery	= 10.34%	
51) 2-Fluorobiphenyl	7.280	172	80048	5.27 ppm	0.00
Spiked Amount 50.000			Recovery	= 10.54%	
73) 2,4,6-Tribromophenol	9.345	330	10853	4.91 ppm	0.00
Spiked Amount 50.000			Recovery	= 9.82%	
85) Terphenyl-d14	12.961	244	80834	4.79 ppm	0.00
Spiked Amount 50.000			Recovery	= 9.58%	
107) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
110) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	

Target Compounds					Qvalue
2) 1,4-Dioxane	2.493	88	13861	5.18 ppm	99
6) Indene	5.119	116	73249	5.47 ppm	99
7) Cumene	4.296	105	104674	5.31 ppm	98
9) Phenol	4.675	94	61266	5.50 ppm	94
10) Aniline	4.665	93	61122	5.53 ppm	98
11) bis(2-Chloroethyl)ether	4.702	93	41594	5.32 ppm	96
12) 2-Chlorophenol	4.766	128	41067	5.56 ppm	94
13) Decane	4.761	43	44931	5.68 ppm	99
14) 1,3-Dichlorobenzene	4.868	146	44549	5.32 ppm	97
15) 1,4-Dichlorobenzene	4.927	146	44385	5.31 ppm	100
16) Benzyl alcohol	5.034	108	26525	5.29 ppm	93
17) 1,2-Dichlorobenzene	5.050	146	41699	5.30 ppm	98
18) Acetophenone	5.242	105	60045	5.49 ppm	98
19) 2-Methylphenol	5.135	108	39731	5.46 ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.125	45	55776	5.67 ppm	96
21) 3&4-Methylphenol	5.264	108	40733	5.15 ppm	96
22) n-Nitroso-di-n-propyla...	5.232	70	32703	5.38 ppm	97
23) Hexachloroethane	5.328	201	14396	5.45 ppm	99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84440.D
Acq On : 7 Jun 2016 12:37 pm
Operator : ashleyn
Sample : ic3720-5
Misc : op94122,e2m3720
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 07 14:53:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:39:07 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
26) Nitrobenzene	5.392	77	47927	5.16	ppm		97
27) Quinoline	6.430	129	76680	5.07	ppm		99
28) Isophorone	5.601	82	84728	5.36	ppm		97
29) 2-Nitrophenol	5.681	139	22158	5.36	ppm		94
30) 2,4-Dimethylphenol	5.729	107	41803	5.20	ppm		99
31) Benzoic acid	5.836	105	14821	3.27	ppm		94
32) bis(2-Chloroethoxy)met...	5.793	93	47013	5.22	ppm		98
33) 2,4-Dichlorophenol	5.932	162	31520	5.15	ppm		97
34) 2,6-Dichlorophenol	6.141	162	31094	5.18	ppm		98
35) 1,3,5-Trichlorobenzene	5.686	180	37319	5.34	ppm		98
36) 1,2,4-Trichlorobenzene	5.991	180	33765	4.97	ppm		98
37) 1,2,3-Trichlorobenzene	6.221	180	33901	5.16	ppm		96
38) Naphthalene	6.071	128	118189	5.23	ppm		98
39) 4-Chloroaniline	6.136	127	46643	5.36	ppm		95
40) 2,3-Dichloroaniline	7.184	161	39529	5.22	ppm		97
41) Caprolactam	6.489	55	19070	4.99	ppm		97
42) Hexachlorobutadiene	6.184	225	19181	5.16	ppm		94
43) 4-Chloro-3-methylphenol	6.687	107	37459	5.18	ppm		99
44) 2-Methylnaphthalene	6.831	141	65048	5.17	ppm		94
45) 1-Methylnaphthalene	6.949	141	67875	5.14	ppm		96
46) Dimethylnaphthalene	7.617	156	68720	5.06	ppm		96
48) Hexachlorocyclopentadiene	7.007	237	4278	2.63	ppm		95
49) 2,4,6-Trichlorophenol	7.195	196	21800	4.99	ppm		96
50) 2,4,5-Trichlorophenol	7.264	196	21962	4.87	ppm		96
52) 2-Chloronaphthalene	7.435	162	70951	5.18	ppm		98
53) Biphenyl	7.409	154	95300	5.20	ppm		99
54) 2-Nitroaniline	7.590	65	28080	5.13	ppm		95
55) Dimethylphthalate	7.815	163	80567	5.19	ppm		96
56) Acenaphthylene	7.986	152	117250	5.11	ppm		99
57) 2,6-Dinitrotoluene	7.917	165	17878	5.04	ppm		94
58) 3-Nitroaniline	8.157	138	20647	5.03	ppm		100
59) Acenaphthene	8.227	153	74194	5.30	ppm		99
60) 2,4-Dinitrophenol	8.345	184	4048	3.27	ppm		78
61) 4-Nitrophenol	8.505	109	7016	3.70	ppm	#	1
62) Dibenzofuran	8.473	168	98216	5.05	ppm		95
63) 2,4-Dinitrotoluene	8.500	165	24832	5.04	ppm		97
64) 2,3,4,6-Tetrachlorophenol	8.682	232	12890	4.64	ppm		94
65) Diethylphthalate	8.831	149	82975	5.10	ppm		96
66) Fluorene	8.970	166	81457	5.20	ppm		99
67) 4-Chlorophenyl-phenyle...	8.981	204	37302	5.11	ppm		100
68) 4-Nitroaniline	9.040	138	21514	5.12	ppm		91
70) 4,6-Dinitro-2-methylph...	9.110	198	8804	4.37	ppm		85
71) n-Nitrosodiphenylamine	9.168	169	53117	5.08	ppm		96
72) 1,2-Diphenylhydrazine	9.216	77	95476	5.22	ppm		96
74) 4-Bromophenyl-phenylether	9.719	248	21543	5.00	ppm		95
75) Hexachlorobenzene	9.799	284	26055	5.21	ppm		96
76) Pentachlorophenol	10.142	266	6605	5.33	ppm		85
77) Phenanthrene	10.431	178	117666	5.11	ppm		97
78) Anthracene	10.511	178	119876	5.17	ppm		98
79) Carbazole	10.800	167	109127	5.15	ppm		99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84440.D
Acq On : 7 Jun 2016 12:37 pm
Operator : ashleyn
Sample : ic3720-5
Misc : op94122,e2m3720
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 07 14:53:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:39:07 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) Di-n-butylphthalate	11.383	149	135646	4.96 ppm	99
81) Fluoranthene	12.313	202	116411	4.96 ppm	97
82) Octadecane	10.286	57	59988	5.39 ppm	98
84) Pyrene	12.666	202	122773	4.89 ppm	99
86) Butylbenzylphthalate	13.779	149	61031	4.91 ppm	96
87) Benzo[a]anthracene	14.603	228	115508	4.99 ppm	98
88) 3,3'-Dichlorobenzidine	14.597	252	45039	5.13 ppm	96
89) Chrysene	14.656	228	109252	5.07 ppm	100
90) bis(2-Ethylhexyl)phtha...	14.726	149	83659	5.19 ppm	94
92) Di-n-octylphthalate	15.720	149	139914	6.12 ppm	99
93) Benzo[b]fluoranthene	16.218	252	91594	5.35 ppm	93
94) Benzo[k]fluoranthene	16.261	252	82420	5.29 ppm	99
95) Benzo[a]pyrene	16.678	252	69149	4.83 ppm	99
96) Indeno[1,2,3-cd]pyrene	18.507	276	78661	4.60 ppm	97
97) Dibenz(a,h)acridine	18.095	279	61231	4.82 ppm	97
98) Dibenz[a,h]anthracene	18.539	278	69159	4.71 ppm	91
99) 7,12-Dimethylbenz(a)an...	16.202	256	40542	5.41 ppm	99
100) Benzo[g,h,i]perylene	19.015	276	68418	4.70 ppm	98

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

7.6.8

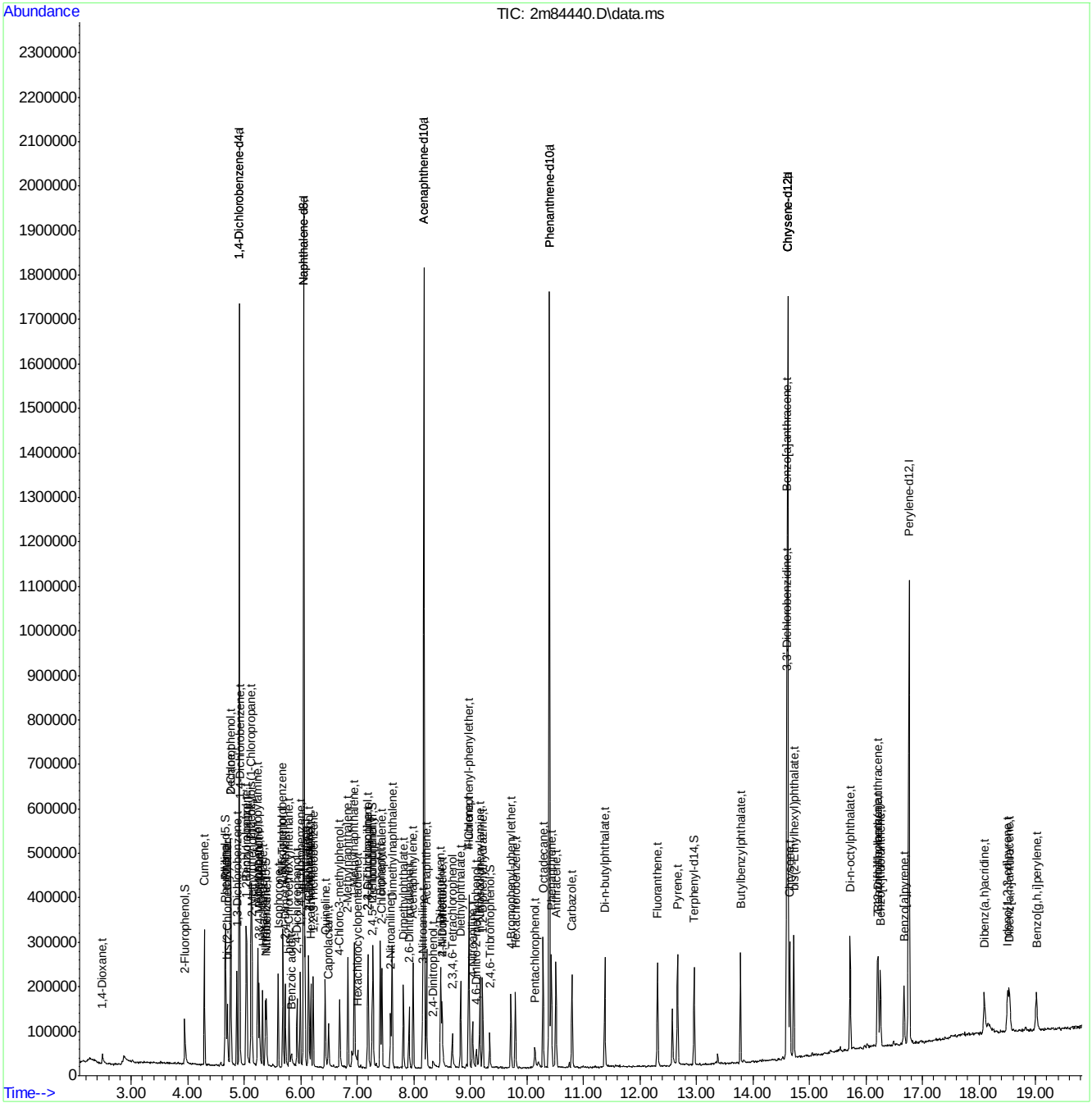
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84440.D
Acq On : 7 Jun 2016 12:37 pm
Operator : ashleyn
Sample : ic3720-5
Misc : op94122,e2m3720
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 07 14:53:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:39:07 2016
Response via : Initial Calibration



M2M3720.M Tue Jun 07 14:53:28 2016 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84441.D
Acq On : 7 Jun 2016 1:04 pm
Operator : ashleyn
Sample : icv3720-50
Misc : op94122,e2m3720
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 14:43:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Wed Jun 08 14:38:41 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.911	152	238189	40.00	ppm	0.00
24) Naphthalene-d8	6.050	136	900242	40.00	ppm	0.00
47) Acenaphthene-d10	8.184	164	496396	40.00	ppm	0.00
69) Phenanthrene-d10	10.399	188	804726	40.00	ppm	0.00
83) Chrysene-d12	14.613	240	692722	40.00	ppm	-0.01
91) Perylene-d12	16.758	264	475077	40.00	ppm	-0.01
101) 1,4-Dichlorobenzene-d4a	4.911	152	238189	40.00	ppm	-0.03
103) Acenaphthene-d10a	8.184	164	496396	40.00	ppm	-0.03
105) Chrysene-d12a	14.613	240	692722	40.00	ppm	-0.03
108) Phenanthrene-d10a	10.399	188	804726	40.00	ppm	-0.03
111) Naphthalene-d8a	6.050	136	900242	40.00	ppm	-0.03
113) Chrysene-d12b	14.613	240	692722	40.00	ppm	-0.03

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
107) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
9) Phenol	4.670	94	529086	40.17	ppm		93
12) 2-Chlorophenol	4.761	128	393290	45.00	ppm		98
19) 2-Methylphenol	5.130	108	387504	45.08	ppm		99
21) 3&4-Methylphenol	5.264	108	404370	43.64	ppm		98
29) 2-Nitrophenol	5.681	139	221997	48.60	ppm	#	66
30) 2,4-Dimethylphenol	5.724	107	430621	48.69	ppm		99
31) Benzoic acid	5.863	105	265843	48.18	ppm		97
33) 2,4-Dichlorophenol	5.927	162	307717	45.74	ppm		98
34) 2,6-Dichlorophenol	6.141	162	303767	46.03	ppm		98
43) 4-Chloro-3-methylphenol	6.681	107	350246	44.04	ppm		98
49) 2,4,6-Trichlorophenol	7.189	196	216550	47.35	ppm		100
50) 2,4,5-Trichlorophenol	7.254	196	212222	45.12	ppm		99
60) 2,4-Dinitrophenol	8.329	184	67221	50.01	ppm		96
61) 4-Nitrophenol	8.478	109	98084	51.05	ppm	#	32
64) 2,3,4,6-Tetrachlorophenol	8.676	232	146916	50.99	ppm		97
70) 4,6-Dinitro-2-methylph...	9.104	198	120774	47.35	ppm		98
76) Pentachlorophenol	10.137	266	67693	51.39	ppm		96

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84441.D
Acq On : 7 Jun 2016 1:04 pm
Operator : ashleyn
Sample : icv3720-50
Misc : op94122,e2m3720
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 14:43:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Wed Jun 08 14:38:41 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.9

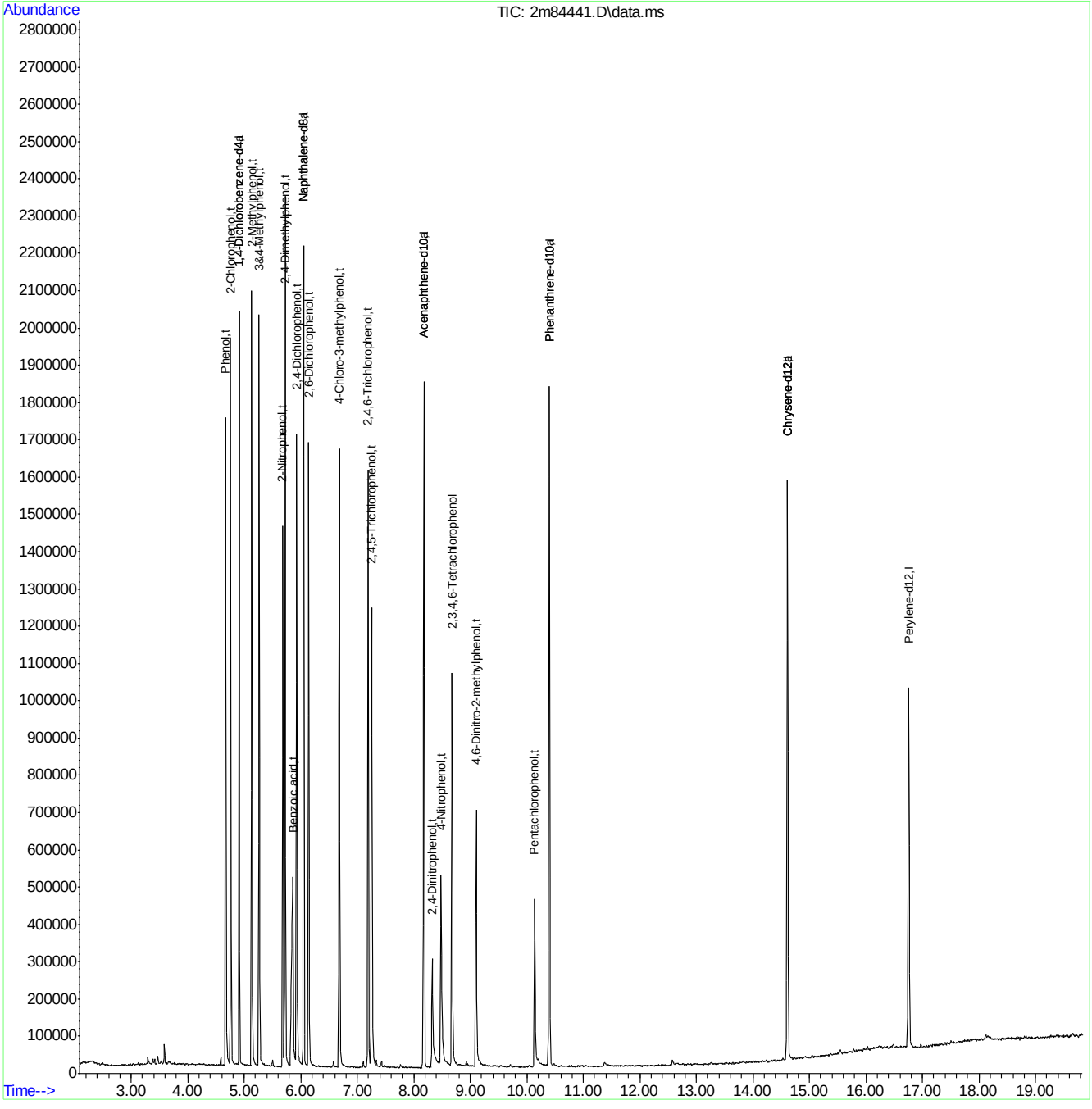
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84441.D
Acq On : 7 Jun 2016 1:04 pm
Operator : ashleyn
Sample : icv3720-50
Misc : op94122,e2m3720
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 08 14:43:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Wed Jun 08 14:38:41 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84442.D
Acq On : 7 Jun 2016 1:30 pm
Operator : ashleyn
Sample : icv3720-50
Misc : op94122,e2m3720
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 07 15:19:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 15:05:19 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.911	152	214646	40.00 ppm	0.00
24) Naphthalene-d8	6.050	136	870680	40.00 ppm	0.00
47) Acenaphthene-d10	8.179	164	489823	40.00 ppm	0.00
69) Phenanthrene-d10	10.399	188	806644	40.00 ppm	0.00
83) Chrysene-d12	14.613	240	663586	40.00 ppm	-0.01
91) Perylene-d12	16.758	264	333548	40.00 ppm	-0.01
101) 1,4-Dichlorobenzene-d4a	4.911	152	214646	40.00 ppm	0.00
103) Acenaphthene-d10a	8.179	164	489823	40.00 ppm	0.00
105) Chrysene-d12a	14.613	240	663586	40.00 ppm	-0.01
108) Phenanthrene-d10a	10.399	188	806644	40.00 ppm	0.00
111) Naphthalene-d8a	6.050	136	870680	40.00 ppm	0.00
113) Chrysene-d12b	14.613	240	663586	40.00 ppm	-0.01

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
107) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
110) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds					Qvalue
10) Aniline	4.665	93	617459	52.41 ppm	97
16) Benzyl alcohol	5.034	108	267291	50.29 ppm	98
39) 4-Chloroaniline	6.136	127	436417	46.91 ppm	98
44) 2-Methylnaphthalene	6.831	141	616041	46.02 ppm	99
54) 2-Nitroaniline	7.590	65	248911	43.89 ppm	98
58) 3-Nitroaniline	8.157	138	193533	45.62 ppm	97
62) Dibenzofuran	8.473	168	954829	47.48 ppm	98
68) 4-Nitroaniline	9.045	138	192837	44.28 ppm	98
79) Carbazole	10.800	167	994194	46.15 ppm	99

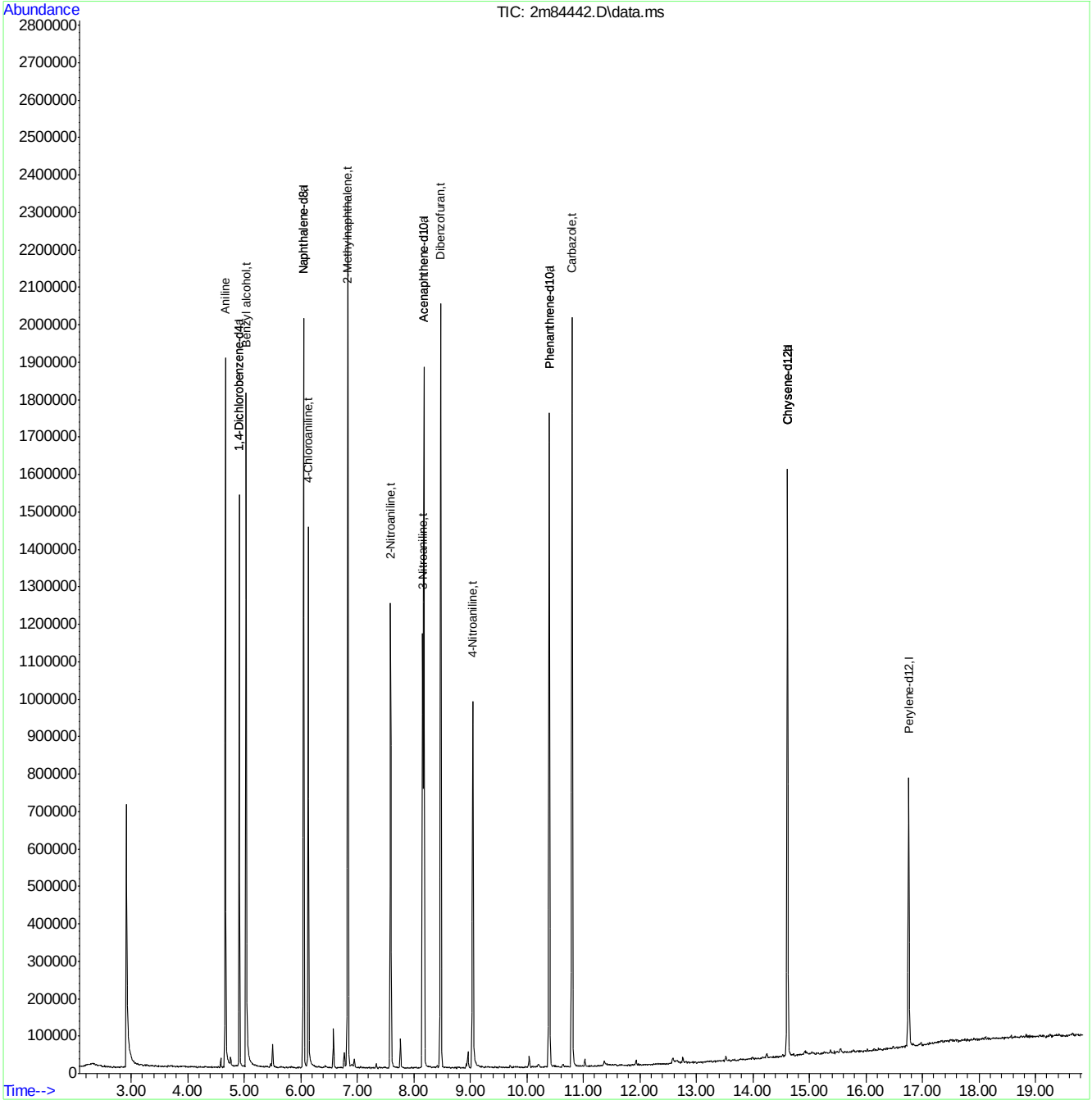
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84442.D
Acq On : 7 Jun 2016 1:30 pm
Operator : ashleyn
Sample : icv3720-50
Misc : op94122,e2m3720
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 07 15:19:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 15:05:19 2016
Response via : Initial Calibration



M2M3720.M Tue Jun 07 15:20:05 2016 Page: 2

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84443.D
Acq On : 7 Jun 2016 1:56 pm
Operator : ashleyn
Sample : icv3720-50
Misc : op94122,e2m3720
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 07 15:20:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:39:07 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.911	152	203128	40.00 ppm	0.00
24) Naphthalene-d8	6.050	136	815817	40.00 ppm	0.00
47) Acenaphthene-d10	8.179	164	458611	40.00 ppm	0.00
69) Phenanthrene-d10	10.398	188	759453	40.00 ppm	0.00
83) Chrysene-d12	14.613	240	656510	40.00 ppm	-0.01
91) Perylene-d12	16.758	264	439867	40.00 ppm	-0.01
101) 1,4-Dichlorobenzene-d4a	4.911	152	203128	40.00 ppm	0.00
103) Acenaphthene-d10a	8.179	164	458611	40.00 ppm	0.00
105) Chrysene-d12a	14.613	240	656510	40.00 ppm	-0.01
108) Phenanthrene-d10a	10.398	188	759453	40.00 ppm	0.00
111) Naphthalene-d8a	6.050	136	815817	40.00 ppm	0.00
113) Chrysene-d12b	14.613	240	656541	40.00 ppm	-0.01

System Monitoring Compounds					
5) 2-Fluorophenol	3.943	112	372639	52.06 ppm	0.00
Spiked Amount 50.000			Recovery	= 104.12%	
8) Phenol-d5	4.659	99	472220	52.44 ppm	0.00
Spiked Amount 50.000			Recovery	= 104.88%	
25) Nitrobenzene-d5	5.376	82	434727	48.51 ppm	0.00
Spiked Amount 50.000			Recovery	= 97.02%	
51) 2-Fluorobiphenyl	7.280	172	756034	51.49 ppm	0.00
Spiked Amount 50.000			Recovery	= 102.98%	
73) 2,4,6-Tribromophenol	9.345	330	116649	55.28 ppm	0.00
Spiked Amount 50.000			Recovery	= 110.56%	
85) Terphenyl-d14	12.960	244	782758	51.83 ppm	0.00
Spiked Amount 50.000			Recovery	= 103.66%	
107) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
110) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	

Target Compounds	Qvalue

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

7.6.11

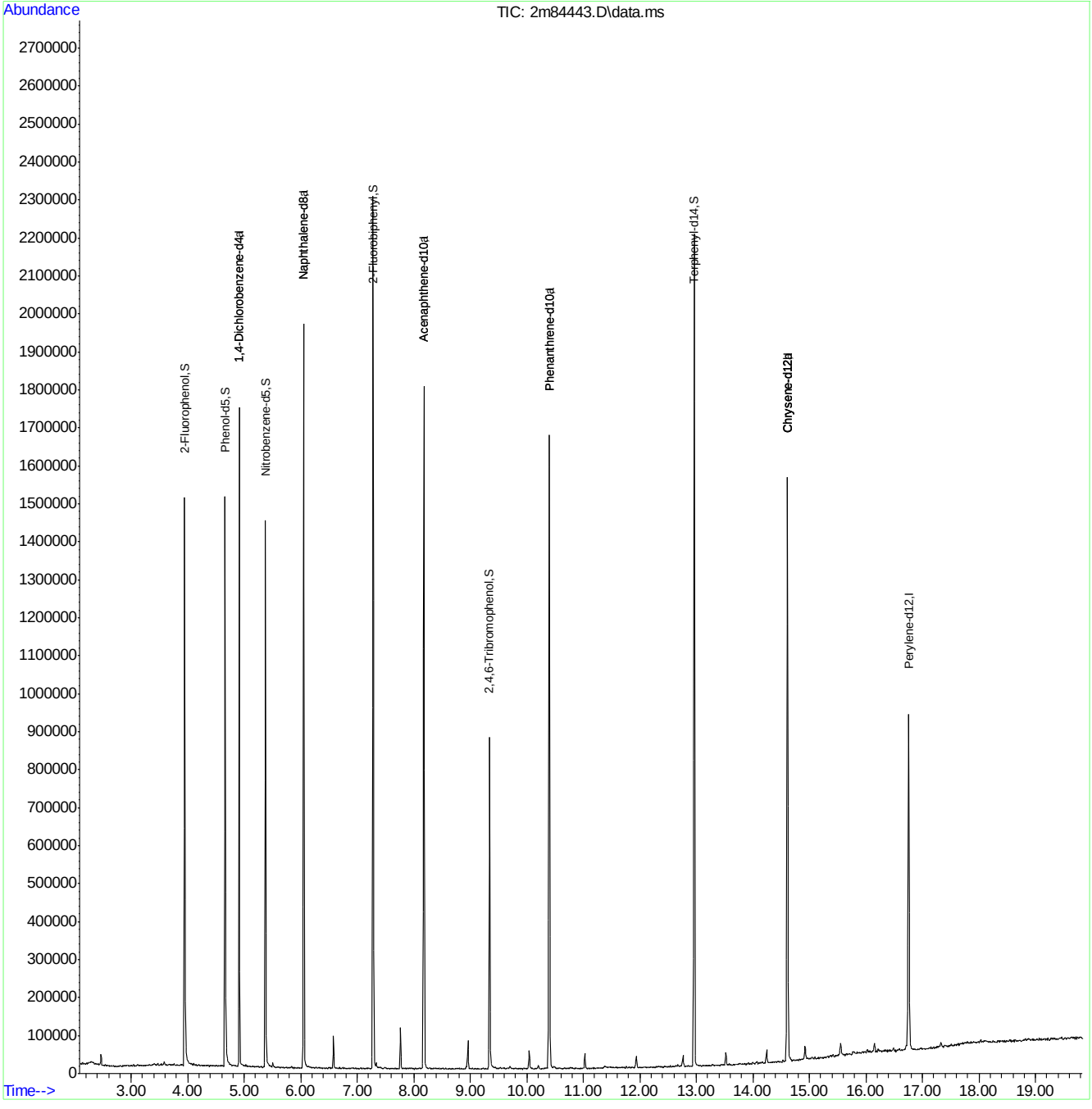
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84443.D
Acq On : 7 Jun 2016 1:56 pm
Operator : ashleyn
Sample : icv3720-50
Misc : op94122,e2m3720
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 07 15:20:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 12:39:07 2016
Response via : Initial Calibration



M2M3720.M Tue Jun 07 15:20:57 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84444.D
Acq On : 7 Jun 2016 2:23 pm
Operator : ashleyn
Sample : icv3720-50
Misc : op94122,e2m3720
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 07 15:22:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 15:05:19 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.911	152	258071	40.00 ppm	0.00
24) Naphthalene-d8	6.050	136	989299	40.00 ppm	0.00
47) Acenaphthene-d10	8.184	164	557189	40.00 ppm	0.00
69) Phenanthrene-d10	10.398	188	905635	40.00 ppm	0.00
83) Chrysene-d12	14.624	240	796909	40.00 ppm	0.00
91) Perylene-d12	16.763	264	510425	40.00 ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.911	152	258071	40.00 ppm	0.00
103) Acenaphthene-d10a	8.184	164	557189	40.00 ppm	0.00
105) Chrysene-d12a	14.624	240	796909	40.00 ppm	0.00
108) Phenanthrene-d10a	10.398	188	905635	40.00 ppm	0.00
111) Naphthalene-d8a	6.050	136	989299	40.00 ppm	0.00
113) Chrysene-d12b	14.624	240	796875	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
107) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
110) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
11) bis(2-Chloroethyl)ether	4.702	93	467511	46.87 ppm	99
14) 1,3-Dichlorobenzene	4.868	146	488077	45.72 ppm	99
15) 1,4-Dichlorobenzene	4.927	146	493647	46.33 ppm	100
17) 1,2-Dichlorobenzene	5.050	146	458895	45.75 ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.125	45	529878	41.89 ppm	98
22) n-Nitroso-di-n-propyla...	5.237	70	348085	44.88 ppm	95
23) Hexachloroethane	5.328	201	165228	48.87 ppm	96
26) Nitrobenzene	5.397	77	518928	46.28 ppm	97
28) Isophorone	5.601	82	909578	47.38 ppm	99
32) bis(2-Chloroethoxy)met...	5.799	93	498405	45.76 ppm	98
36) 1,2,4-Trichlorobenzene	5.991	180	386301	47.32 ppm	98
38) Naphthalene	6.077	128	1296450	47.44 ppm	100
42) Hexachlorobutadiene	6.178	225	216930	48.33 ppm	99
52) 2-Chloronaphthalene	7.441	162	749838	46.38 ppm	98
55) Dimethylphthalate	7.826	163	827680	45.14 ppm	100
56) Acenaphthylene	7.992	152	1177027	43.55 ppm	99
57) 2,6-Dinitrotoluene	7.922	165	192568	46.16 ppm	99
59) Acenaphthene	8.232	153	768086	46.34 ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84444.D
Acq On : 7 Jun 2016 2:23 pm
Operator : ashleyn
Sample : icv3720-50
Misc : op94122,e2m3720
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 07 15:22:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 15:05:19 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
63) 2,4-Dinitrotoluene	8.500	165	248221	42.87 ppm	97
65) Diethylphthalate	8.837	149	836211	43.63 ppm	100
66) Fluorene	8.976	166	834463	45.15 ppm	98
67) 4-Chlorophenyl-phenyle...	8.981	204	398245	46.34 ppm	98
71) n-Nitrosodiphenylamine	9.174	169	549441	46.12 ppm	99
72) 1,2-Diphenylhydrazine	9.222	77	968779	46.28 ppm	99
74) 4-Bromophenyl-phenylether	9.719	248	229867	46.89 ppm	94
75) Hexachlorobenzene	9.805	284	264657	46.30 ppm	97
77) Phenanthrene	10.436	178	1212945	46.16 ppm	99
78) Anthracene	10.516	178	1172025	44.21 ppm	99
80) Di-n-butylphthalate	11.383	149	1421172	45.74 ppm	100
81) Fluoranthene	12.319	202	1228150	46.03 ppm	99
84) Pyrene	12.672	202	1288525	47.36 ppm	99
86) Butylbenzylphthalate	13.784	149	601209	44.59 ppm	99
87) Benzo[a]anthracene	14.602	228	1128245	44.86 ppm	99
89) Chrysene	14.661	228	1027550	43.83 ppm	100
90) bis(2-Ethylhexyl)phtha...	14.725	149	795909	45.19 ppm	97
92) Di-n-octylphthalate	15.720	149	1185267	51.04 ppm	99
93) Benzo[b]fluoranthene	16.228	252	807523	47.29 ppm	99
94) Benzo[k]fluoranthene	16.266	252	804956	51.89 ppm	100
95) Benzo[a]pyrene	16.683	252	666954	47.35 ppm	97
96) Indeno[1,2,3-cd]pyrene	18.523	276	804799	48.10 ppm	99
98) Dibenz[a,h]anthracene	18.550	278	691456	47.96 ppm	99
100) Benzo[g,h,i]perylene	19.031	276	680616	47.63 ppm	98

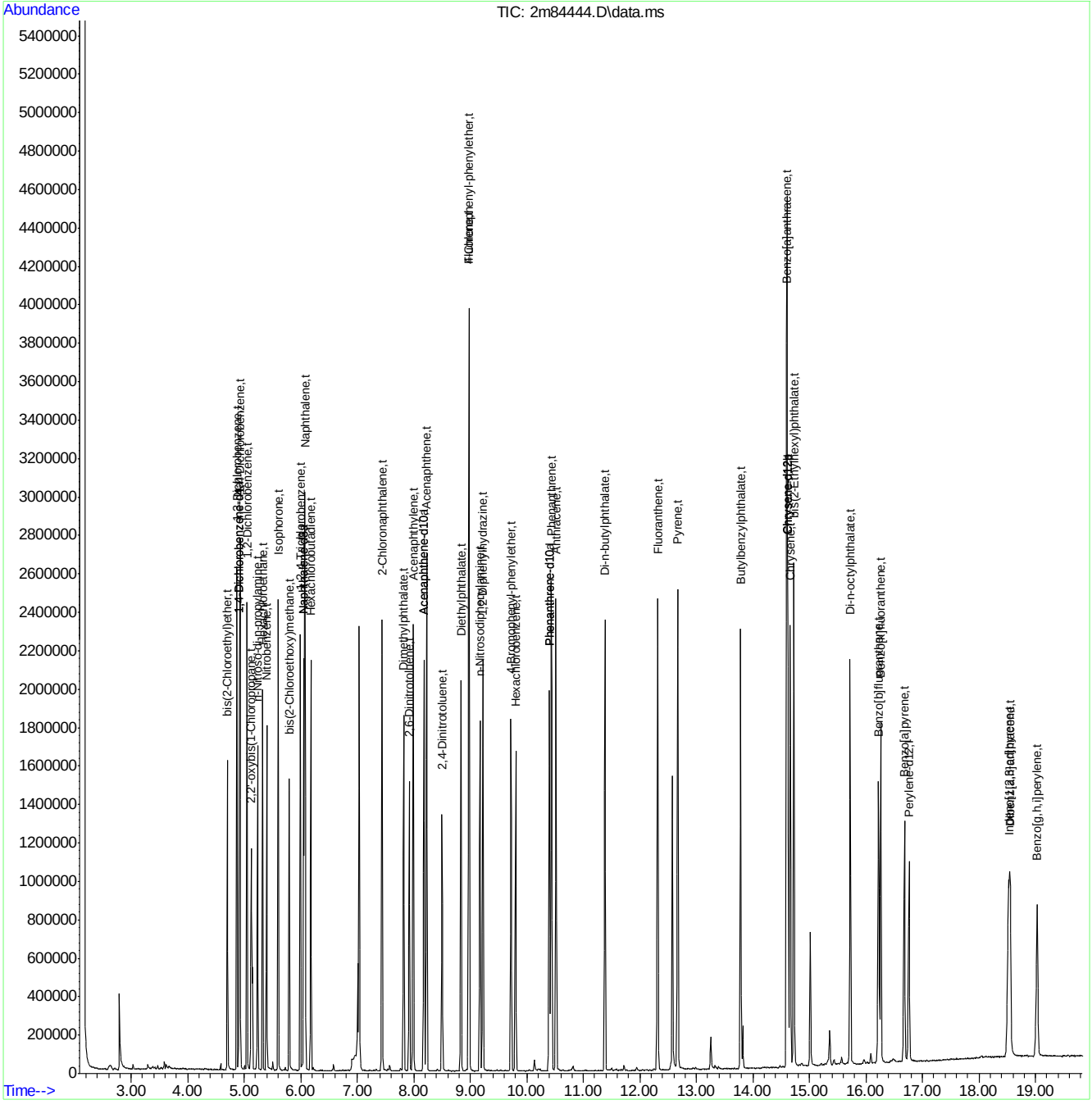
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84444.D
Acq On : 7 Jun 2016 2:23 pm
Operator : ashleyn
Sample : icv3720-50
Misc : op94122,e2m3720
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 07 15:22:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 15:05:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84446.D
Acq On : 7 Jun 2016 3:15 pm
Operator : ashleyn
Sample : icv3720-50
Misc : op94122,e2m3720
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 07 15:50:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 15:05:19 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.911	152	212363	40.00 ppm	0.00
24) Naphthalene-d8	6.050	136	830116	40.00 ppm	0.00
47) Acenaphthene-d10	8.179	164	485874	40.00 ppm	0.00
69) Phenanthrene-d10	10.393	188	829077	40.00 ppm	-0.01
83) Chrysene-d12	14.613	240	780950	40.00 ppm	-0.01
91) Perylene-d12	16.758	264	607926	40.00 ppm	-0.01
101) 1,4-Dichlorobenzene-d4a	4.911	152	212363	40.00 ppm	0.00
103) Acenaphthene-d10a	8.179	164	485874	40.00 ppm	0.00
105) Chrysene-d12a	14.613	240	780950	40.00 ppm	-0.01
108) Phenanthrene-d10a	10.393	188	829077	40.00 ppm	-0.01
111) Naphthalene-d8a	6.050	136	830116	40.00 ppm	0.00
113) Chrysene-d12b	14.613	240	780950	40.00 ppm	-0.01

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
107) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
110) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
88) 3,3'-Dichlorobenzidine	14.597	252	433670	46.21 ppm	100

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

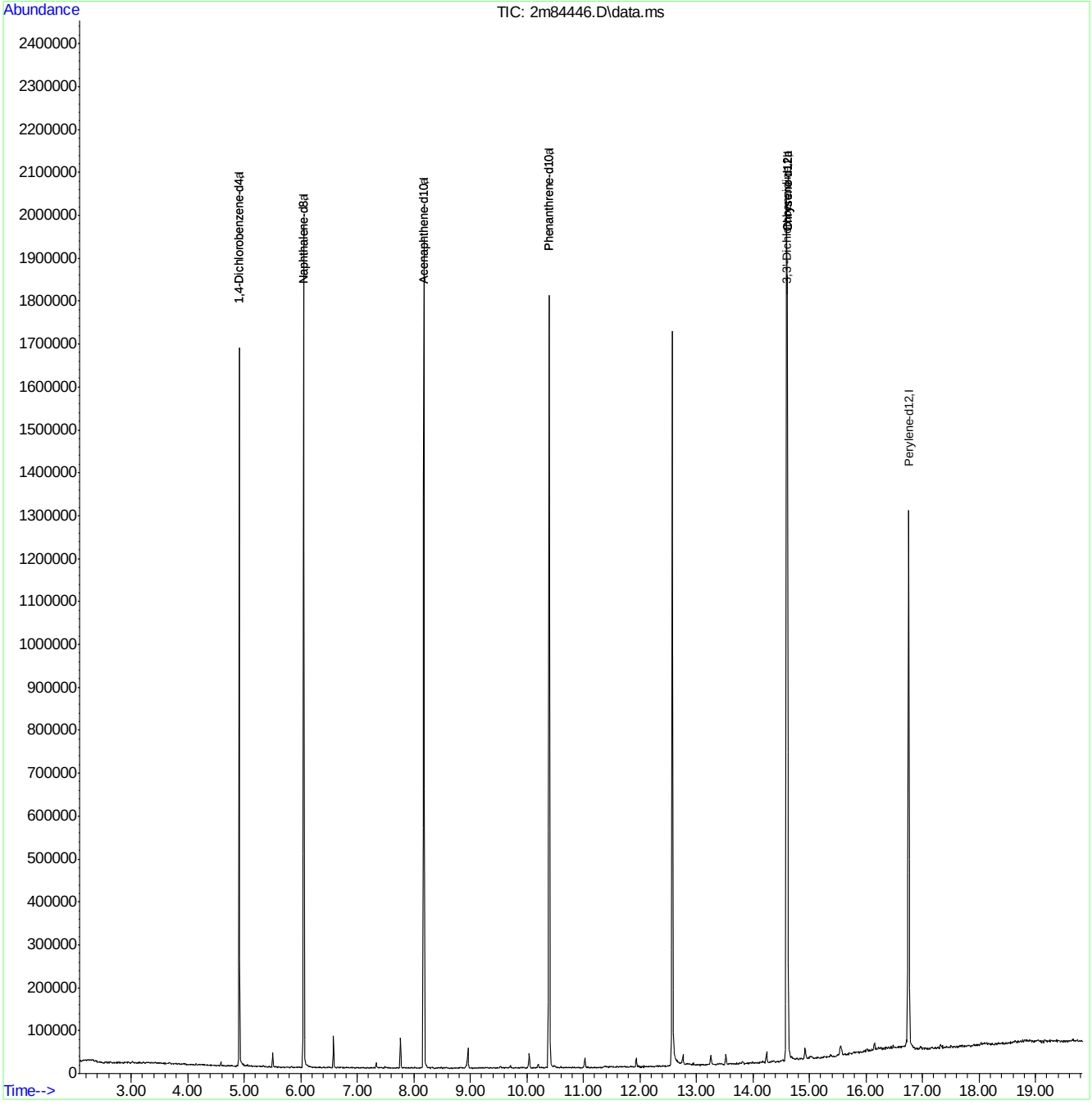
7.6.13

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3720\
Data File : 2m84446.D
Acq On : 7 Jun 2016 3:15 pm
Operator : ashleyn
Sample : icv3720-50
Misc : op94122,e2m3720
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 07 15:50:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 15:05:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3721\
Data File : 2m84450.D
Acq On : 7 Jun 2016 5:25 pm
Operator : ashleyn
Sample : icv3720-50
Misc : op94122,e2m3721
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 09:04:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 16:18:16 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.906	152	223237	40.00 ppm	0.00
24) Naphthalene-d8	6.045	136	983171	40.00 ppm	-0.01
47) Acenaphthene-d10	8.174	164	475317	40.00 ppm	-0.01
69) Phenanthrene-d10	10.388	188	785394	40.00 ppm	-0.02
83) Chrysene-d12	14.608	240	657258	40.00 ppm	-0.02
91) Perylene-d12	16.747	264	439945	40.00 ppm	-0.02
101) 1,4-Dichlorobenzene-d4a	4.906	152	223237	40.00 ppm	-0.03
103) Acenaphthene-d10a	8.174	164	475317	40.00 ppm	-0.04
105) Chrysene-d12a	14.608	240	657258	40.00 ppm	-0.04
108) Phenanthrene-d10a	10.388	188	785394	40.00 ppm	-0.04
111) Naphthalene-d8a	6.045	136	983171	40.00 ppm	-0.04
113) Chrysene-d12b	14.608	240	657258	40.00 ppm	-0.04

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
107) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
110) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
2) 1,4-Dioxane	2.493	88	148929	50.61 ppm	97
6) Indene	5.114	116	705808	47.61 ppm	100
7) Cumene	4.291	105	972642	44.72 ppm	99
13) Decane	4.756	43	390765	44.75 ppm	98
18) Acetophenone	5.237	105	543916	44.93 ppm	98
27) Quinoline	6.425	129	704502	39.39 ppm	99
40) 2,3-Dichloroaniline	7.179	161	325242	36.22 ppm	98
41) Caprolactam	6.494	55	167315	38.19 ppm	98
45) 1-Methylnaphthalene	6.949	141	610658	38.57 ppm	97
46) Dimethylnaphthalene	7.612	156	618670	38.45 ppm	96
48) Hexachlorocyclopentadiene	7.002	237	85124	48.15 ppm	99
53) Biphenyl	7.403	154	847502	45.91 ppm	98
82) Octadecane	10.286	57	496489	44.79 ppm	99
99) 7,12-Dimethylbenz(a)an...	16.197	256	272497	42.22 ppm	97

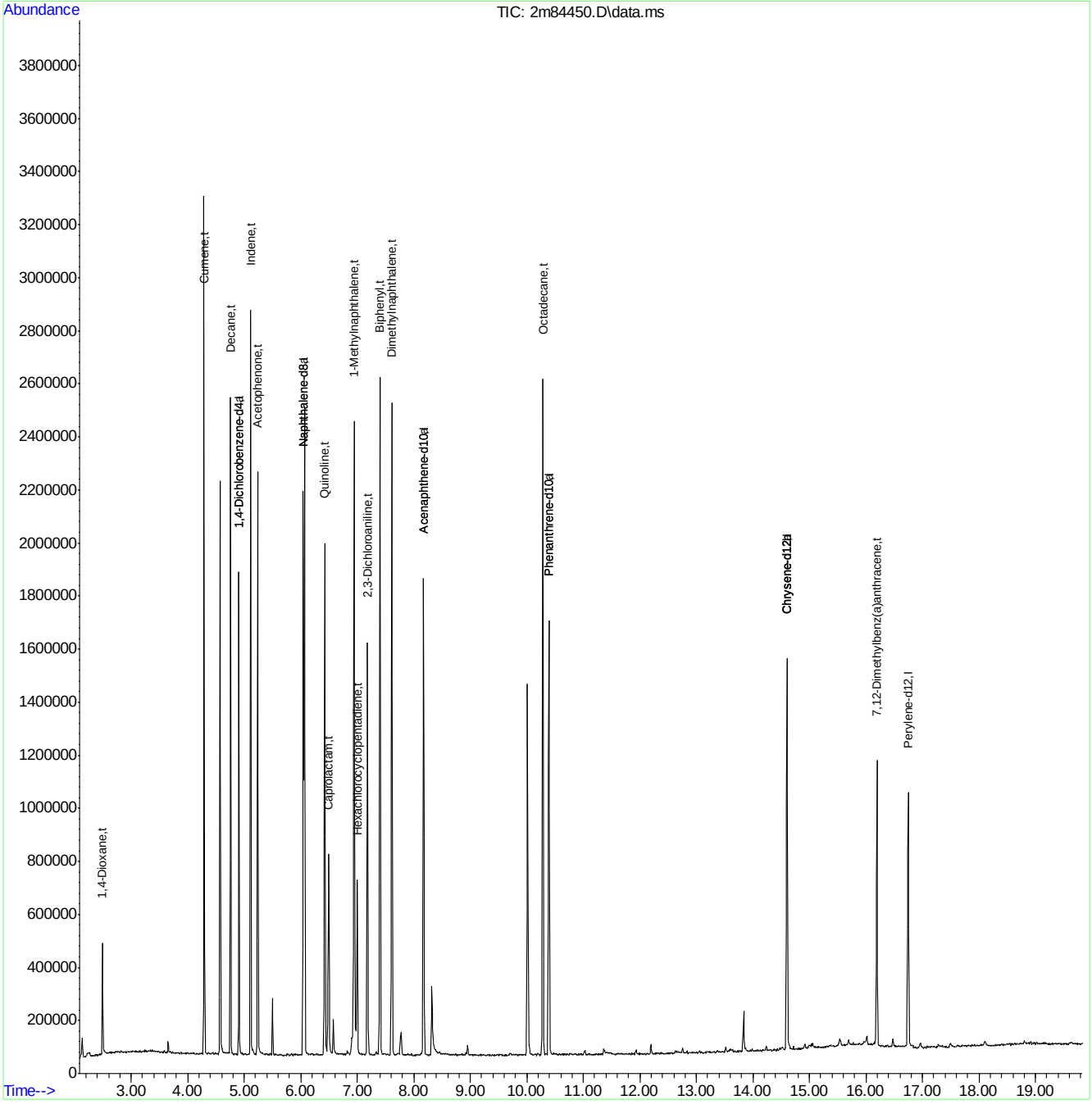
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3721\
Data File : 2m84450.D
Acq On : 7 Jun 2016 5:25 pm
Operator : ashleyn
Sample : icv3720-50
Misc : op94122,e2m3721
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 08 09:04:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Tue Jun 07 16:18:16 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E2M3754\
Data File : 2m85108.D
Acq On : 28 Jun 2016 10:09 am
Operator : ashleyn
Sample : cc3720-25
Misc : op94766,e2m3754
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 14:54:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Jun 27 16:37:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.836	152	130661	40.00 ppm	-0.05
24) Naphthalene-d8	5.959	136	561803	40.00 ppm	-0.05
47) Acenaphthene-d10	8.067	164	357030	40.00 ppm	-0.06
69) Phenanthrene-d10	10.276	188	599514	40.00 ppm	-0.07
83) Chrysene-d12	14.496	240	410015	40.00 ppm	-0.07
91) Perylene-d12	16.635	264	270750	40.00 ppm	-0.08
101) 1,4-Dichlorobenzene-d4a	4.836	152	130661	40.00 ppm	-0.05
103) Acenaphthene-d10a	8.067	164	357030	40.00 ppm	-0.06
105) Chrysene-d12a	14.496	240	410015	40.00 ppm	-0.07
108) Phenanthrene-d10a	10.276	188	599514	40.00 ppm	-0.07
111) Naphthalene-d8a	5.959	136	561803	40.00 ppm	-0.05
113) Chrysene-d12b	14.496	240	409539	40.00 ppm	-0.07

System Monitoring Compounds					
5) 2-Fluorophenol	3.889	112	103183	22.31 ppm	-0.04
Spiked Amount 50.000			Recovery = 44.62%		
8) Phenol-d5	4.601	99	144048	24.61 ppm	-0.04
Spiked Amount 50.000			Recovery = 49.22%		
25) Nitrobenzene-d5	5.301	82	137967	22.26 ppm	-0.04
Spiked Amount 50.000			Recovery = 44.52%		
51) 2-Fluorobiphenyl	7.173	172	245603	21.34 ppm	-0.06
Spiked Amount 50.000			Recovery = 42.68%		
73) 2,4,6-Tribromophenol	9.233	330	34014	20.47 ppm	-0.07
Spiked Amount 50.000			Recovery = 40.94%		
85) Terphenyl-d14	12.832	244	225875	24.08 ppm	-0.09
Spiked Amount 50.000			Recovery = 48.16%		
107) 1-chlorooctadecane	0.000	57	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
110) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds					Qvalue
2) 1,4-Dioxane	2.402	88	41797	24.27 ppm	95
6) Indene	5.039	116	221371	25.51 ppm	99
7) Cumene	4.216	105	323244	25.39 ppm	99
9) Phenol	4.611	94	182795	25.30 ppm	92
10) Aniline	4.595	93	165619	23.09 ppm	79
11) bis(2-Chloroethyl)ether	4.627	93	129538	25.65 ppm	96
12) 2-Chlorophenol	4.692	128	128061	26.71 ppm	98
13) Decane	4.681	43	125458	24.55 ppm	97
14) 1,3-Dichlorobenzene	4.788	146	134018	24.79 ppm	99
15) 1,4-Dichlorobenzene	4.847	146	139360	25.83 ppm	99
16) Benzyl alcohol	4.964	108	83488	25.81 ppm	91
17) 1,2-Dichlorobenzene	4.970	146	129447	25.49 ppm	97
18) Acetophenone	5.168	105	185649	26.20 ppm	97
19) 2-Methylphenol	5.066	108	117375	24.89 ppm	95
20) 2,2'-oxybis(1-Chloropr...	5.045	45	147958	23.11 ppm	93
21) 3&4-Methylphenol	5.200	108	123196	24.24 ppm	99
22) n-Nitroso-di-n-propyla...	5.157	70	93515	23.81 ppm	96
23) Hexachloroethane	5.237	201	46713	27.29 ppm	93

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E2M3754\
Data File : 2m85108.D
Acq On : 28 Jun 2016 10:09 am
Operator : ashleyn
Sample : cc3720-25
Misc : op94766,e2m3754
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 14:54:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Jun 27 16:37:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
26) Nitrobenzene	5.317	77	143651	22.56 ppm	97
27) Quinoline	6.339	129	238017	23.29 ppm	96
28) Isophorone	5.521	82	242045	22.20 ppm	96
29) 2-Nitrophenol	5.601	139	73234	25.69 ppm	94
30) 2,4-Dimethylphenol	5.649	107	142429	25.80 ppm	96
31) Benzoic acid	5.772	105	84498	26.02 ppm	89
32) bis(2-Chloroethoxy)met...	5.708	93	139831	22.61 ppm	99
33) 2,4-Dichlorophenol	5.858	162	102994	24.53 ppm	99
34) 2,6-Dichlorophenol	6.056	162	101303	24.60 ppm	98
35) 1,3,5-Trichlorobenzene	5.596	180	119621	24.85 ppm	97
36) 1,2,4-Trichlorobenzene	5.900	180	107971	23.29 ppm	96
37) 1,2,3-Trichlorobenzene	6.125	180	110298	24.46 ppm	98
38) Naphthalene	5.981	128	368397	23.74 ppm	99
39) 4-Chloroaniline	6.050	127	137474	22.90 ppm	97
40) 2,3-Dichloroaniline	7.088	161	121686	23.72 ppm	98
41) Caprolactam	6.435	55	55312	22.09 ppm	96
42) Hexachlorobutadiene	6.082	225	61975	24.32 ppm	97
43) 4-Chloro-3-methylphenol	6.606	107	119574	24.09 ppm	81
44) 2-Methylnaphthalene	6.729	141	207831	24.06 ppm	97
45) 1-Methylnaphthalene	6.847	141	220796	24.41 ppm	95
46) Dimethylnaphthalene	7.505	156	221967	24.14 ppm	94
48) Hexachlorocyclopentadiene	6.901	237	31736	30.21 ppm	97
49) 2,4,6-Trichlorophenol	7.099	196	75246	22.87 ppm	94
50) 2,4,5-Trichlorophenol	7.173	196	70826	20.94 ppm	99
52) 2-Chloronaphthalene	7.334	162	226708	21.88 ppm	98
53) Biphenyl	7.302	154	301996	21.78 ppm	98
54) 2-Nitroaniline	7.500	65	82372	19.93 ppm	97
55) Dimethylphthalate	7.714	163	246145	20.95 ppm	99
56) Acenaphthylene	7.879	152	367673	21.23 ppm	99
57) 2,6-Dinitrotoluene	7.821	165	55178	20.64 ppm	99
58) 3-Nitroaniline	8.067	138	64679	20.91 ppm	85
59) Acenaphthene	8.115	153	228297	21.50 ppm	95
60) 2,4-Dinitrophenol	8.254	184	29948	34.29 ppm	85
61) 4-Nitrophenol	8.446	109	27208	19.69 ppm	80
62) Dibenzofuran	8.361	168	313396	21.38 ppm	100
63) 2,4-Dinitrotoluene	8.404	165	76711	20.67 ppm	91
64) 2,3,4,6-Tetrachlorophenol	8.575	232	48419	23.36 ppm	92
65) Diethylphthalate	8.719	149	271445	22.10 ppm	98
66) Fluorene	8.858	166	259947	21.95 ppm	93
67) 4-Chlorophenyl-phenyle...	8.864	204	120000	21.79 ppm	98
68) 4-Nitroaniline	8.960	138	61283	19.30 ppm	84
70) 4,6-Dinitro-2-methylph...	9.013	198	33730	19.61 ppm	87
71) n-Nitrosodiphenylamine	9.056	169	168202	21.33 ppm	94
72) 1,2-Diphenylhydrazine	9.104	77	302595	21.84 ppm	99
74) 4-Bromophenyl-phenylether	9.596	248	70819	21.82 ppm	90
75) Hexachlorobenzene	9.682	284	80716	21.33 ppm	98
76) Pentachlorophenol	10.030	266	42583	44.68 ppm	93
77) Phenanthrene	10.313	178	358034	20.58 ppm	99
78) Anthracene	10.393	178	368876	21.02 ppm	99
79) Carbazole	10.687	167	332856	20.79 ppm	99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E2M3754\
Data File : 2m85108.D
Acq On : 28 Jun 2016 10:09 am
Operator : ashleyn
Sample : cc3720-25
Misc : op94766,e2m3754
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 14:54:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Jun 27 16:37:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
80) Di-n-butylphthalate	11.260	149	423892	20.61 ppm	99
81) Fluoranthene	12.196	202	346528	19.62 ppm	98
82) Octadecane	10.163	57	166943	19.73 ppm	98
84) Pyrene	12.549	202	350776	25.06 ppm	99
86) Butylbenzylphthalate	13.651	149	184708	26.63 ppm	95
87) Benzo[a]anthracene	14.480	228	315455	24.38 ppm	97
88) 3,3'-Dichlorobenzidine	14.474	252	115694	23.48 ppm	93
89) Chrysene	14.538	228	283688	23.52 ppm	98
90) bis(2-Ethylhexyl)phtha...	14.592	149	231205	25.52 ppm	97
92) Di-n-octylphthalate	15.587	149	353725	28.72 ppm	97
93) Benzo[b]fluoranthene	16.106	252	221092	24.41 ppm	99
94) Benzo[k]fluoranthene	16.143	252	200314	24.34 ppm	96
95) Benzo[a]pyrene	16.560	252	187605	25.11 ppm	96
96) Indeno[1,2,3-cd]pyrene	18.357	276	204520	23.05 ppm	92
97) Dibenz(a,h)acridine	17.940	279	148330	22.35 ppm	99
98) Dibenz[a,h]anthracene	18.368	278	175955	23.01 ppm	95
99) 7,12-Dimethylbenz(a)an...	16.074	256	109058	27.46 ppm	96
100) Benzo[g,h,i]perylene	18.844	276	167456	22.09 ppm	92

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

7.6.15

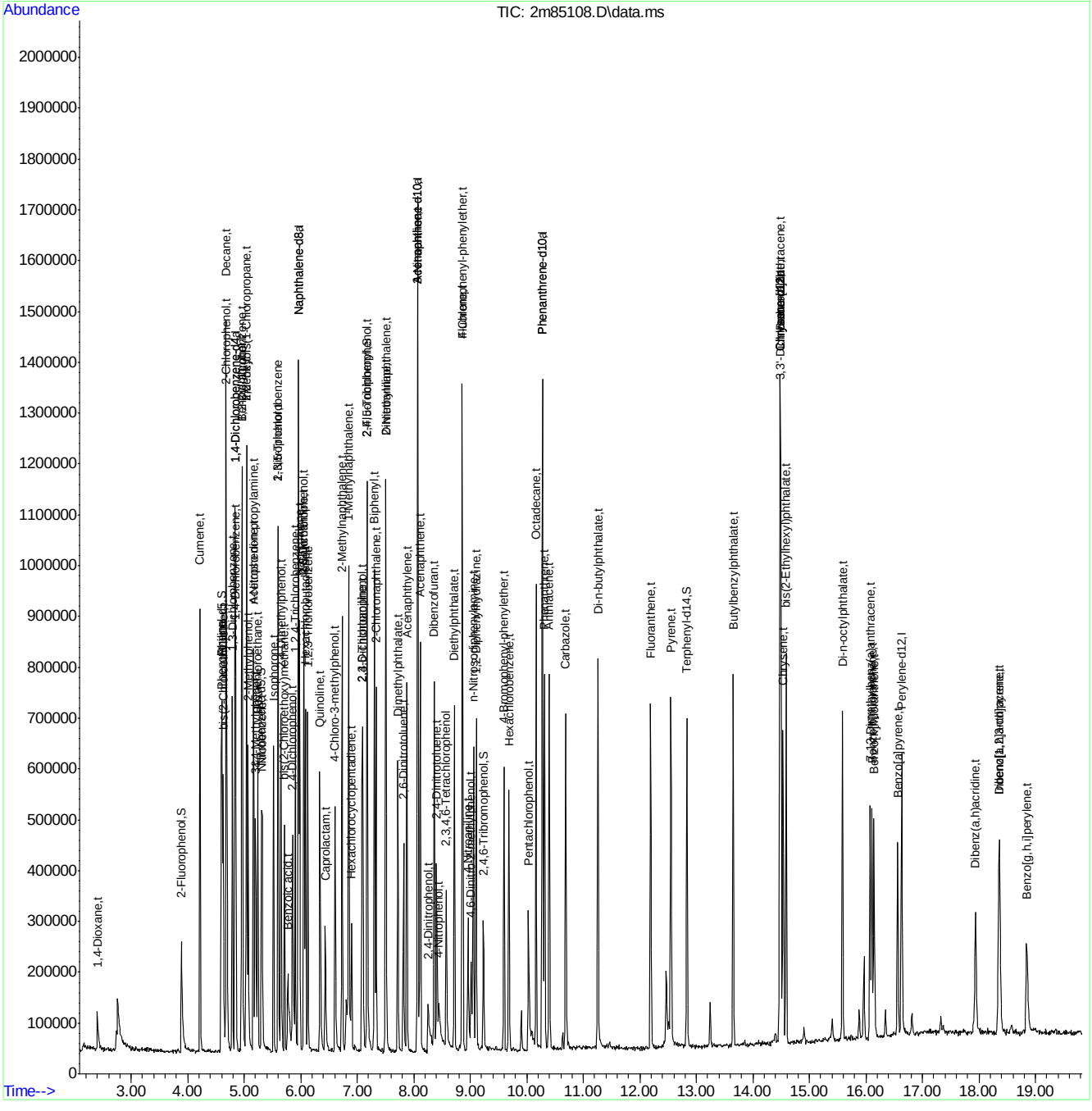
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E2M3754\
Data File : 2m85108.D
Acq On : 28 Jun 2016 10:09 am
Operator : ashleyn
Sample : cc3720-25
Misc : op94766,e2m3754
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 28 14:54:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3720.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Jun 27 16:37:24 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
06/23/16 13:16

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84387.D
Acq On : 22 Jun 2016 10:40 am
Operator : ashleyn
Sample : ic3699-2
Misc : op94630a,e3e3699
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 22 13:03:15 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:58:14 2016
QLast Update : Wed Jun 22 12:58:14 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	100451	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	389107	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	220794	40.00	ppm	0.00
69) Phenanthrene-d10	10.673	188	372215	40.00	ppm	0.00
83) Chrysene-d12	14.904	240	374734	40.00	ppm	-0.01
92) Perylene-d12	17.076	264	358687	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.111	152	100451	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	220794	40.00	ppm	0.00
106) Phenanthrene-d10a	10.673	188	372215	40.00	ppm	0.00
110) Chrysene-d12a	14.904	240	374734	40.00	ppm	-0.01
112) Naphthalene-d8a	6.282	136	389107	40.00	ppm	0.00
114) Chrysene-d12b	14.904	240	374734	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	4.105	112	6223	1.96	ppm	0.02
Spiked Amount 50.000			Recovery = 3.92%			
8) Phenol-d5	4.817	99	7998	2.10	ppm	-0.04
Spiked Amount 50.000			Recovery = 4.20%			
25) Nitrobenzene-d5	5.581	82	6006	2.02	ppm	0.00
Spiked Amount 50.000			Recovery = 4.04%			
51) 2-Fluorobiphenyl	7.528	172	15410	2.06	ppm	0.00
Spiked Amount 50.000			Recovery = 4.12%			
73) 2,4,6-Tribromophenol	9.604	330	2359	1.98	ppm	0.02
Spiked Amount 50.000			Recovery = 3.96%			
85) Terphenyl-d14	13.241	244	15847	1.97	ppm	-0.05
Spiked Amount 50.000			Recovery = 3.94%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.699	88	3044	2.37	ppm		74
3) Pyridine	3.036	79	6842	2.04	ppm		79
4) N-Nitrosodimethylamine	2.977	74	4270	2.24	ppm	#	48
6) Indene	5.330	116	12855	2.11	ppm		92
7) Cumene	4.496	105	16173	2.01	ppm		97
9) Phenol	4.827	94	9417	2.13	ppm	#	62
10) Aniline	4.849	93	9875	1.95	ppm		64
11) bis(2-Chloroethyl)ether	4.886	93	6437	2.02	ppm		91
12) 2-Chlorophenol	4.950	128	7288	1.97	ppm		85
13) Decane	4.972	43	6533	2.13	ppm		87
14) 1,3-Dichlorobenzene	5.068	146	8803	2.11	ppm		95
15) 1,4-Dichlorobenzene	5.127	146	8648	1.94	ppm		96
16) Benzyl alcohol	5.218	108	4332	1.91	ppm		92
17) 1,2-Dichlorobenzene	5.255	146	8095	2.02	ppm		94
18) Acetophenone	5.442	105	9375	2.02	ppm		95
19) 2-Methylphenol	5.309	108	5857	1.88	ppm		100
20) 2,2'-oxybis(1-Chloropr...	5.325	121	2517	1.98	ppm	#	48
21) 3&4-Methylphenol	5.437	108	6635	2.00	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84387.D
Acq On : 22 Jun 2016 10:40 am
Operator : ashleyn
Sample : ic3699-2
Misc : op94630a,e3e3699
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 22 13:03:15 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:58:14 2016
QLast Update : Wed Jun 22 12:58:14 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.437	70	4250	2.16	ppm		78
23) Hexachloroethane	5.549	201	2752	2.15	ppm		94
26) Nitrobenzene	5.598	77	6397	2.04	ppm		81
27) Quinoline	6.662	129	13923	2.01	ppm		88
28) Isophorone	5.811	82	10782	1.91	ppm		77
29) 2-Nitrophenol	5.892	139	3749	1.92	ppm		94
30) 2,4-Dimethylphenol	5.924	107	5834	1.98	ppm		78
31) Benzoic acid	5.972	105	2190	1.33	ppm	#	56
32) bis(2-Chloroethoxy)met...	6.004	93	6770	1.84	ppm		98
33) 2,4-Dichlorophenol	6.132	162	5951	2.06	ppm		94
34) 2,6-Dichlorophenol	6.362	162	5937	2.02	ppm		83
35) 1,3,5-Trichlorobenzene	5.908	180	6262	1.81	ppm		89
36) 1,2,4-Trichlorobenzene	6.218	180	6314	2.00	ppm		96
37) 1,2,3-Trichlorobenzene	6.459	180	6289	2.02	ppm		98
38) Naphthalene	6.304	128	21571	1.99	ppm		97
39) 4-Chloroaniline	6.346	127	8023	1.92	ppm		76
40) 2,3-Dichloroaniline	7.421	161	7210	2.12	ppm		89
41) Caprolactam	6.699	55	2845	1.99	ppm		81
42) Hexachlorobutadiene	6.432	225	3144	2.00	ppm		91
43) 4-Chloro-3-methylphenol	6.881	107	5364	2.08	ppm		85
44) 2-Methylnaphthalene	7.079	141	12306	1.98	ppm		89
45) 1-Methylnaphthalene	7.197	141	12608	1.96	ppm		90
46) Dimethylnaphthalene	7.871	156	12532	2.04	ppm		88
48) Hexachlorocyclopentadiene	7.277	237	5574	3.28	ppm		84
49) 2,4,6-Trichlorophenol	7.427	196	3964	1.90	ppm		92
50) 2,4,5-Trichlorophenol	7.475	196	4083	1.91	ppm		98
52) 2-Chloronaphthalene	7.689	162	12773	2.08	ppm		90
53) Biphenyl	7.662	154	17432	1.96	ppm		94
54) 2-Nitroaniline	7.817	65	2794	1.88	ppm	#	32
55) Dimethylphthalate	8.069	163	14077	2.05	ppm		98
56) Acenaphthylene	8.250	152	21893	2.04	ppm		77
57) 2,6-Dinitrotoluene	8.143	165	2637	1.75	ppm	#	60
58) 3-Nitroaniline	8.379	138	3210	1.84	ppm		80
59) Acenaphthene	8.496	153	13915	1.97	ppm		88
60) 2,4-Dinitrophenol	8.529	184	1073	2.00	ppm	#	55
61) 4-Nitrophenol	8.641	109	1131	1.86	ppm	#	32
62) Dibenzofuran	8.743	168	18179	2.00	ppm		79
63) 2,4-Dinitrotoluene	8.721	165	3361	1.85	ppm	#	51
64) 2,3,4,6-Tetrachlorophenol	8.930	232	2830	1.84	ppm		82
65) Diethylphthalate	9.090	149	13866	2.06	ppm		96
66) Fluorene	9.240	166	15198	2.01	ppm		87
67) 4-Chlorophenyl-phenyle...	9.251	204	6780	1.84	ppm		85
68) 4-Nitroaniline	9.267	138	3522	1.98	ppm		79
70) 4,6-Dinitro-2-methylph...	9.326	198	1002	1.12	ppm	#	56
71) n-Nitrosodiphenylamine	9.427	169	10293	2.04	ppm		84
72) 1,2-Diphenylhydrazine	9.486	77	11985	1.91	ppm		79
74) 4-Bromophenyl-phenylether	9.989	248	4046	2.02	ppm		77
75) Hexachlorobenzene	10.090	284	4862	2.00	ppm		86
76) Pentachlorophenol	10.401	266	2011	2.09	ppm		80
77) Phenanthrene	10.711	178	21286	2.02	ppm		96

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84387.D
Acq On : 22 Jun 2016 10:40 am
Operator : ashleyn
Sample : ic3699-2
Misc : op94630a,e3e3699
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 22 13:03:15 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:58:14 2016
QLast Update : Wed Jun 22 12:58:14 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.786	178	21626	2.04 ppm	97
79) Carbazole	11.048	167	19600	2.01 ppm	90
80) Di-n-butylphthalate	11.658	149	23146	1.91 ppm	97
81) Fluoranthene	12.594	202	20706	1.85 ppm	95
82) Octadecane	10.582	57	7399	1.82 ppm	82
84) Pyrene	12.952	202	23162	2.01 ppm	93
86) Butylbenzylphthalate	14.059	149	10452	1.98 ppm	82
88) Benzo[a]anthracene	14.888	228	23307	2.02 ppm	94
89) 3,3'-Dichlorobenzidine	14.867	252	8595	1.92 ppm	96
90) Chrysene	14.942	228	20941	2.07 ppm	95
91) bis(2-Ethylhexyl)phtha...	15.016	149	14924	2.06 ppm	95
93) Di-n-octylphthalate	16.006	149	25648	1.79 ppm	91
94) Benzo[b]fluoranthene	16.503	252	22478	1.76 ppm	96
95) Benzo[k]fluoranthene	16.541	252	22312	2.06 ppm	95
96) Benzo[a]pyrene	16.979	252	20121	1.94 ppm	94
97) Indeno[1,2,3-cd]pyrene	18.905	276	20613m	1.83 ppm	
98) Dibenz(a,h)acridine	18.472	279	18736	1.85 ppm	95
99) Dibenz[a,h]anthracene	18.948	278	20768	1.93 ppm	98
100) 7,12-Dimethylbenz(a)an...	16.503	256	8903	1.63 ppm	86
101) Benzo[g,h,i]perylene	19.440	276	19802	1.94 ppm	88

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

7.6.16

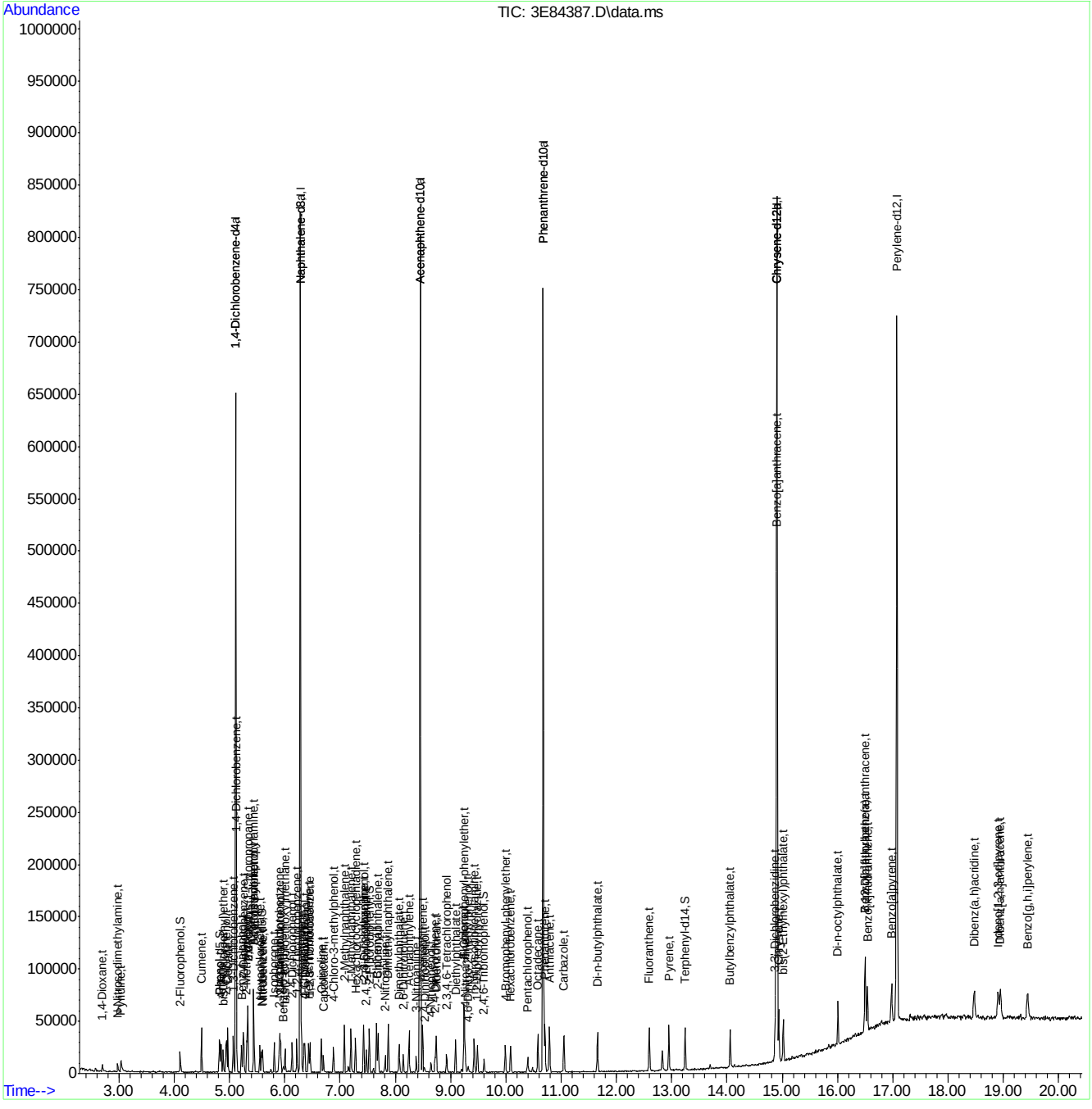
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84387.D
Acq On : 22 Jun 2016 10:40 am
Operator : ashleyn
Sample : ic3699-2
Misc : op94630a,e3e3699
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 22 13:03:15 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:58:14 2016
QLast Update : Wed Jun 22 12:58:14 2016
Response via : Initial Calibration



Manual Integration Approval Summary

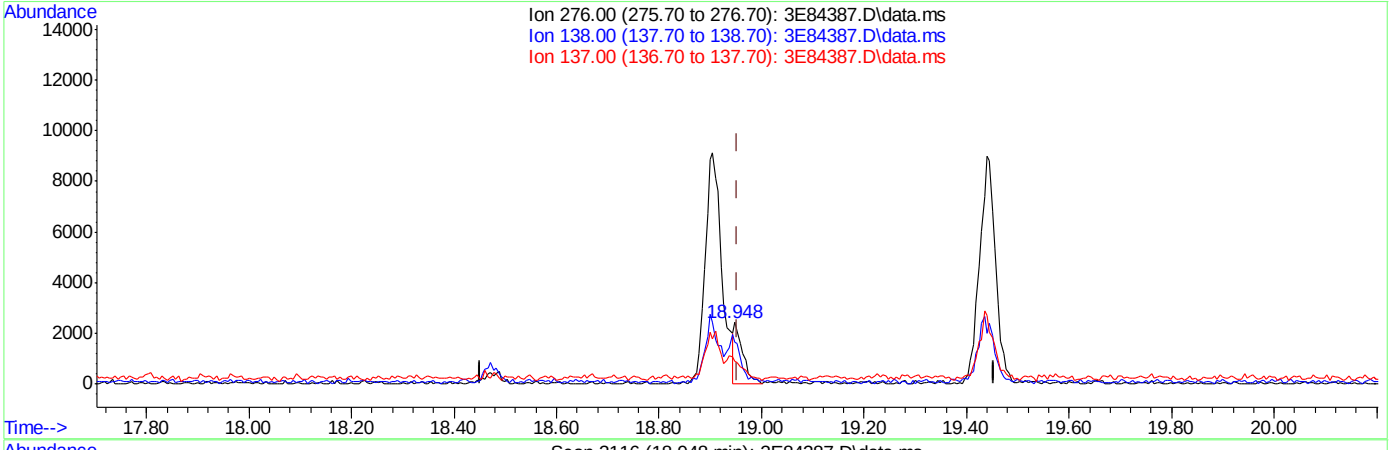
Sample Number:	E3E3699-IC3699	**Method:**	SW846 8270D
Lab FileID:	3E84387.D	**Analyst approved:**	06/23/16 13:01 Ashley Noble
Injection Time:	06/22/16 10:40	**Supervisor approved:**	06/23/16 13:16 Nina Pandya

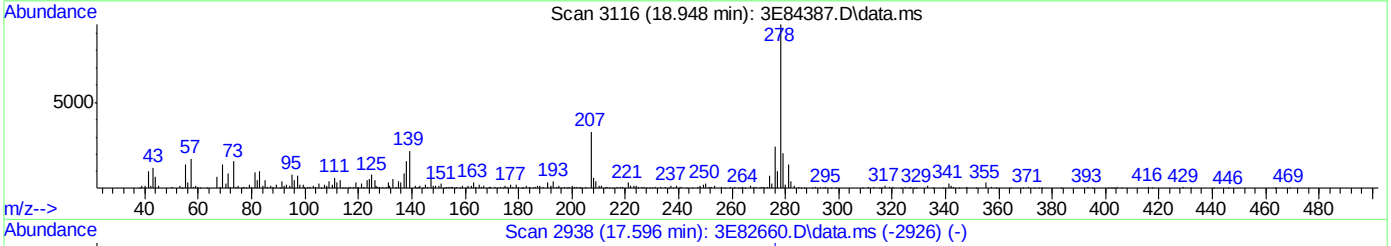
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.90	Split peak

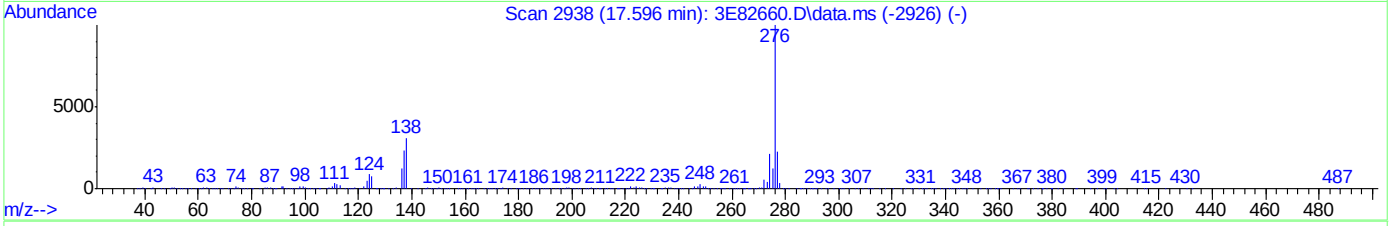
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84387.D
Acq On : 22 Jun 2016 10:40 am
Operator : ashleyn
Sample : ic3699-2
Misc : op94630a,e3e3699
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 22 12:58:18 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:58:14 2016
QLast Update : Wed Jun 22 12:58:14 2016
Response via : Initial Calibration







TIC: 3E84387.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.948min (-0.005) 0.27ppm

response 3010

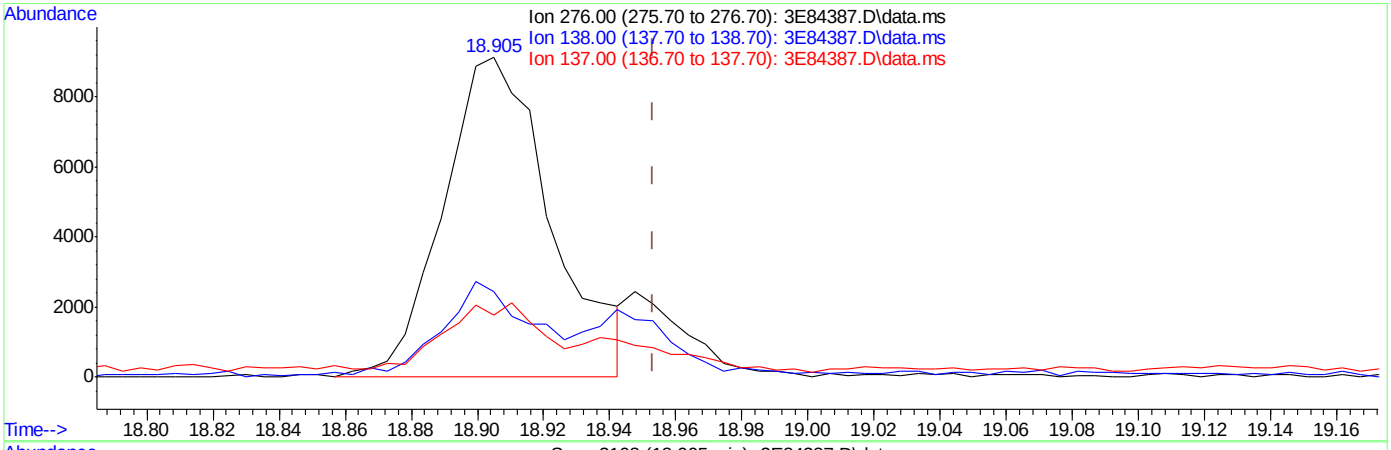
Ion	Exp%	Act%
276.00	100	100
138.00	27.80	41.32
137.00	20.40	21.41
0.00	0.00	0.00

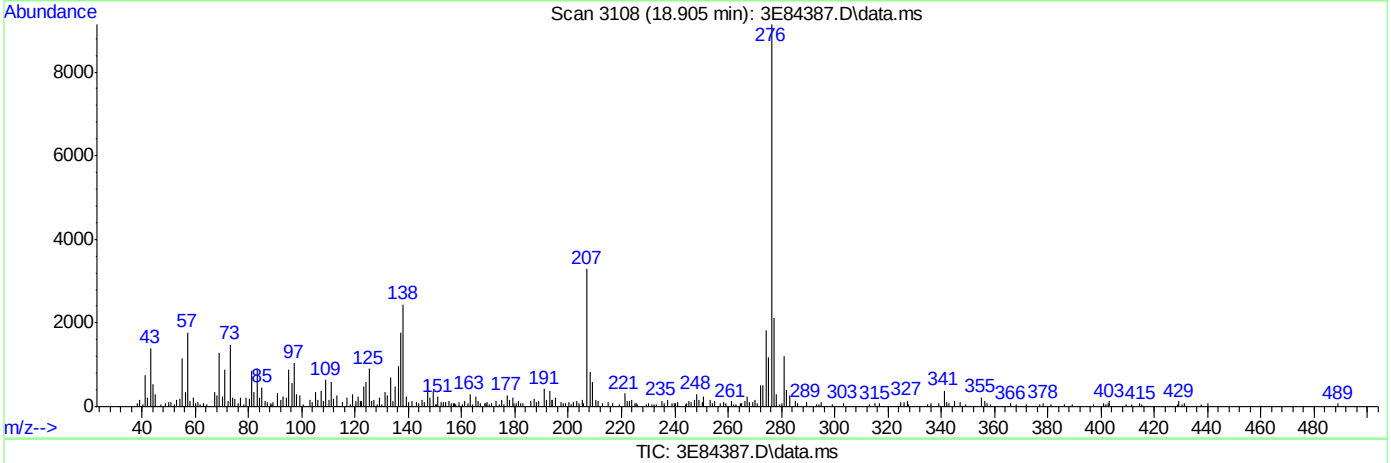
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84387.D
Acq On : 22 Jun 2016 10:40 am
Operator : ashleyn
Sample : ic3699-2
Misc : op94630a,e3e3699
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 22 12:58:18 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:58:14 2016
QLast Update : Wed Jun 22 12:58:14 2016
Response via : Initial Calibration





TIC: 3E84387.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.905min (-0.048) 1.83ppm m

response 20613

Ion	Exp%	Act%
276.00	100	100
138.00	27.80	26.76
137.00	20.40	19.47
0.00	0.00	0.00

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84388.D
Acq On : 22 Jun 2016 11:07 am
Operator : ashleyn
Sample : ic3699-1
Misc : op94630a,e3e3699
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 22 12:57:24 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:56:57 2016
QLast Update : Wed Jun 22 12:56:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	104708	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	410678	40.00	ppm	0.00
47) Acenaphthene-d10	8.449	164	231828	40.00	ppm	0.00
69) Phenanthrene-d10	10.674	188	391290	40.00	ppm	0.00
83) Chrysene-d12	14.904	240	380885	40.00	ppm	-0.01
92) Perylene-d12	17.076	264	372707	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.111	152	104708	40.00	ppm	0.00
104) Acenaphthene-d10a	8.449	164	231828	40.00	ppm	0.00
106) Phenanthrene-d10a	10.674	188	391290	40.00	ppm	0.00
110) Chrysene-d12a	14.904	240	380885	40.00	ppm	-0.01
112) Naphthalene-d8a	6.282	136	410678	40.00	ppm	0.00
114) Chrysene-d12b	14.904	240	380885	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	4.105	112	3397	1.05	ppm	0.02
Spiked Amount 50.000			Recovery = 2.10%			
8) Phenol-d5	4.817	99	4055	1.04	ppm	-0.04
Spiked Amount 50.000			Recovery = 2.08%			
25) Nitrobenzene-d5	5.582	82	3069	0.96	ppm	0.00
Spiked Amount 50.000			Recovery = 1.92%			
51) 2-Fluorobiphenyl	7.529	172	8098	1.06	ppm	0.00
Spiked Amount 50.000			Recovery = 2.12%			
73) 2,4,6-Tribromophenol	9.604	330	1166	0.87	ppm	0.02
Spiked Amount 50.000			Recovery = 1.74%			
85) Terphenyl-d14	13.241	244	8297	1.03	ppm	-0.05
Spiked Amount 50.000			Recovery = 2.06%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.699	88	1372	1.05	ppm		90
3) Pyridine	3.041	79	3605	1.07	ppm		82
4) N-Nitrosodimethylamine	2.977	74	2047	1.07	ppm	#	53
6) Indene	5.330	116	6408	1.02	ppm		91
7) Cumene	4.496	105	8754	1.09	ppm		88
9) Phenol	4.827	94	4549	0.98	ppm	#	57
10) Aniline	4.849	93	6151	1.40	ppm		64
11) bis(2-Chloroethyl)ether	4.886	93	3565	1.16	ppm		82
12) 2-Chlorophenol	4.950	128	3802	0.98	ppm		86
13) Decane	4.972	43	3369	1.11	ppm		78
14) 1,3-Dichlorobenzene	5.068	146	4451	1.05	ppm		91
15) 1,4-Dichlorobenzene	5.127	146	4970	1.15	ppm		93
16) Benzyl alcohol	5.218	108	2492	1.11	ppm		99
17) 1,2-Dichlorobenzene	5.255	146	4321	1.07	ppm		97
18) Acetophenone	5.443	105	4822	1.00	ppm		93
19) 2-Methylphenol	5.309	108	3362	1.07	ppm		83
20) 2,2'-oxybis(1-Chloropr...	5.325	121	1373	1.08	ppm	#	52
21) 3&4-Methylphenol	5.437	108	3462	1.00	ppm		94

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84388.D
Acq On : 22 Jun 2016 11:07 am
Operator : ashleyn
Sample : ic3699-1
Misc : op94630a,e3e3699
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 22 12:57:24 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:56:57 2016
QLast Update : Wed Jun 22 12:56:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.437	70	2006	0.96	ppm		82
23) Hexachloroethane	5.550	201	1405	1.11	ppm		95
26) Nitrobenzene	5.598	77	3248	0.96	ppm		78
27) Quinoline	6.662	129	7490	1.05	ppm		80
28) Isophorone	5.812	82	6019	1.02	ppm		78
29) 2-Nitrophenol	5.892	139	1946	0.89	ppm		83
30) 2,4-Dimethylphenol	5.924	107	2932	0.89	ppm		81
31) Benzoic acid	5.972	105	959	0.38	ppm		97
32) bis(2-Chloroethoxy)met...	6.004	93	3936	1.03	ppm		92
33) 2,4-Dichlorophenol	6.133	162	2924	0.93	ppm		94
34) 2,6-Dichlorophenol	6.363	162	3197	1.06	ppm		88
35) 1,3,5-Trichlorobenzene	5.908	180	3516	0.93	ppm		87
36) 1,2,4-Trichlorobenzene	6.218	180	3307	0.98	ppm		91
37) 1,2,3-Trichlorobenzene	6.453	180	3412	1.08	ppm		99
38) Naphthalene	6.304	128	11822	1.06	ppm		99
39) 4-Chloroaniline	6.346	127	4458	1.02	ppm		80
40) 2,3-Dichloroaniline	7.422	161	3612	1.01	ppm		87
41) Caprolactam	6.699	55	1613	1.14	ppm		80
42) Hexachlorobutadiene	6.432	225	1709	1.07	ppm		94
43) 4-Chloro-3-methylphenol	6.881	107	2685	0.97	ppm		83
44) 2-Methylnaphthalene	7.074	141	6646	1.03	ppm		84
45) 1-Methylnaphthalene	7.197	141	6934	1.04	ppm		86
46) Dimethylnaphthalene	7.871	156	6930	1.15	ppm		95
48) Hexachlorocyclopentadiene	7.277	237	2652	1.18	ppm		96
49) 2,4,6-Trichlorophenol	7.427	196	2133	0.95	ppm		87
50) 2,4,5-Trichlorophenol	7.475	196	2233	0.98	ppm		96
52) 2-Chloronaphthalene	7.689	162	6391	0.98	ppm		91
53) Biphenyl	7.662	154	9414	1.01	ppm		95
54) 2-Nitroaniline	7.817	65	1414	0.83	ppm	#	50
55) Dimethylphthalate	8.063	163	7278	1.02	ppm		98
56) Acenaphthylene	8.245	152	11358	1.01	ppm		79
57) 2,6-Dinitrotoluene	8.144	165	1487	0.88	ppm		77
58) 3-Nitroaniline	8.379	138	1661	0.83	ppm	#	54
59) Acenaphthene	8.491	153	7573	1.04	ppm		84
60) 2,4-Dinitrophenol	8.534	184	370	0.39	ppm	#	39
61) 4-Nitrophenol	8.641	109	531	0.71	ppm	#	73
62) Dibenzofuran	8.743	168	9843	1.06	ppm		79
63) 2,4-Dinitrotoluene	8.716	165	1539	0.68	ppm	#	52
64) 2,3,4,6-Tetrachlorophenol	8.930	232	1466	0.83	ppm		84
65) Diethylphthalate	9.090	149	7153	1.03	ppm		94
66) Fluorene	9.240	166	8039	1.02	ppm		79
67) 4-Chlorophenyl-phenyle...	9.251	204	4094	1.12	ppm	#	70
68) 4-Nitroaniline	9.261	138	1845	0.98	ppm		68
70) 4,6-Dinitro-2-methylph...	9.320	198	487	0.35	ppm	#	51
71) n-Nitrosodiphenylamine	9.427	169	5330	1.01	ppm		86
72) 1,2-Diphenylhydrazine	9.486	77	6160	0.88	ppm		77
74) 4-Bromophenyl-phenylether	9.989	248	2035	0.94	ppm		89
75) Hexachlorobenzene	10.085	284	2570	1.02	ppm		90
76) Pentachlorophenol	10.395	266	756	0.46	ppm		81
77) Phenanthrene	10.706	178	11448	1.06	ppm		97

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84388.D
Acq On : 22 Jun 2016 11:07 am
Operator : ashleyn
Sample : ic3699-1
Misc : op94630a,e3e3699
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 22 12:57:24 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:56:57 2016
QLast Update : Wed Jun 22 12:56:57 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.786	178	11531	1.07 ppm	99
79) Carbazole	11.048	167	10145	0.98 ppm	94
80) Di-n-butylphthalate	11.658	149	12135	0.91 ppm	96
81) Fluoranthene	12.594	202	11237	0.91 ppm	96
82) Octadecane	10.577	57	3921	0.84 ppm	86
84) Pyrene	12.952	202	11869	1.03 ppm	95
86) Butylbenzylphthalate	14.059	149	5263	0.96 ppm	93
88) Benzo[a]anthracene	14.888	228	12550	1.15 ppm	95
89) 3,3'-Dichlorobenzidine	14.872	252	4287	0.89 ppm	98
90) Chrysene	14.936	228	11057	1.17 ppm	95
91) bis(2-Ethylhexyl)phtha...	15.017	149	7775	1.11 ppm	97
93) Di-n-octylphthalate	16.006	149	13419	0.82 ppm	88
94) Benzo[b]fluoranthene	16.498	252	12316	0.87 ppm	96
95) Benzo[k]fluoranthene	16.541	252	11923	1.13 ppm	95
96) Benzo[a]pyrene	16.974	252	11117	1.07 ppm	95
97) Indeno[1,2,3-cd]pyrene	18.900	276	11571	0.98 ppm	96
98) Dibenz(a,h)acridine	18.472	279	10277	0.96 ppm	98
99) Dibenz[a,h]anthracene	18.943	278	11521	1.06 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.498	256	4652	0.69 ppm	93
101) Benzo[g,h,i]perylene	19.440	276	10791	1.03 ppm	84

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

7.6.17

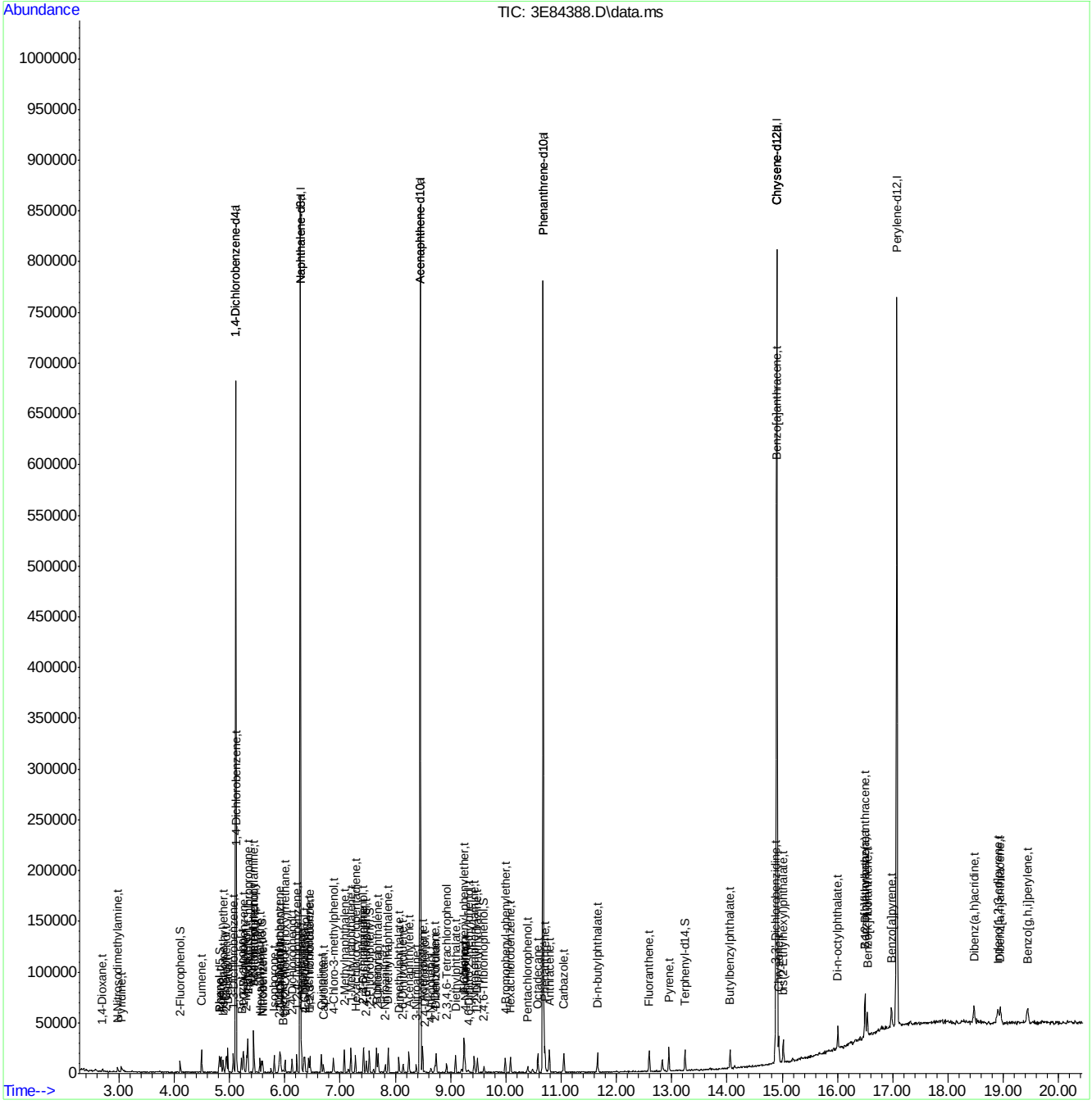
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84388.D
Acq On : 22 Jun 2016 11:07 am
Operator : ashleyn
Sample : ic3699-1
Misc : op94630a,e3e3699
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 22 12:57:24 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:56:57 2016
QLast Update : Wed Jun 22 12:56:57 2016
Response via : Initial Calibration



M3E3699.M Wed Jun 22 12:57:33 2016 MS3E Page: 4

SGS ACCUTEST JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
06/23/16 13:16

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84389.D
Acq On : 22 Jun 2016 11:34 am
Operator : ashleyn
Sample : ic3699-100
Misc : op94630a,e3e3699
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 22 12:19:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:18:16 2016
QLast Update : Wed Jun 22 12:18:16 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.116	152	96457	40.00	ppm	0.00
24) Naphthalene-d8	6.288	136	344524	40.00	ppm	0.00
47) Acenaphthene-d10	8.454	164	178192	40.00	ppm	0.00
69) Phenanthrene-d10	10.679	188	276799	40.00	ppm	0.00
83) Chrysene-d12	14.915	240	289467	40.00	ppm	0.00
92) Perylene-d12	17.081	264	228765	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.116	152	96457	40.00	ppm	0.00
104) Acenaphthene-d10a	8.454	164	178192	40.00	ppm	0.00
106) Phenanthrene-d10a	10.679	188	276799	40.00	ppm	0.00
110) Chrysene-d12a	14.915	240	289467	40.00	ppm	0.00
112) Naphthalene-d8a	6.288	136	344524	40.00	ppm	0.00
114) Chrysene-d12b	14.915	240	289467	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	4.111	112	296699	100.00	ppm	0.02
Spiked Amount 50.000			Recovery	=	200.00%	
8) Phenol-d5	4.827	99	359015	100.00	ppm	-0.03
Spiked Amount 50.000			Recovery	=	200.00%	
25) Nitrobenzene-d5	5.587	82	269418	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
51) 2-Fluorobiphenyl	7.539	172	585050	100.00	ppm	0.01
Spiked Amount 50.000			Recovery	=	200.00%	
73) 2,4,6-Tribromophenol	9.614	330	95098	100.00	ppm	0.03
Spiked Amount 50.000			Recovery	=	200.00%	
85) Terphenyl-d14	13.252	244	612978	100.00	ppm	-0.04
Spiked Amount 50.000			Recovery	=	200.00%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds							Qvalue
2) 1,4-Dioxane	2.688	88	120105	100.00	ppm		86
3) Pyridine	3.004	79	310981	100.00	ppm		83
4) N-Nitrosodimethylamine	2.966	74	176869	100.00	ppm	#	62
6) Indene	5.330	116	581521	100.00	ppm		96
7) Cumene	4.496	105	738287	100.00	ppm		96
9) Phenol	4.838	94	428288	100.00	ppm	#	64
10) Aniline	4.849	93	405597	100.00	ppm		67
11) bis(2-Chloroethyl)ether	4.897	93	282974	100.00	ppm		87
12) 2-Chlorophenol	4.956	128	358953	100.00	ppm		90
13) Decane	4.977	43	279359	100.00	ppm		83
14) 1,3-Dichlorobenzene	5.073	146	392343	100.00	ppm		93
15) 1,4-Dichlorobenzene	5.127	146	397267	100.00	ppm		98
16) Benzyl alcohol	5.229	108	206038	100.00	ppm	#	70
17) 1,2-Dichlorobenzene	5.261	146	370947	100.00	ppm		99
18) Acetophenone	5.453	105	446176	100.00	ppm		97
19) 2-Methylphenol	5.319	108	289513	100.00	ppm		97
20) 2,2'-oxybis(1-Chloropr...	5.330	121	117135	100.00	ppm	#	43
21) 3&4-Methylphenol	5.448	108	319674	100.00	ppm		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84389.D
Acq On : 22 Jun 2016 11:34 am
Operator : ashleyn
Sample : ic3699-100
Misc : op94630a,e3e3699
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 22 12:19:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:18:16 2016
QLast Update : Wed Jun 22 12:18:16 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.453	70	193103	100.00	ppm		77
23) Hexachloroethane	5.555	201	116263	100.00	ppm		96
26) Nitrobenzene	5.608	77	282716	100.00	ppm		72
27) Quinoline	6.683	129	600097	100.00	ppm		83
28) Isophorone	5.822	82	493862	100.00	ppm		80
29) 2-Nitrophenol	5.902	139	182799	100.00	ppm		100
30) 2,4-Dimethylphenol	5.935	107	276729	100.00	ppm		76
31) Benzoic acid	6.068	105	211695m	109.69	ppm		
32) bis(2-Chloroethoxy)met...	6.015	93	320921	100.00	ppm		99
33) 2,4-Dichlorophenol	6.143	162	265162	100.00	ppm		93
34) 2,6-Dichlorophenol	6.373	162	253251	100.00	ppm		92
35) 1,3,5-Trichlorobenzene	5.913	180	317767	100.00	ppm		94
36) 1,2,4-Trichlorobenzene	6.223	180	282414	100.00	ppm		94
37) 1,2,3-Trichlorobenzene	6.464	180	264407	100.00	ppm		96
38) Naphthalene	6.309	128	931447	100.00	ppm		99
39) 4-Chloroaniline	6.357	127	367395	100.00	ppm		79
40) 2,3-Dichloroaniline	7.432	161	298670	100.00	ppm		88
41) Caprolactam	6.769	55	118233m	119.89	ppm		
42) Hexachlorobutadiene	6.437	225	134361	100.00	ppm		97
43) 4-Chloro-3-methylphenol	6.903	107	232227	100.00	ppm		87
44) 2-Methylnaphthalene	7.085	141	542744	100.00	ppm		90
45) 1-Methylnaphthalene	7.208	141	559402	100.00	ppm		91
46) Dimethylnaphthalene	7.881	156	505659	100.00	ppm		91
48) Hexachlorocyclopentadiene	7.282	237	344672	200.00	ppm		94
49) 2,4,6-Trichlorophenol	7.438	196	173131	100.00	ppm		100
50) 2,4,5-Trichlorophenol	7.491	196	174275	100.00	ppm		97
52) 2-Chloronaphthalene	7.700	162	501861	100.00	ppm		89
53) Biphenyl	7.673	154	713781	100.00	ppm		97
54) 2-Nitroaniline	7.833	65	130614	100.00	ppm	#	60
55) Dimethylphthalate	8.079	163	549657	100.00	ppm		99
56) Acenaphthylene	8.256	152	860310	100.00	ppm		82
57) 2,6-Dinitrotoluene	8.160	165	129298	100.00	ppm	#	68
58) 3-Nitroaniline	8.400	138	154064	100.00	ppm	#	70
59) Acenaphthene	8.502	153	557539	100.00	ppm		95
60) 2,4-Dinitrophenol	8.550	184	144784	200.00	ppm	#	46
61) 4-Nitrophenol	8.668	109	57332	100.00	ppm	#	58
62) Dibenzofuran	8.753	168	712059	100.00	ppm		82
63) 2,4-Dinitrotoluene	8.737	165	175178	100.00	ppm	#	59
64) 2,3,4,6-Tetrachlorophenol	8.941	232	135755	100.00	ppm		80
65) Diethylphthalate	9.106	149	535852	100.00	ppm		96
66) Fluorene	9.256	166	603647	100.00	ppm		96
67) 4-Chlorophenyl-phenyle...	9.256	204	280387	100.00	ppm		80
68) 4-Nitroaniline	9.304	138	145004	100.00	ppm		81
70) 4,6-Dinitro-2-methylph...	9.347	198	98567	100.00	ppm		71
71) n-Nitrosodiphenylamine	9.443	169	373935	100.00	ppm		91
72) 1,2-Diphenylhydrazine	9.497	77	497244	100.00	ppm		87
74) 4-Bromophenyl-phenylether	10.000	248	153911	100.00	ppm		84
75) Hexachlorobenzene	10.101	284	178942	100.00	ppm		84
76) Pentachlorophenol	10.411	266	233007	200.00	ppm		98
77) Phenanthrene	10.722	178	761219	100.00	ppm		98

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84389.D
Acq On : 22 Jun 2016 11:34 am
Operator : ashleyn
Sample : ic3699-100
Misc : op94630a,e3e3699
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 22 12:19:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:18:16 2016
QLast Update : Wed Jun 22 12:18:16 2016
Response via : Initial Calibration

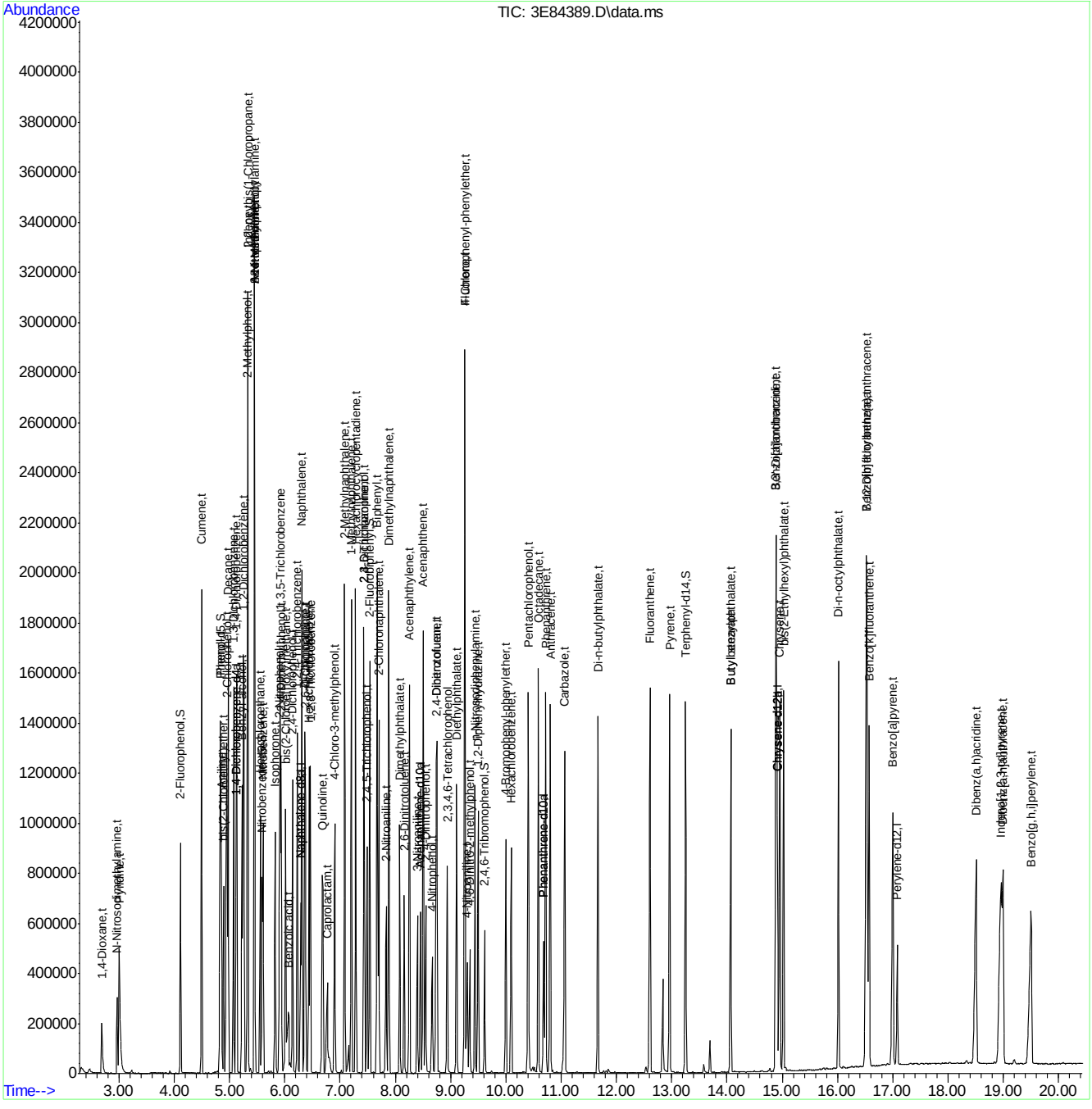
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.802	178	761461	100.00 ppm	96
79) Carbazole	11.064	167	732610	100.00 ppm	90
80) Di-n-butylphthalate	11.668	149	945172	100.00 ppm	97
81) Fluoranthene	12.610	202	869116	100.00 ppm	97
82) Octadecane	10.588	57	328605	100.00 ppm	85
84) Pyrene	12.968	202	874997	100.00 ppm	94
86) Butylbenzylphthalate	14.070	149	416826	100.00 ppm	85
87) Butyl stearate	14.070	56	13431	100.00 ppm	66
88) Benzo[a]anthracene	14.894	228	832216	100.00 ppm	95
89) 3,3'-Dichlorobenzidine	14.888	252	365852	100.00 ppm	98
90) Chrysene	14.963	228	720747	100.00 ppm	96
91) bis(2-Ethylhexyl)phtha...	15.027	149	530907	100.00 ppm	97
93) Di-n-octylphthalate	16.017	149	999650	100.00 ppm	91
94) Benzo[b]fluoranthene	16.530	252	869520	100.00 ppm	95
95) Benzo[k]fluoranthene	16.573	252	646954	100.00 ppm	96
96) Benzo[a]pyrene	17.006	252	640299	100.00 ppm	96
97) Indeno[1,2,3-cd]pyrene	18.953	276	725468	100.00 ppm	91
98) Dibenz(a,h)acridine	18.509	279	660183	100.00 ppm	96
99) Dibenz[a,h]anthracene	18.996	278	668007	100.00 ppm	92
100) 7,12-Dimethylbenz(a)an...	16.530	256	411096	100.00 ppm	92
101) Benzo[g,h,i]perylene	19.504	276	640270	100.00 ppm	83

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84389.D
Acq On : 22 Jun 2016 11:34 am
Operator : ashleyn
Sample : ic3699-100
Misc : op94630a,e3e3699
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 22 12:19:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:18:16 2016
QLast Update : Wed Jun 22 12:18:16 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Manual Integration Approval Summary

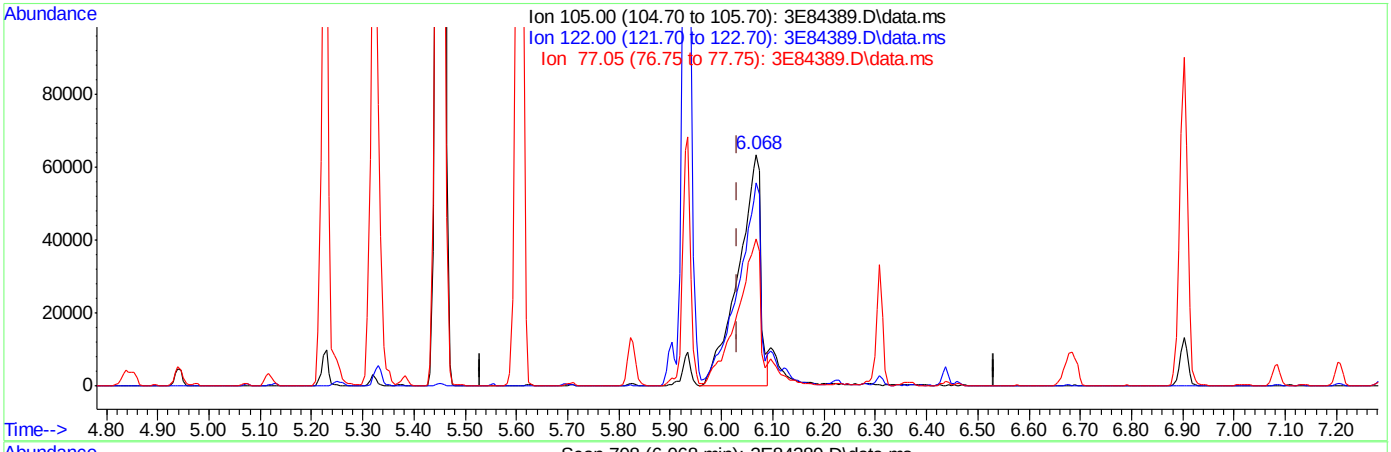
Sample Number:	E3E3699-IC3699	**Method:**	SW846 8270D
Lab FileID:	3E84389.D	**Analyst approved:**	06/23/16 13:01 Ashley Noble
Injection Time:	06/22/16 11:34	**Supervisor approved:**	06/23/16 13:16 Nina Pandya

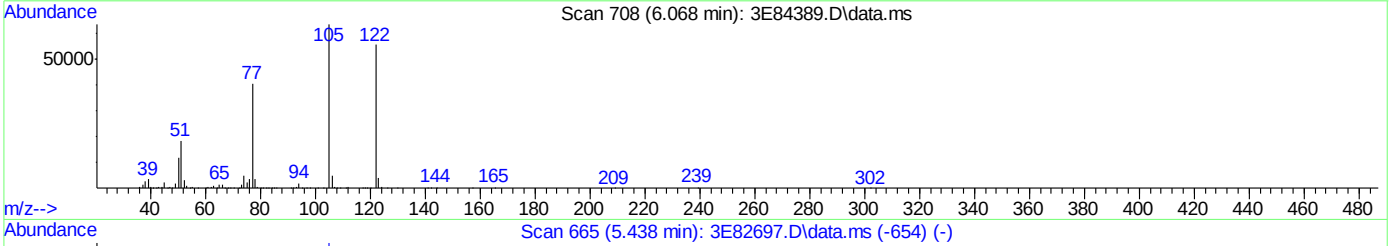
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		6.07	Split peak
Caprolactam	105-60-2		6.77	Split peak

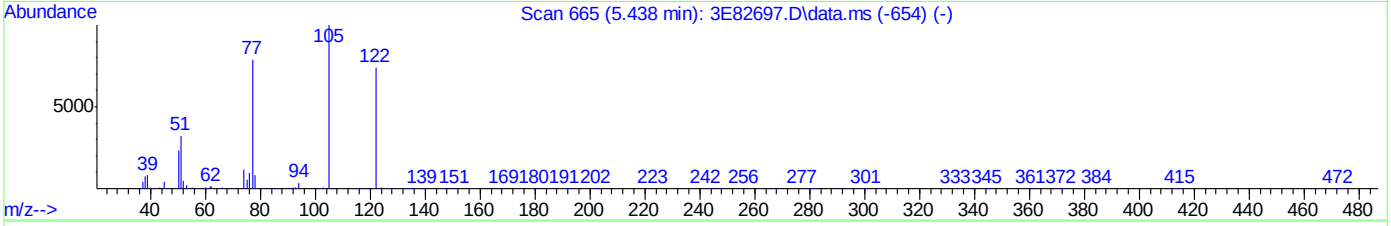
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84389.D
Acq On : 22 Jun 2016 11:34 am
Operator : ashleyn
Sample : ic3699-100
Misc : op94630a,e3e3699
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 22 12:18:25 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:18:16 2016
QLast Update : Wed Jun 22 12:18:16 2016
Response via : Initial Calibration







TIC: 3E84389.D\data.ms

(31) Benzoic acid (t)

6.068min (+0.037) 100.00ppm

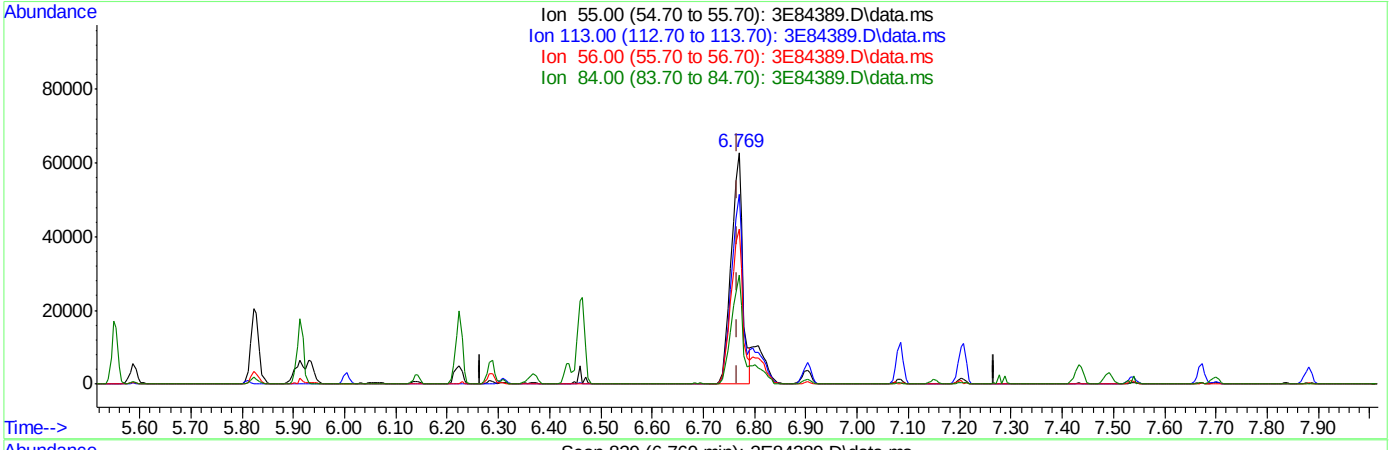
response 192998

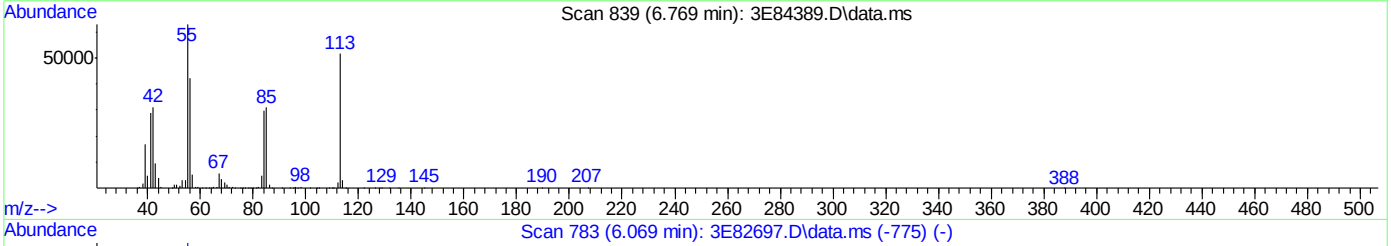
Ion	Exp%	Act%
105.00	100	100
122.00	69.20	84.26
77.05	80.50	63.01
0.00	0.00	0.00

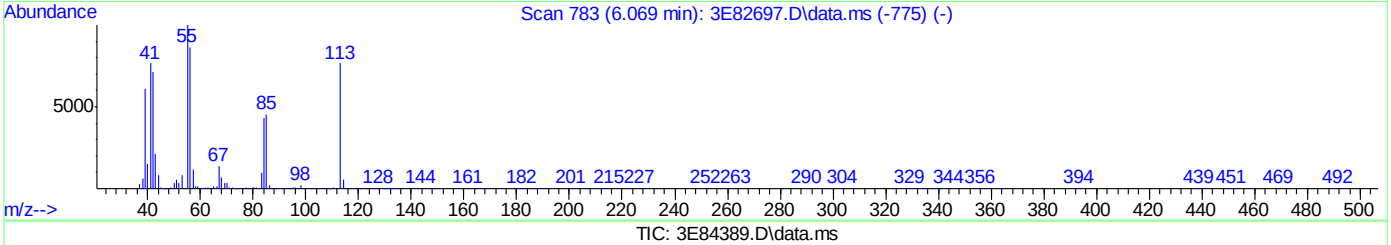
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84389.D
Acq On : 22 Jun 2016 11:34 am
Operator : ashleyn
Sample : ic3699-100
Misc : op94630a,e3e3699
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 22 12:18:25 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:18:16 2016
QLast Update : Wed Jun 22 12:18:16 2016
Response via : Initial Calibration







TIC: 3E84389.D\data.ms

(41) Caprolactam (t)

6.769min (+0.002) 100.00ppm

response 98622

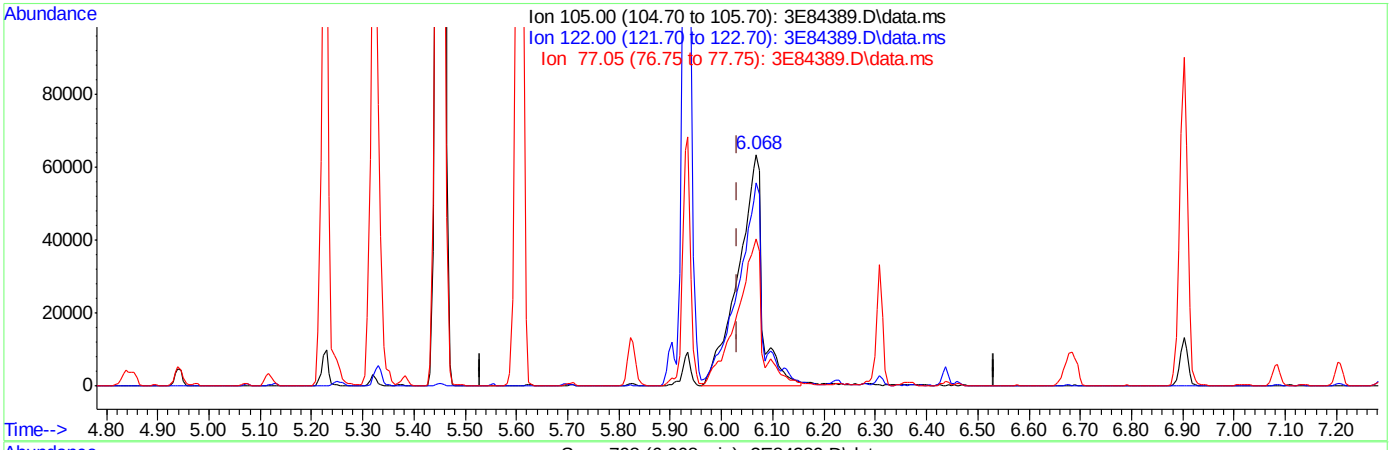
Ion	Exp%	Act%
55.00	100	100
113.00	66.30	81.03
56.00	86.80	67.20
84.00	42.70	46.96

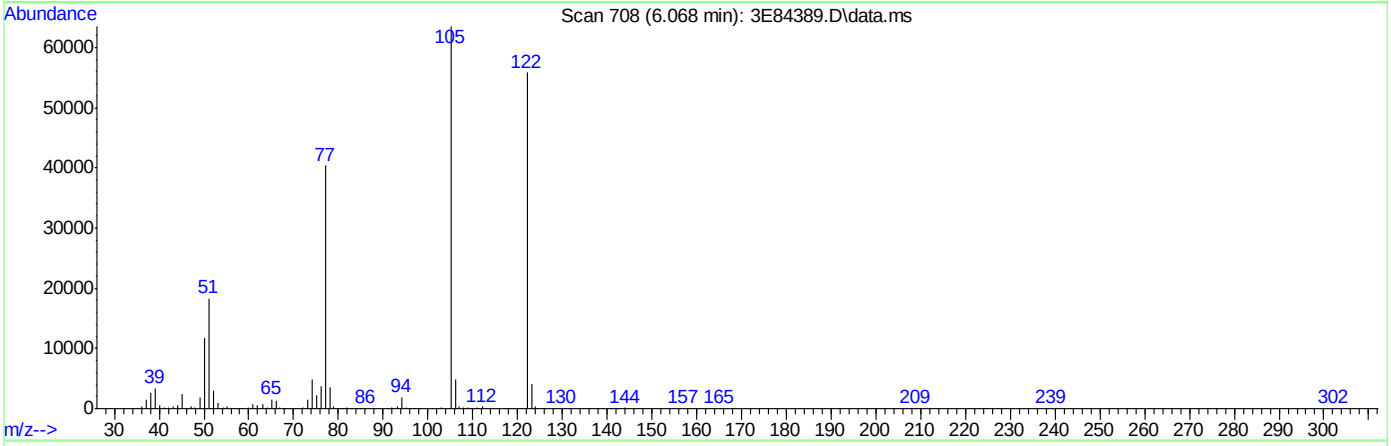
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84389.D
Acq On : 22 Jun 2016 11:34 am
Operator : ashleyn
Sample : ic3699-100
Misc : op94630a,e3e3699
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 22 12:19:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:18:16 2016
QLast Update : Wed Jun 22 12:18:16 2016
Response via : Initial Calibration





TIC: 3E84389.D\data.ms

(31) Benzoic acid (t)

6.068min (+0.037) 109.69ppm m

response 211695

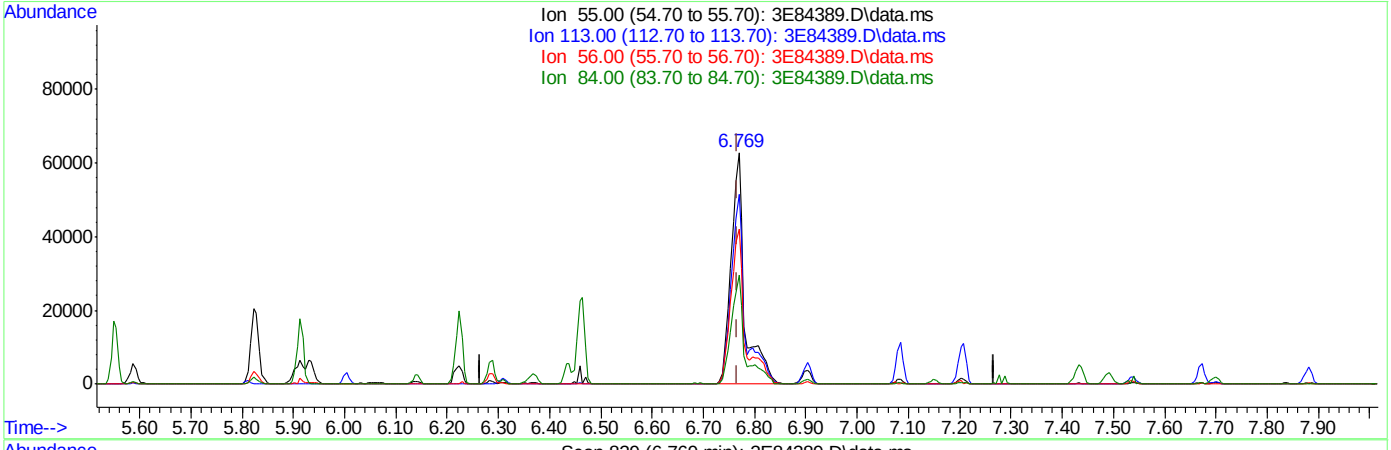
Ion	Exp%	Act%
105.00	100	100
122.00	69.20	87.93
77.05	80.50	63.59
0.00	0.00	0.00

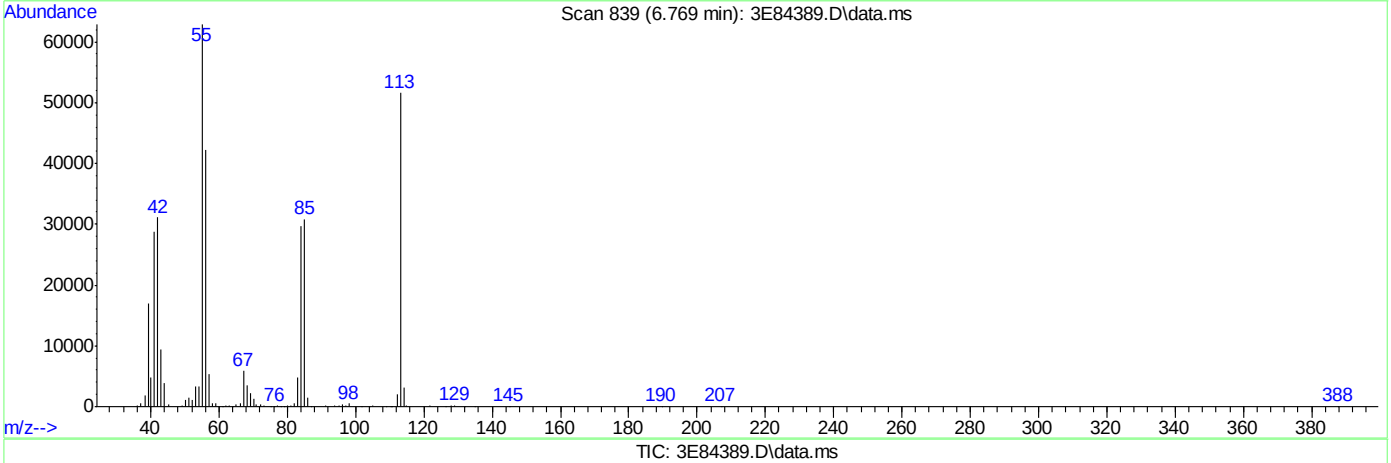
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84389.D
Acq On : 22 Jun 2016 11:34 am
Operator : ashleyn
Sample : ic3699-100
Misc : op94630a,e3e3699
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 22 12:19:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 12:18:16 2016
QLast Update : Wed Jun 22 12:18:16 2016
Response via : Initial Calibration





TIC: 3E84389.D\data.ms

(41) Caprolactam (t)

6.769min (+0.002) 119.89ppm m

response 118233

Ion	Exp%	Act%
55.00	100	100
113.00	66.30	82.07
56.00	86.80	67.19
84.00	42.70	47.33

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84390.D
Acq On : 22 Jun 2016 12:02 pm
Operator : ashleyn
Sample : ic3699-80
Misc : op94630a,e3e3699
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 22 13:06:10 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 13:05:42 2016
QLast Update : Wed Jun 22 13:05:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.116	152	90073	40.00	ppm	0.00
24) Naphthalene-d8	6.288	136	334842	40.00	ppm	0.00
47) Acenaphthene-d10	8.454	164	174771	40.00	ppm	0.00
69) Phenanthrene-d10	10.679	188	273625	40.00	ppm	0.00
83) Chrysene-d12	14.915	240	286385	40.00	ppm	0.00
92) Perylene-d12	17.081	264	238339	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.116	152	90073	40.00	ppm	0.00
104) Acenaphthene-d10a	8.454	164	174771	40.00	ppm	0.00
106) Phenanthrene-d10a	10.679	188	273625	40.00	ppm	0.00
110) Chrysene-d12a	14.915	240	286385	40.00	ppm	0.00
112) Naphthalene-d8a	6.288	136	334842	40.00	ppm	0.00
114) Chrysene-d12b	14.915	240	286385	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	4.111	112	232253	82.14	ppm	0.02
Spiked Amount 50.000			Recovery = 164.28%			
8) Phenol-d5	4.822	99	281738	81.06	ppm	-0.03
Spiked Amount 50.000			Recovery = 162.12%			
25) Nitrobenzene-d5	5.587	82	214469	83.51	ppm	0.00
Spiked Amount 50.000			Recovery = 167.02%			
51) 2-Fluorobiphenyl	7.539	172	455844	76.22	ppm	0.01
Spiked Amount 50.000			Recovery = 152.44%			
73) 2,4,6-Tribromophenol	9.615	330	75484	86.35	ppm	0.03
Spiked Amount 50.000			Recovery = 172.70%			
85) Terphenyl-d14	13.246	244	488132	79.77	ppm	-0.05
Spiked Amount 50.000			Recovery = 159.54%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.688	88	95438	78.09	ppm		88
3) Pyridine	3.004	79	252276	83.42	ppm		84
4) N-Nitrosodimethylamine	2.961	74	142091	80.02	ppm	#	65
6) Indene	5.330	116	460514	82.70	ppm		95
7) Cumene	4.496	105	592096	81.95	ppm		96
9) Phenol	4.833	94	333844	82.53	ppm	#	62
10) Aniline	4.849	93	319743	71.02	ppm		67
11) bis(2-Chloroethyl)ether	4.892	93	224652	78.41	ppm		89
12) 2-Chlorophenol	4.951	128	275631	83.61	ppm		94
13) Decane	4.972	43	226865	80.68	ppm		90
14) 1,3-Dichlorobenzene	5.074	146	301760	79.14	ppm		99
15) 1,4-Dichlorobenzene	5.127	146	309885	78.37	ppm		98
16) Benzyl alcohol	5.223	108	159764	79.75	ppm		95
17) 1,2-Dichlorobenzene	5.261	146	283681	78.72	ppm		99
18) Acetophenone	5.448	105	348028	83.41	ppm		93
19) 2-Methylphenol	5.320	108	225777	82.38	ppm		93
20) 2,2'-oxybis(1-Chloropr...	5.330	121	91332	80.51	ppm	#	44
21) 3&4-Methylphenol	5.448	108	249644	83.79	ppm		93

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84390.D
Acq On : 22 Jun 2016 12:02 pm
Operator : ashleyn
Sample : ic3699-80
Misc : op94630a,e3e3699
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 22 13:06:10 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 13:05:42 2016
QLast Update : Wed Jun 22 13:05:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.448	70	155637	85.92	ppm		80
23) Hexachloroethane	5.555	201	90364	76.84	ppm		94
26) Nitrobenzene	5.603	77	226318	83.32	ppm		80
27) Quinoline	6.678	129	467183	78.17	ppm		85
28) Isophorone	5.822	82	389641	81.48	ppm		81
29) 2-Nitrophenol	5.903	139	143664	86.61	ppm		97
30) 2,4-Dimethylphenol	5.929	107	212671	84.06	ppm		76
31) Benzoic acid	6.058	105	166309	131.93	ppm		98
32) bis(2-Chloroethoxy)met...	6.015	93	251118	81.52	ppm		98
33) 2,4-Dichlorophenol	6.138	162	200638	80.02	ppm		94
34) 2,6-Dichlorophenol	6.368	162	193885	76.31	ppm		93
35) 1,3,5-Trichlorobenzene	5.913	180	236364	81.98	ppm		95
36) 1,2,4-Trichlorobenzene	6.223	180	214721	78.96	ppm		96
37) 1,2,3-Trichlorobenzene	6.459	180	198994	74.09	ppm		97
38) Naphthalene	6.309	128	737371	79.08	ppm		100
39) 4-Chloroaniline	6.357	127	286662	80.69	ppm		79
40) 2,3-Dichloroaniline	7.427	161	231483	77.59	ppm		88
41) Caprolactam	6.758	55	94446	76.82	ppm		86
42) Hexachlorobutadiene	6.437	225	103456	76.60	ppm		96
43) 4-Chloro-3-methylphenol	6.897	107	180229	80.05	ppm		87
44) 2-Methylnaphthalene	7.085	141	422216	79.22	ppm		91
45) 1-Methylnaphthalene	7.202	141	433100	78.67	ppm		92
46) Dimethylnaphthalene	7.882	156	408948	76.88	ppm		87
48) Hexachlorocyclopentadiene	7.283	237	257558	203.71	ppm		96
49) 2,4,6-Trichlorophenol	7.438	196	135229	83.22	ppm		97
50) 2,4,5-Trichlorophenol	7.491	196	133856	80.17	ppm		97
52) 2-Chloronaphthalene	7.700	162	389771	79.03	ppm		90
53) Biphenyl	7.668	154	557839	79.70	ppm		97
54) 2-Nitroaniline	7.833	65	102263	88.85	ppm	#	45
55) Dimethylphthalate	8.079	163	436592	79.63	ppm		99
56) Acenaphthylene	8.256	152	687879	80.41	ppm		81
57) 2,6-Dinitrotoluene	8.160	165	102691	89.74	ppm	#	65
58) 3-Nitroaniline	8.395	138	121679	90.50	ppm	#	72
59) Acenaphthene	8.502	153	435576	78.32	ppm		92
60) 2,4-Dinitrophenol	8.545	184	113941	321.92	ppm	#	42
61) 4-Nitrophenol	8.662	109	44864	95.44	ppm	#	63
62) Dibenzofuran	8.748	168	562471	78.12	ppm		82
63) 2,4-Dinitrotoluene	8.737	165	137953	98.34	ppm	#	57
64) 2,3,4,6-Tetrachlorophenol	8.935	232	107415	90.60	ppm		83
65) Diethylphthalate	9.106	149	424786	78.98	ppm		96
66) Fluorene	9.251	166	474710	79.14	ppm		99
67) 4-Chlorophenyl-phenyle...	9.256	204	216937	76.39	ppm		78
68) 4-Nitroaniline	9.299	138	118206	84.29	ppm		80
70) 4,6-Dinitro-2-methylph...	9.342	198	78527	139.96	ppm		73
71) n-Nitrosodiphenylamine	9.438	169	297890	79.74	ppm		93
72) 1,2-Diphenylhydrazine	9.497	77	404549	89.05	ppm		86
74) 4-Bromophenyl-phenylether	10.000	248	119179	80.68	ppm		86
75) Hexachlorobenzene	10.096	284	141128	79.09	ppm		90
76) Pentachlorophenol	10.406	266	181318	304.64	ppm		97
77) Phenanthrene	10.722	178	614395	78.92	ppm		97

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84390.D
Acq On : 22 Jun 2016 12:02 pm
Operator : ashleyn
Sample : ic3699-80
Misc : op94630a,e3e3699
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 22 13:06:10 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 13:05:42 2016
QLast Update : Wed Jun 22 13:05:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.797	178	614506	78.32 ppm	96
79) Carbazole	11.064	167	590643	82.26 ppm	91
80) Di-n-butylphthalate	11.663	149	758103	86.35 ppm	97
81) Fluoranthene	12.604	202	689336	85.95 ppm	95
82) Octadecane	10.588	57	268020	92.32 ppm	85
84) Pyrene	12.963	202	709432	80.52 ppm	95
86) Butylbenzylphthalate	14.070	149	333564	82.87 ppm	84
88) Benzo[a]anthracene	14.894	228	664921	75.06 ppm	95
89) 3,3'-Dichlorobenzidine	14.883	252	291798	86.44 ppm	98
90) Chrysene	14.958	228	590549	75.56 ppm	97
91) bis(2-Ethylhexyl)phtha...	15.022	149	440343	78.63 ppm	94
93) Di-n-octylphthalate	16.017	149	806715	87.95 ppm	92
94) Benzo[b]fluoranthene	16.525	252	709723	87.25 ppm	95
95) Benzo[k]fluoranthene	16.568	252	559276	77.04 ppm	100
96) Benzo[a]pyrene	17.001	252	536890	78.70 ppm	97
97) Indeno[1,2,3-cd]pyrene	18.948	276	585080	80.49 ppm	92
98) Dibenz(a,h)acridine	18.504	279	530448	80.88 ppm	90
99) Dibenz[a,h]anthracene	18.985	278	554247	78.33 ppm	95
100) 7,12-Dimethylbenz(a)an...	16.525	256	332623	97.68 ppm	94
101) Benzo[g,h,i]perylene	19.493	276	539610	80.34 ppm	85

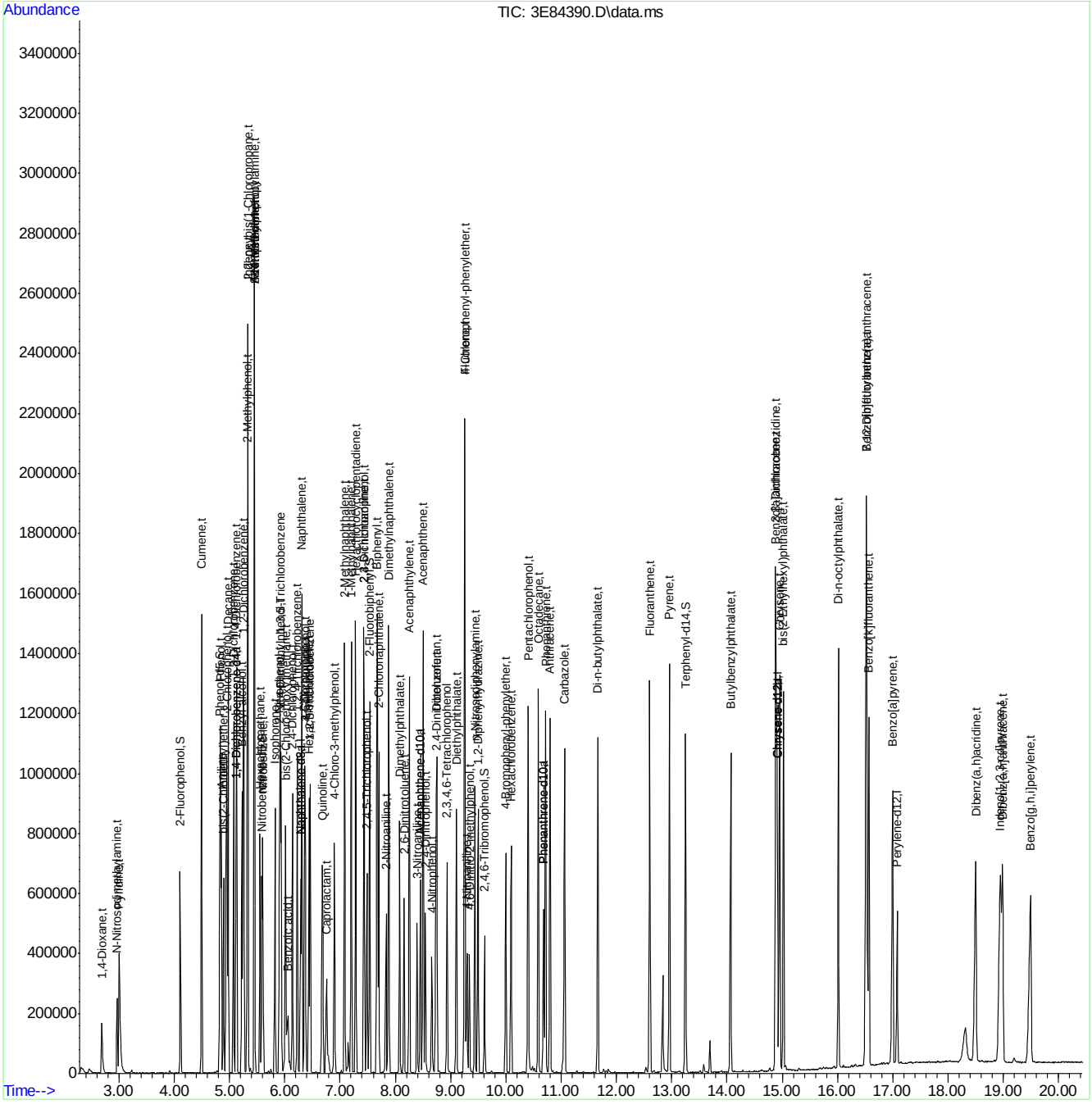
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84390.D
Acq On : 22 Jun 2016 12:02 pm
Operator : ashleyn
Sample : ic3699-80
Misc : op94630a,e3e3699
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 22 13:06:10 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 13:05:42 2016
QLast Update : Wed Jun 22 13:05:42 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84391.D
Acq On : 22 Jun 2016 12:29 pm
Operator : ashleyn
Sample : ic3699-25
Misc : op94630a,e3e3699
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 22 13:07:51 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 13:06:29 2016
QLast Update : Wed Jun 22 13:06:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	96817	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	365335	40.00	ppm	0.00
47) Acenaphthene-d10	8.454	164	204944	40.00	ppm	0.00
69) Phenanthrene-d10	10.673	188	339330	40.00	ppm	0.00
83) Chrysene-d12	14.904	240	344353	40.00	ppm	-0.01
92) Perylene-d12	17.076	264	313453	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.111	152	96817	40.00	ppm	0.00
104) Acenaphthene-d10a	8.454	164	204944	40.00	ppm	0.00
106) Phenanthrene-d10a	10.673	188	339330	40.00	ppm	0.00
110) Chrysene-d12a	14.904	240	344353	40.00	ppm	-0.01
112) Naphthalene-d8a	6.282	136	365335	40.00	ppm	0.00
114) Chrysene-d12b	14.904	240	344353	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	4.105	112	73362	23.98	ppm	0.02
Spiked Amount 50.000			Recovery = 47.96%			
8) Phenol-d5	4.817	99	88304	23.56	ppm	-0.04
Spiked Amount 50.000			Recovery = 47.12%			
25) Nitrobenzene-d5	5.582	82	69608	24.57	ppm	0.00
Spiked Amount 50.000			Recovery = 49.14%			
51) 2-Fluorobiphenyl	7.534	172	161509	23.30	ppm	0.00
Spiked Amount 50.000			Recovery = 46.60%			
73) 2,4,6-Tribromophenol	9.609	330	27075	24.49	ppm	0.02
Spiked Amount 50.000			Recovery = 48.98%			
85) Terphenyl-d14	13.241	244	174598	23.75	ppm	-0.05
Spiked Amount 50.000			Recovery = 47.50%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.693	88	31048	23.78	ppm		89
3) Pyridine	3.009	79	80489	24.50	ppm		81
4) N-Nitrosodimethylamine	2.966	74	45329	23.75	ppm	#	68
6) Indene	5.330	116	143023	23.69	ppm		97
7) Cumene	4.496	105	185938	23.80	ppm		95
9) Phenol	4.827	94	103372	23.59	ppm	#	62
10) Aniline	4.849	93	104452	22.21	ppm		68
11) bis(2-Chloroethyl)ether	4.892	93	70634	23.05	ppm		87
12) 2-Chlorophenol	4.950	128	85001	23.72	ppm		91
13) Decane	4.972	43	75098	24.79	ppm		93
14) 1,3-Dichlorobenzene	5.068	146	94539	23.13	ppm		98
15) 1,4-Dichlorobenzene	5.127	146	98205	23.22	ppm		99
16) Benzyl alcohol	5.218	108	50592	23.51	ppm		100
17) 1,2-Dichlorobenzene	5.255	146	91144	23.63	ppm		97
18) Acetophenone	5.442	105	108268	23.89	ppm		94
19) 2-Methylphenol	5.314	108	71811	24.20	ppm		98
20) 2,2'-oxybis(1-Chloropr...	5.325	121	29173	23.89	ppm	#	53
21) 3&4-Methylphenol	5.437	108	77577	23.94	ppm		97

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84391.D
Acq On : 22 Jun 2016 12:29 pm
Operator : ashleyn
Sample : ic3699-25
Misc : op94630a,e3e3699
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 22 13:07:51 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 13:06:29 2016
QLast Update : Wed Jun 22 13:06:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.437	70	48794	24.61	ppm		83
23) Hexachloroethane	5.549	201	30408	24.30	ppm		88
26) Nitrobenzene	5.598	77	74476	24.87	ppm		80
27) Quinoline	6.662	129	160457	24.75	ppm		83
28) Isophorone	5.812	82	126541	24.14	ppm		81
29) 2-Nitrophenol	5.897	139	45116	24.42	ppm		99
30) 2,4-Dimethylphenol	5.924	107	63513	22.72	ppm		74
31) Benzoic acid	6.009	105	47902	29.97	ppm		98
32) bis(2-Chloroethoxy)met...	6.009	93	82675	24.48	ppm		98
33) 2,4-Dichlorophenol	6.132	162	66152	24.18	ppm		94
34) 2,6-Dichlorophenol	6.362	162	63797	23.28	ppm		96
35) 1,3,5-Trichlorobenzene	5.908	180	76473	24.16	ppm		98
36) 1,2,4-Trichlorobenzene	6.223	180	72122	24.39	ppm		96
37) 1,2,3-Trichlorobenzene	6.459	180	70944	24.66	ppm		95
38) Naphthalene	6.304	128	242275	23.88	ppm		100
39) 4-Chloroaniline	6.352	127	95820	24.67	ppm		78
40) 2,3-Dichloroaniline	7.427	161	78789	24.39	ppm		89
41) Caprolactam	6.726	55	30725	23.13	ppm		82
42) Hexachlorobutadiene	6.432	225	35137	24.10	ppm		98
43) 4-Chloro-3-methylphenol	6.887	107	60107	24.47	ppm		89
44) 2-Methylnaphthalene	7.079	141	139062	23.97	ppm		90
45) 1-Methylnaphthalene	7.202	141	143477	23.99	ppm		86
46) Dimethylnaphthalene	7.876	156	140015	24.36	ppm		90
48) Hexachlorocyclopentadiene	7.277	237	83886	52.96	ppm		98
49) 2,4,6-Trichlorophenol	7.427	196	46172	23.99	ppm		99
50) 2,4,5-Trichlorophenol	7.480	196	47335	24.16	ppm		96
52) 2-Chloronaphthalene	7.694	162	141296	24.51	ppm		87
53) Biphenyl	7.662	154	193426	23.59	ppm		96
54) 2-Nitroaniline	7.823	65	34964	25.21	ppm	#	49
55) Dimethylphthalate	8.069	163	155361	24.19	ppm		98
56) Acenaphthylene	8.251	152	241057	24.00	ppm		81
57) 2,6-Dinitrotoluene	8.149	165	35678	25.80	ppm	#	65
58) 3-Nitroaniline	8.384	138	41948	25.76	ppm	#	71
59) Acenaphthene	8.497	153	150827	23.25	ppm		91
60) 2,4-Dinitrophenol	8.534	184	33532	64.48	ppm	#	43
61) 4-Nitrophenol	8.646	109	14943	25.86	ppm	#	57
62) Dibenzofuran	8.743	168	201148	23.97	ppm		82
63) 2,4-Dinitrotoluene	8.721	165	46676	26.84	ppm	#	53
64) 2,3,4,6-Tetrachlorophenol	8.930	232	37733	26.27	ppm		82
65) Diethylphthalate	9.096	149	150509	23.94	ppm		96
66) Fluorene	9.245	166	165498	23.59	ppm		97
67) 4-Chlorophenyl-phenyle...	9.251	204	78142	23.73	ppm		76
68) 4-Nitroaniline	9.277	138	43140	25.89	ppm		79
70) 4,6-Dinitro-2-methylph...	9.331	198	24838	30.06	ppm	#	66
71) n-Nitrosodiphenylamine	9.427	169	108413	23.42	ppm		87
72) 1,2-Diphenylhydrazine	9.491	77	136406	23.55	ppm		80
74) 4-Bromophenyl-phenylether	9.994	248	43475	23.68	ppm	#	83
75) Hexachlorobenzene	10.090	284	53311	24.16	ppm		88
76) Pentachlorophenol	10.401	266	57443	63.48	ppm		98
77) Phenanthrene	10.711	178	229579	23.86	ppm		96

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84391.D
Acq On : 22 Jun 2016 12:29 pm
Operator : ashleyn
Sample : ic3699-25
Misc : op94630a,e3e3699
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 22 13:07:51 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 13:06:29 2016
QLast Update : Wed Jun 22 13:06:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Anthracene	10.791	178	227330	23.49	ppm	96
79) Carbazole	11.053	167	215230	24.00	ppm	92
80) Di-n-butylphthalate	11.658	149	261192	23.52	ppm	97
81) Fluoranthene	12.599	202	236194	23.31	ppm	96
82) Octadecane	10.583	57	89854	24.03	ppm	86
84) Pyrene	12.952	202	248284	23.40	ppm	95
86) Butylbenzylphthalate	14.065	149	111934	22.92	ppm	86
88) Benzo[a]anthracene	14.888	228	233728	22.29	ppm	96
89) 3,3'-Dichlorobenzidine	14.872	252	101704	24.56	ppm	97
90) Chrysene	14.942	228	220185	23.76	ppm	96
91) bis(2-Ethylhexyl)phtha...	15.022	149	157711	23.52	ppm	99
93) Di-n-octylphthalate	16.011	149	270497	21.88	ppm	91
94) Benzo[b]fluoranthene	16.509	252	254922	23.30	ppm	96
95) Benzo[k]fluoranthene	16.552	252	220822	23.35	ppm	97
96) Benzo[a]pyrene	16.985	252	205474	23.00	ppm	97
97) Indeno[1,2,3-cd]pyrene	18.916	276	211156	22.05	ppm	89
98) Dibenz(a,h)acridine	18.482	279	194198	22.45	ppm	90
99) Dibenz[a,h]anthracene	18.964	278	214343	23.15	ppm	95
100) 7,12-Dimethylbenz(a)an...	16.509	256	115062	24.35	ppm	94
101) Benzo[g,h,i]perylene	19.456	276	203901	23.06	ppm	87

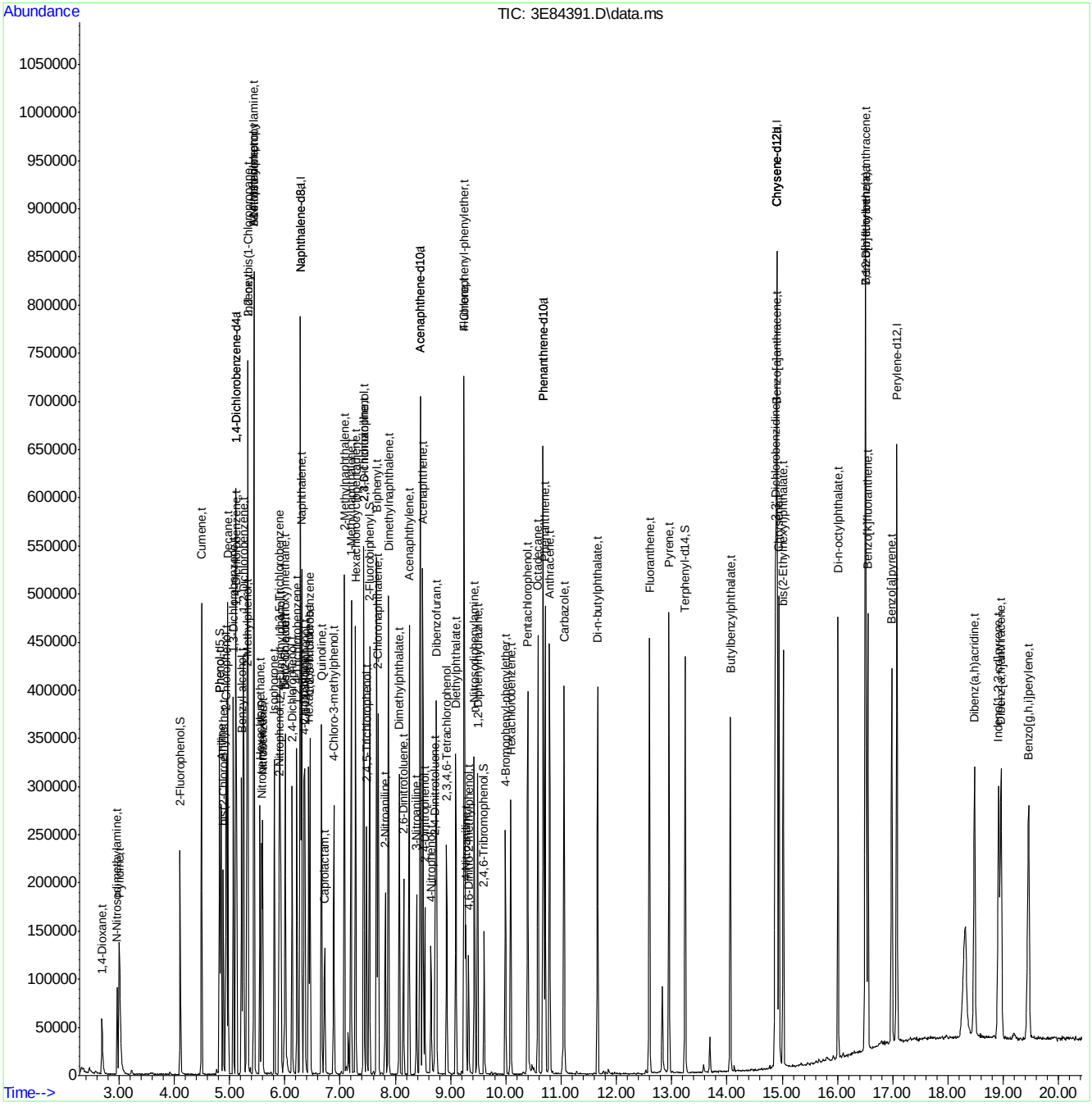
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84391.D
Acq On : 22 Jun 2016 12:29 pm
Operator : ashleyn
Sample : ic3699-25
Misc : op94630a,e3e3699
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 22 13:07:51 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 13:06:29 2016
QLast Update : Wed Jun 22 13:06:29 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84392.D
Acq On : 22 Jun 2016 12:56 pm
Operator : ashleyn
Sample : ic3699-10
Misc : op94630a,e3e3699
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 22 14:32:43 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 13:08:09 2016
QLast Update : Wed Jun 22 13:08:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	99022	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	378925	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	214671	40.00	ppm	0.00
69) Phenanthrene-d10	10.673	188	359308	40.00	ppm	0.00
83) Chrysene-d12	14.904	240	360567	40.00	ppm	-0.01
92) Perylene-d12	17.076	264	349547	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.111	152	99022	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	214671	40.00	ppm	0.00
106) Phenanthrene-d10a	10.673	188	359308	40.00	ppm	0.00
110) Chrysene-d12a	14.904	240	360567	40.00	ppm	-0.01
112) Naphthalene-d8a	6.282	136	378925	40.00	ppm	0.00
114) Chrysene-d12b	14.904	240	360567	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	4.105	112	30724	9.90	ppm	0.02
Spiked Amount 50.000			Recovery	=	19.80%	
8) Phenol-d5	4.817	99	36897	9.74	ppm	-0.04
Spiked Amount 50.000			Recovery	=	19.48%	
25) Nitrobenzene-d5	5.582	82	28683	9.80	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.60%	
51) 2-Fluorobiphenyl	7.528	172	69719	9.74	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.48%	
73) 2,4,6-Tribromophenol	9.604	330	11235	9.64	ppm	0.02
Spiked Amount 50.000			Recovery	=	19.28%	
85) Terphenyl-d14	13.241	244	76713	10.07	ppm	-0.05
Spiked Amount 50.000			Recovery	=	20.14%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds							Qvalue
2) 1,4-Dioxane	2.693	88	12698	9.60	ppm		86
3) Pyridine	3.014	79	33600	10.04	ppm		81
4) N-Nitrosodimethylamine	2.966	74	18757	9.71	ppm	#	68
6) Indene	5.330	116	60775	9.95	ppm		96
7) Cumene	4.490	105	76186	9.63	ppm		97
9) Phenol	4.822	94	44434	10.03	ppm	#	62
10) Aniline	4.849	93	45104	9.59	ppm		65
11) bis(2-Chloroethyl)ether	4.886	93	29519	9.57	ppm		85
12) 2-Chlorophenol	4.945	128	35716	9.85	ppm		92
13) Decane	4.972	43	29750	9.62	ppm		87
14) 1,3-Dichlorobenzene	5.068	146	40275	9.78	ppm		97
15) 1,4-Dichlorobenzene	5.127	146	40554	9.51	ppm		98
16) Benzyl alcohol	5.218	108	21087	9.70	ppm		96
17) 1,2-Dichlorobenzene	5.255	146	37904	9.71	ppm		96
18) Acetophenone	5.442	105	43750	9.52	ppm		98
19) 2-Methylphenol	5.309	108	29553	9.80	ppm		95
20) 2,2'-oxybis(1-Chloropr...	5.325	121	11934	9.64	ppm	#	51
21) 3&4-Methylphenol	5.437	108	31924	9.71	ppm		95

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84392.D
Acq On : 22 Jun 2016 12:56 pm
Operator : ashleyn
Sample : ic3699-10
Misc : op94630a,e3e3699
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 22 14:32:43 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 13:08:09 2016
QLast Update : Wed Jun 22 13:08:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.437	70	19978	9.88	ppm		83
23) Hexachloroethane	5.549	201	12210	9.59	ppm		89
26) Nitrobenzene	5.598	77	30411	9.80	ppm		72
27) Quinoline	6.662	129	67448	10.05	ppm		82
28) Isophorone	5.812	82	53615	9.93	ppm		79
29) 2-Nitrophenol	5.897	139	18722	9.82	ppm		95
30) 2,4-Dimethylphenol	5.924	107	26182	9.20	ppm		74
31) Benzoic acid	5.988	105	17965	10.42	ppm		99
32) bis(2-Chloroethoxy)met...	6.004	93	34249	9.82	ppm		99
33) 2,4-Dichlorophenol	6.132	162	28105	9.97	ppm		93
34) 2,6-Dichlorophenol	6.362	162	26692	9.52	ppm		96
35) 1,3,5-Trichlorobenzene	5.908	180	32563	9.99	ppm		96
36) 1,2,4-Trichlorobenzene	6.218	180	30361	9.95	ppm		93
37) 1,2,3-Trichlorobenzene	6.459	180	29957	10.07	ppm		95
38) Naphthalene	6.304	128	102450	9.82	ppm		100
39) 4-Chloroaniline	6.346	127	40279	10.02	ppm		78
40) 2,3-Dichloroaniline	7.421	161	34264	10.28	ppm		85
41) Caprolactam	6.705	55	12650	9.32	ppm		83
42) Hexachlorobutadiene	6.432	225	15258	10.16	ppm		94
43) 4-Chloro-3-methylphenol	6.881	107	25228	9.94	ppm		90
44) 2-Methylnaphthalene	7.079	141	56811	9.52	ppm		88
45) 1-Methylnaphthalene	7.197	141	60207	9.78	ppm		91
46) Dimethylnaphthalene	7.871	156	61378	10.35	ppm		87
48) Hexachlorocyclopentadiene	7.277	237	32561	19.40	ppm		94
49) 2,4,6-Trichlorophenol	7.427	196	19273	9.64	ppm		97
50) 2,4,5-Trichlorophenol	7.475	196	19981	9.80	ppm		93
52) 2-Chloronaphthalene	7.689	162	60831	10.11	ppm		89
53) Biphenyl	7.662	154	83094	9.79	ppm		95
54) 2-Nitroaniline	7.817	65	13952	9.59	ppm	#	52
55) Dimethylphthalate	8.069	163	66468	9.95	ppm		98
56) Acenaphthylene	8.251	152	102920	9.86	ppm		79
57) 2,6-Dinitrotoluene	8.144	165	14904	10.22	ppm	#	65
58) 3-Nitroaniline	8.379	138	17063	9.94	ppm	#	73
59) Acenaphthene	8.497	153	63866	9.53	ppm		92
60) 2,4-Dinitrophenol	8.529	184	10957	19.01	ppm	#	49
61) 4-Nitrophenol	8.641	109	5961	9.78	ppm	#	58
62) Dibenzofuran	8.743	168	86623	9.94	ppm		82
63) 2,4-Dinitrotoluene	8.721	165	18845	10.19	ppm	#	46
64) 2,3,4,6-Tetrachlorophenol	8.930	232	15359	10.11	ppm		82
65) Diethylphthalate	9.090	149	63547	9.73	ppm		94
66) Fluorene	9.245	166	70148	9.66	ppm		98
67) 4-Chlorophenyl-phenyle...	9.251	204	34060	9.98	ppm		76
68) 4-Nitroaniline	9.267	138	18177	10.34	ppm		81
70) 4,6-Dinitro-2-methylph...	9.326	198	9280	10.19	ppm		69
71) n-Nitrosodiphenylamine	9.427	169	45927	9.49	ppm		91
72) 1,2-Diphenylhydrazine	9.486	77	57927	9.55	ppm		81
74) 4-Bromophenyl-phenylether	9.989	248	18662	9.70	ppm		85
75) Hexachlorobenzene	10.090	284	23086	9.95	ppm		83
76) Pentachlorophenol	10.395	266	20466	20.27	ppm		98
77) Phenanthrene	10.711	178	98162	9.72	ppm		98

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84392.D
Acq On : 22 Jun 2016 12:56 pm
Operator : ashleyn
Sample : ic3699-10
Misc : op94630a,e3e3699
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 22 14:32:43 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 13:08:09 2016
QLast Update : Wed Jun 22 13:08:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
78) Anthracene	10.786	178	98522	9.73	ppm	96
79) Carbazole	11.048	167	92517	9.82	ppm	93
80) Di-n-butylphthalate	11.658	149	109750	9.45	ppm	96
81) Fluoranthene	12.594	202	99649	9.42	ppm	96
82) Octadecane	10.583	57	36467	9.28	ppm	83
84) Pyrene	12.952	202	107015	9.76	ppm	95
86) Butylbenzylphthalate	14.059	149	47024	9.35	ppm	84
88) Benzo[a]anthracene	14.888	228	102318	9.52	ppm	94
89) 3,3'-Dichlorobenzidine	14.872	252	42551	9.85	ppm	96
90) Chrysene	14.942	228	96106	10.00	ppm	96
91) bis(2-Ethylhexyl)phtha...	15.017	149	66412	9.57	ppm	97
93) Di-n-octylphthalate	16.006	149	114344	8.51	ppm	91
94) Benzo[b]fluoranthene	16.503	252	110081	9.15	ppm	95
95) Benzo[k]fluoranthene	16.541	252	98975	9.51	ppm	98
96) Benzo[a]pyrene	16.980	252	92766	9.46	ppm	97
97) Indeno[1,2,3-cd]pyrene	18.910	276	92998	8.92	ppm	87
98) Dibenz(a,h)acridine	18.477	279	87767	9.29	ppm	89
99) Dibenz[a,h]anthracene	18.953	278	97242	9.56	ppm	96
100) 7,12-Dimethylbenz(a)an...	16.503	256	47652	9.09	ppm	93
101) Benzo[g,h,i]perylene	19.445	276	92458	9.52	ppm	88

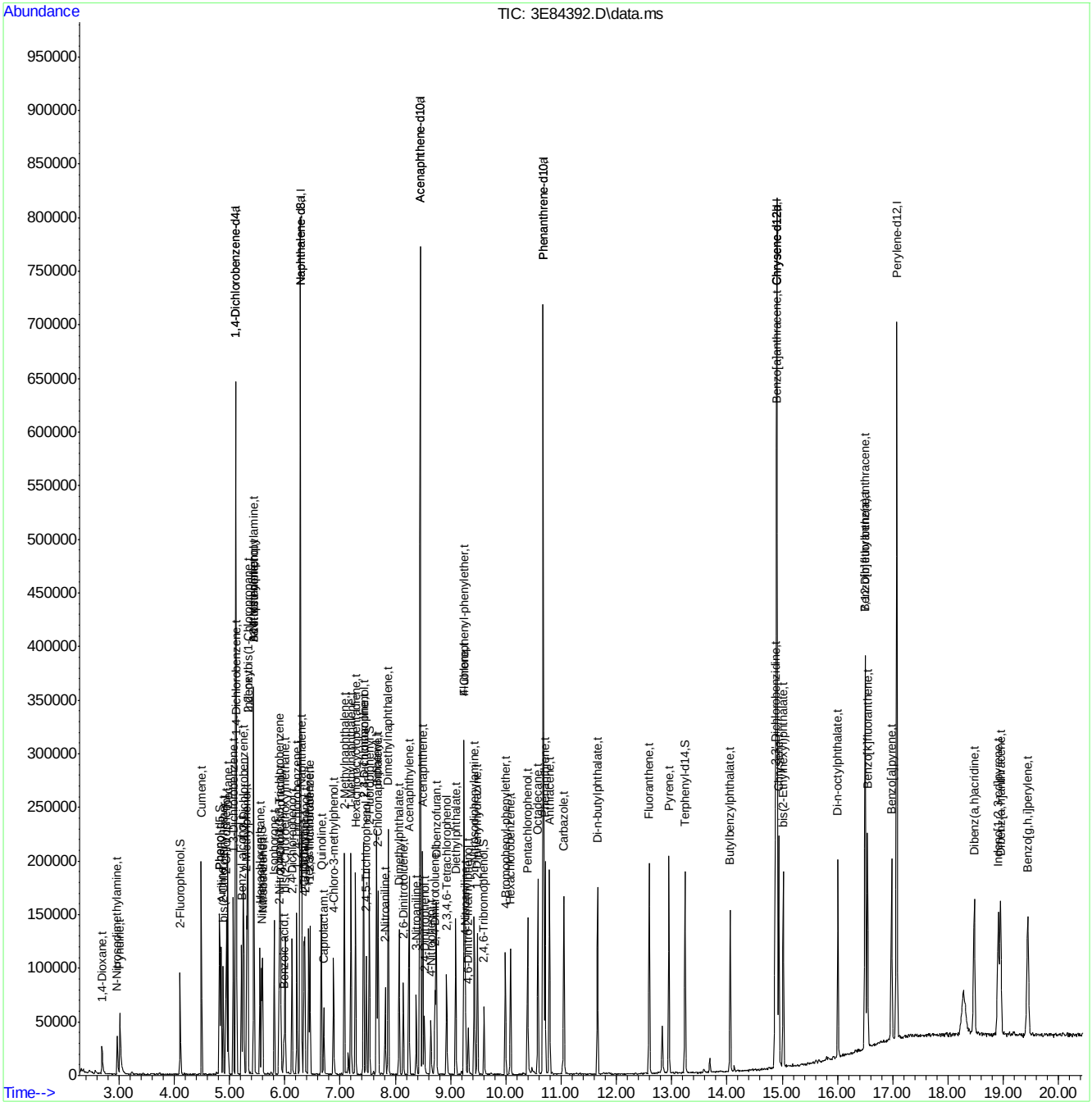
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84392.D
Acq On : 22 Jun 2016 12:56 pm
Operator : ashleyn
Sample : ic3699-10
Misc : op94630a,e3e3699
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 22 14:32:43 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 13:08:09 2016
QLast Update : Wed Jun 22 13:08:09 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84393.D
Acq On : 22 Jun 2016 1:23 pm
Operator : ashleyn
Sample : ic3699-5
Misc : op94630a,e3e3699
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 22 14:40:13 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 14:37:39 2016
QLast Update : Wed Jun 22 14:37:39 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	101014	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	390775	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	222508	40.00	ppm	0.00
69) Phenanthrene-d10	10.673	188	376882	40.00	ppm	0.00
83) Chrysene-d12	14.904	240	381258	40.00	ppm	-0.01
92) Perylene-d12	17.076	264	368084	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.111	152	101014	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	222508	40.00	ppm	0.00
106) Phenanthrene-d10a	10.673	188	376882	40.00	ppm	0.00
110) Chrysene-d12a	14.904	240	381258	40.00	ppm	-0.01
112) Naphthalene-d8a	6.282	136	390775	40.00	ppm	0.00
114) Chrysene-d12b	14.904	240	381258	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	4.105	112	15198	4.81	ppm	0.02
Spiked Amount 50.000			Recovery	=	9.62%	
8) Phenol-d5	4.811	99	18685	4.85	ppm	-0.04
Spiked Amount 50.000			Recovery	=	9.70%	
25) Nitrobenzene-d5	5.581	82	14512	4.82	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.64%	
51) 2-Fluorobiphenyl	7.528	172	36294	4.91	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.82%	
73) 2,4,6-Tribromophenol	9.604	330	5838	4.80	ppm	0.02
Spiked Amount 50.000			Recovery	=	9.60%	
85) Terphenyl-d14	13.241	244	39639	4.91	ppm	-0.05
Spiked Amount 50.000			Recovery	=	9.82%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds							Qvalue
2) 1,4-Dioxane	2.693	88	6893	5.14	ppm		80
3) Pyridine	3.019	79	17192	5.03	ppm		83
4) N-Nitrosodimethylamine	2.971	74	9884	5.04	ppm	#	58
6) Indene	5.330	116	31203	5.01	ppm		97
7) Cumene	4.496	105	39661	4.94	ppm		94
9) Phenol	4.822	94	21951	4.85	ppm		67
10) Aniline	4.849	93	25058	5.26	ppm		64
11) bis(2-Chloroethyl)ether	4.886	93	15506	4.96	ppm		85
12) 2-Chlorophenol	4.950	128	18815	5.10	ppm		89
13) Decane	4.972	43	15785	5.04	ppm		84
14) 1,3-Dichlorobenzene	5.068	146	20652	4.93	ppm		99
15) 1,4-Dichlorobenzene	5.127	146	21309	4.94	ppm		98
16) Benzyl alcohol	5.218	108	10453	4.74	ppm		94
17) 1,2-Dichlorobenzene	5.255	146	19532	4.93	ppm		100
18) Acetophenone	5.442	105	22794	4.90	ppm		94
19) 2-Methylphenol	5.309	108	15455	5.04	ppm		98
20) 2,2'-oxybis(1-Chloropr...	5.325	121	6051	4.82	ppm	#	48
21) 3&4-Methylphenol	5.437	108	16054	4.81	ppm		95

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84393.D
Acq On : 22 Jun 2016 1:23 pm
Operator : ashleyn
Sample : ic3699-5
Misc : op94630a,e3e3699
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 22 14:40:13 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 14:37:39 2016
QLast Update : Wed Jun 22 14:37:39 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.437	70	10322	5.01	ppm		79
23) Hexachloroethane	5.549	201	6542	5.07	ppm		94
26) Nitrobenzene	5.597	77	15241	4.78	ppm		71
27) Quinoline	6.662	129	35109	5.07	ppm		87
28) Isophorone	5.811	82	27269	4.90	ppm		78
29) 2-Nitrophenol	5.892	139	9304	4.75	ppm		92
30) 2,4-Dimethylphenol	5.924	107	13969	4.82	ppm	#	73
31) Benzoic acid	5.977	105	7546	4.21	ppm		94
32) bis(2-Chloroethoxy)met...	6.004	93	17634	4.92	ppm		99
33) 2,4-Dichlorophenol	6.132	162	14181	4.88	ppm		91
34) 2,6-Dichlorophenol	6.362	162	14300	4.99	ppm		91
35) 1,3,5-Trichlorobenzene	5.908	180	17634	5.24	ppm		94
36) 1,2,4-Trichlorobenzene	6.218	180	15661	4.98	ppm		92
37) 1,2,3-Trichlorobenzene	6.453	180	15729	5.12	ppm		97
38) Naphthalene	6.303	128	53148	4.96	ppm		100
39) 4-Chloroaniline	6.346	127	21442	5.17	ppm		78
40) 2,3-Dichloroaniline	7.421	161	17669	5.11	ppm		90
41) Caprolactam	6.699	55	6746	4.88	ppm		80
42) Hexachlorobutadiene	6.432	225	8195	5.28	ppm		95
43) 4-Chloro-3-methylphenol	6.881	107	13382	5.12	ppm		81
44) 2-Methylnaphthalene	7.079	141	29908	4.90	ppm		86
45) 1-Methylnaphthalene	7.197	141	31265	4.94	ppm		88
46) Dimethylnaphthalene	7.871	156	31220	5.08	ppm		93
48) Hexachlorocyclopentadiene	7.277	237	16303	9.42	ppm		98
49) 2,4,6-Trichlorophenol	7.427	196	9901	4.81	ppm		99
50) 2,4,5-Trichlorophenol	7.475	196	10601	5.03	ppm		95
52) 2-Chloronaphthalene	7.689	162	33147	5.31	ppm		90
53) Biphenyl	7.662	154	42931	4.89	ppm		92
54) 2-Nitroaniline	7.817	65	6908	4.61	ppm	#	47
55) Dimethylphthalate	8.069	163	35246	5.09	ppm		98
56) Acenaphthylene	8.245	152	52329	4.85	ppm		81
57) 2,6-Dinitrotoluene	8.143	165	7432	4.90	ppm	#	63
58) 3-Nitroaniline	8.379	138	8912	5.02	ppm	#	73
59) Acenaphthene	8.491	153	34417	4.99	ppm		89
60) 2,4-Dinitrophenol	8.528	184	4857	8.20	ppm	#	29
61) 4-Nitrophenol	8.646	109	3048	4.84	ppm	#	41
62) Dibenzofuran	8.742	168	46137	5.11	ppm		79
63) 2,4-Dinitrotoluene	8.716	165	9314	4.85	ppm	#	53
64) 2,3,4,6-Tetrachlorophenol	8.930	232	7960	5.04	ppm		83
65) Diethylphthalate	9.090	149	33527	4.98	ppm		96
66) Fluorene	9.240	166	37351	4.99	ppm		91
67) 4-Chlorophenyl-phenyle...	9.251	204	17752	5.02	ppm		77
68) 4-Nitroaniline	9.267	138	8644	4.72	ppm		86
70) 4,6-Dinitro-2-methylph...	9.320	198	4026	4.20	ppm		72
71) n-Nitrosodiphenylamine	9.427	169	24159	4.80	ppm		91
72) 1,2-Diphenylhydrazine	9.486	77	30009	4.75	ppm		80
74) 4-Bromophenyl-phenylether	9.989	248	9829	4.90	ppm		83
75) Hexachlorobenzene	10.085	284	12413	5.10	ppm		87
76) Pentachlorophenol	10.395	266	8629	8.13	ppm		98
77) Phenanthrene	10.705	178	52873	5.02	ppm		96

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84393.D
Acq On : 22 Jun 2016 1:23 pm
Operator : ashleyn
Sample : ic3699-5
Misc : op94630a,e3e3699
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 22 14:40:13 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 14:37:39 2016
QLast Update : Wed Jun 22 14:37:39 2016
Response via : Initial Calibration

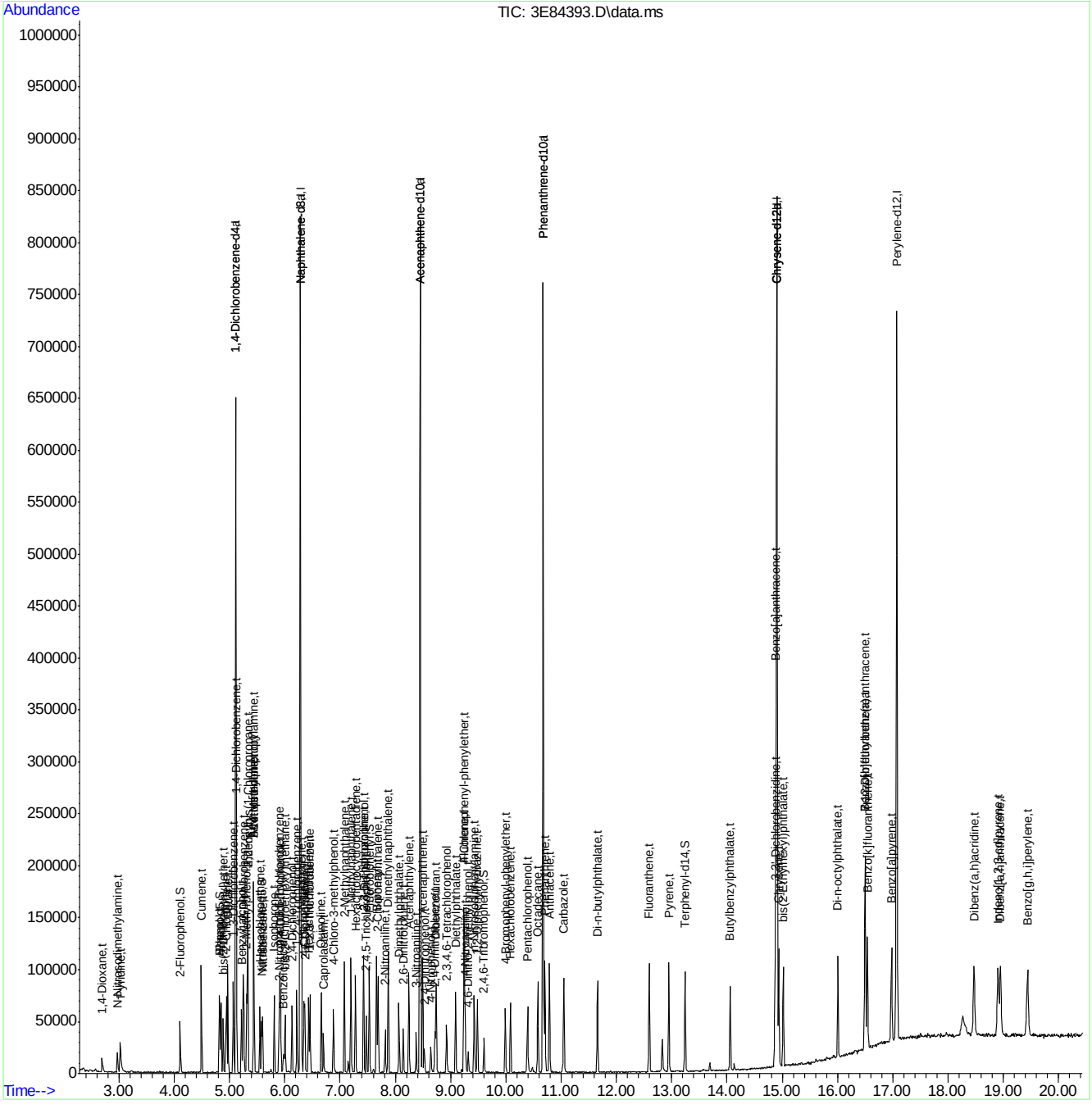
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.786	178	52788	4.99 ppm	95
79) Carbazole	11.048	167	49548	5.03 ppm	90
80) Di-n-butylphthalate	11.657	149	55892	4.63 ppm	97
81) Fluoranthene	12.593	202	53506	4.87 ppm	94
82) Octadecane	10.577	57	18370	4.51 ppm	81
84) Pyrene	12.952	202	56380	4.88 ppm	93
86) Butylbenzylphthalate	14.059	149	24651	4.69 ppm	83
88) Benzo[a]anthracene	14.883	228	54251	4.81 ppm	95
89) 3,3'-Dichlorobenzidine	14.872	252	21908	4.81 ppm	99
90) Chrysene	14.936	228	52110	5.13 ppm	96
91) bis(2-Ethylhexyl)phtha...	15.016	149	34695	4.76 ppm	98
93) Di-n-octylphthalate	16.006	149	60482	4.38 ppm	92
94) Benzo[b]fluoranthene	16.503	252	56225	4.50 ppm	97
95) Benzo[k]fluoranthene	16.541	252	55033	5.06 ppm	93
96) Benzo[a]pyrene	16.979	252	49790	4.87 ppm	95
97) Indeno[1,2,3-cd]pyrene	18.905	276	48860	4.53 ppm	88
98) Dibenz(a,h)acridine	18.472	279	47151	4.80 ppm	89
99) Dibenz[a,h]anthracene	18.948	278	53904	5.07 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.498	256	23256	4.28 ppm	90
101) Benzo[g,h,i]perylene	19.440	276	50930	5.02 ppm	89

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84393.D
Acq On : 22 Jun 2016 1:23 pm
Operator : ashleyn
Sample : ic3699-5
Misc : op94630a,e3e3699
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 22 14:40:13 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 14:37:39 2016
QLast Update : Wed Jun 22 14:37:39 2016
Response via : Initial Calibration



M3E3699.M Wed Jun 22 14:40:27 2016 MS3E Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84394.D
Acq On : 22 Jun 2016 1:50 pm
Operator : ashleyn
Sample : icc3699-50
Misc : op94630a,e3e3699
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 22 14:42:35 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 14:41:41 2016
QLast Update : Wed Jun 22 14:41:41 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.116	152	107092	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	400246	40.00	ppm	0.00
47) Acenaphthene-d10	8.454	164	214051	40.00	ppm	0.00
69) Phenanthrene-d10	10.679	188	345796	40.00	ppm	0.00
83) Chrysene-d12	14.909	240	364354	40.00	ppm	0.00
92) Perylene-d12	17.081	264	323096	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.116	152	107092	40.00	ppm	0.00
104) Acenaphthene-d10a	8.454	164	214051	40.00	ppm	0.00
106) Phenanthrene-d10a	10.679	188	345796	40.00	ppm	0.00
110) Chrysene-d12a	14.909	240	364354	40.00	ppm	0.00
112) Naphthalene-d8a	6.282	136	400246	40.00	ppm	0.00
114) Chrysene-d12b	14.909	240	364354	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	4.105	112	161047	48.32	ppm	0.02
Spiked Amount 50.000			Recovery = 96.64%			
8) Phenol-d5	4.822	99	191516	47.13	ppm	-0.03
Spiked Amount 50.000			Recovery = 94.26%			
25) Nitrobenzene-d5	5.587	82	147653	48.15	ppm	0.00
Spiked Amount 50.000			Recovery = 96.30%			
51) 2-Fluorobiphenyl	7.534	172	350097	49.37	ppm	0.00
Spiked Amount 50.000			Recovery = 98.74%			
73) 2,4,6-Tribromophenol	9.609	330	59454	53.61	ppm	0.02
Spiked Amount 50.000			Recovery = 107.22%			
85) Terphenyl-d14	13.246	244	376725	48.98	ppm	-0.05
Spiked Amount 50.000			Recovery = 97.96%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.688	88	67886	47.59	ppm		88
3) Pyridine	3.003	79	170617	47.06	ppm		85
4) N-Nitrosodimethylamine	2.961	74	97427	46.79	ppm	#	64
6) Indene	5.330	116	319619	48.40	ppm		96
7) Cumene	4.496	105	405608	47.76	ppm		94
9) Phenol	4.833	94	228011	47.75	ppm	#	59
10) Aniline	4.849	93	215039	42.26	ppm		66
11) bis(2-Chloroethyl)ether	4.891	93	157721	47.66	ppm		88
12) 2-Chlorophenol	4.950	128	194232	49.50	ppm		92
13) Decane	4.972	43	154734	46.51	ppm		88
14) 1,3-Dichlorobenzene	5.073	146	206727	46.68	ppm		98
15) 1,4-Dichlorobenzene	5.127	146	217824	47.71	ppm		97
16) Benzyl alcohol	5.223	108	110966	47.79	ppm		99
17) 1,2-Dichlorobenzene	5.261	146	201595	48.09	ppm		98
18) Acetophenone	5.448	105	238451	48.51	ppm		95
19) 2-Methylphenol	5.314	108	154908	47.60	ppm		95
20) 2,2'-oxybis(1-Chloropr...	5.330	121	62369	47.11	ppm	#	41
21) 3&4-Methylphenol	5.442	108	168712	47.96	ppm		94

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84394.D
Acq On : 22 Jun 2016 1:50 pm
Operator : ashleyn
Sample : icc3699-50
Misc : op94630a,e3e3699
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 22 14:42:35 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 14:41:41 2016
QLast Update : Wed Jun 22 14:41:41 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.442	70	104251	47.75	ppm		81
23) Hexachloroethane	5.555	201	65898	48.10	ppm		98
26) Nitrobenzene	5.603	77	155500	47.91	ppm		74
27) Quinoline	6.673	129	343826	48.37	ppm		84
28) Isophorone	5.817	82	272624	47.99	ppm		79
29) 2-Nitrophenol	5.897	139	101352	50.84	ppm		97
30) 2,4-Dimethylphenol	5.924	107	146338	49.58	ppm		80
31) Benzoic acid	6.041	105	114402	63.82	ppm		96
32) bis(2-Chloroethoxy)met...	6.009	93	179176	48.90	ppm		99
33) 2,4-Dichlorophenol	6.138	162	149510	50.41	ppm		92
34) 2,6-Dichlorophenol	6.368	162	144977	49.38	ppm		91
35) 1,3,5-Trichlorobenzene	5.913	180	173325	49.98	ppm		97
36) 1,2,4-Trichlorobenzene	6.223	180	162515	50.48	ppm		96
37) 1,2,3-Trichlorobenzene	6.459	180	152888	48.43	ppm		94
38) Naphthalene	6.309	128	531440	48.45	ppm		100
39) 4-Chloroaniline	6.352	127	209086	49.00	ppm		78
40) 2,3-Dichloroaniline	7.427	161	174140	49.06	ppm		87
41) Caprolactam	6.747	55	63948	45.29	ppm		82
42) Hexachlorobutadiene	6.437	225	78555	49.01	ppm		97
43) 4-Chloro-3-methylphenol	6.892	107	129556	48.22	ppm		83
44) 2-Methylnaphthalene	7.079	141	302782	48.57	ppm		89
45) 1-Methylnaphthalene	7.202	141	313770	48.52	ppm		90
46) Dimethylnaphthalene	7.876	156	303645	48.09	ppm		88
48) Hexachlorocyclopentadiene	7.282	237	193832	117.36	ppm		97
49) 2,4,6-Trichlorophenol	7.432	196	101551	51.52	ppm		96
50) 2,4,5-Trichlorophenol	7.486	196	105036	51.80	ppm		100
52) 2-Chloronaphthalene	7.694	162	305732	50.43	ppm		89
53) Biphenyl	7.667	154	414141	49.23	ppm		96
54) 2-Nitroaniline	7.822	65	71752	50.35	ppm	#	48
55) Dimethylphthalate	8.074	163	330327	49.48	ppm		99
56) Acenaphthylene	8.250	152	517692	50.08	ppm		81
57) 2,6-Dinitrotoluene	8.154	165	76845	52.82	ppm	#	62
58) 3-Nitroaniline	8.389	138	88720	51.88	ppm	#	70
59) Acenaphthene	8.502	153	325645	49.13	ppm		94
60) 2,4-Dinitrophenol	8.539	184	83737	150.82	ppm	#	41
61) 4-Nitrophenol	8.652	109	32526	53.96	ppm	#	62
62) Dibenzofuran	8.748	168	423971	48.67	ppm		82
63) 2,4-Dinitrotoluene	8.726	165	104394	56.70	ppm	#	53
64) 2,3,4,6-Tetrachlorophenol	8.930	232	84073	55.31	ppm		83
65) Diethylphthalate	9.101	149	318227	49.13	ppm		96
66) Fluorene	9.251	166	356523	49.51	ppm		96
67) 4-Chlorophenyl-phenyle...	9.256	204	167485	49.19	ppm		76
68) 4-Nitroaniline	9.288	138	94036	53.78	ppm		78
70) 4,6-Dinitro-2-methylph...	9.336	198	59209	68.94	ppm	#	67
71) n-Nitrosodiphenylamine	9.432	169	226204	49.26	ppm		90
72) 1,2-Diphenylhydrazine	9.491	77	286870	49.88	ppm		81
74) 4-Bromophenyl-phenylether	9.994	248	93784	51.07	ppm		84
75) Hexachlorobenzene	10.090	284	116127	51.88	ppm		86
76) Pentachlorophenol	10.401	266	139938	147.61	ppm		96
77) Phenanthrene	10.716	178	470285	48.61	ppm		97

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84394.D
Acq On : 22 Jun 2016 1:50 pm
Operator : ashleyn
Sample : icc3699-50
Misc : op94630a,e3e3699
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 22 14:42:35 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 14:41:41 2016
QLast Update : Wed Jun 22 14:41:41 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.796	178	470612	48.52 ppm	96
79) Carbazole	11.058	167	443256	49.00 ppm	90
80) Di-n-butylphthalate	11.663	149	553919	50.54 ppm	97
81) Fluoranthene	12.599	202	509607	50.72 ppm	96
82) Octadecane	10.582	57	185209	50.28 ppm	85
84) Pyrene	12.957	202	527303	47.93 ppm	95
86) Butylbenzylphthalate	14.064	149	239386	48.06 ppm	85
88) Benzo[a]anthracene	14.893	228	505073	47.15 ppm	94
89) 3,3'-Dichlorobenzidine	14.877	252	213835	49.37 ppm	98
90) Chrysene	14.952	228	452624	46.45 ppm	96
91) bis(2-Ethylhexyl)phtha...	15.022	149	322547	46.65 ppm	96
93) Di-n-octylphthalate	16.011	149	575424	48.35 ppm	92
94) Benzo[b]fluoranthene	16.519	252	560334	51.84 ppm	94
95) Benzo[k]fluoranthene	16.562	252	447587	46.82 ppm	97
96) Benzo[a]pyrene	16.990	252	424719	47.47 ppm	97
97) Indeno[1,2,3-cd]pyrene	18.932	276	462719	49.56 ppm	89
98) Dibenz(a,h)acridine	18.493	279	420938	49.06 ppm	92
99) Dibenz[a,h]anthracene	18.974	278	450503	48.18 ppm	95
100) 7,12-Dimethylbenz(a)an...	16.519	256	255980	54.77 ppm	91
101) Benzo[g,h,i]perylene	19.477	276	431466	48.44 ppm	87

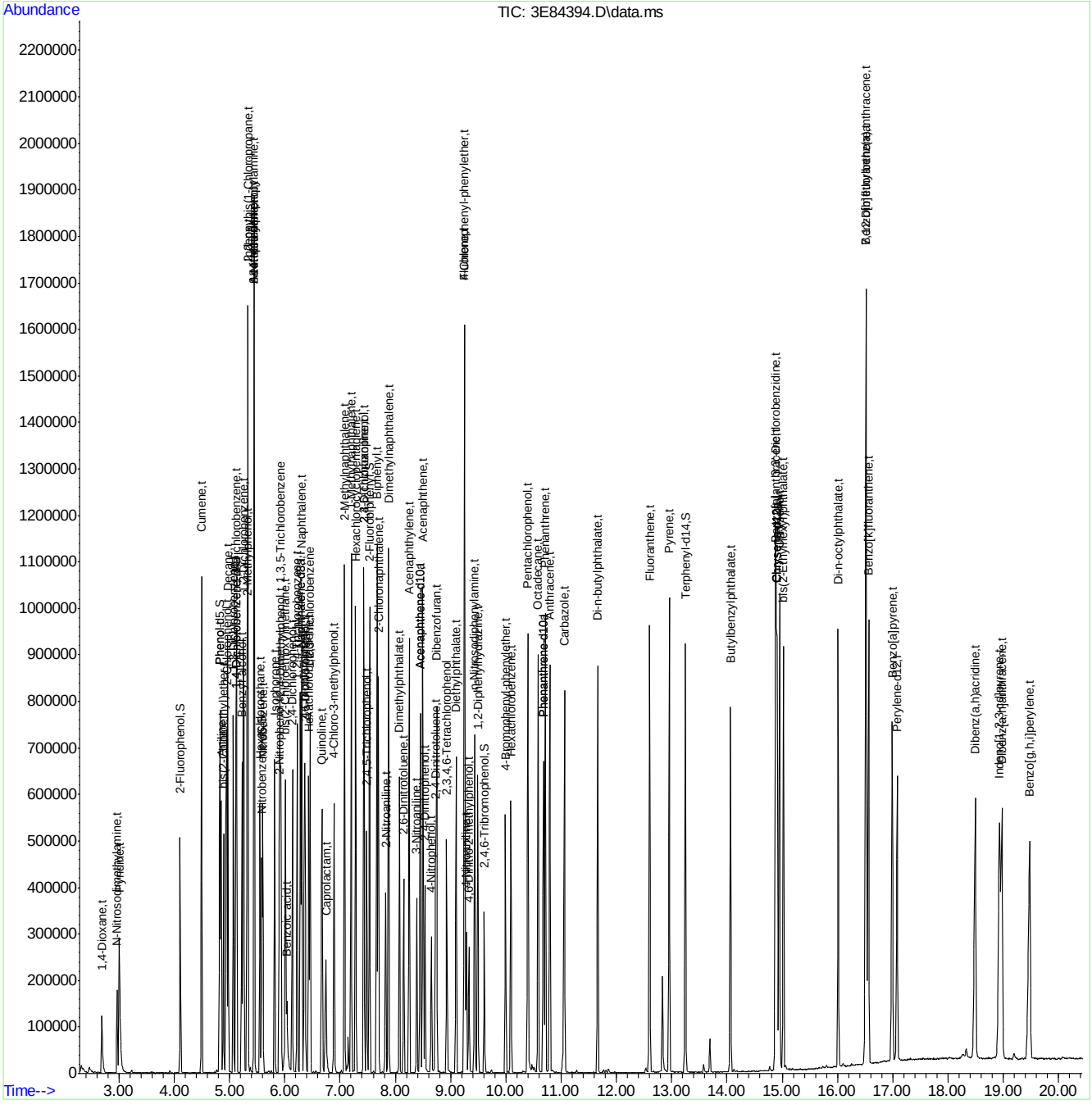
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84394.D
Acq On : 22 Jun 2016 1:50 pm
Operator : ashleyn
Sample : icc3699-50
Misc : op94630a,e3e3699
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 22 14:42:35 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 14:41:41 2016
QLast Update : Wed Jun 22 14:41:41 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84395.D
Acq On : 22 Jun 2016 2:17 pm
Operator : ashleyn
Sample : icv3699-50
Misc : op94630a,e3e3699
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 22 15:14:03 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 15:07:09 2016
QLast Update : Wed Jun 22 15:07:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	94939	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	349188	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	192613	40.00	ppm	0.00
69) Phenanthrene-d10	10.673	188	302861	40.00	ppm	0.00
83) Chrysene-d12	14.899	240	281119	40.00	ppm	-0.01
92) Perylene-d12	17.070	264	270700	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	5.111	152	94939	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	192613	40.00	ppm	0.00
106) Phenanthrene-d10a	10.673	188	302861	40.00	ppm	0.00
110) Chrysene-d12a	14.899	240	281119	40.00	ppm	-0.01
112) Naphthalene-d8a	6.282	136	349188	40.00	ppm	0.00
114) Chrysene-d12b	14.899	240	281119	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
9) Phenol	4.827	94	177786	42.24	ppm		97
12) 2-Chlorophenol	4.950	128	163809	47.15	ppm		96
19) 2-Methylphenol	5.309	108	135864	47.38	ppm		97
21) 3&4-Methylphenol	5.437	108	146134	47.10	ppm		98
29) 2-Nitrophenol	5.897	139	87147	50.00	ppm		96
30) 2,4-Dimethylphenol	5.924	107	136203	52.95	ppm		99
31) Benzoic acid	6.031	105	88791	45.32	ppm		95
33) 2,4-Dichlorophenol	6.132	162	129645	50.05	ppm		98
34) 2,6-Dichlorophenol	6.362	162	127952	50.03	ppm		97
43) 4-Chloro-3-methylphenol	6.881	107	110555	47.38	ppm		97
49) 2,4,6-Trichlorophenol	7.427	196	87990	49.42	ppm		99
50) 2,4,5-Trichlorophenol	7.475	196	87404	47.69	ppm		94
60) 2,4-Dinitrophenol	8.529	184	30346	44.80	ppm	#	84
61) 4-Nitrophenol	8.641	109	26116	47.68	ppm		95
64) 2,3,4,6-Tetrachlorophenol	8.930	232	71954	51.92	ppm		94
70) 4,6-Dinitro-2-methylph...	9.325	198	47236	46.10	ppm		99
76) Pentachlorophenol	10.395	266	52560	47.56	ppm		97

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84395.D
Acq On : 22 Jun 2016 2:17 pm
Operator : ashleyn
Sample : icv3699-50
Misc : op94630a,e3e3699
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 22 15:14:03 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 15:07:09 2016
QLast Update : Wed Jun 22 15:07:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

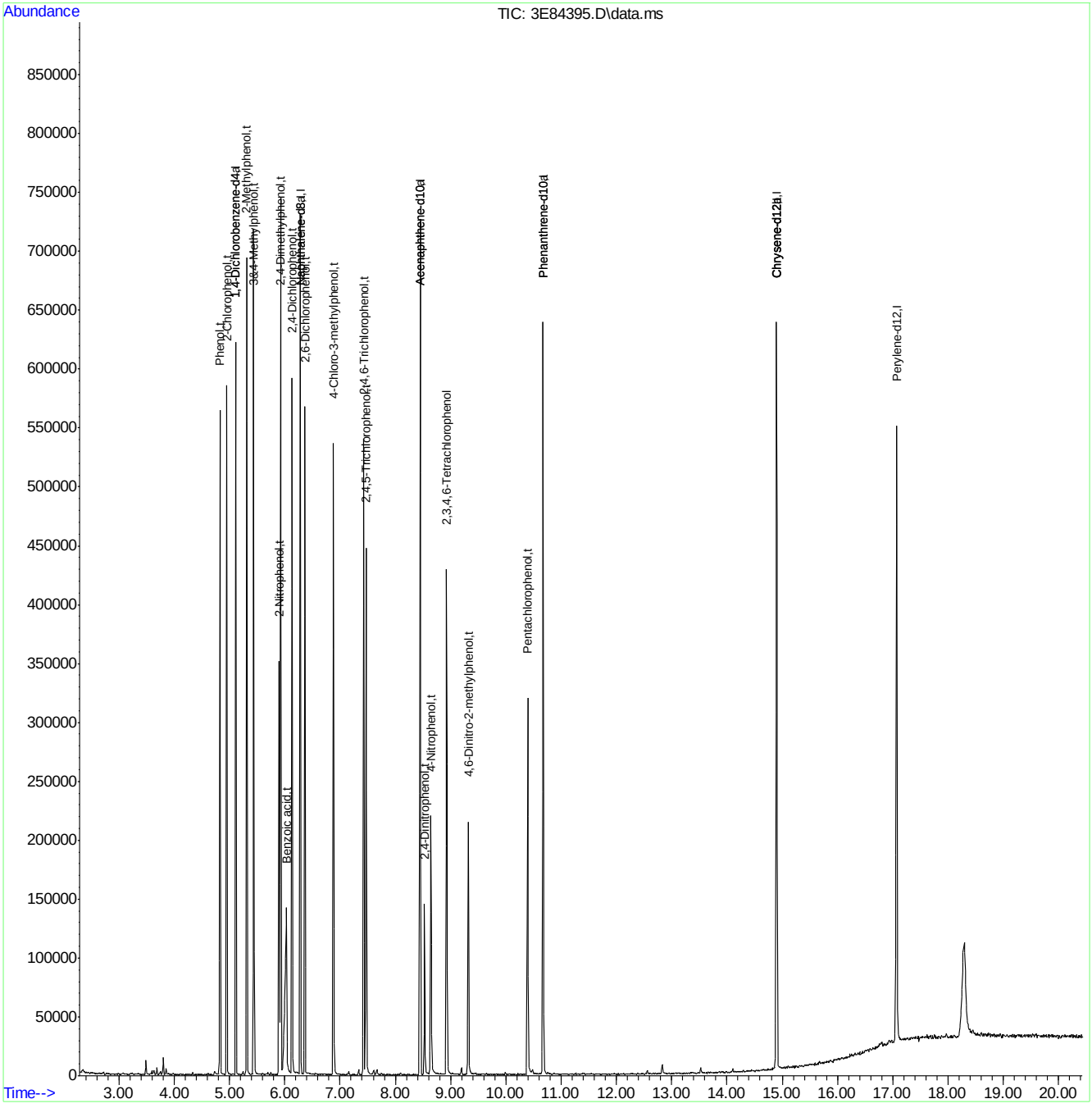
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84395.D
Acq On : 22 Jun 2016 2:17 pm
Operator : ashleyn
Sample : icv3699-50
Misc : op94630a,e3e3699
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 22 15:14:03 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 15:07:09 2016
QLast Update : Wed Jun 22 15:07:09 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84396.D
Acq On : 22 Jun 2016 2:44 pm
Operator : ashleyn
Sample : icv3699-50
Misc : op94630a,e3e3699
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 22 15:15:04 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 15:07:09 2016
QLast Update : Wed Jun 22 15:07:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	106125	40.00 ppm	0.00
24) Naphthalene-d8	6.282	136	470411	40.00 ppm	0.00
47) Acenaphthene-d10	8.448	164	286203	40.00 ppm	0.00
69) Phenanthrene-d10	10.673	188	477232	40.00 ppm	0.00
83) Chrysene-d12	14.904	240	453259	40.00 ppm	0.00
92) Perylene-d12	17.076	264	404075	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.111	152	106125	40.00 ppm	0.00
104) Acenaphthene-d10a	8.448	164	286203	40.00 ppm	0.00
106) Phenanthrene-d10a	10.673	188	477232	40.00 ppm	0.00
110) Chrysene-d12a	14.904	240	453259	40.00 ppm	0.00
112) Naphthalene-d8a	6.282	136	470411	40.00 ppm	0.00
114) Chrysene-d12b	14.904	240	453259	40.00 ppm	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) o-Terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
109) 1-Chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
3) Pyridine	3.094	79	176025	49.36 ppm	98
10) Aniline	4.849	93	282167	57.06 ppm	98
16) Benzyl alcohol	5.223	108	126603	55.32 ppm	97
39) 4-Chloroaniline	6.352	127	236021	47.18 ppm	97
44) 2-Methylnaphthalene	7.079	141	333984	45.74 ppm	98
54) 2-Nitroaniline	7.823	65	76717	40.23 ppm	90
58) 3-Nitroaniline	8.390	138	100557	43.77 ppm	93
62) Dibenzofuran	8.743	168	516056	44.45 ppm	100
68) 4-Nitroaniline	9.277	138	100202	42.46 ppm	98
79) Carbazole	11.059	167	530801	42.62 ppm	99

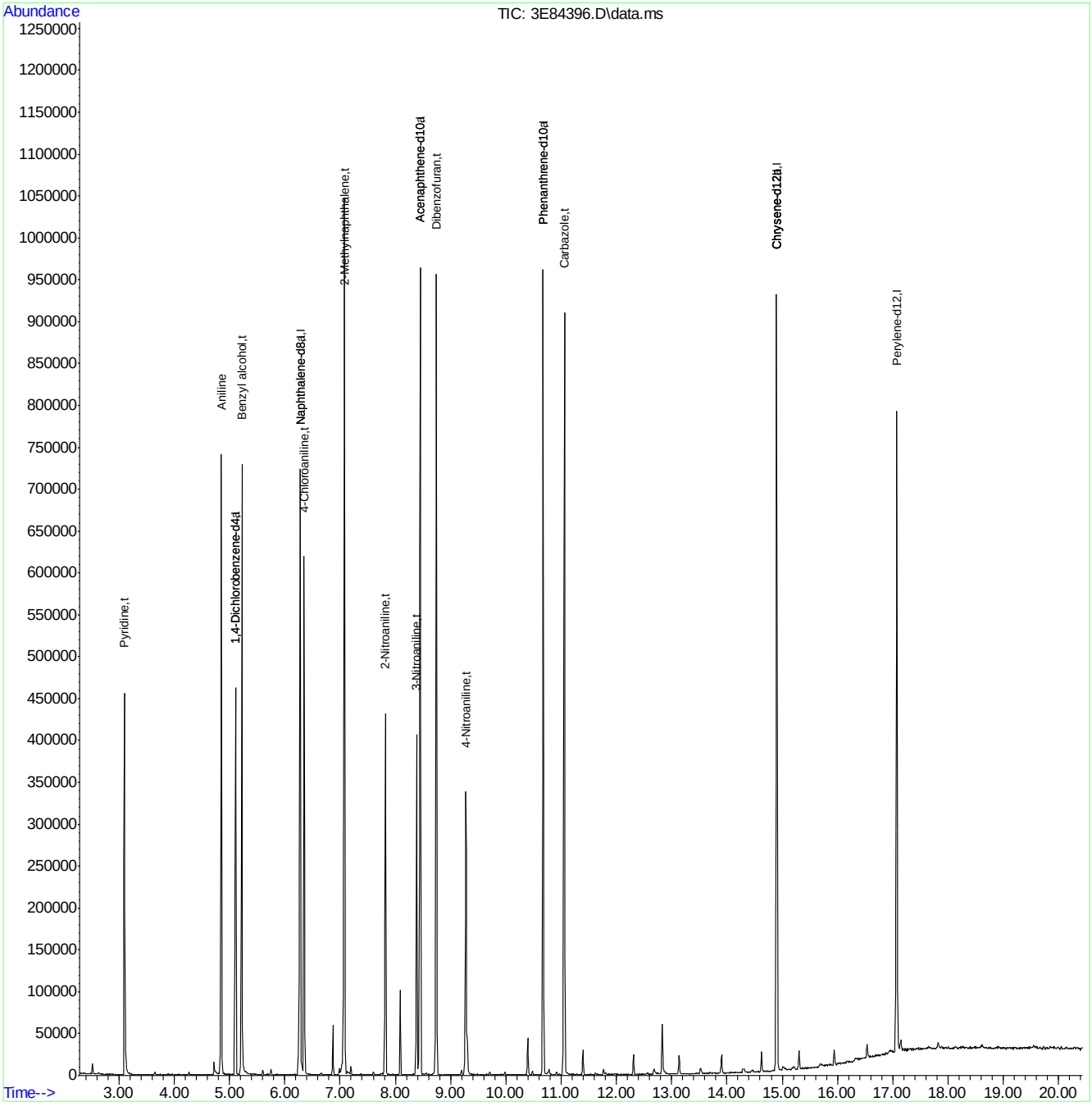
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84396.D
Acq On : 22 Jun 2016 2:44 pm
Operator : ashleyn
Sample : icv3699-50
Misc : op94630a,e3e3699
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 22 15:15:04 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 15:07:09 2016
QLast Update : Wed Jun 22 15:07:09 2016
Response via : Initial Calibration



M3E3699.M Wed Jun 22 15:15:11 2016 MS3E

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84397.D
Acq On : 22 Jun 2016 3:11 pm
Operator : ashleyn
Sample : icv3699-50
Misc : op94630a,e3e3699
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 22 16:25:57 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 15:07:09 2016
QLast Update : Wed Jun 22 15:07:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	97068	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	364199	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	195564	40.00	ppm	0.00
69) Phenanthrene-d10	10.674	188	307966	40.00	ppm	0.00
83) Chrysene-d12	14.899	240	287010	40.00	ppm	-0.01
92) Perylene-d12	17.070	264	277233	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	5.111	152	97068	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	195564	40.00	ppm	0.00
106) Phenanthrene-d10a	10.674	188	307966	40.00	ppm	0.00
110) Chrysene-d12a	14.899	240	287010	40.00	ppm	-0.01
112) Naphthalene-d8a	6.282	136	364199	40.00	ppm	0.00
114) Chrysene-d12b	14.899	240	287010	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	4.111	112	150238	49.95	ppm	0.00
Spiked Amount 50.000			Recovery = 99.90%			
8) Phenol-d5	4.817	99	168817	46.17	ppm	0.00
Spiked Amount 50.000			Recovery = 92.34%			
25) Nitrobenzene-d5	5.582	82	128629	46.31	ppm	0.00
Spiked Amount 50.000			Recovery = 92.62%			
51) 2-Fluorobiphenyl	7.529	172	330314	51.07	ppm	0.00
Spiked Amount 50.000			Recovery = 102.14%			
73) 2,4,6-Tribromophenol	9.604	330	47139	47.30	ppm	0.00
Spiked Amount 50.000			Recovery = 94.60%			
85) Terphenyl-d14	13.241	244	329450	54.52	ppm	0.00
Spiked Amount 50.000			Recovery = 109.04%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds	Qvalue

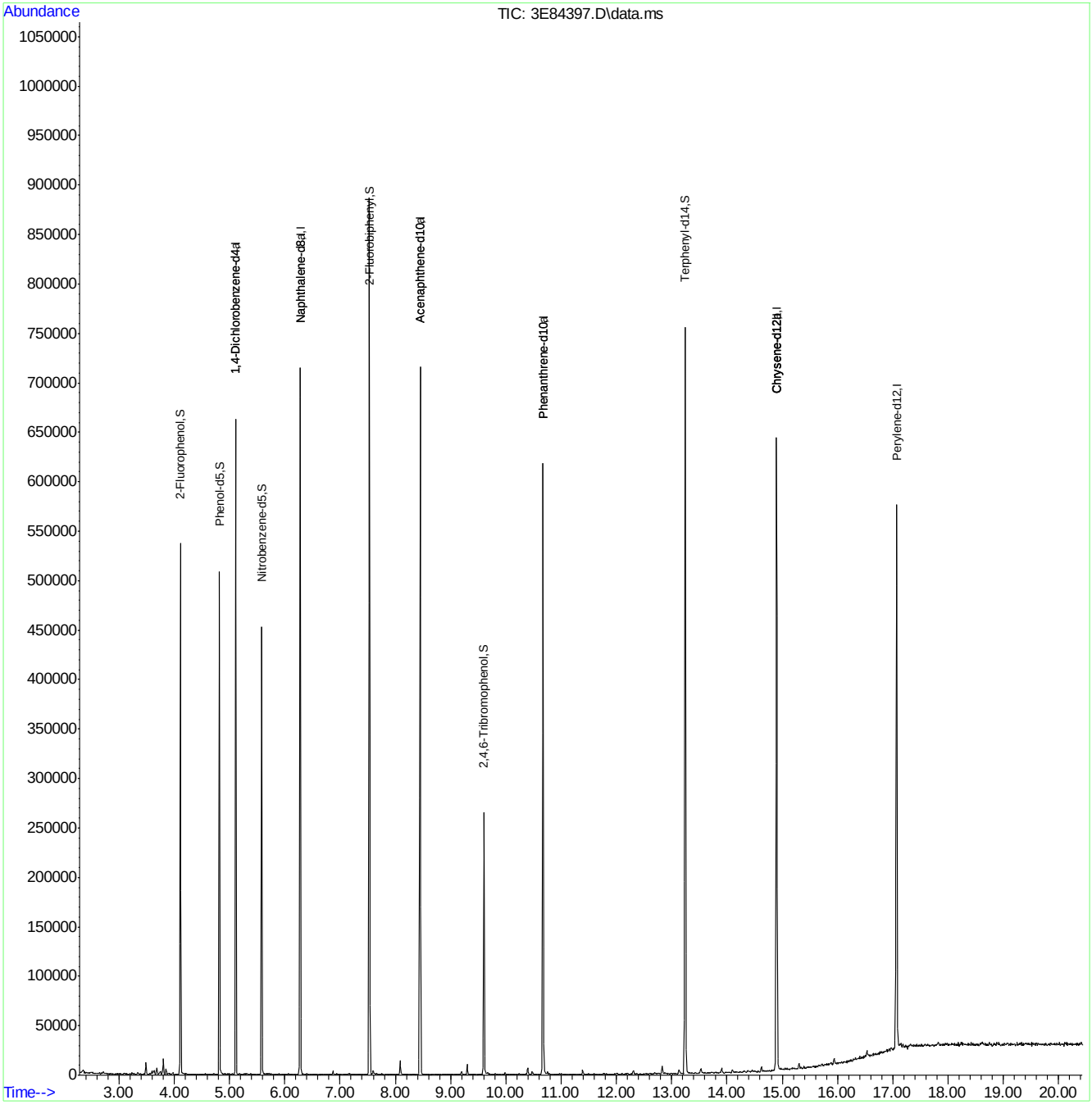
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84397.D
Acq On : 22 Jun 2016 3:11 pm
Operator : ashleyn
Sample : icv3699-50
Misc : op94630a,e3e3699
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 22 16:25:57 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 15:07:09 2016
QLast Update : Wed Jun 22 15:07:09 2016
Response via : Initial Calibration



M3E3699.M Wed Jun 22 16:26:03 2016 MS3E

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84398.D
Acq On : 22 Jun 2016 3:39 pm
Operator : ashleyn
Sample : icv3699-50
Misc : op94630a,e3e3699
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 22 16:40:32 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 16:35:28 2016
QLast Update : Wed Jun 22 16:35:28 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.116	152	106105	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	391698	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	211411	40.00	ppm	0.00
69) Phenanthrene-d10	10.673	188	336342	40.00	ppm	0.00
83) Chrysene-d12	14.904	240	312299	40.00	ppm	0.00
92) Perylene-d12	17.076	264	283046	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.116	152	106105	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	211411	40.00	ppm	0.00
106) Phenanthrene-d10a	10.673	188	336342	40.00	ppm	0.00
110) Chrysene-d12a	14.904	240	312299	40.00	ppm	0.00
112) Naphthalene-d8a	6.282	136	391698	40.00	ppm	0.00
114) Chrysene-d12b	14.904	240	312299	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%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.971	74	86534	42.29	ppm	96
11) bis(2-Chloroethyl)ether	4.886	93	151638	46.52	ppm	99
14) 1,3-Dichlorobenzene	5.068	146	196644	45.19	ppm	96
15) 1,4-Dichlorobenzene	5.127	146	206437	45.90	ppm	99
17) 1,2-Dichlorobenzene	5.255	146	187207	45.29	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.325	121	54798	42.08	ppm	88
22) n-Nitroso-di-n-propyla...	5.437	70	86960	40.43	ppm	97
23) Hexachloroethane	5.549	201	63201	46.78	ppm	88
26) Nitrobenzene	5.597	77	131496	41.62	ppm	98
28) Isophorone	5.811	82	256179	46.31	ppm	98
32) bis(2-Chloroethoxy)met...	6.009	93	164805	46.08	ppm	99
36) 1,2,4-Trichlorobenzene	6.218	180	153059	48.52	ppm	99
38) Naphthalene	6.303	128	485010	45.36	ppm	99
42) Hexachlorobutadiene	6.432	225	75895	48.51	ppm	98
48) Hexachlorocyclopentadiene	7.277	237	73706	42.56	ppm	98
52) 2-Chloronaphthalene	7.689	162	283114	47.23	ppm	99
55) Dimethylphthalate	8.069	163	288618	43.83	ppm	100
56) Acenaphthylene	8.250	152	449165	43.98	ppm	100

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84398.D
Acq On : 22 Jun 2016 3:39 pm
Operator : ashleyn
Sample : icv3699-50
Misc : op94630a,e3e3699
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 22 16:40:32 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 16:35:28 2016
QLast Update : Wed Jun 22 16:35:28 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
57) 2,6-Dinitrotoluene	8.149	165	64198	44.37 ppm	96
59) Acenaphthene	8.496	153	293944	45.00 ppm	94
63) 2,4-Dinitrotoluene	8.721	165	73332	40.38 ppm	97
65) Diethylphthalate	9.095	149	273989	42.92 ppm	99
66) Fluorene	9.245	166	315147	44.37 ppm	98
67) 4-Chlorophenyl-phenyle...	9.251	204	152904	45.56 ppm	97
71) n-Nitrosodiphenylamine	9.427	169	195307	43.81 ppm	98
72) 1,2-Diphenylhydrazine	9.491	77	236053	42.21 ppm	93
74) 4-Bromophenyl-phenylether	9.994	248	87767	49.00 ppm	96
75) Hexachlorobenzene	10.090	284	102030	46.65 ppm	97
77) Phenanthrene	10.711	178	414527	44.20 ppm	99
78) Anthracene	10.791	178	404142	43.00 ppm	99
80) Di-n-butylphthalate	11.663	149	454339	42.56 ppm	99
81) Fluoranthene	12.599	202	413753	42.26 ppm	98
84) Pyrene	12.957	202	427809	45.61 ppm	98
86) Butylbenzylphthalate	14.064	149	184339	43.39 ppm	95
88) Benzo[a]anthracene	14.888	228	396216	43.46 ppm	98
90) Chrysene	14.947	228	354551	42.83 ppm	98
91) bis(2-Ethylhexyl)phtha...	15.022	149	255098	43.41 ppm	99
93) Di-n-octylphthalate	16.011	149	428688	41.29 ppm	98
94) Benzo[b]fluoranthene	16.509	252	383123	40.27 ppm	93
95) Benzo[k]fluoranthene	16.551	252	367250	44.21 ppm	100
96) Benzo[a]pyrene	16.985	252	337091	43.28 ppm	99
97) Indeno[1,2,3-cd]pyrene	18.921	276	365872	44.78 ppm	97
99) Dibenz[a,h]anthracene	18.964	278	349377	42.84 ppm	98
101) Benzo[g,h,i]perylene	19.461	276	333599	42.92 ppm	98

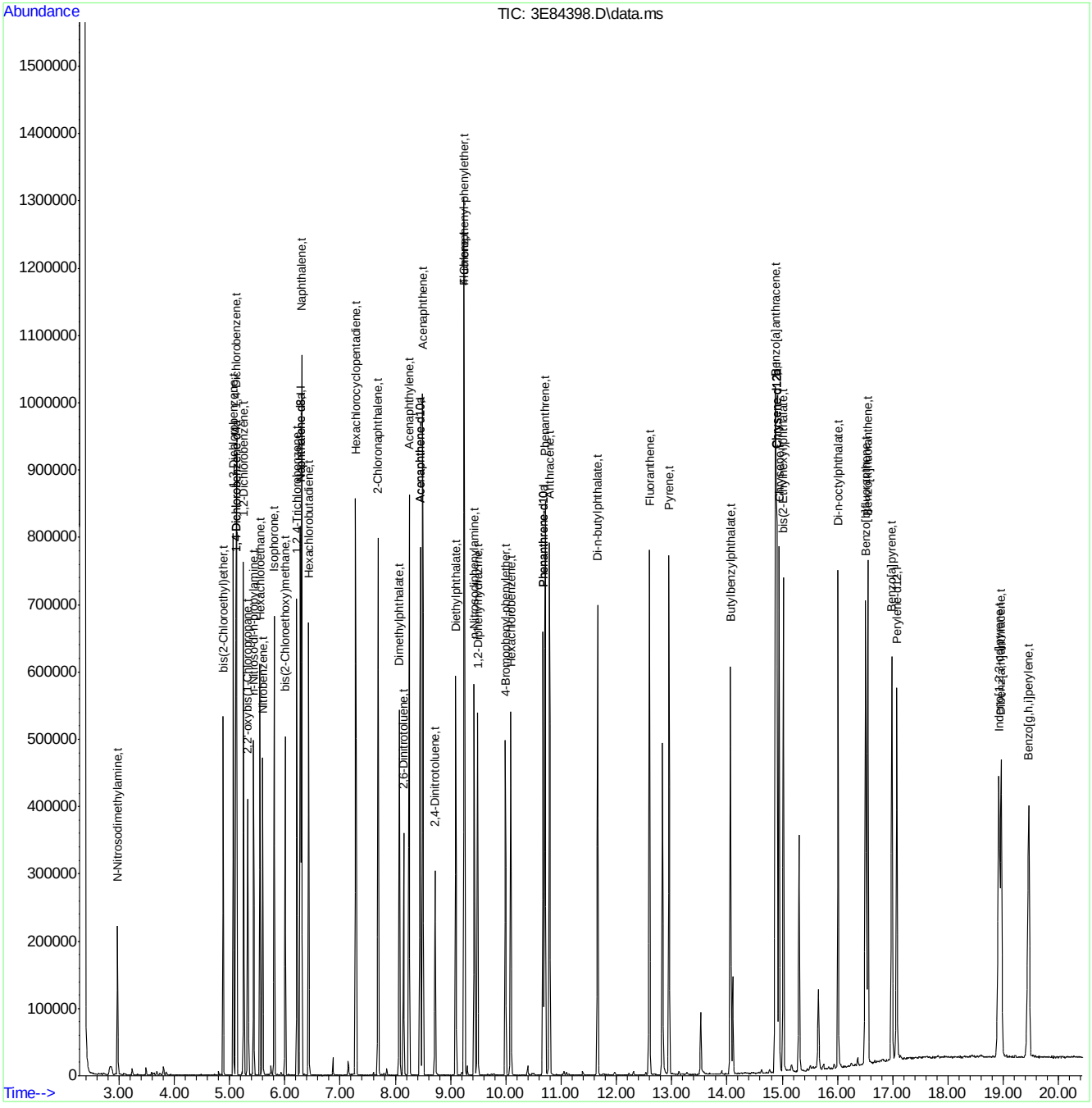
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84398.D
Acq On : 22 Jun 2016 3:39 pm
Operator : ashleyn
Sample : icv3699-50
Misc : op94630a,e3e3699
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 22 16:40:32 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 16:35:28 2016
QLast Update : Wed Jun 22 16:35:28 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84400.D
Acq On : 22 Jun 2016 4:33 pm
Operator : ashleyn
Sample : icv3699-50
Misc : op94630a,e3e3699
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 22 16:57:16 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 16:35:28 2016
QLast Update : Wed Jun 22 16:35:28 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	105378	40.00 ppm	0.00
24) Naphthalene-d8	6.282	136	406736	40.00 ppm	0.00
47) Acenaphthene-d10	8.448	164	237984	40.00 ppm	0.00
69) Phenanthrene-d10	10.673	188	404763	40.00 ppm	0.00
83) Chrysene-d12	14.899	240	417057	40.00 ppm	-0.01
92) Perylene-d12	17.076	264	407916	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.111	152	105378	40.00 ppm	0.00
104) Acenaphthene-d10a	8.448	164	237984	40.00 ppm	0.00
106) Phenanthrene-d10a	10.673	188	404763	40.00 ppm	0.00
110) Chrysene-d12a	14.899	240	417057	40.00 ppm	-0.01
112) Naphthalene-d8a	6.282	136	406736	40.00 ppm	0.00
114) Chrysene-d12b	14.899	240	417057	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%	
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery =	0.00%	
108) o-Terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery =	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery =	0.00%	

Target Compounds					Qvalue
89) 3,3'-Dichlorobenzidine	14.872	252	223625	45.18 ppm	100

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

7.6.28

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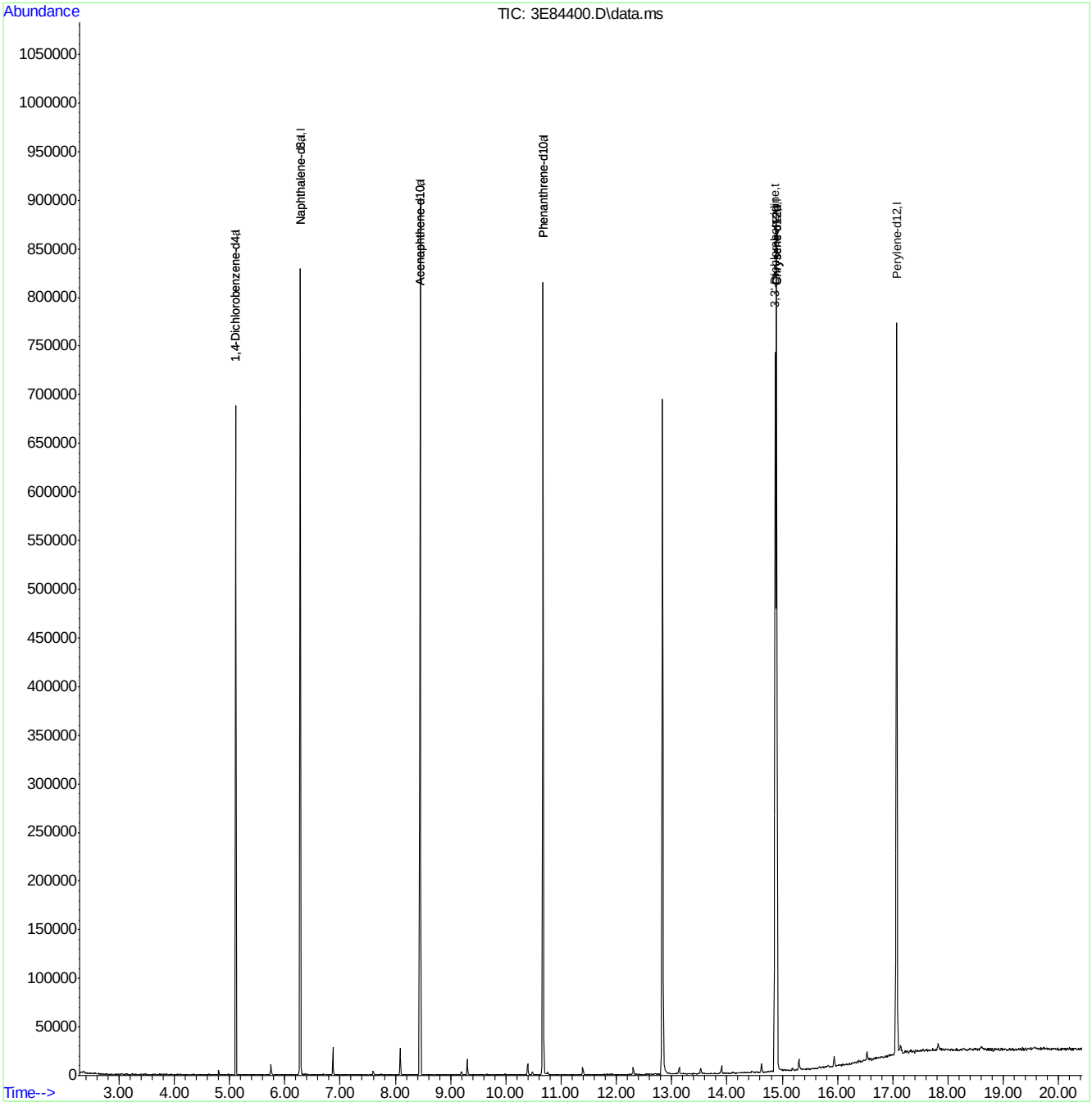
SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3699\
Data File : 3E84400.D
Acq On : 22 Jun 2016 4:33 pm
Operator : ashleyn
Sample : icv3699-50
Misc : op94630a,e3e3699
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 22 16:57:16 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Jun 22 16:35:28 2016
QLast Update : Wed Jun 22 16:35:28 2016
Response via : Initial Calibration



M3E3699.M Wed Jun 22 16:57:24 2016 MS3E

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84408a.D
Acq On : 22 Jun 2016 6:28 pm
Operator : seanb1
Sample : ic3700-100
Misc : op94630a,e3e3700
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 08:07:16 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	87193	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	327636	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	183123	40.00	ppm	0.00
69) Phenanthrene-d10	10.673	188	308714	40.00	ppm	0.00
83) Chrysene-d12	14.899	240	308290	40.00	ppm	-0.01
92) Perylene-d12	17.076	264	299675	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.111	152	87193	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	183123	40.00	ppm	0.00
106) Phenanthrene-d10a	10.673	188	308714	40.00	ppm	0.00
110) Chrysene-d12a	14.899	240	308290	40.00	ppm	-0.01
112) Naphthalene-d8a	6.282	136	327636	40.00	ppm	0.00
114) Chrysene-d12b	14.899	240	308290	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%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	11.315	230	469877	100.00	ppm	-0.03
Spiked Amount 50.000			Recovery	=	200.00%	
109) 1-Chlorooctadecane	12.503	57	191605	100.00	ppm	-0.09
Spiked Amount 50.000			Recovery	=	200.00%	

Target Compounds						Qvalue
103) Benzaldehyde	4.763	105	111332	100.00	ppm	80
105) 1,2,4,5-Tetrachloroben...	7.288	216	249061	100.00	ppm	95
107) Atrazine	10.283	215	87317	100.00	ppm	87
111) benzidine	12.840	184	365350	100.00	ppm	99
113) Hydroquinone	6.710	110	266752	100.00	ppm	70

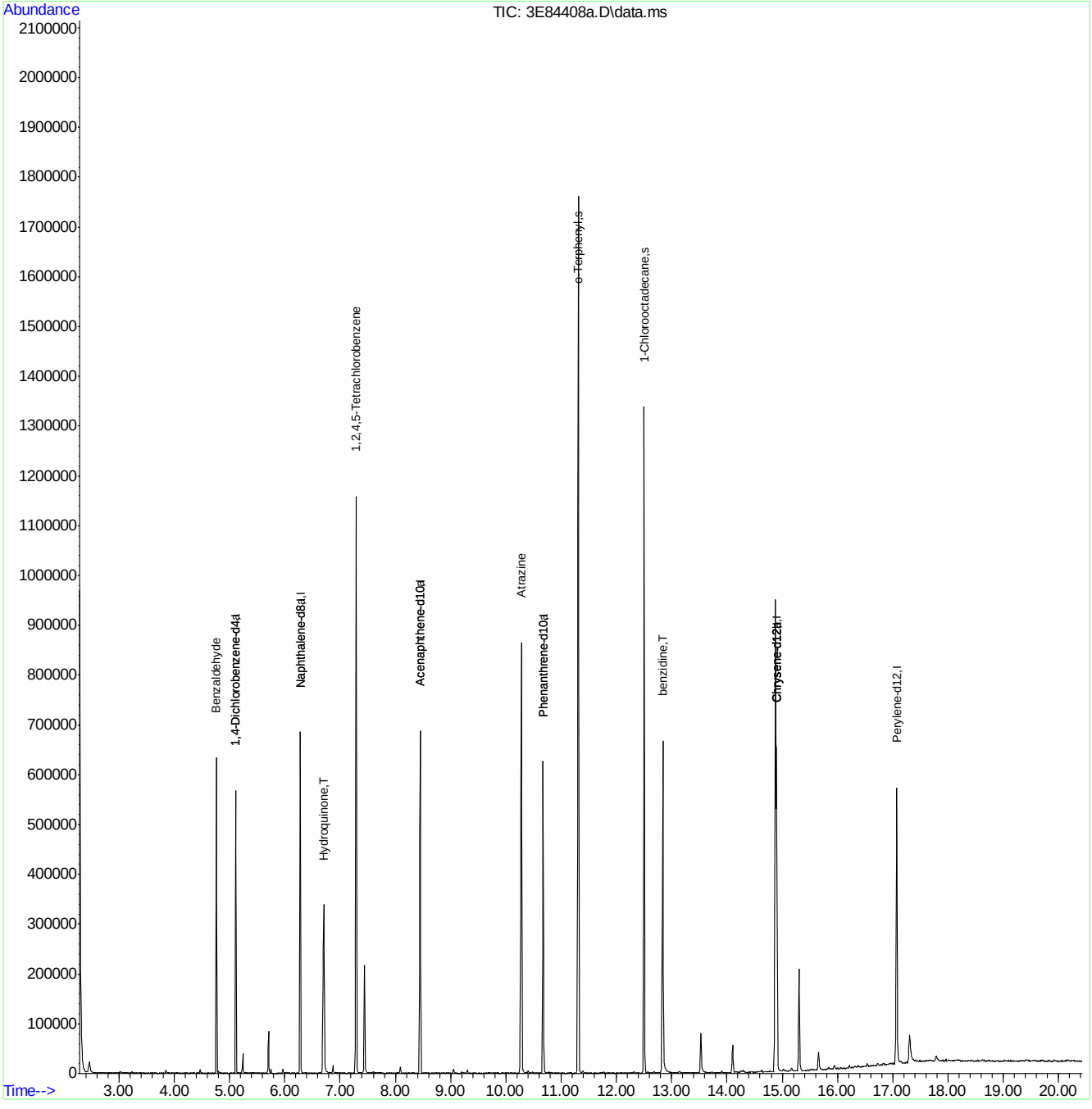
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84408a.D
Acq On : 22 Jun 2016 6:28 pm
Operator : seanb1
Sample : ic3700-100
Misc : op94630a,e3e3700
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 23 08:07:16 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration



M3E3699.M Thu Jun 23 08:09:23 2016 MS3E

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84409.D
Acq On : 22 Jun 2016 6:55 pm
Operator : seanb1
Sample : ic3700-80
Misc : op94630a,e3e3700
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 08:09:09 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	86505	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	333618	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	190151	40.00	ppm	0.00
69) Phenanthrene-d10	10.673	188	314417	40.00	ppm	0.00
83) Chrysene-d12	14.899	240	318077	40.00	ppm	-0.01
92) Perylene-d12	17.070	264	318647	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	5.111	152	86505	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	190151	40.00	ppm	0.00
106) Phenanthrene-d10a	10.673	188	314417	40.00	ppm	0.00
110) Chrysene-d12a	14.899	240	318077	40.00	ppm	-0.01
112) Naphthalene-d8a	6.282	136	333618	40.00	ppm	0.00
114) Chrysene-d12b	14.899	240	318077	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%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	11.310	230	377289	78.84	ppm	-0.04
Spiked Amount 50.000			Recovery	=	157.68%	
109) 1-Chlorooctadecane	12.497	57	161125	82.57	ppm	-0.10
Spiked Amount 50.000			Recovery	=	165.14%	

Target Compounds						Qvalue
103) Benzaldehyde	4.763	105	131415	118.98	ppm	80
105) 1,2,4,5-Tetrachloroben...	7.288	216	201880	78.06	ppm	97
107) Atrazine	10.278	215	73667	82.84	ppm	90
111) benzidine	12.834	184	270464	71.75	ppm	99
113) Hydroquinone	6.699	110	216650	79.76	ppm	70

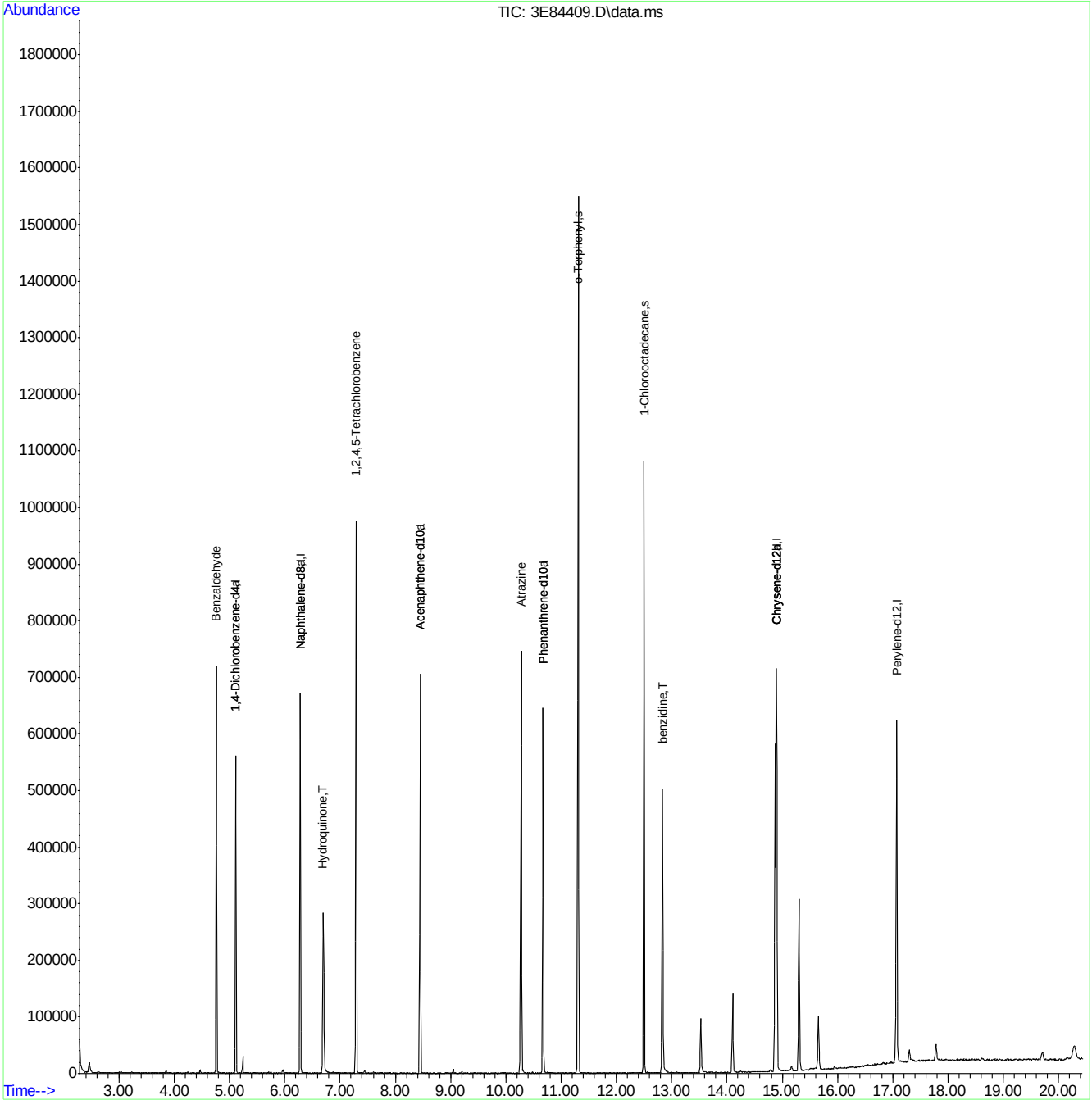
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84409.D
Acq On : 22 Jun 2016 6:55 pm
Operator : seanb1
Sample : ic3700-80
Misc : op94630a,e3e3700
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 23 08:09:09 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration



M3E3699.M Thu Jun 23 08:09:19 2016 MS3E

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84410.D
Acq On : 22 Jun 2016 7:51 pm
Operator : seanb1
Sample : icc3700-50
Misc : op94630a,e3e3700
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 08:09:56 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	87891	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	328828	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	189872	40.00	ppm	0.00
69) Phenanthrene-d10	10.673	188	329841	40.00	ppm	0.00
83) Chrysene-d12	14.904	240	330454	40.00	ppm	0.00
92) Perylene-d12	17.076	264	321002	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.111	152	87891	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	189872	40.00	ppm	0.00
106) Phenanthrene-d10a	10.673	188	329841	40.00	ppm	0.00
110) Chrysene-d12a	14.904	240	330454	40.00	ppm	0.00
112) Naphthalene-d8a	6.282	136	328828	40.00	ppm	0.00
114) Chrysene-d12b	14.904	240	330454	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	11.310	230	233689	46.55	ppm	-0.04
Spiked Amount 50.000			Recovery = 93.10%			
109) 1-Chlorooctadecane	12.503	57	100281	48.99	ppm	-0.09
Spiked Amount 50.000			Recovery = 97.98%			

Target Compounds						Qvalue
103) Benzaldehyde	4.763	105	107291	95.60	ppm #	81
105) 1,2,4,5-Tetrachloroben...	7.288	216	123778	47.93	ppm	98
107) Atrazine	10.278	215	45935	49.24	ppm #	90
111) benzidine	12.840	184	177979	45.45	ppm	99
113) Hydroquinone	6.694	110	140219	52.37	ppm	70

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

7.6.31

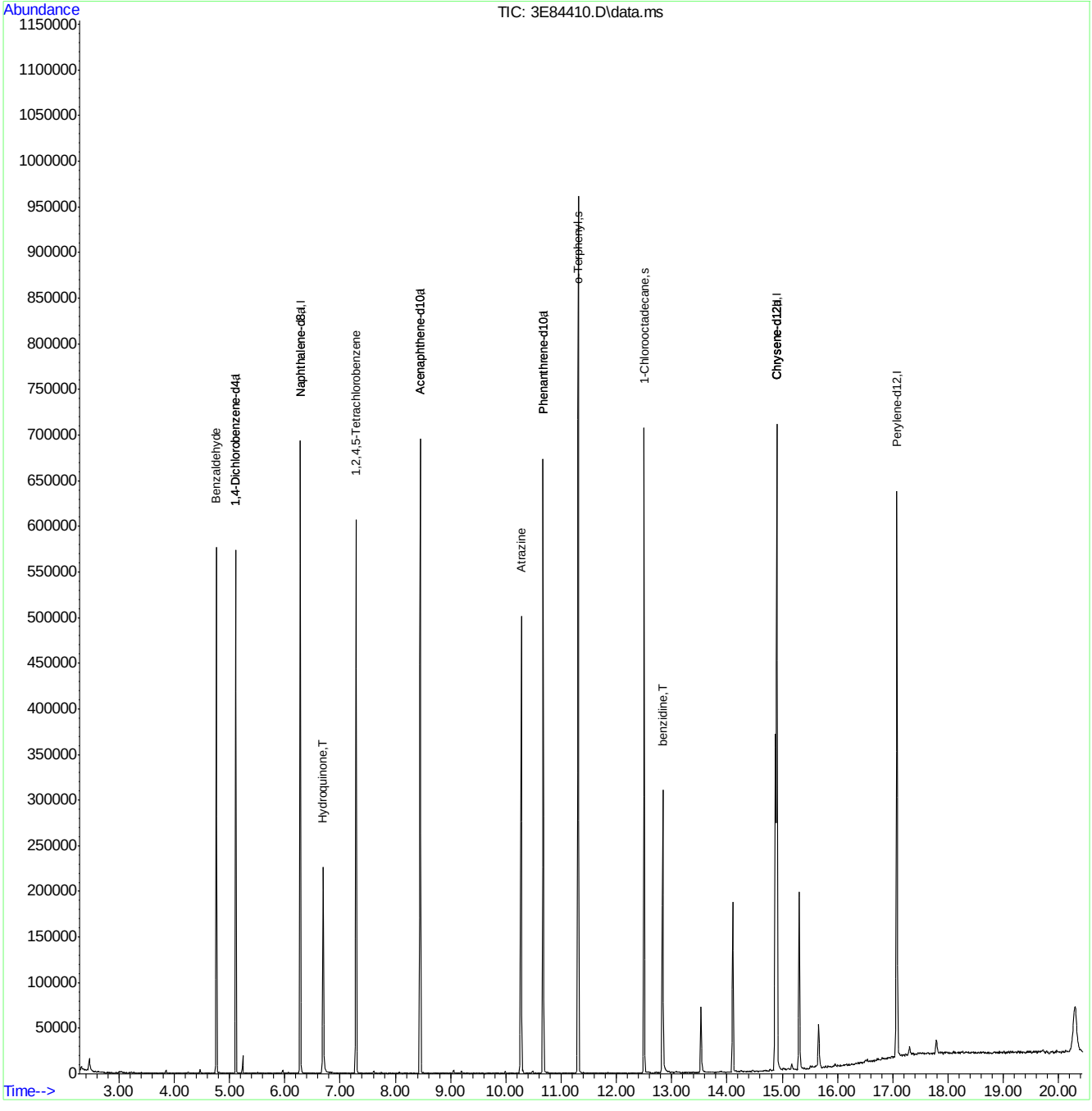
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84410.D
Acq On : 22 Jun 2016 7:51 pm
Operator : seanb1
Sample : icc3700-50
Misc : op94630a,e3e3700
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 23 08:09:56 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration



M3E3699.M Thu Jun 23 08:10:07 2016 MS3E

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84411.D
Acq On : 22 Jun 2016 8:18 pm
Operator : seanb1
Sample : ic3700-25
Misc : op94630a,e3e3700
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 08:10:25 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	87423	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	333752	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	194663	40.00	ppm	0.00
69) Phenanthrene-d10	10.673	188	346288	40.00	ppm	0.00
83) Chrysene-d12	14.899	240	345439	40.00	ppm	-0.01
92) Perylene-d12	17.070	264	337309	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	5.111	152	87423	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	194663	40.00	ppm	0.00
106) Phenanthrene-d10a	10.673	188	346288	40.00	ppm	0.00
110) Chrysene-d12a	14.899	240	345439	40.00	ppm	-0.01
112) Naphthalene-d8a	6.282	136	333752	40.00	ppm	0.00
114) Chrysene-d12b	14.899	240	345439	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%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	11.305	230	115791	21.97	ppm	-0.04
Spiked Amount 50.000			Recovery = 43.94%			
109) 1-Chlorooctadecane	12.497	57	49348	22.96	ppm	-0.10
Spiked Amount 50.000			Recovery = 45.92%			

Target Compounds						Qvalue
103) Benzaldehyde	4.763	105	50947	45.64	ppm	79
105) 1,2,4,5-Tetrachloroben...	7.288	216	61572	23.26	ppm	96
107) Atrazine	10.267	215	22170	22.64	ppm	88
111) benzidine	12.834	184	74798	18.27	ppm	98
113) Hydroquinone	6.689	110	66015	24.29	ppm	69

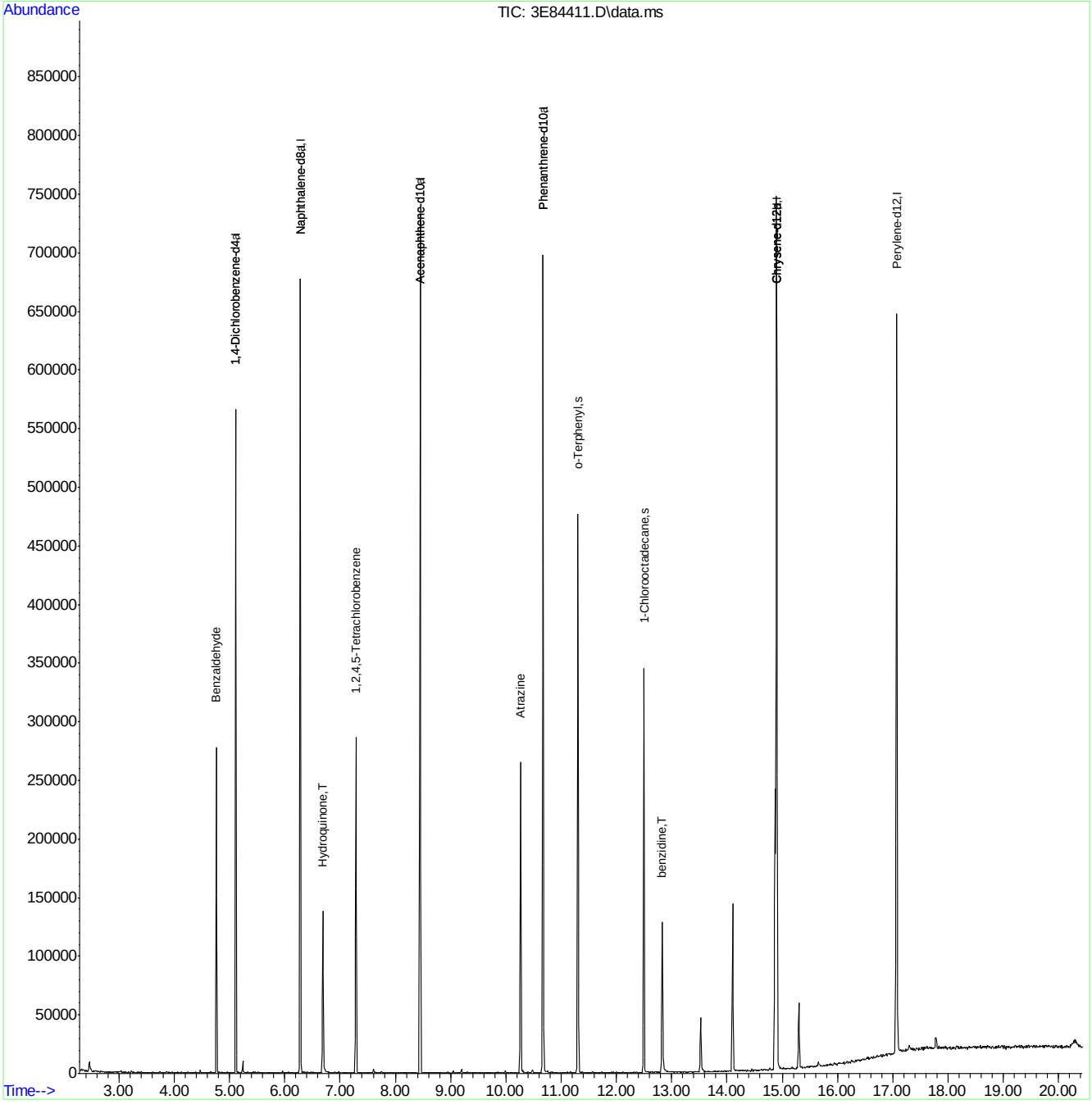
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84411.D
Acq On : 22 Jun 2016 8:18 pm
Operator : seanb1
Sample : ic3700-25
Misc : op94630a,e3e3700
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 23 08:10:25 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration



M3E3699.M Thu Jun 23 08:10:36 2016 MS3E Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84412.D
Acq On : 22 Jun 2016 8:45 pm
Operator : seanb1
Sample : ic3700-10
Misc : op94630a,e3e3700
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 08:10:53 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	114527	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	430183	40.00	ppm	0.00
47) Acenaphthene-d10	8.449	164	246394	40.00	ppm	0.00
69) Phenanthrene-d10	10.674	188	412541	40.00	ppm	0.00
83) Chrysene-d12	14.899	240	436001	40.00	ppm	-0.01
92) Perylene-d12	17.071	264	432401	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	5.111	152	114527	40.00	ppm	0.00
104) Acenaphthene-d10a	8.449	164	246394	40.00	ppm	0.00
106) Phenanthrene-d10a	10.674	188	412541	40.00	ppm	0.00
110) Chrysene-d12a	14.899	240	436001	40.00	ppm	-0.01
112) Naphthalene-d8a	6.282	136	430183	40.00	ppm	0.00
114) Chrysene-d12b	14.899	240	436001	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%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	11.305	230	57659	9.18	ppm	-0.04
Spiked Amount 50.000			Recovery	=	18.36%	
109) 1-Chlorooctadecane	12.492	57	22579	8.82	ppm	-0.10
Spiked Amount 50.000			Recovery	=	17.64%	

Target Compounds						Qvalue
103) Benzaldehyde	4.763	105	25261	17.27	ppm #	79
105) 1,2,4,5-Tetrachloroben...	7.288	216	30140	8.99	ppm	97
107) Atrazine	10.267	215	10505	9.00	ppm	89
111) benzidine	12.829	184	46144	8.93	ppm	98
113) Hydroquinone	6.683	110	28144	8.04	ppm	69

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

7.6.33

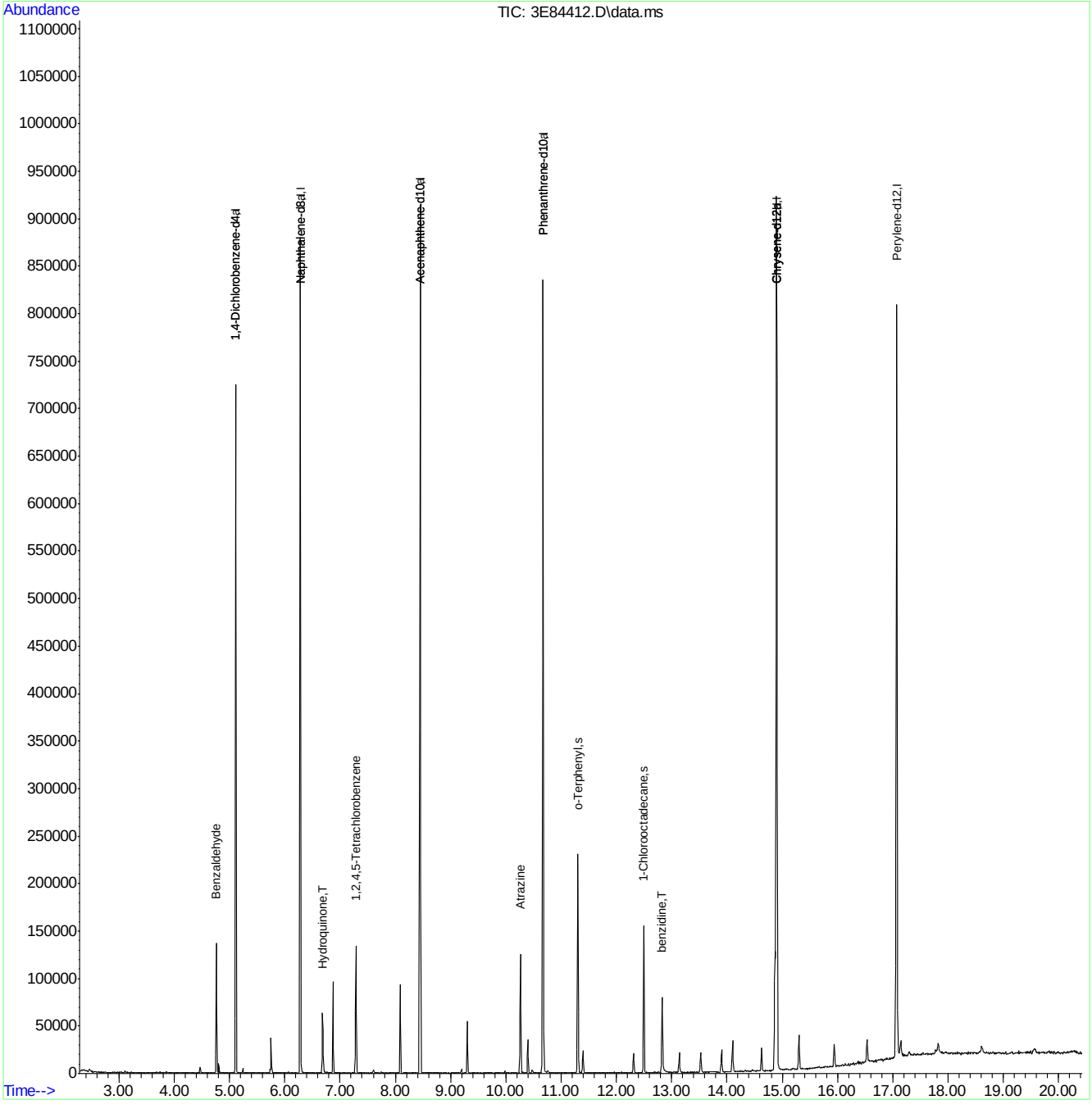
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84412.D
Acq On : 22 Jun 2016 8:45 pm
Operator : seanb1
Sample : ic3700-10
Misc : op94630a,e3e3700
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 23 08:10:53 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration



M3E3699.M Thu Jun 23 08:11:02 2016 MS3E

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84413.D
Acq On : 22 Jun 2016 9:12 pm
Operator : seanb1
Sample : ic3700-5
Misc : op94630a,e3e3700
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 08:11:20 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	113434	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	426837	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	239948	40.00	ppm	0.00
69) Phenanthrene-d10	10.673	188	406390	40.00	ppm	0.00
83) Chrysene-d12	14.899	240	424960	40.00	ppm	-0.01
92) Perylene-d12	17.070	264	426331	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	5.111	152	113434	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	239948	40.00	ppm	0.00
106) Phenanthrene-d10a	10.673	188	406390	40.00	ppm	0.00
110) Chrysene-d12a	14.899	240	424960	40.00	ppm	-0.01
112) Naphthalene-d8a	6.282	136	426837	40.00	ppm	0.00
114) Chrysene-d12b	14.899	240	424960	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%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	11.304	230	30346	4.91	ppm	-0.04
Spiked Amount 50.000			Recovery	=	9.82%	
109) 1-Chlorooctadecane	12.497	57	12678	5.03	ppm	-0.10
Spiked Amount 50.000			Recovery	=	10.06%	

Target Compounds							Qvalue
103) Benzaldehyde	4.763	105	14135	9.76	ppm	#	82
105) 1,2,4,5-Tetrachloroben...	7.288	216	16886	5.17	ppm		99
107) Atrazine	10.267	215	5614	4.88	ppm	#	87
111) benzidine	12.829	184	19943	3.96	ppm		97
113) Hydroquinone	6.683	110	15126	4.35	ppm		70

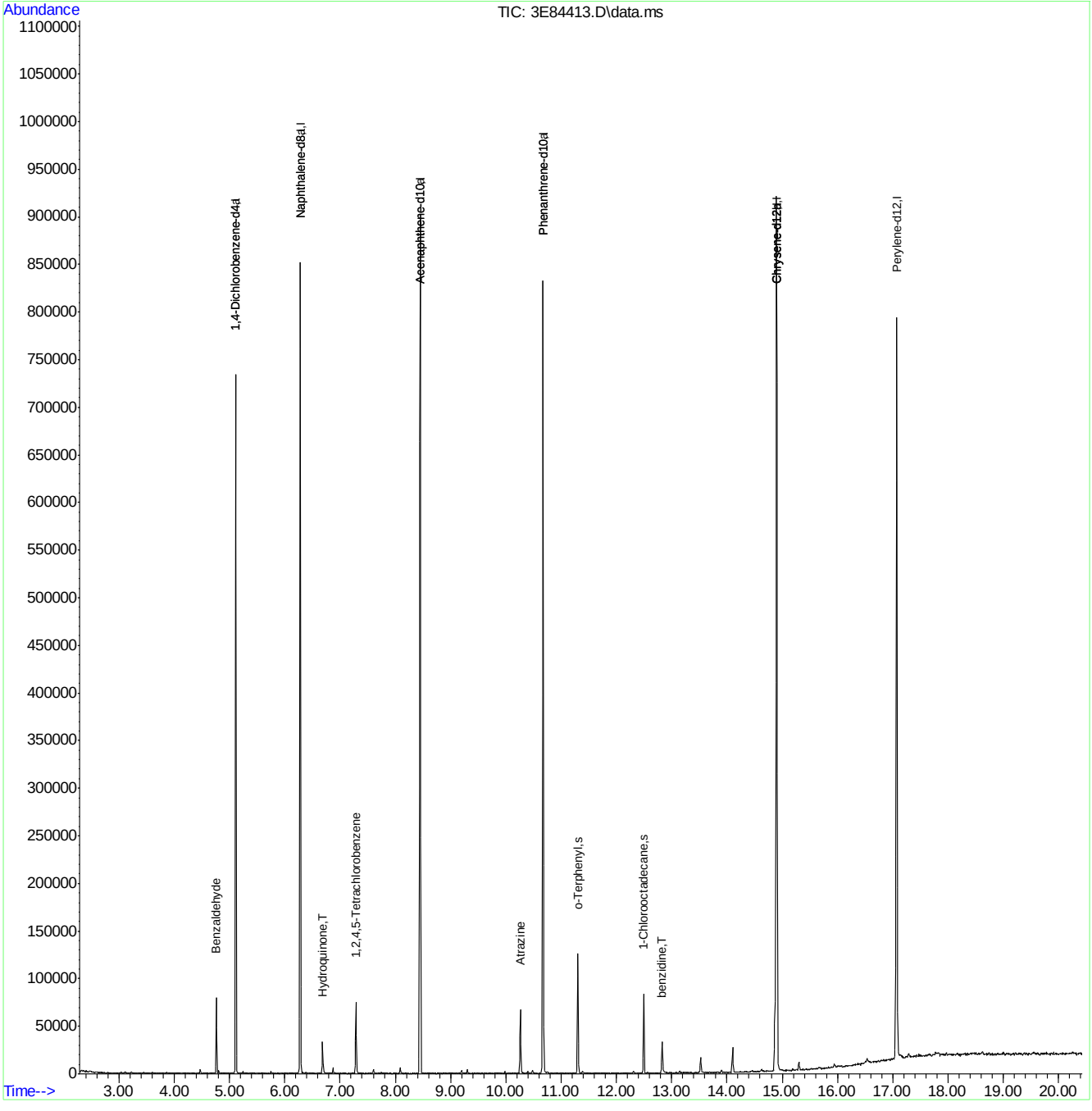
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84413.D
Acq On : 22 Jun 2016 9:12 pm
Operator : seanb1
Sample : ic3700-5
Misc : op94630a,e3e3700
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 23 08:11:20 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration



M3E3699.M Thu Jun 23 08:11:32 2016 MS3E Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84414.D
Acq On : 22 Jun 2016 9:40 pm
Operator : seanb1
Sample : ic3700-2
Misc : op94630a,e3e3700
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 08:11:48 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	102198	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	380920	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	216640	40.00	ppm	0.00
69) Phenanthrene-d10	10.673	188	366296	40.00	ppm	0.00
83) Chrysene-d12	14.899	240	379074	40.00	ppm	-0.01
92) Perylene-d12	17.070	264	377977	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	5.111	152	102198	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	216640	40.00	ppm	0.00
106) Phenanthrene-d10a	10.673	188	366296	40.00	ppm	0.00
110) Chrysene-d12a	14.899	240	379074	40.00	ppm	-0.01
112) Naphthalene-d8a	6.282	136	380920	40.00	ppm	0.00
114) Chrysene-d12b	14.899	240	379074	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%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	11.304	230	10513	1.89	ppm	-0.04
Spiked Amount 50.000			Recovery	=	3.78%	
109) 1-Chlorooctadecane	12.492	57	4286	1.89	ppm	-0.10
Spiked Amount 50.000			Recovery	=	3.78%	

Target Compounds						Qvalue
103) Benzaldehyde	4.763	105	5015	3.84	ppm	85
105) 1,2,4,5-Tetrachloroben...	7.288	216	6117	2.08	ppm	94
107) Atrazine	10.262	215	1982	1.91	ppm	92
111) benzidine	12.829	184	6819	1.52	ppm	98
113) Hydroquinone	6.683	110	4760	1.53	ppm	71

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

7.6.35

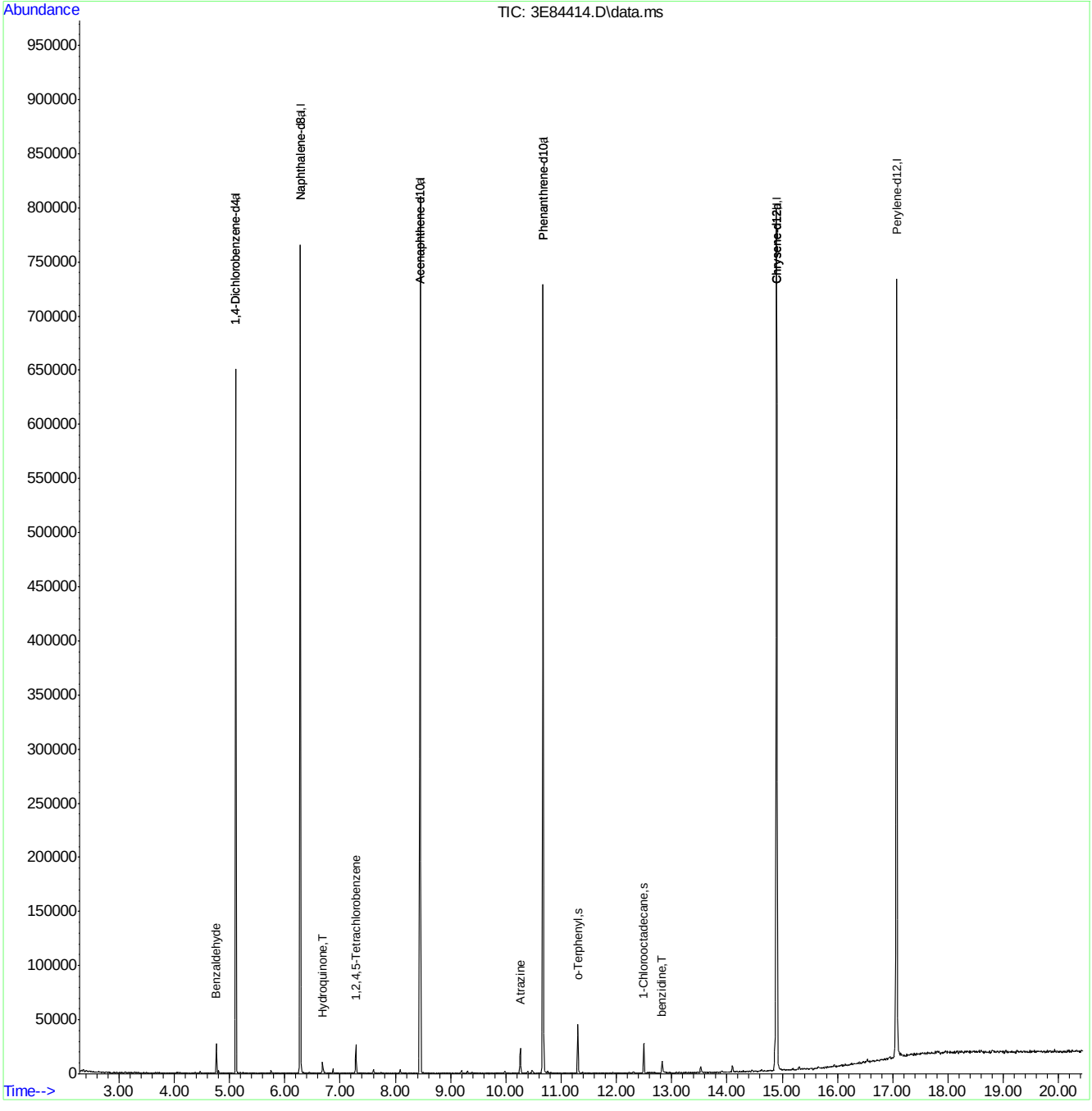
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84414.D
Acq On : 22 Jun 2016 9:40 pm
Operator : seanb1
Sample : ic3700-2
Misc : op94630a,e3e3700
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 23 08:11:48 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration



M3E3699.M Thu Jun 23 08:11:58 2016 MS3E Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84415.D
Acq On : 22 Jun 2016 10:07 pm
Operator : seanb1
Sample : ic3700-1
Misc : op94630a,e3e3700
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 08:12:12 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	96674	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	365267	40.00	ppm	0.00
47) Acenaphthene-d10	8.449	164	206551	40.00	ppm	0.00
69) Phenanthrene-d10	10.674	188	347578	40.00	ppm	0.00
83) Chrysene-d12	14.899	240	358674	40.00	ppm	-0.01
92) Perylene-d12	17.071	264	364634	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	5.111	152	96674	40.00	ppm	0.00
104) Acenaphthene-d10a	8.449	164	206551	40.00	ppm	0.00
106) Phenanthrene-d10a	10.674	188	347578	40.00	ppm	0.00
110) Chrysene-d12a	14.899	240	358674	40.00	ppm	-0.01
112) Naphthalene-d8a	6.282	136	365267	40.00	ppm	0.00
114) Chrysene-d12b	14.899	240	358674	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%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	11.305	230	5127	0.97	ppm	-0.04
Spiked Amount 50.000			Recovery	=	1.94%	
109) 1-Chlorooctadecane	12.492	57	2203	1.02	ppm	-0.10
Spiked Amount 50.000			Recovery	=	2.04%	

Target Compounds							Qvalue
103) Benzaldehyde	4.763	105	2475	2.01	ppm	#	76
105) 1,2,4,5-Tetrachloroben...	7.283	216	2818	1.00	ppm		92
107) Atrazine	10.262	215	1063	1.08	ppm	#	75
111) benzidine	12.829	184	3516	0.83	ppm		94
113) Hydroquinone	6.683	110	1947	0.65	ppm		69

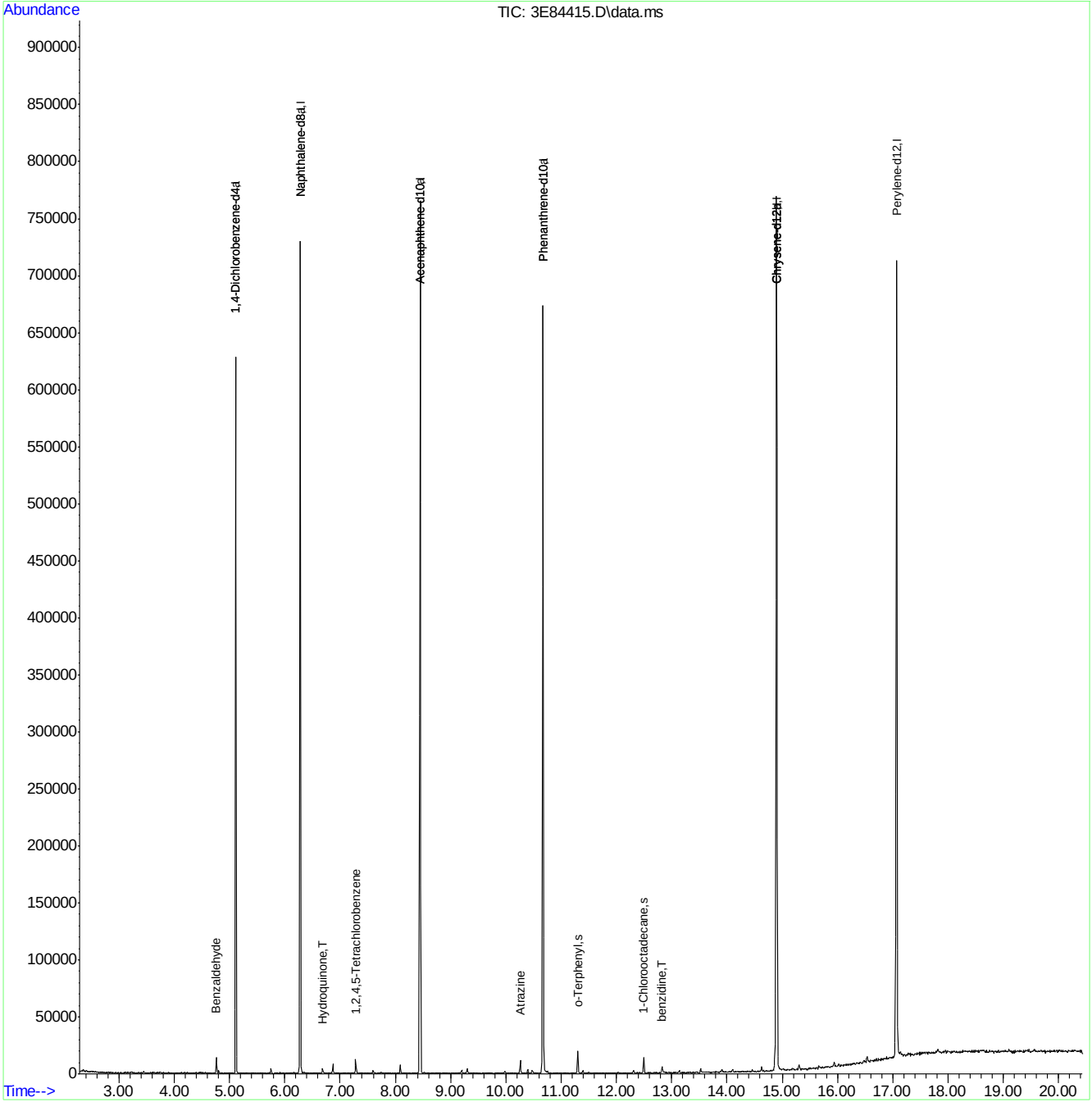
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84415.D
Acq On : 22 Jun 2016 10:07 pm
Operator : seanb1
Sample : ic3700-1
Misc : op94630a,e3e3700
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 23 08:12:12 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:06:09 2016
QLast Update : Thu Jun 23 08:06:09 2016
Response via : Initial Calibration



M3E3699.M Thu Jun 23 08:12:23 2016 MS3E

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84416.D
Acq On : 22 Jun 2016 10:34 pm
Operator : seanb1
Sample : icv3700-50
Misc : op94630a,e3e3700
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 08:32:11 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:24:46 2016
QLast Update : Thu Jun 23 08:24:46 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	108786	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	388193	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	211537	40.00	ppm	0.00
69) Phenanthrene-d10	10.674	188	336003	40.00	ppm	0.00
83) Chrysene-d12	14.904	240	328073	40.00	ppm	0.00
92) Perylene-d12	17.070	264	302664	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	5.111	152	108786	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	211537	40.00	ppm	0.00
106) Phenanthrene-d10a	10.674	188	336003	40.00	ppm	0.00
110) Chrysene-d12a	14.904	240	328073	40.00	ppm	0.00
112) Naphthalene-d8a	6.282	136	388193	40.00	ppm	0.00
114) Chrysene-d12b	14.904	240	328073	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%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds						Qvalue
105) 1,2,4,5-Tetrachloroben...	7.288	216	146446	51.94	ppm	98
111) benzidine	12.834	184	276498	83.57	ppm	98

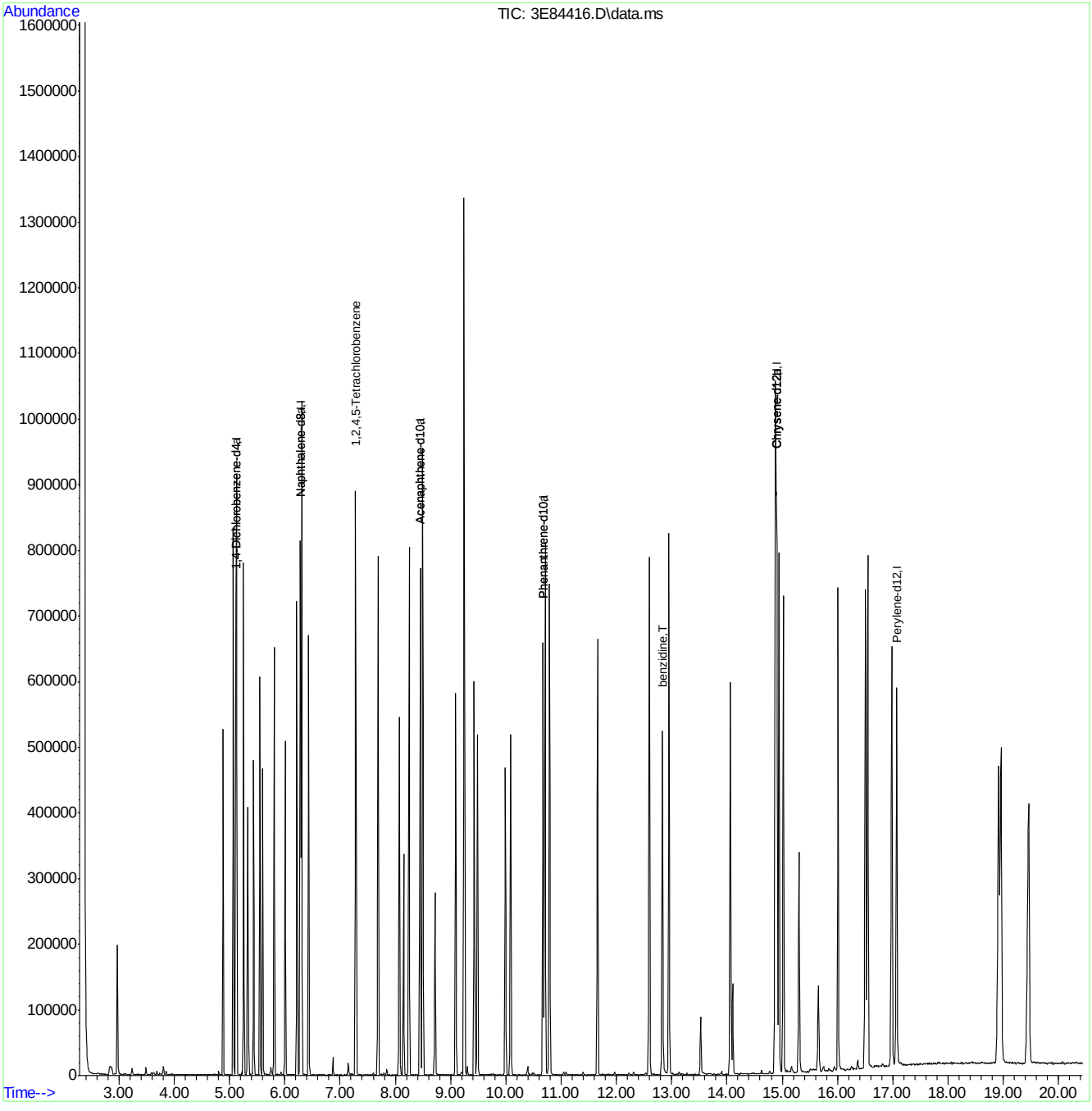
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84416.D
Acq On : 22 Jun 2016 10:34 pm
Operator : seanb1
Sample : icv3700-50
Misc : op94630a,e3e3700
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 23 08:32:11 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:24:46 2016
QLast Update : Thu Jun 23 08:24:46 2016
Response via : Initial Calibration



M3E3699.M Thu Jun 23 08:32:43 2016 MS3E Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84417a.D
Acq On : 22 Jun 2016 11:01 pm
Operator : seanb1
Sample : icv3700-50
Misc : op94630a,e3e3700
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 23 10:09:55 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 10:08:02 2016
QLast Update : Thu Jun 23 10:08:02 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	98447	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	421887	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	196091	40.00	ppm	0.00
69) Phenanthrene-d10	10.668	188	314779	40.00	ppm	-0.01
83) Chrysene-d12	14.899	240	292090	40.00	ppm	-0.01
92) Perylene-d12	17.070	264	251748	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	5.111	152	98447	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	196091	40.00	ppm	0.00
106) Phenanthrene-d10a	10.668	188	314779	40.00	ppm	0.00
110) Chrysene-d12a	14.899	240	292090	40.00	ppm	0.00
112) Naphthalene-d8a	6.282	136	421887	40.00	ppm	0.00
114) Chrysene-d12b	14.899	240	292090	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
103) Benzaldehyde	4.763	105	146444	63.56	ppm	98
107) Atrazine	10.272	215	36861	42.24	ppm	89

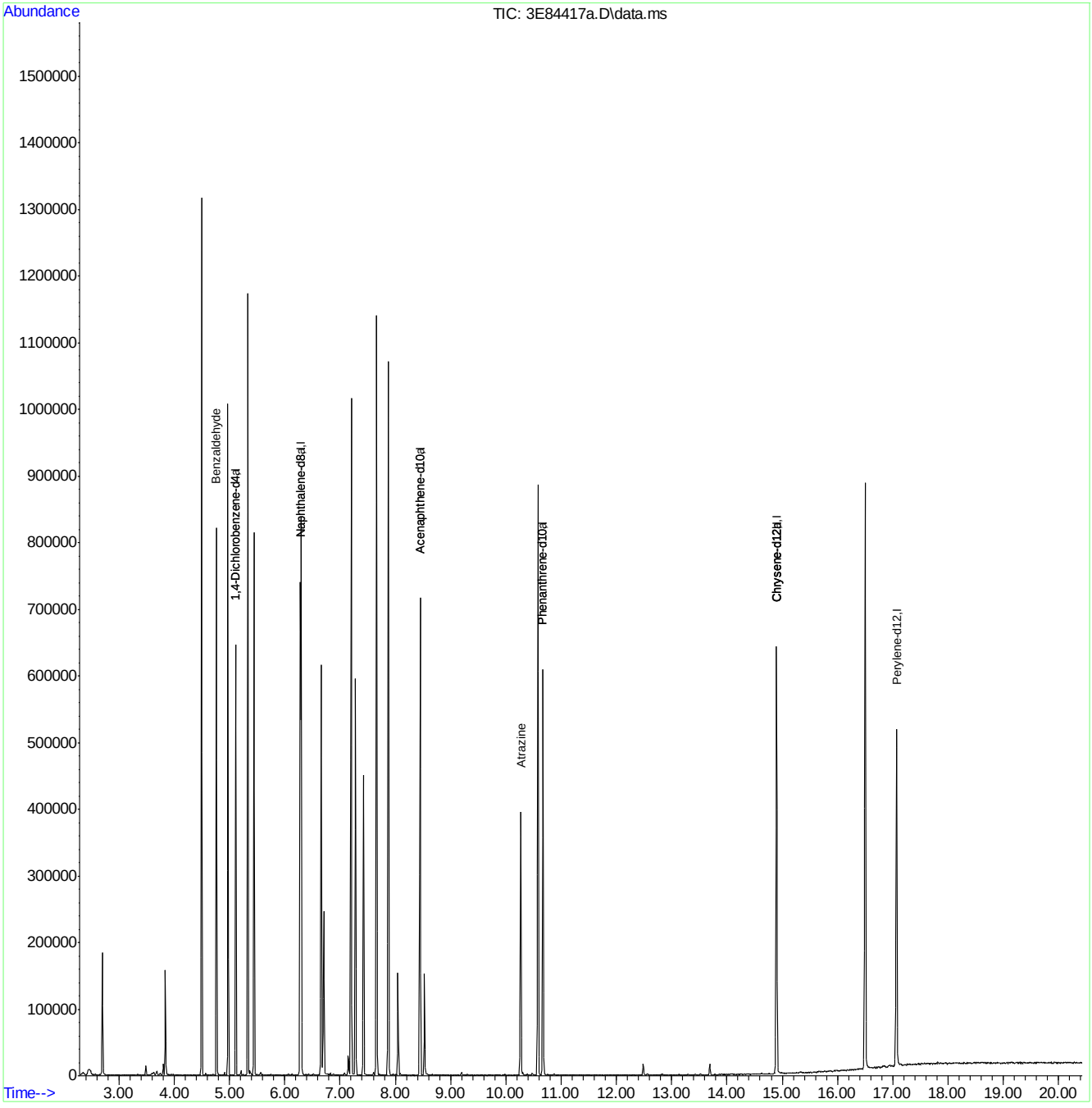
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84417a.D
Acq On : 22 Jun 2016 11:01 pm
Operator : seanb1
Sample : icv3700-50
Misc : op94630a,e3e3700
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 23 10:09:55 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 10:08:02 2016
QLast Update : Thu Jun 23 10:08:02 2016
Response via : Initial Calibration



M3E3699.M Thu Jun 23 10:10:26 2016 MS3E

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SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84417.D
Acq On : 22 Jun 2016 11:01 pm
Operator : seanb1
Sample : icv3699-50
Misc : op94630a,e3e3700
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 23 10:10:38 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 10:08:02 2016
QLast Update : Thu Jun 23 10:08:02 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	98447	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	421887	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	196091	40.00	ppm	0.00
69) Phenanthrene-d10	10.668	188	314779	40.00	ppm	-0.01
83) Chrysene-d12	14.899	240	292090	40.00	ppm	-0.01
92) Perylene-d12	17.070	264	251748	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	5.111	152	98447	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	196091	40.00	ppm	0.00
106) Phenanthrene-d10a	10.668	188	314779	40.00	ppm	0.00
110) Chrysene-d12a	14.899	240	292090	40.00	ppm	0.00
112) Naphthalene-d8a	6.282	136	421887	40.00	ppm	0.00
114) Chrysene-d12b	14.899	240	292090	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.698	88	69044	52.97	ppm	97
6) Indene	5.330	116	323420	53.49	ppm	98
7) Cumene	4.496	105	413487	53.26	ppm	100
13) Decane	4.972	43	156192	51.52	ppm	99
18) Acetophenone	5.442	105	215700	47.91	ppm	94
27) Quinoline	6.656	129	254042	34.29	ppm	99
40) 2,3-Dichloroaniline	7.421	161	128082	34.31	ppm	98
41) Caprolactam	6.710	55	56278	38.26	ppm	97
45) 1-Methylnaphthalene	7.202	141	303001	44.62	ppm	99
46) Dimethylnaphthalene	7.871	156	305990	46.20	ppm	99
53) Biphenyl	7.662	154	418106	54.36	ppm	97
82) Octadecane	10.582	57	171356	51.07	ppm	95
100) 7,12-Dimethylbenz(a)an...	16.503	256	237244	63.05	ppm	96

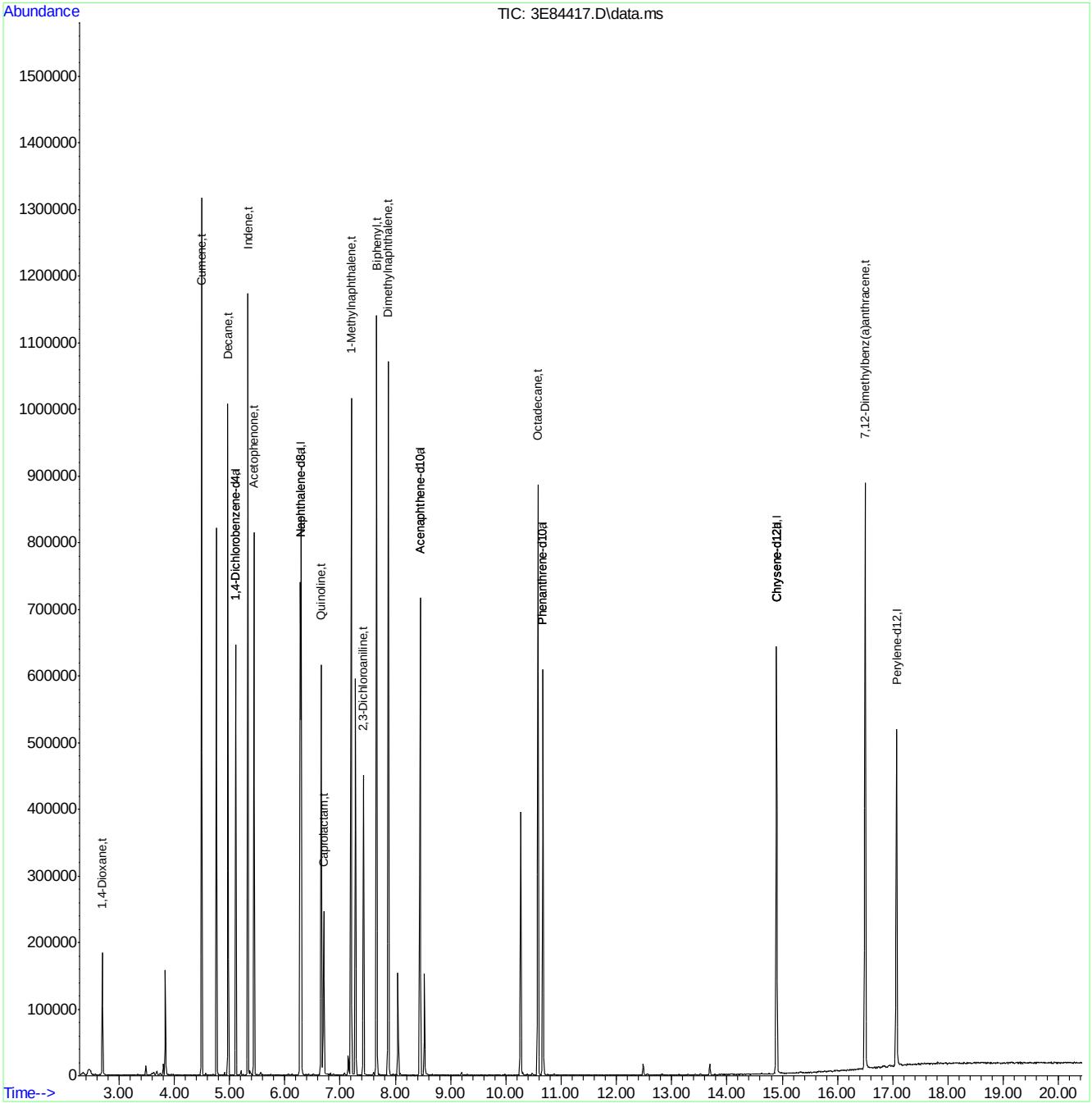
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84417.D
Acq On : 22 Jun 2016 11:01 pm
Operator : seanb1
Sample : icv3699-50
Misc : op94630a,e3e3700
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 23 10:10:38 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 10:08:02 2016
QLast Update : Thu Jun 23 10:08:02 2016
Response via : Initial Calibration



M3E3699.M Thu Jun 23 10:10:45 2016 MS3E

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SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84419.D
Acq On : 22 Jun 2016 11:55 pm
Operator : seanb1
Sample : icv3700-50
Misc : op94630a,e3e3700
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 08:42:13 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:37:12 2016
QLast Update : Thu Jun 23 08:37:12 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.111	152	88292	40.00	ppm	0.00
24) Naphthalene-d8	6.282	136	341338	40.00	ppm	0.00
47) Acenaphthene-d10	8.448	164	191634	40.00	ppm	0.00
69) Phenanthrene-d10	10.668	188	316522	40.00	ppm	-0.01
83) Chrysene-d12	14.899	240	321713	40.00	ppm	-0.01
92) Perylene-d12	17.070	264	321054	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	5.111	152	88292	40.00	ppm	0.00
104) Acenaphthene-d10a	8.448	164	191634	40.00	ppm	0.00
106) Phenanthrene-d10a	10.668	188	316522	40.00	ppm	0.00
110) Chrysene-d12a	14.899	240	321713	40.00	ppm	0.00
112) Naphthalene-d8a	6.282	136	341338	40.00	ppm	0.00
114) Chrysene-d12b	14.899	240	321713	40.00	ppm	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
113) Hydroquinone	6.689	110	127322	49.66	ppm	98

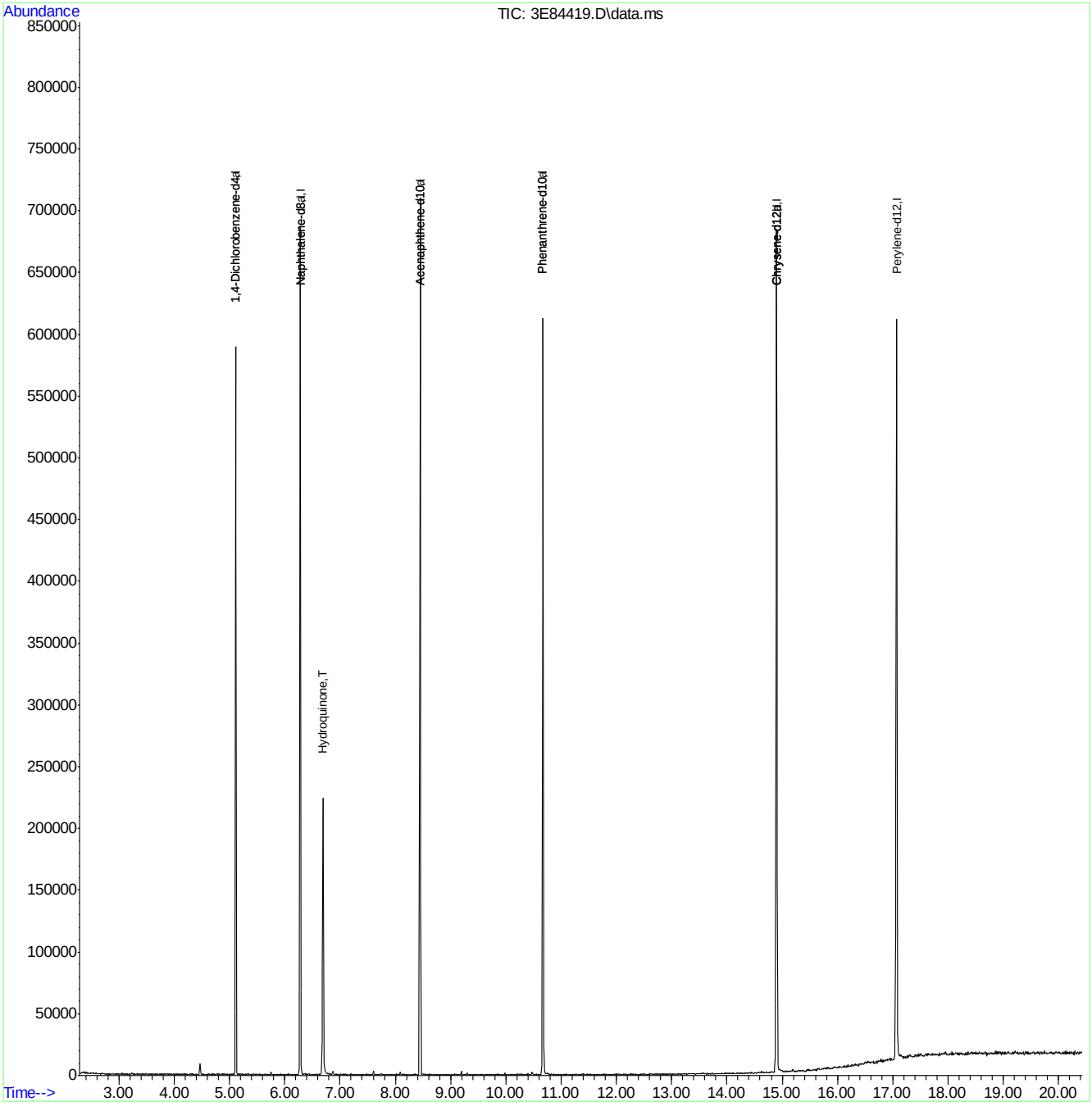
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3700\
Data File : 3E84419.D
Acq On : 22 Jun 2016 11:55 pm
Operator : seanb1
Sample : icv3700-50
Misc : op94630a,e3e3700
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 23 08:42:13 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 23 08:37:12 2016
QLast Update : Thu Jun 23 08:37:12 2016
Response via : Initial Calibration



M3E3699.M Thu Jun 23 08:42:27 2016 MS3E

SGS ACCUTEST JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
07/05/16 10:28

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84760.D
Acq On : 1 Jul 2016 8:27 pm
Operator : seanb1
Sample : cc3699-25
Misc : op95221,e3e3716
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 03 17:31:54 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.015	152	119665	40.00	ppm	-0.03
24) Naphthalene-d8	6.170	136	450142	40.00	ppm	-0.10
47) Acenaphthene-d10	8.320	164	255605	40.00	ppm	-0.11
69) Phenanthrene-d10	10.545	188	402846	40.00	ppm	-0.11
83) Chrysene-d12	14.776	240	395345	40.00	ppm	-0.10
92) Perylene-d12	16.937	264	299420	40.00	ppm	-0.11
102) 1,4-Dichlorobenzene-d4a	5.015	152	119665	40.00	ppm	-0.09
104) Acenaphthene-d10a	8.320	164	255605	40.00	ppm	-0.11
106) Phenanthrene-d10a	10.545	188	402846	40.00	ppm	-0.11
108) Chrysene-d12a	14.776	240	395345	40.00	ppm	-0.10
110) Naphthalene-d8a	6.170	136	450142	40.00	ppm	-0.10

System Monitoring Compounds						
5) 2-Fluorophenol	4.025	112	85956	23.18	ppm	-0.02
Spiked Amount 50.000			Recovery = 46.36%			
8) Phenol-d5	4.736	99	106113	23.54	ppm	-0.01
Spiked Amount 50.000			Recovery = 47.08%			
25) Nitrobenzene-d5	5.480	82	86244	25.12	ppm	-0.10
Spiked Amount 50.000			Recovery = 50.24%			
51) 2-Fluorobiphenyl	7.405	172	195137	23.08	ppm	-0.11
Spiked Amount 50.000			Recovery = 46.16%			
73) 2,4,6-Tribromophenol	9.481	330	20857	16.00	ppm	-0.10
Spiked Amount 50.000			Recovery = 32.00%			
85) Terphenyl-d14	13.107	244	184932	22.22	ppm	-0.11
Spiked Amount 50.000			Recovery = 44.44%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.592	88	37731	23.81	ppm		98
3) Pyridine	2.918	79	92347	22.97	ppm		97
4) N-Nitrosodimethylamine	2.875	74	55495	24.05	ppm		100
6) Indene	5.228	116	178564	24.30	ppm		96
7) Cumene	4.399	105	225174	23.86	ppm		97
9) Phenol	4.747	94	133874	25.23	ppm		83
10) Aniline	4.758	93	141697	25.41	ppm		94
11) bis(2-Chloroethyl)ether	4.795	93	85944	23.38	ppm		97
12) 2-Chlorophenol	4.859	128	108540	24.79	ppm		98
13) Decane	4.875	43	82507	22.39	ppm		95
14) 1,3-Dichlorobenzene	4.972	146	111950	22.81	ppm		99
15) 1,4-Dichlorobenzene	5.031	146	115467	22.76	ppm		97
16) Benzyl alcohol	5.127	108	62309	24.15	ppm		98
17) 1,2-Dichlorobenzene	5.159	146	108382	23.25	ppm		100
18) Acetophenone	5.346	105	133360	24.37	ppm		89
19) 2-Methylphenol	5.223	108	89165	24.67	ppm		99
20) 2,2'-oxybis(1-Chloropr...	5.228	121	34419	23.43	ppm	#	87
21) 3&4-Methylphenol	5.346	108	96641	24.71	ppm		99
22) n-Nitroso-di-n-propyla...	5.341	70	58878	24.27	ppm		97
23) Hexachloroethane	5.442	201	36825	24.17	ppm		93
26) Nitrobenzene	5.496	77	88873	24.47	ppm		94
27) Quinoline	6.550	129	191691	24.25	ppm		98
28) Isophorone	5.710	82	154943	24.37	ppm		99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84760.D
Acq On : 1 Jul 2016 8:27 pm
Operator : seanb1
Sample : cc3699-25
Misc : op95221,e3e3716
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 03 17:31:54 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2-Nitrophenol	5.790	139	60391	26.88	ppm		93
30) 2,4-Dimethylphenol	5.822	107	91259	27.52	ppm		97
31) Benzoic acid	5.929	105	63016	24.95	ppm		90
32) bis(2-Chloroethoxy)met...	5.902	93	96528	23.49	ppm		98
33) 2,4-Dichlorophenol	6.031	162	88495	26.50	ppm		98
34) 2,6-Dichlorophenol	6.255	162	85368	25.89	ppm		94
35) 1,3,5-Trichlorobenzene	5.801	180	93132	23.88	ppm		99
36) 1,2,4-Trichlorobenzene	6.111	180	86964	23.99	ppm		96
37) 1,2,3-Trichlorobenzene	6.341	180	84546	23.90	ppm		98
38) Naphthalene	6.191	128	287158	23.37	ppm		98
39) 4-Chloroaniline	6.239	127	119003	24.86	ppm		98
40) 2,3-Dichloroaniline	7.304	161	97898	24.58	ppm		96
41) Caprolactam	6.624	55	35401	22.56	ppm		97
42) Hexachlorobutadiene	6.314	225	44729	24.88	ppm		96
43) 4-Chloro-3-methylphenol	6.785	107	77152	25.65	ppm		95
44) 2-Methylnaphthalene	6.956	141	162057	23.20	ppm		92
45) 1-Methylnaphthalene	7.079	141	170214	23.49	ppm		99
46) Dimethylnaphthalene	7.748	156	167570	23.71	ppm		97
48) Hexachlorocyclopentadiene	7.154	237	61497	29.37	ppm		99
49) 2,4,6-Trichlorophenol	7.314	196	59177	25.05	ppm		99
50) 2,4,5-Trichlorophenol	7.368	196	59118	24.31	ppm		96
52) 2-Chloronaphthalene	7.566	162	168444	23.24	ppm		99
53) Biphenyl	7.539	154	224514	22.39	ppm		99
54) 2-Nitroaniline	7.705	65	40285	23.65	ppm		92
55) Dimethylphthalate	7.946	163	187770	23.59	ppm		100
56) Acenaphthylene	8.122	152	276060	22.36	ppm		98
57) 2,6-Dinitrotoluene	8.031	165	44817	25.62	ppm		97
58) 3-Nitroaniline	8.266	138	50939	24.83	ppm		94
59) Acenaphthene	8.368	153	175046	22.17	ppm		95
60) 2,4-Dinitrophenol	8.432	184	43576	48.00	ppm	#	83
61) 4-Nitrophenol	8.555	109	20446	28.13	ppm	#	79
62) Dibenzofuran	8.614	168	235108	22.68	ppm		99
63) 2,4-Dinitrotoluene	8.609	165	61123	27.84	ppm		79
64) 2,3,4,6-Tetrachlorophenol	8.807	232	45353	24.66	ppm		97
65) Diethylphthalate	8.962	149	171964	22.28	ppm		98
66) Fluorene	9.117	166	192277	22.39	ppm		98
67) 4-Chlorophenyl-phenyle...	9.117	204	91114	22.46	ppm		95
68) 4-Nitroaniline	9.160	138	48479	23.00	ppm		93
70) 4,6-Dinitro-2-methylph...	9.224	198	33830	26.33	ppm		96
71) n-Nitrosodiphenylamine	9.299	169	127208	23.82	ppm		100
72) 1,2-Diphenylhydrazine	9.358	77	156738	23.40	ppm		99
74) 4-Bromophenyl-phenylether	9.855	248	51045	23.80	ppm		97
75) Hexachlorobenzene	9.962	284	53068	20.26	ppm		92
76) Pentachlorophenol	10.278	266	64431	44.26	ppm		98
77) Phenanthrene	10.577	178	250734	22.32	ppm		99
78) Anthracene	10.657	178	252790	22.46	ppm		99
79) Carbazole	10.925	167	243384	23.15	ppm		99
80) Di-n-butylphthalate	11.524	149	289413	22.63	ppm		100
81) Fluoranthene	12.465	202	277384	23.66	ppm		97
82) Octadecane	10.443	57	102855	23.95	ppm		99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84760.D
Acq On : 1 Jul 2016 8:27 pm
Operator : seanb1
Sample : cc3699-25
Misc : op95221,e3e3716
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 03 17:31:54 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
84) Pyrene	12.818	202	291028	24.51 ppm	100
86) Butylbenzylphthalate	13.925	149	126632	23.54 ppm	98
88) Benzo[a]anthracene	14.760	228	266609	23.10 ppm	98
89) 3,3'-Dichlorobenzidine	14.744	252	102493	21.84 ppm	97
90) Chrysene	14.813	228	239281	22.83 ppm	98
91) bis(2-Ethylhexyl)phtha...	14.877	149	168899	22.70 ppm	97
93) Di-n-octylphthalate	15.872	149	296274	26.97 ppm	98
94) Benzo[b]fluoranthene	16.386	252	244326	24.28 ppm	97
95) Benzo[k]fluoranthene	16.423	252	220612	25.10 ppm	99
96) Benzo[a]pyrene	16.846	252	204789	24.86 ppm	99
97) Indeno[1,2,3-cd]pyrene	18.739	276	203587m	23.56 ppm	
98) Dibenz(a,h)acridine	18.306	279	180022	22.69 ppm	100
99) Dibenz[a,h]anthracene	18.771	278	189457	21.96 ppm	96
100) 7,12-Dimethylbenz(a)an...	16.375	256	122782	27.44 ppm	94
101) Benzo[g,h,i]perylene	19.263	276	181349	22.05 ppm	98

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

7.6.41

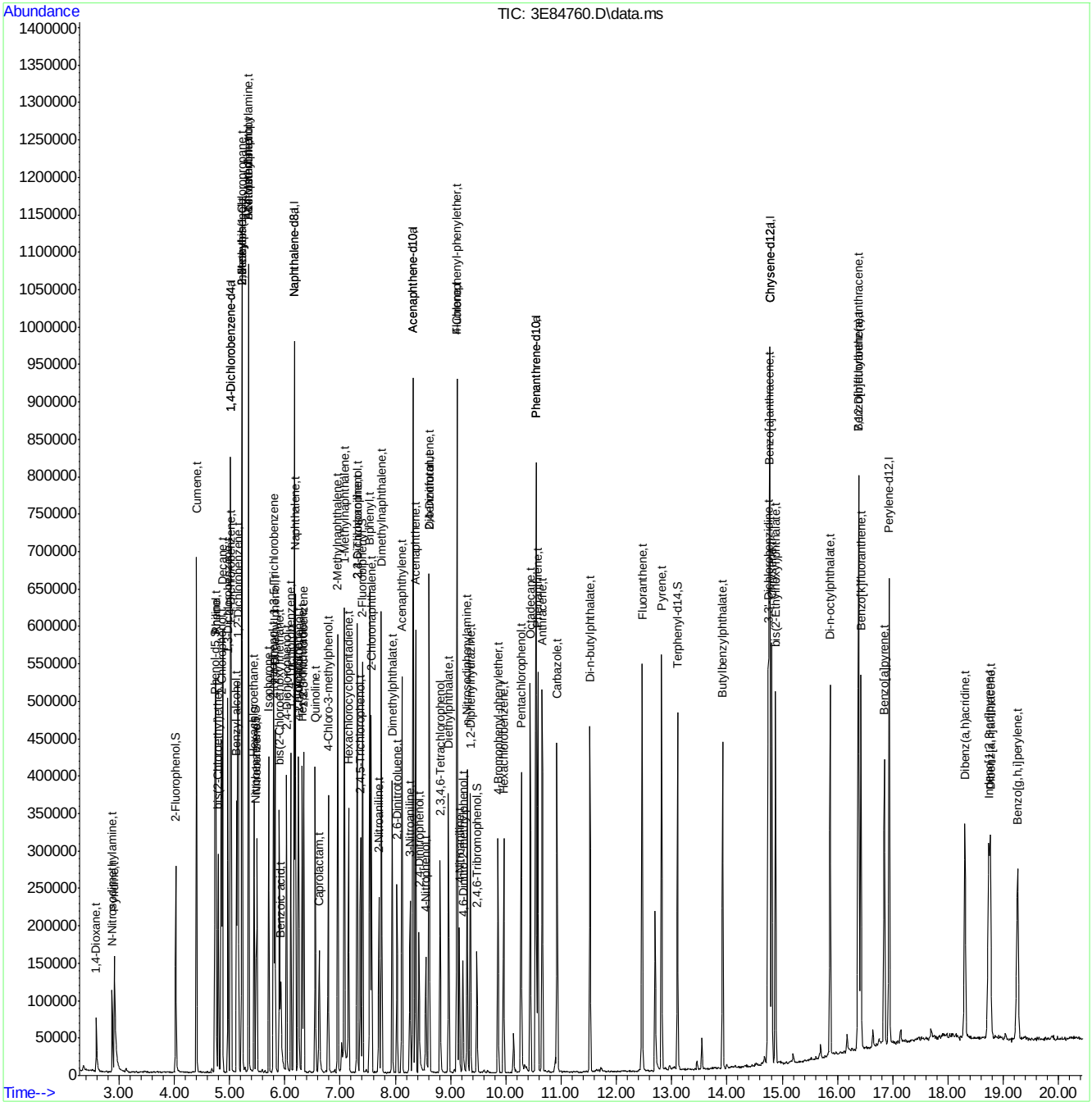
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84760.D
Acq On : 1 Jul 2016 8:27 pm
Operator : seanb1
Sample : cc3699-25
Misc : op95221,e3e3716
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 03 17:31:54 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration



Manual Integration Approval Summary

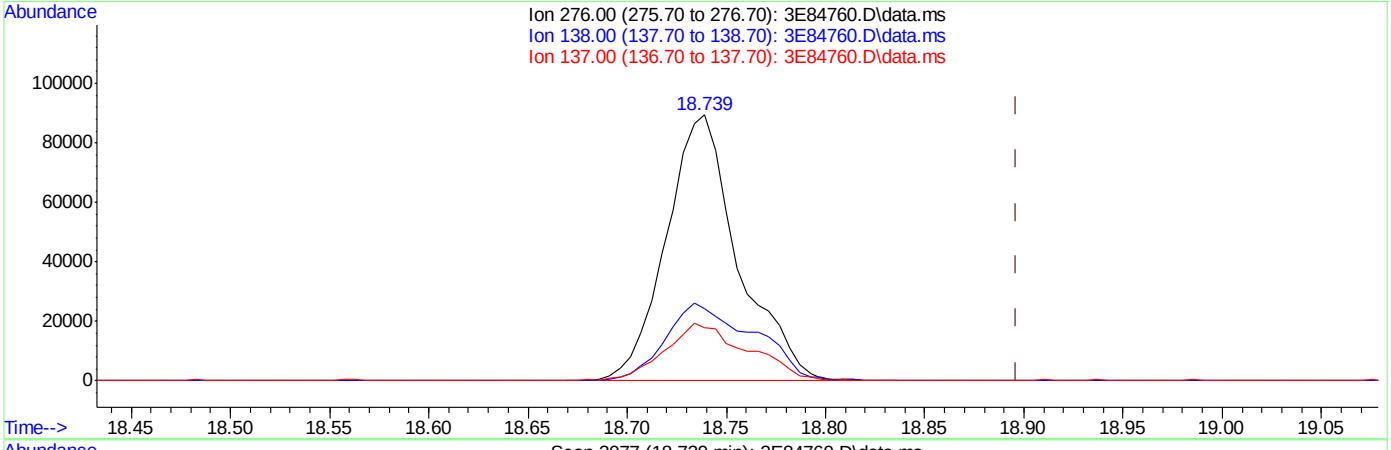
Sample Number:	E3E3716-CC3699	**Method:**	SW846 8270D
Lab FileID:	3E84760.D	**Analyst approved:**	07/03/16 17:48 Kristi Schollenberger
Injection Time:	07/01/16 20:27	**Supervisor approved:**	07/05/16 10:28 Nina Pandya

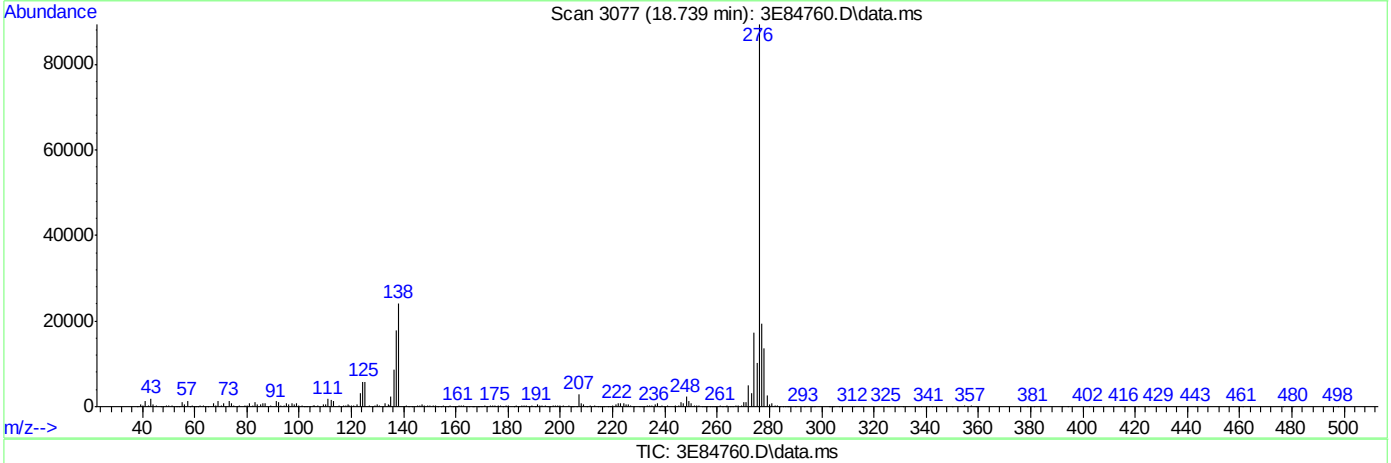
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.74	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84760.D
Acq On : 1 Jul 2016 8:27 pm
Operator : seanb1
Sample : cc3699-25
Misc : op95221,e3e3716
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 01 20:48:37 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration





TIC: 3E84760.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.739min (-0.157) 26.01ppm

response 224774

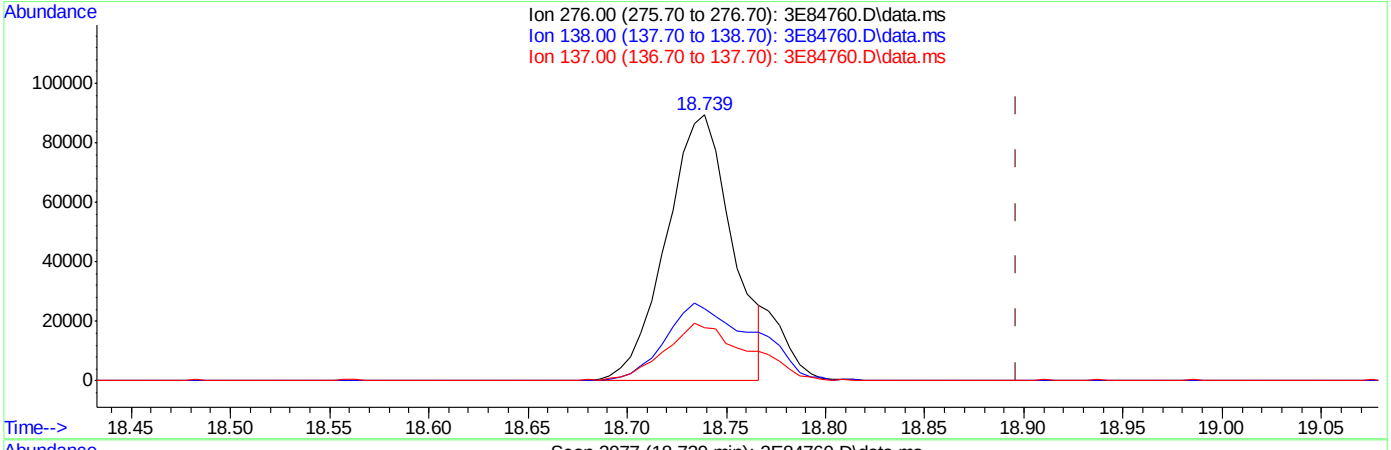
Ion	Exp%	Act%
276.00	100	100
138.00	20.80	26.92
137.00	17.00	19.69
0.00	0.00	0.00

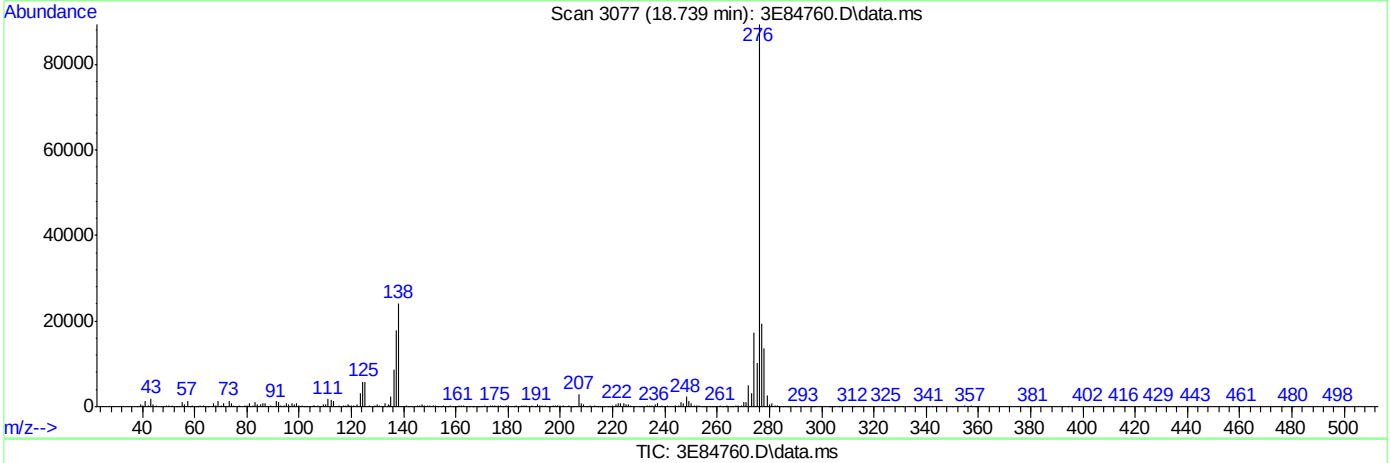
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84760.D
Acq On : 1 Jul 2016 8:27 pm
Operator : seanb1
Sample : cc3699-25
Misc : op95221,e3e3716
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 01 20:48:37 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration





TIC: 3E84760.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.739min (-0.157) 23.56ppm m

response 203587

Ion	Exp%	Act%
276.00	100	100
138.00	20.80	27.00
137.00	17.00	19.81
0.00	0.00	0.00

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84761.D
Acq On : 1 Jul 2016 8:55 pm
Operator : seanb1
Sample : cc3700-25
Misc : op95221,e3e3716
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 03 17:32:29 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.015	152	108696	40.00	ppm	-0.03
24) Naphthalene-d8	6.165	136	418017	40.00	ppm	-0.11
47) Acenaphthene-d10	8.320	164	257927	40.00	ppm	-0.11
69) Phenanthrene-d10	10.540	188	457123	40.00	ppm	-0.11
83) Chrysene-d12	14.771	240	453730	40.00	ppm	-0.11
92) Perylene-d12	16.937	264	385314	40.00	ppm	-0.11
102) 1,4-Dichlorobenzene-d4a	5.015	152	108696	40.00	ppm	-0.09
104) Acenaphthene-d10a	8.320	164	257927	40.00	ppm	-0.11
106) Phenanthrene-d10a	10.540	188	457123	40.00	ppm	-0.11
108) Chrysene-d12a	14.771	240	453730	40.00	ppm	-0.11
110) Naphthalene-d8a	6.165	136	418017	40.00	ppm	-0.10

System Monitoring Compounds

5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds						Qvalue
103) Benzaldehyde	4.672	105	59485	23.38	ppm	97
105) 1,2,4,5-Tetrachloroben...	7.165	216	79423	23.10	ppm	99
107) Atrazine	10.144	215	29755	23.48	ppm	96
109) benzidine	12.701	184	150528	32.90	ppm	99
111) Hydroquinone	6.598	110	86561	27.57	ppm	98

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

7.6.42

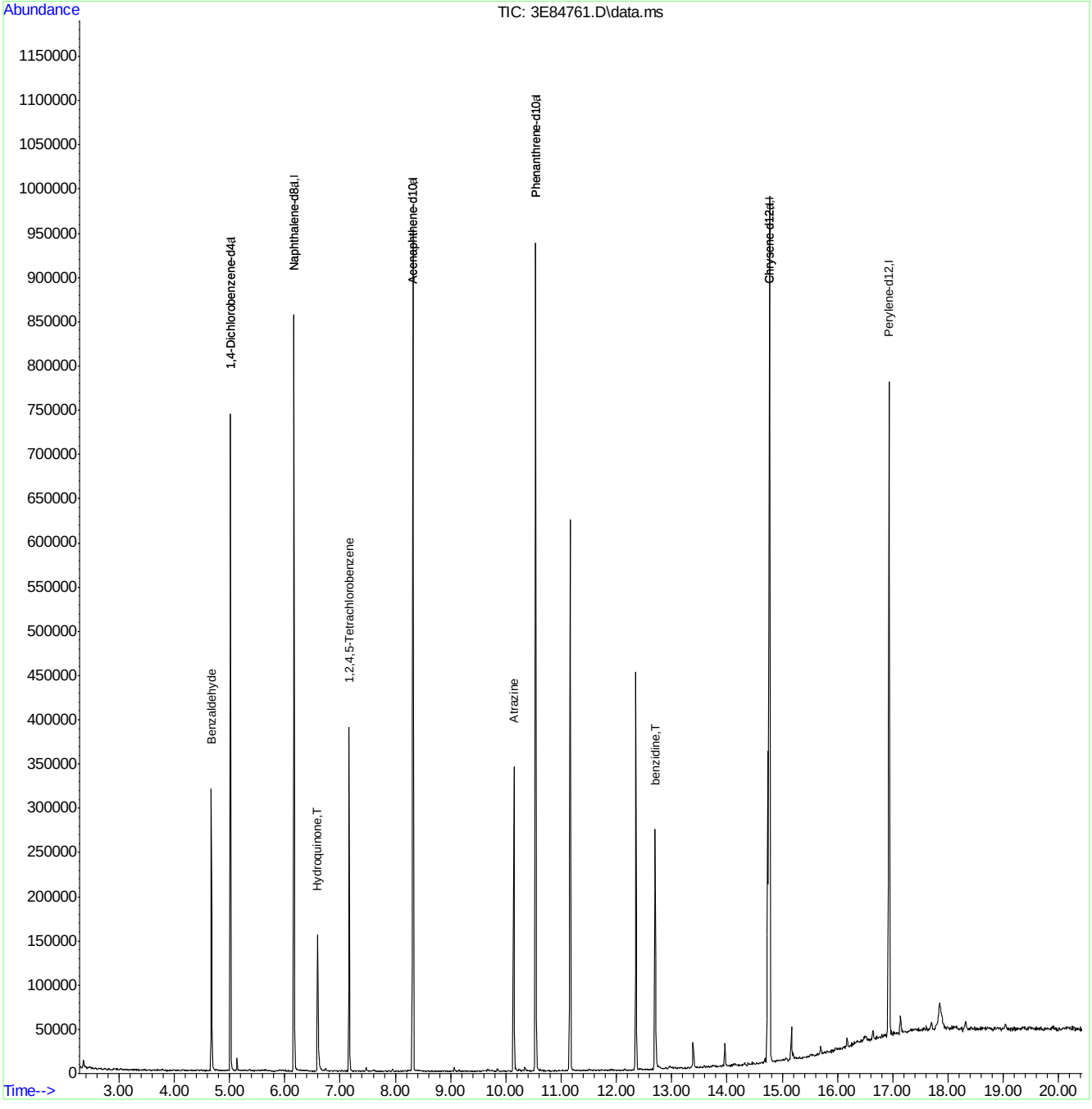
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3716\
Data File : 3E84761.D
Acq On : 1 Jul 2016 8:55 pm
Operator : seanb1
Sample : cc3700-25
Misc : op95221,e3e3716
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jul 03 17:32:29 2016
Quant Method : C:\msdchem\1\METHODS\M3E3699.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Jun 30 11:55:56 2016
QLast Update : Thu Jun 30 11:55:56 2016
Response via : Initial Calibration



M3E3699.M Sun Jul 03 17:32:35 2016 MS3E

Page: 2

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62371.D
Acq On : 20 Jun 2016 6:49 pm
Operator : ashleyd
Sample : ic2942-0.2
Misc : op94419a,e3m2942
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 21:38:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 21:37:54 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.886	150	746360	4.00	ppm	0.00
14) Fluorene-d10	13.875	176	1132165	4.00	ppm	0.00
21) Fluoranthene-d10	18.079	212	1784341	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.678	264	1292564	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.770	112	519849	4.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.00%	
4) Phenol-d5	6.345	99	829923	4.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.00%	
7) Nitrobenzene-d5	7.952	82	635385	4.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.00%	
15) 2-Fluorobiphenyl	11.537	172	1446223	4.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.00%	
20) 2,4,6-Tribromophenol	14.422	330	119847	4.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.00%	
28) Terphenyl-d14	18.867	244	1119414	4.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.00%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.514	88	9938	0.20	ppm	# 72
5) Phenol	6.370	94	225453	1.00	ppm	# 76
6) bis(2-Chloroethyl)ether	6.515	93	34022	0.20	ppm	# 65
8) Nitrobenzene	7.989	77	36647	0.20	ppm	# 60
9) Naphthalene	9.383	128	97044	0.20	ppm	93
10) Hexachlorobutadiene	9.684	225	15095	0.20	ppm	78
11) 2-Methylnaphthalene	10.743	141	52067	0.20	ppm	75
12) 1-Methylnaphthalene	10.948	141	56526	0.20	ppm	70
13) Hexachlorocyclopentadiene	11.112	237	17898	0.40	ppm	81
16) Acenaphthylene	12.527	152	88333	0.20	ppm	98
17) Acenaphthene	12.898	153	58820	0.20	ppm	95
18) 4,6-dinitro-2-methylph...	14.083	198	8809	1.00	ppm	68
19) Fluorene	13.932	166	66597	0.20	ppm	89
22) Hexachlorobenzene	15.065	284	18430	0.20	ppm	96
23) Pentachlorophenol	15.467	266	25357	1.00	ppm	98
24) Phenanthrene	15.853	178	92098	0.20	ppm	100
25) Anthracene	15.946	178	80458	0.20	ppm	100
26) Fluoranthene	18.110	202	104719	0.20	ppm	100
27) Pyrene	18.496	202	99859	0.20	ppm	99
29) Benzo[a]anthracene	20.582	228	79934	0.20	ppm	99
30) Chrysene	20.644	228	85863	0.20	ppm	99
32) Benzo[b]fluoranthene	22.245	252	91730	0.20	ppm	97
33) Benzo[k]fluoranthene	22.283	252	86718	0.20	ppm	97
34) Benzo[a]pyrene	22.697	252	86961	0.20	ppm	99
35) Indeno[1,2,3-cd]pyrene	24.258	276	75545	0.20	ppm	96
36) Dibenz[a,h]anthracene	24.295	278	61064	0.20	ppm	70
37) Benzo[g,h,i]perylene	24.672	276	69114	0.20	ppm	99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62371.D
Acq On : 20 Jun 2016 6:49 pm
Operator : ashleyd
Sample : ic2942-0.2
Misc : op94419a,e3m2942
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 21:38:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 21:37:54 2016
Response via : Initial Calibration

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

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

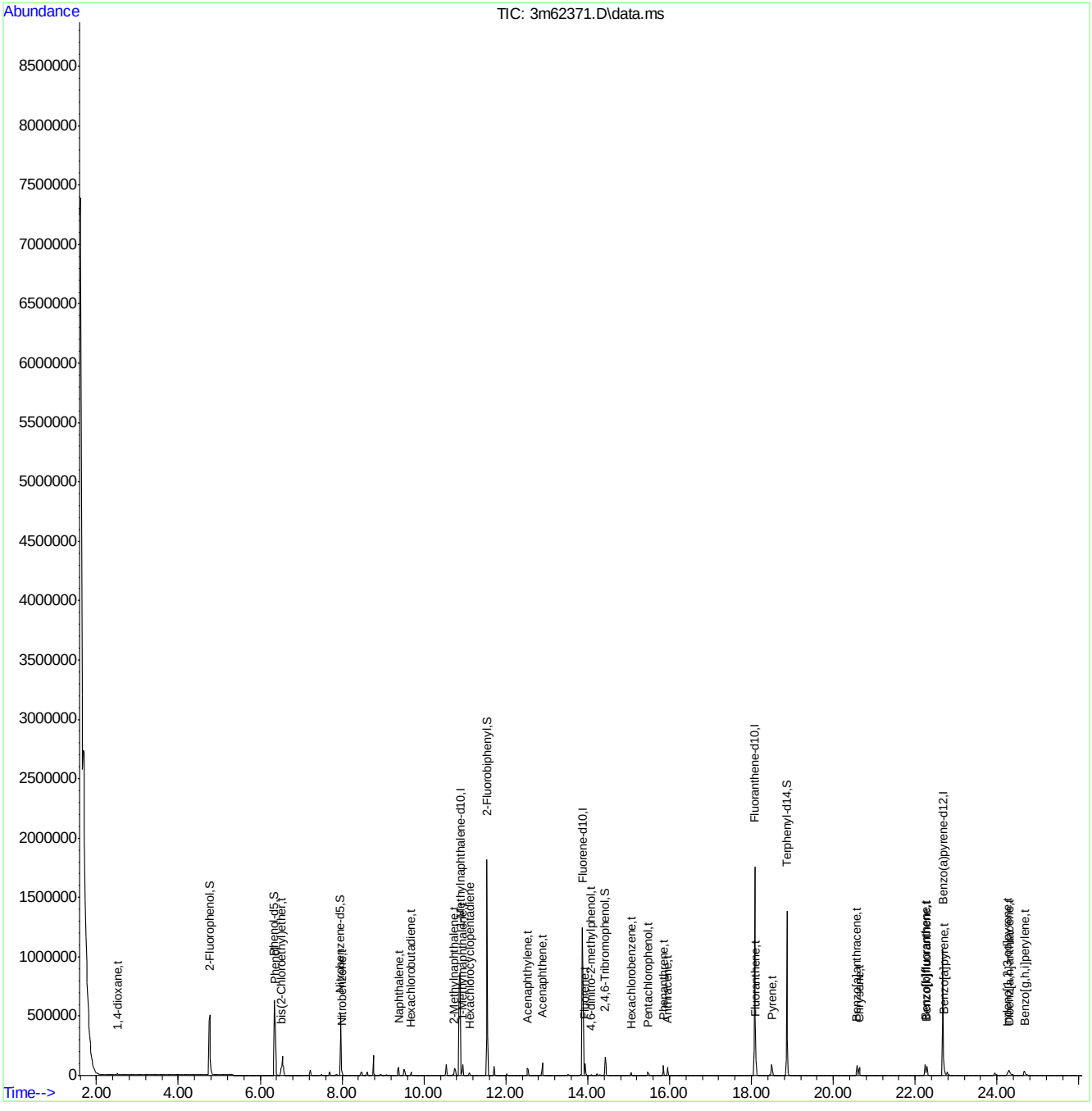
7.6.43

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62371.D
Acq On : 20 Jun 2016 6:49 pm
Operator : ashleyd
Sample : ic2942-0.2
Misc : op94419a,e3m2942
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 21:38:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 21:37:54 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62372.D
Acq On : 20 Jun 2016 7:23 pm
Operator : ashleyd
Sample : ic2942-0.1
Misc : op94419a,e3m2942
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 20 21:38:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 21:38:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.886	150	687709	4.00	ppm	0.00
14) Fluorene-d10	13.875	176	1021527	4.00	ppm	0.00
21) Fluoranthene-d10	18.079	212	1617402	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.678	264	1150136	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.770	112	215637	1.80	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.60%	
4) Phenol-d5	6.345	99	342725	1.79	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.58%	
7) Nitrobenzene-d5	7.971	82	253595	1.73	ppm	0.02
Spiked Amount 50.000			Recovery	=	3.46%	
15) 2-Fluorobiphenyl	11.537	172	599071	1.84	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.68%	
20) 2,4,6-Tribromophenol	14.422	330	39741	1.47	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.94%	
28) Terphenyl-d14	18.867	244	435469	1.72	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.44%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.514	88	4052	0.09	ppm #	73
5) Phenol	6.369	94	93421	0.45	ppm #	76
6) bis(2-Chloroethyl)ether	6.515	93	14129	0.09	ppm #	65
8) Nitrobenzene	7.989	77	14905	0.09	ppm #	58
9) Naphthalene	9.383	128	39406	0.09	ppm	93
10) Hexachlorobutadiene	9.684	225	6208	0.09	ppm	77
11) 2-Methylnaphthalene	10.743	141	19304	0.08	ppm	74
12) 1-Methylnaphthalene	10.948	141	23378	0.09	ppm #	69
13) Hexachlorocyclopentadiene	11.112	237	6480	0.16	ppm	80
16) Acenaphthylene	12.527	152	33748	0.08	ppm	97
17) Acenaphthene	12.898	153	22436	0.08	ppm	94
18) 4,6-dinitro-2-methylph...	14.083	198	2442	0.31	ppm #	1
19) Fluorene	13.932	166	26055	0.09	ppm	88
22) Hexachlorobenzene	15.065	284	7350	0.09	ppm	98
23) Pentachlorophenol	15.467	266	6279	0.27	ppm	95
24) Phenanthrene	15.853	178	35554	0.09	ppm	99
25) Anthracene	15.946	178	29452	0.08	ppm	98
26) Fluoranthene	18.110	202	46301	0.10	ppm	99
27) Pyrene	18.496	202	39190	0.09	ppm	99
29) Benzo[a]anthracene	20.582	228	28616	0.08	ppm	100
30) Chrysene	20.644	228	38226	0.10	ppm	100
32) Benzo[b]fluoranthene	22.245	252	30818	0.08	ppm	96
33) Benzo[k]fluoranthene	22.283	252	35762	0.09	ppm	97
34) Benzo[a]pyrene	22.697	252	36780	0.10	ppm	98
35) Indeno[1,2,3-cd]pyrene	24.258	276	24907	0.07	ppm	95
36) Dibenz[a,h]anthracene	24.295	278	19720	0.07	ppm	66
37) Benzo[g,h,i]perylene	24.672	276	24545	0.08	ppm	98

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62372.D
Acq On : 20 Jun 2016 7:23 pm
Operator : ashleyd
Sample : ic2942-0.1
Misc : op94419a,e3m2942
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 20 21:38:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 21:38:26 2016
Response via : Initial Calibration

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

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

7.6.44

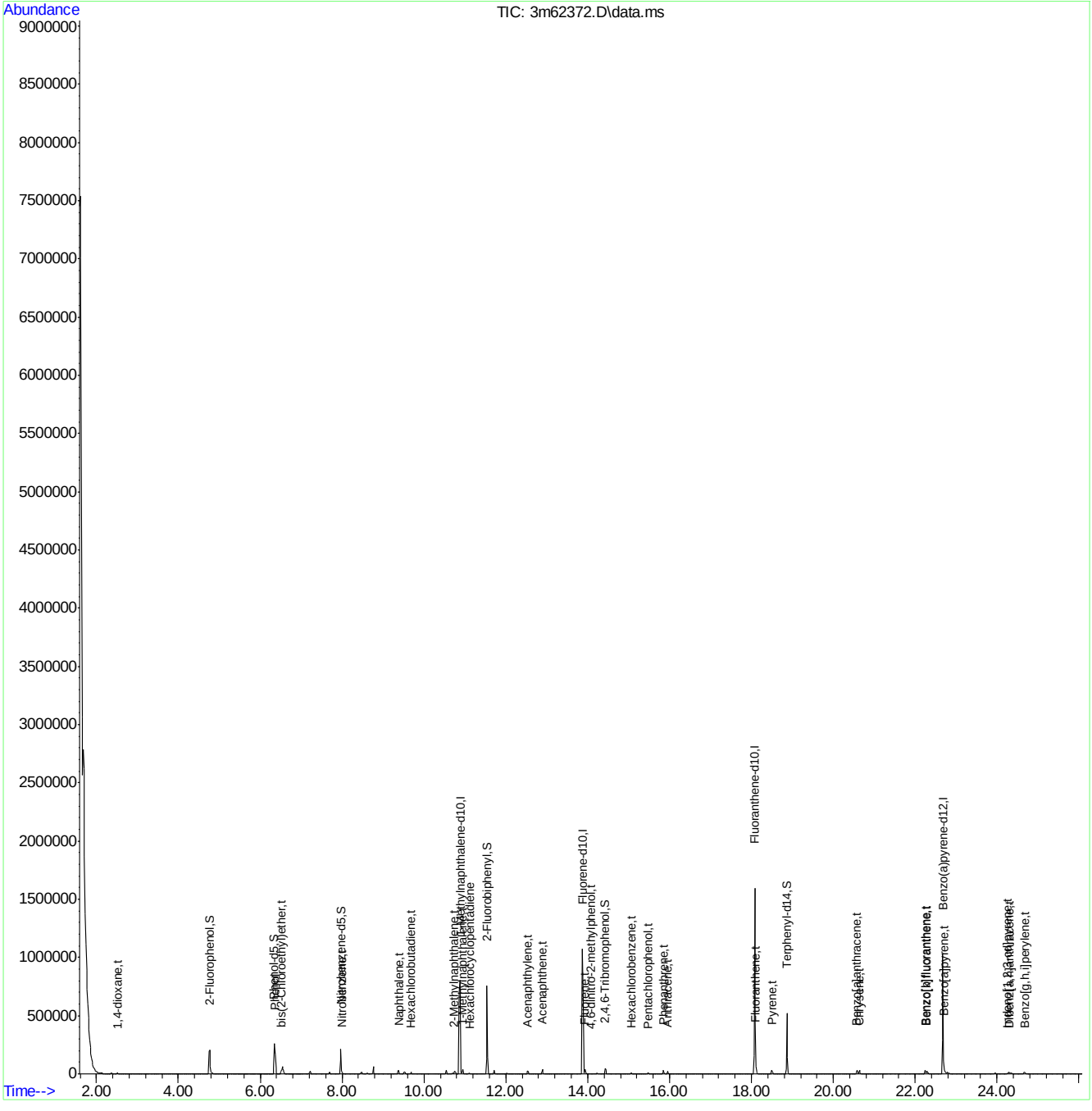
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62372.D
Acq On : 20 Jun 2016 7:23 pm
Operator : ashleyd
Sample : ic2942-0.1
Misc : op94419a,e3m2942
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 20 21:38:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 21:38:26 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62373.D
Acq On : 20 Jun 2016 7:56 pm
Operator : ashleyd
Sample : icc2942-1.0
Misc : op94419a,e3m2942
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 21:38:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 21:38:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.886	150	560953	4.00	ppm	0.00
14) Fluorene-d10	13.875	176	738238	4.00	ppm	0.00
21) Fluoranthene-d10	18.079	212	1136326	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.678	264	795917	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.770	112	1770750	19.08	ppm	0.00
Spiked Amount 50.000			Recovery = 38.16%			
4) Phenol-d5	6.357	99	2788469	18.86	ppm	0.01
Spiked Amount 50.000			Recovery = 37.72%			
7) Nitrobenzene-d5	7.971	82	2324446	20.86	ppm	0.00
Spiked Amount 50.000			Recovery = 41.72%			
15) 2-Fluorobiphenyl	11.537	172	4893460	21.64	ppm	0.00
Spiked Amount 50.000			Recovery = 43.28%			
20) 2,4,6-Tribromophenol	14.422	330	484189	28.57	ppm	0.00
Spiked Amount 50.000			Recovery = 57.14%			
28) Terphenyl-d14	18.867	244	3770409	22.77	ppm	0.00
Spiked Amount 50.000			Recovery = 45.54%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.514	88	34156	0.97	ppm #	72
5) Phenol	6.370	94	779251	4.84	ppm #	80
6) bis(2-Chloroethyl)ether	6.515	93	116885	0.96	ppm #	66
8) Nitrobenzene	7.989	77	134103	1.03	ppm #	59
9) Naphthalene	9.383	128	337949	0.99	ppm	94
10) Hexachlorobutadiene	9.684	225	51291	0.96	ppm	77
11) 2-Methylnaphthalene	10.743	141	169641	0.96	ppm	72
12) 1-Methylnaphthalene	10.948	141	203303	1.01	ppm	72
13) Hexachlorocyclopentadiene	11.112	237	70680	2.35	ppm	78
16) Acenaphthylene	12.542	152	318177	1.20	ppm	90
17) Acenaphthene	12.898	153	208912	1.18	ppm	92
18) 4,6-dinitro-2-methylph...	14.083	198	49338	10.64	ppm	74
19) Fluorene	13.932	166	228671	1.13	ppm	87
22) Hexachlorobenzene	15.065	284	65163	1.18	ppm	96
23) Pentachlorophenol	15.467	266	114448	9.17	ppm	99
24) Phenanthrene	15.853	178	333014	1.23	ppm	99
25) Anthracene	15.946	178	299136	1.29	ppm	98
26) Fluoranthene	18.110	202	359096	1.09	ppm	100
27) Pyrene	18.496	202	346998	1.17	ppm	98
29) Benzo[a]anthracene	20.582	228	261540	1.15	ppm	99
30) Chrysene	20.644	228	290022	1.07	ppm	100
32) Benzo[b]fluoranthene	22.245	252	290938	1.17	ppm	95
33) Benzo[k]fluoranthene	22.283	252	296199	1.15	ppm	95
34) Benzo[a]pyrene	22.697	252	274207	1.05	ppm	97
35) Indeno[1,2,3-cd]pyrene	24.258	276	247701	1.22	ppm	99
36) Dibenz[a,h]anthracene	24.295	278	197993	1.22	ppm	91
37) Benzo[g,h,i]perylene	24.672	276	223523	1.17	ppm	99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62373.D
Acq On : 20 Jun 2016 7:56 pm
Operator : ashleyd
Sample : icc2942-1.0
Misc : op94419a,e3m2942
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 21:38:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 21:38:51 2016
Response via : Initial Calibration

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

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

7.6.45

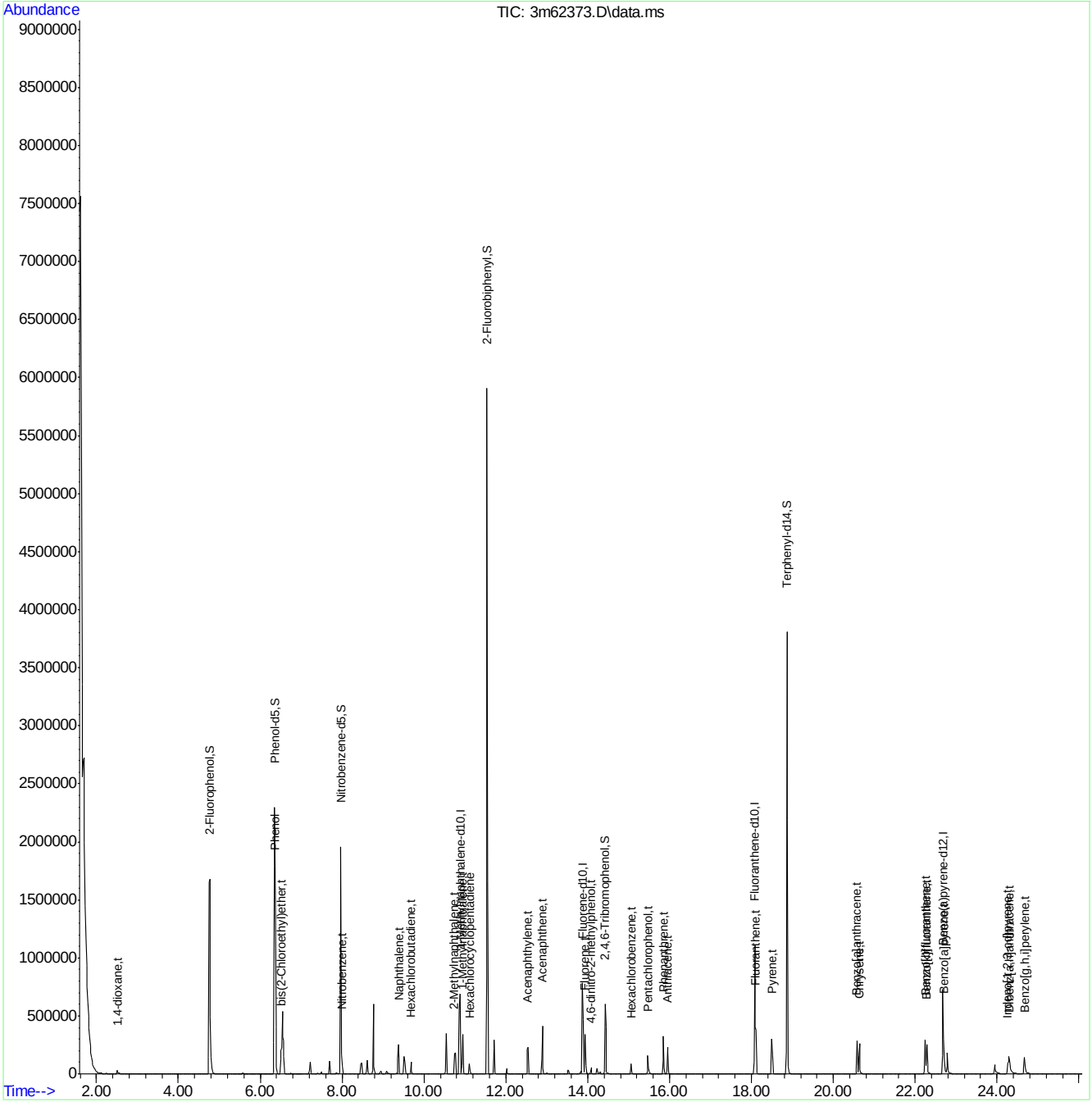
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62373.D
Acq On : 20 Jun 2016 7:56 pm
Operator : ashleyd
Sample : icc2942-1.0
Misc : op94419a,e3m2942
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 21:38:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 21:38:51 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62374.D
Acq On : 20 Jun 2016 8:30 pm
Operator : ashleyd
Sample : ic2942-0.5
Misc : op94419a,e3m2942
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 20 21:39:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 21:39:23 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.886	150	524241	4.00	ppm	0.00
14) Fluorene-d10	13.875	176	698845	4.00	ppm	0.00
21) Fluoranthene-d10	18.079	212	1076504	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.678	264	714394	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.770	112	866880	10.15	ppm	0.00
Spiked Amount 50.000			Recovery = 20.30%			
4) Phenol-d5	6.345	99	1391997	10.27	ppm	-0.01
Spiked Amount 50.000			Recovery = 20.54%			
7) Nitrobenzene-d5	7.952	82	1132793	10.73	ppm	-0.02
Spiked Amount 50.000			Recovery = 21.46%			
15) 2-Fluorobiphenyl	11.537	172	2460723	11.19	ppm	0.00
Spiked Amount 50.000			Recovery = 22.38%			
20) 2,4,6-Tribromophenol	14.422	330	218010	11.89	ppm	0.00
Spiked Amount 50.000			Recovery = 23.78%			
28) Terphenyl-d14	18.867	244	1853991	11.30	ppm	0.00
Spiked Amount 50.000			Recovery = 22.60%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.514	88	16484	0.51	ppm	75
5) Phenol	6.369	94	386917	2.60	ppm #	78
6) bis(2-Chloroethyl)ether	6.515	93	57628	0.51	ppm #	68
8) Nitrobenzene	7.989	77	63935	0.52	ppm #	60
9) Naphthalene	9.383	128	165765	0.52	ppm	94
10) Hexachlorobutadiene	9.684	225	25095	0.51	ppm	77
11) 2-Methylnaphthalene	10.763	141	82525	0.51	ppm #	71
12) 1-Methylnaphthalene	10.948	141	100435	0.53	ppm	73
13) Hexachlorocyclopentadiene	11.112	237	31790	1.07	ppm	79
16) Acenaphthylene	12.542	152	147905	0.55	ppm	90
17) Acenaphthene	12.898	153	101641	0.57	ppm	93
18) 4,6-dinitro-2-methylph...	14.083	198	17820	2.95	ppm	67
19) Fluorene	13.932	166	113108	0.57	ppm	88
22) Hexachlorobenzene	15.065	284	31826	0.57	ppm	97
23) Pentachlorophenol	15.467	266	41546	2.75	ppm	99
24) Phenanthrene	15.853	178	159982	0.58	ppm	100
25) Anthracene	15.946	178	140300	0.58	ppm	99
26) Fluoranthene	18.110	202	172862	0.54	ppm	100
27) Pyrene	18.496	202	158726	0.53	ppm	98
29) Benzo[a]anthracene	20.582	228	117144	0.52	ppm	98
30) Chrysene	20.644	228	144335	0.55	ppm	99
32) Benzo[b]fluoranthene	22.245	252	117056	0.50	ppm	93
33) Benzo[k]fluoranthene	22.283	252	138073	0.57	ppm	95
34) Benzo[a]pyrene	22.697	252	112327	0.47	ppm	97
35) Indeno[1,2,3-cd]pyrene	24.258	276	102481	0.52	ppm	97
36) Dibenz[a,h]anthracene	24.295	278	82981	0.53	ppm	55
37) Benzo[g,h,i]perylene	24.672	276	97296	0.54	ppm	99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62374.D
Acq On : 20 Jun 2016 8:30 pm
Operator : ashleyd
Sample : ic2942-0.5
Misc : op94419a,e3m2942
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 20 21:39:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 21:39:23 2016
Response via : Initial Calibration

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

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

7.6.46

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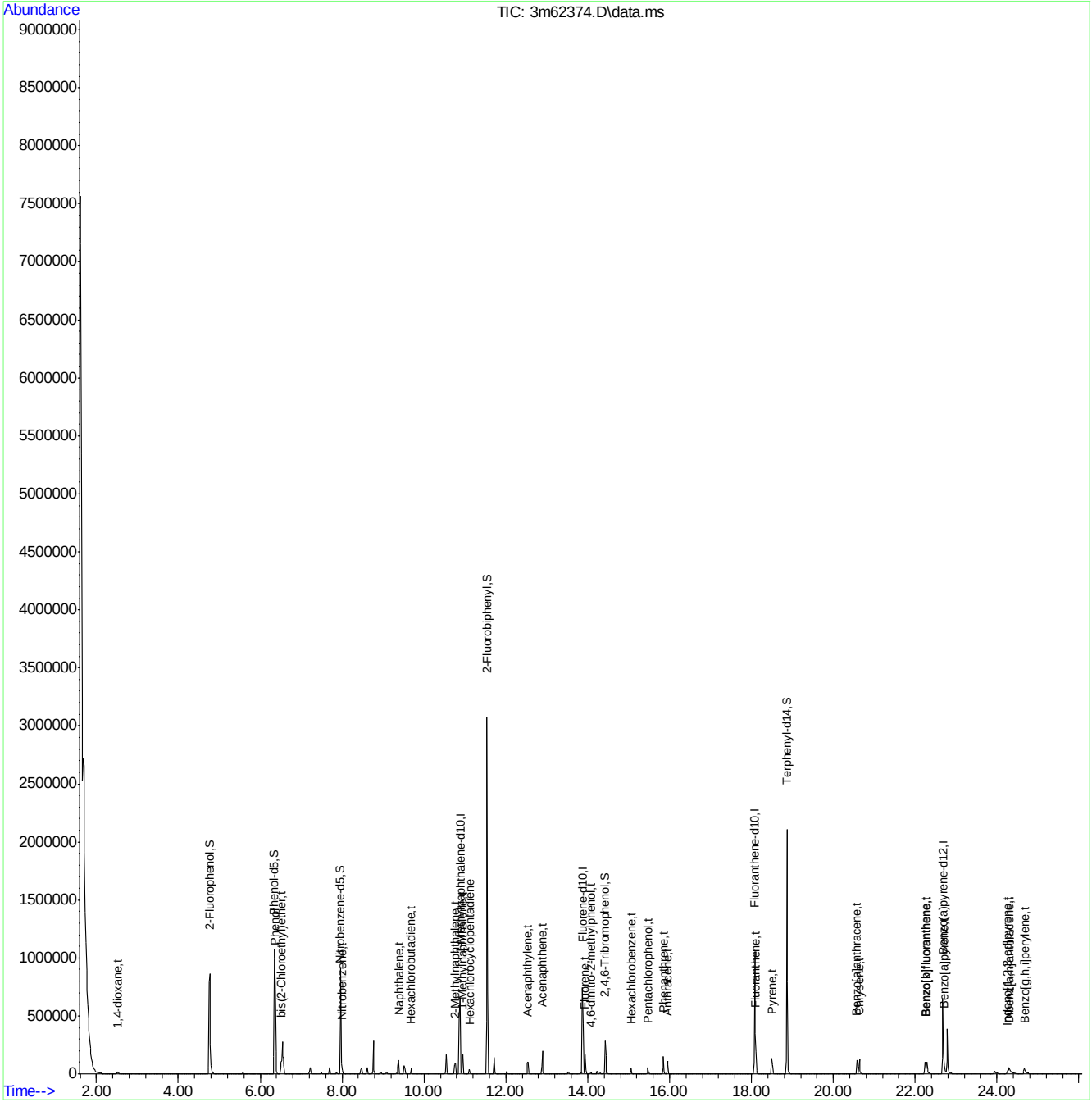
SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62374.D
Acq On : 20 Jun 2016 8:30 pm
Operator : ashleyd
Sample : ic2942-0.5
Misc : op94419a,e3m2942
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 20 21:39:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 21:39:23 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62376.D
Acq On : 20 Jun 2016 9:36 pm
Operator : ashleyd
Sample : ic2942-0.02
Misc : op94419a,e3m2942
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 20 22:16:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 21:39:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.886	150	638422	4.00	ppm	0.00
14) Fluorene-d10	13.876	176	926948	4.00	ppm	0.00
21) Fluoranthene-d10	18.079	212	1476996	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.678	264	1032846	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.770	112	38852	0.37	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.74%	
4) Phenol-d5	6.345	99	60388	0.36	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.72%	
7) Nitrobenzene-d5	7.971	82	44329	0.34	ppm	0.02
Spiked Amount 50.000			Recovery	=	0.68%	
15) 2-Fluorobiphenyl	11.537	172	106932	0.36	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.72%	
20) 2,4,6-Tribromophenol	14.422	330	5432	0.21	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.42%	
28) Terphenyl-d14	18.867	244	64698	0.28	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.56%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.514	88	953	0.02	ppm	81
5) Phenol	6.370	94	16612	0.09	ppm #	87
6) bis(2-Chloroethyl)ether	6.515	93	2558	0.02	ppm	90
8) Nitrobenzene	7.989	77	2448	0.02	ppm #	52
9) Naphthalene	9.383	128	7469	0.02	ppm	94
10) Hexachlorobutadiene	9.684	225	1118	0.02	ppm	73
11) 2-Methylnaphthalene	10.763	141	6160	0.03	ppm	74
12) 1-Methylnaphthalene	10.948	141	4549	0.02	ppm	74
13) Hexachlorocyclopentadiene	11.112	237	831	0.02	ppm #	76
16) Acenaphthylene	12.542	152	5683	0.02	ppm	91
17) Acenaphthene	12.898	153	3871	0.02	ppm	90
18) 4,6-dinitro-2-methylph...	14.102	198	515	0.06	ppm #	48
19) Fluorene	13.932	166	4511	0.02	ppm	90
22) Hexachlorobenzene	15.065	284	1365	0.02	ppm	96
23) Pentachlorophenol	15.482	266	1624	0.08	ppm	91
24) Phenanthrene	15.853	178	6273	0.02	ppm	98
25) Anthracene	15.946	178	4659	0.01	ppm	98
26) Fluoranthene	18.110	202	11783	0.03	ppm	98
27) Pyrene	18.496	202	7982	0.02	ppm	98
29) Benzo[a]anthracene	20.582	228	5144	0.02	ppm	97
30) Chrysene	20.644	228	9509	0.03	ppm	96
34) Benzo[a]pyrene	22.697	252	11690	0.03	ppm	99
35) Indeno[1,2,3-cd]pyrene	24.258	276	2989	0.01	ppm	97
36) Dibenz[a,h]anthracene	24.296	278	2179	0.01	ppm	66
37) Benzo[g,h,i]perylene	24.672	276	3139	0.01	ppm	100

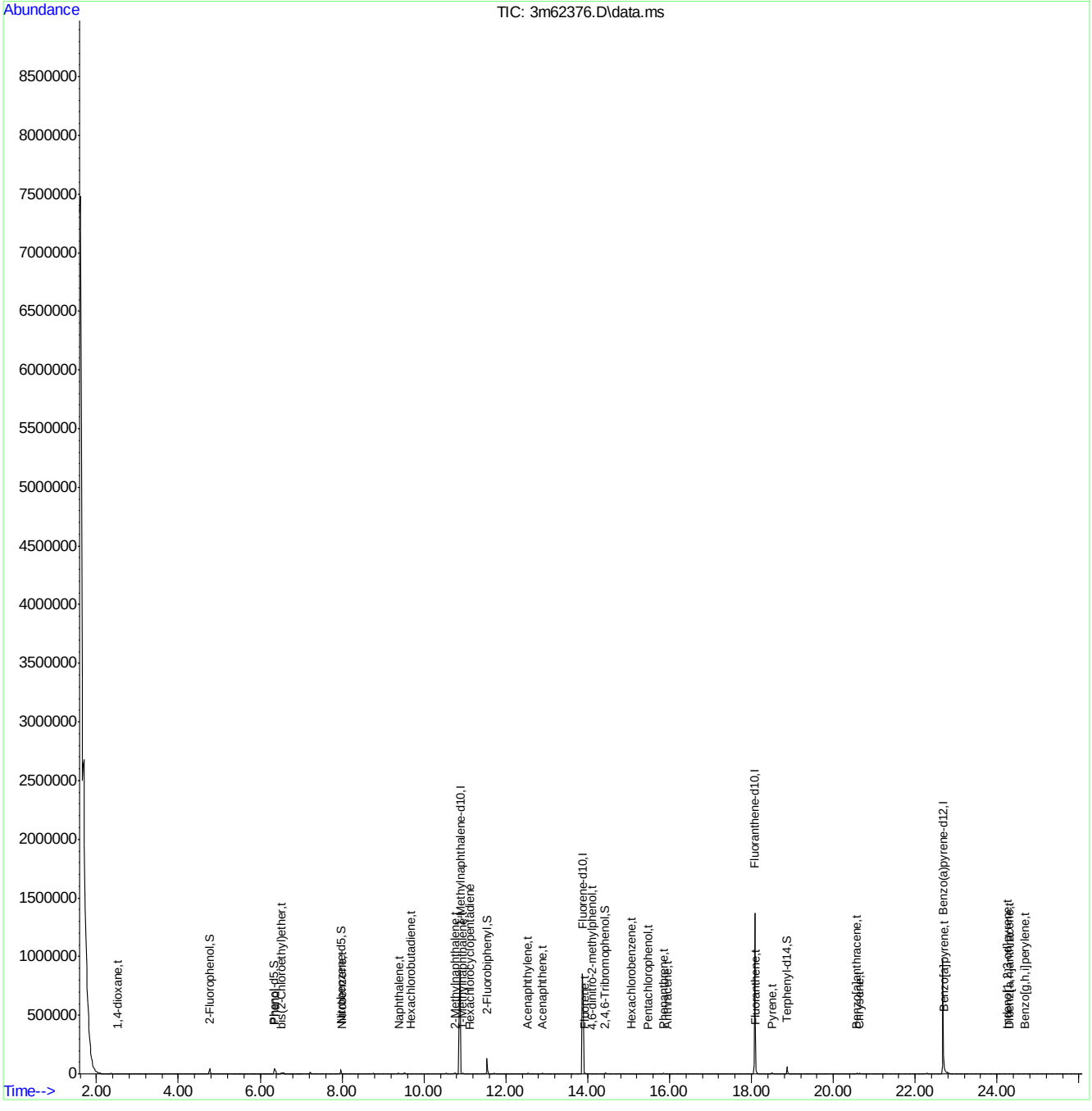
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62376.D
Acq On : 20 Jun 2016 9:36 pm
Operator : ashleyd
Sample : ic2942-0.02
Misc : op94419a,e3m2942
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 20 22:16:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 21:39:50 2016
Response via : Initial Calibration



M3M2942SIM.M Mon Jun 20 22:18:34 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62377.D
Acq On : 20 Jun 2016 10:10 pm
Operator : ashleyd
Sample : ic2942-0.01
Misc : op94419a,e3m2942
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 20 22:55:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 22:16:59 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.886	150	601557	4.00	ppm	0.00
14) Fluorene-d10	13.875	176	867178	4.00	ppm	0.00
21) Fluoranthene-d10	18.079	212	1350669	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.678	264	891426	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.770	112	17307	0.18	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.36%	
4) Phenol-d5	6.345	99	27285	0.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.34%	
7) Nitrobenzene-d5	7.970	82	19802	0.16	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.32%	
15) 2-Fluorobiphenyl	11.537	172	47157	0.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.34%	
20) 2,4,6-Tribromophenol	14.422	330	2299	0.10	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.20%	
28) Terphenyl-d14	18.867	244	27546	0.13	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.26%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.514	88	545	0.01	ppm	# 54
5) Phenol	6.369	94	7517	0.04	ppm	# 90
6) bis(2-Chloroethyl)ether	6.514	93	1190	0.01	ppm	90
8) Nitrobenzene	7.989	77	1102	0.01	ppm	# 53
9) Naphthalene	9.383	128	3371	0.01	ppm	95
10) Hexachlorobutadiene	9.684	225	515	0.01	ppm	75
11) 2-Methylnaphthalene	10.763	141	4533	0.02	ppm	78
12) 1-Methylnaphthalene	10.947	141	2086	0.01	ppm	73
13) Hexachlorocyclopentadiene	11.112	237	333	0.01	ppm	# 71
16) Acenaphthylene	12.542	152	2520	0.01	ppm	90
17) Acenaphthene	12.897	153	1776	0.01	ppm	94
18) 4,6-dinitro-2-methylph...	14.101	198	353	0.05	ppm	# 44
22) Hexachlorobenzene	15.065	284	655	0.01	ppm	97
23) Pentachlorophenol	15.482	266	1182	0.06	ppm	96
24) Phenanthrene	15.853	178	3008	0.01	ppm	97
25) Anthracene	15.946	178	2109	0.01	ppm	98
26) Fluoranthene	18.109	202	7405	0.02	ppm	98
27) Pyrene	18.496	202	4718	0.01	ppm	96
29) Benzo[a]anthracene	20.582	228	3007	0.01	ppm	97
30) Chrysene	20.643	228	5892	0.02	ppm	98
34) Benzo[a]pyrene	22.696	252	8391	0.03	ppm	98
35) Indeno[1,2,3-cd]pyrene	24.258	276	1281	0.01	ppm	92
36) Dibenz[a,h]anthracene	24.295	278	955	0.00	ppm	71
37) Benzo[g,h,i]perylene	24.671	276	1806	0.01	ppm	97

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

7.6.48

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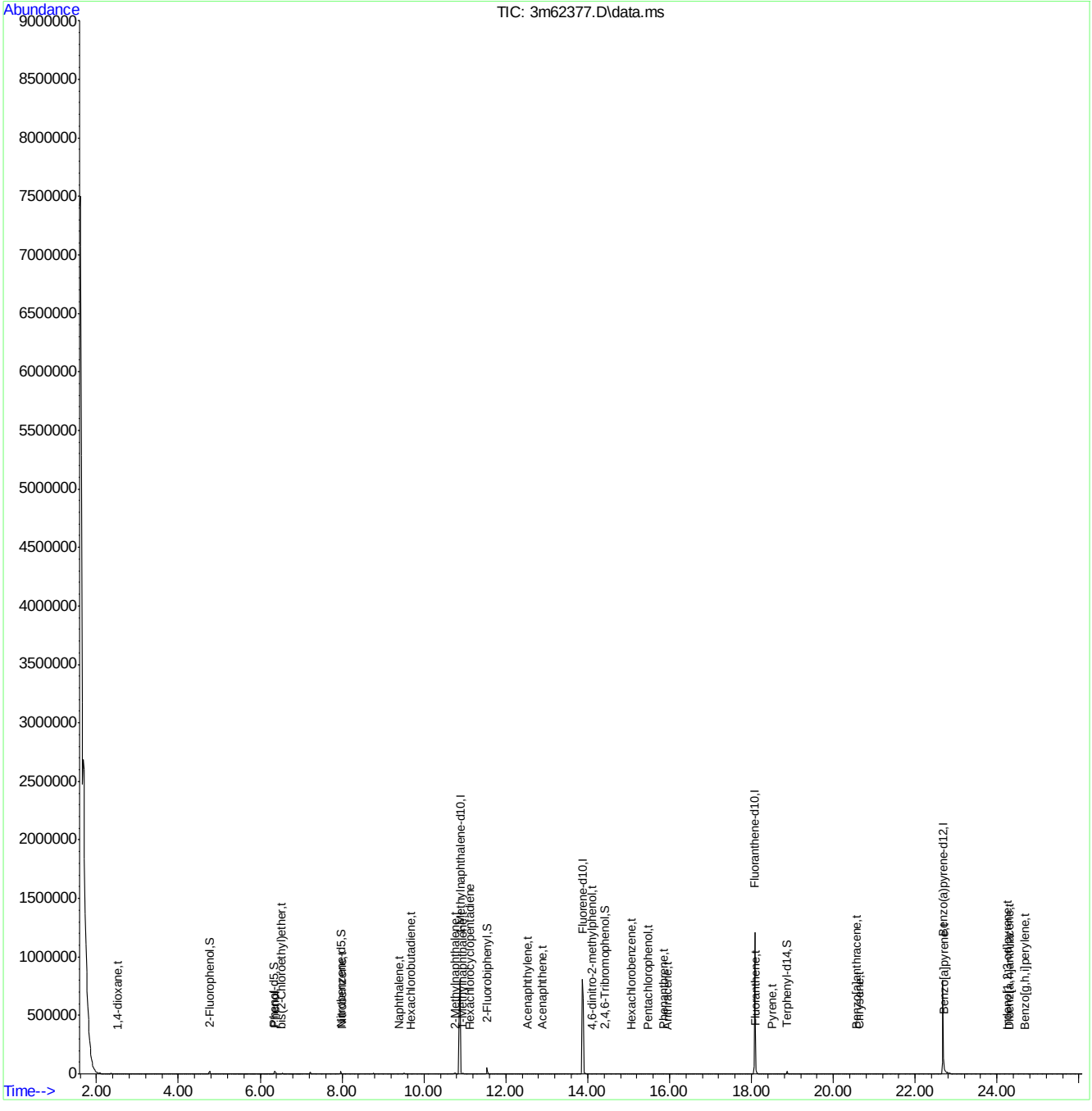
SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62377.D
Acq On : 20 Jun 2016 10:10 pm
Operator : ashleyd
Sample : ic2942-0.01
Misc : op94419a,e3m2942
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 20 22:55:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 22:16:59 2016
Response via : Initial Calibration



M3M2942SIM.M Mon Jun 20 22:55:45 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62378.D
Acq On : 20 Jun 2016 10:43 pm
Operator : ashleyd
Sample : ic2942-5.0
Misc : op94419a,e3m2942
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 20 23:08:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 22:55:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.886	150	600602	4.00	ppm	0.00
14) Fluorene-d10	13.894	176	857773	4.00	ppm	0.02
21) Fluoranthene-d10	18.079	212	1312499	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.678	264	962800	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.770	112	8564918	87.21	ppm	0.00
Spiked Amount 50.000			Recovery	=	174.42%	
4) Phenol-d5	6.370	99	13518401	86.47	ppm	0.02
Spiked Amount 50.000			Recovery	=	172.94%	
7) Nitrobenzene-d5	7.971	82	10955089	88.93	ppm	0.00
Spiked Amount 50.000			Recovery	=	177.86%	
15) 2-Fluorobiphenyl	11.553	172	15352393	57.85	ppm	0.02
Spiked Amount 50.000			Recovery	=	115.70%	
20) 2,4,6-Tribromophenol	14.441	330	3140266	133.24	ppm	0.02
Spiked Amount 50.000			Recovery	=	266.48%	
28) Terphenyl-d14	18.882	244	15545206	75.25	ppm	0.02
Spiked Amount 50.000			Recovery	=	150.50%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.499	88	186962	5.00	ppm #	36
5) Phenol	6.394	94	3799210	22.48	ppm #	55
6) bis(2-Chloroethyl)ether	6.515	93	596906	4.73	ppm #	68
8) Nitrobenzene	8.008	77	693851	5.25	ppm	97
9) Naphthalene	9.383	128	1767896	4.90	ppm	95
10) Hexachlorobutadiene	9.684	225	251136	4.55	ppm	73
11) 2-Methylnaphthalene	10.763	141	887119	4.74	ppm	77
12) 1-Methylnaphthalene	10.948	141	1071882	4.94	ppm	78
13) Hexachlorocyclopentadiene	11.112	237	448305	12.94	ppm #	72
16) Acenaphthylene	12.542	152	1728196	5.57	ppm	92
17) Acenaphthene	12.898	153	1088142	5.19	ppm	87
18) 4,6-dinitro-2-methylph...	14.101	198	625697	80.76	ppm	74
19) Fluorene	13.932	166	1111209	4.54	ppm	80
22) Hexachlorobenzene	15.065	284	325659	4.83	ppm	90
23) Pentachlorophenol	15.467	266	835976	44.27	ppm	91
24) Phenanthrene	15.853	178	1641735	4.68	ppm	97
25) Anthracene	15.962	178	1645612	5.38	ppm	91
26) Fluoranthene	18.110	202	1797990	4.50	ppm	97
27) Pyrene	18.496	202	1849683	5.02	ppm	96
29) Benzo[a]anthracene	20.582	228	1395780	5.01	ppm	96
30) Chrysene	20.644	228	1549380	4.72	ppm	97
32) Benzo[b]fluoranthene	22.245	252	1461257	4.61	ppm	89
33) Benzo[k]fluoranthene	22.283	252	1521685	4.50	ppm	88
34) Benzo[a]pyrene	22.697	252	1232922	3.89	ppm	92
35) Indeno[1,2,3-cd]pyrene	24.277	276	1368173	5.14	ppm	90
36) Dibenz[a,h]anthracene	24.314	278	1102426	5.15	ppm	95
37) Benzo[g,h,i]perylene	24.672	276	1202870	4.83	ppm	100

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62378.D
Acq On : 20 Jun 2016 10:43 pm
Operator : ashleyd
Sample : ic2942-5.0
Misc : op94419a,e3m2942
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 20 23:08:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 22:55:49 2016
Response via : Initial Calibration

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

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

7.6.49

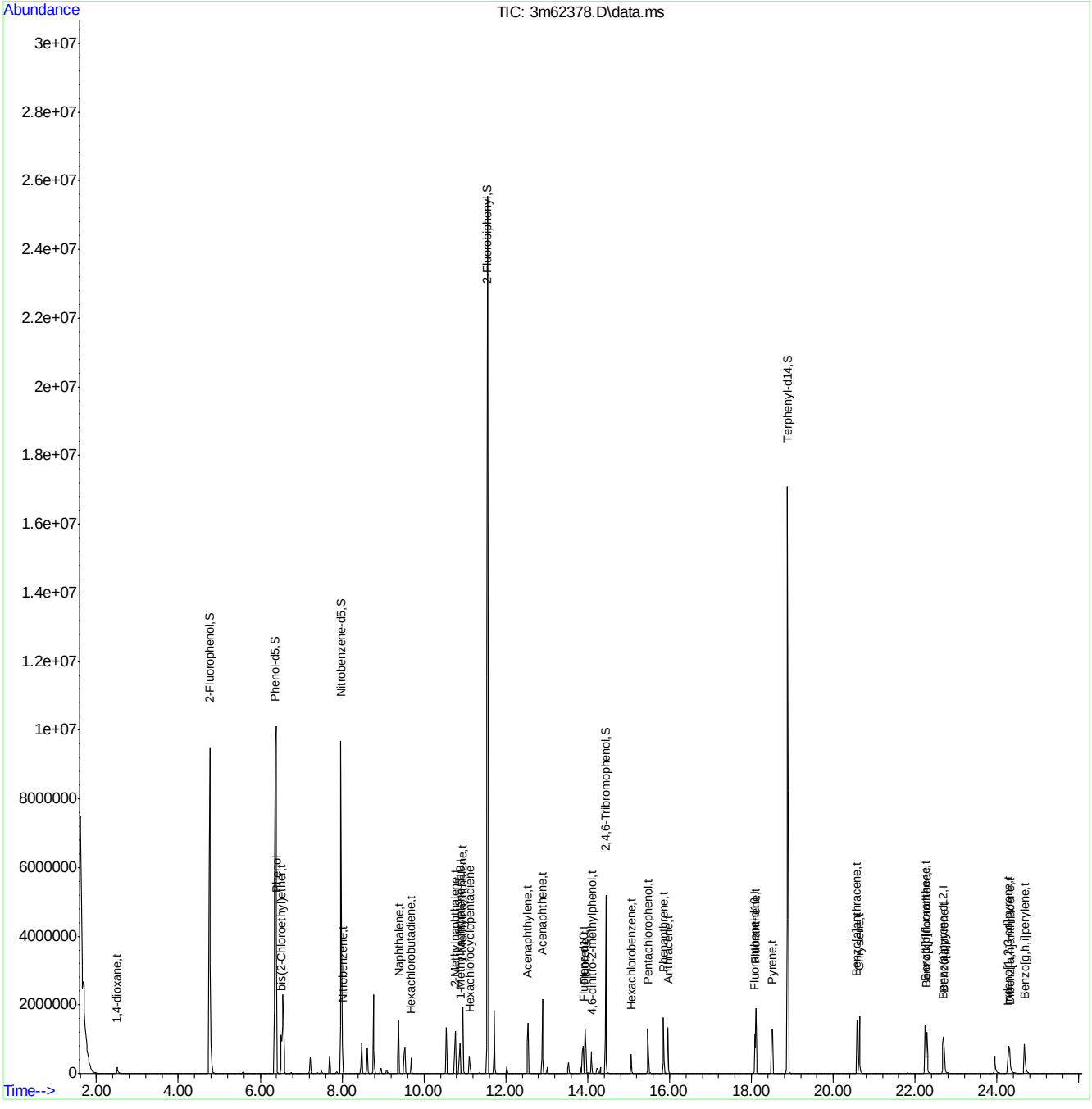
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62378.D
Acq On : 20 Jun 2016 10:43 pm
Operator : ashleyd
Sample : ic2942-5.0
Misc : op94419a,e3m2942
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 20 23:08:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 22:55:49 2016
Response via : Initial Calibration



M3M2942SIM.M Tue Jun 21 08:21:33 2016 RPT1 Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62379.D
Acq On : 20 Jun 2016 11:16 pm
Operator : ashleyd
Sample : ic2942-2.5
Misc : op94419a,e3m2942
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 20 23:41:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 23:15:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	10.886	150	579707	4.00	ppm		0.00
14) Fluorene-d10	13.894	176	818906	4.00	ppm		0.00
21) Fluoranthene-d10	18.079	212	1258402	4.00	ppm		0.00
31) Benzo(a)pyrene-d12	22.678	264	930705	4.00	ppm		0.00
System Monitoring Compounds							
3) 2-Fluorophenol	4.770	112	4289950	46.44	ppm		0.00
Spiked Amount 50.000			Recovery	=	92.88%		
4) Phenol-d5	6.358	99	6700399	45.64	ppm		-0.01
Spiked Amount 50.000			Recovery	=	91.28%		
7) Nitrobenzene-d5	7.971	82	6516023	56.04	ppm		0.00
Spiked Amount 50.000			Recovery	=	112.08%		
15) 2-Fluorobiphenyl	11.553	172	12168361	48.03	ppm		0.00
Spiked Amount 50.000			Recovery	=	96.06%		
20) 2,4,6-Tribromophenol	14.441	330	1413154	58.89	ppm		0.00
Spiked Amount 50.000			Recovery	=	117.78%		
28) Terphenyl-d14	18.882	244	9783853	51.97	ppm		0.00
Spiked Amount 50.000			Recovery	=	103.94%		
Target Compounds							Qvalue
2) 1,4-dioxane	2.514	88	86501	2.39	ppm		75
5) Phenol	6.382	94	1899479	11.84	ppm	#	62
6) bis(2-Chloroethyl)ether	6.515	93	292148	2.42	ppm		92
8) Nitrobenzene	7.990	77	334492	2.60	ppm	#	49
9) Naphthalene	9.383	128	845708	2.44	ppm		95
10) Hexachlorobutadiene	9.684	225	123120	2.34	ppm		73
11) 2-Methylnaphthalene	10.763	141	434460	2.43	ppm		77
12) 1-Methylnaphthalene	10.948	141	511871	2.45	ppm		76
13) Hexachlorocyclopentadiene	11.112	237	204078	5.76	ppm	#	74
16) Acenaphthylene	12.542	152	819251	2.72	ppm		92
17) Acenaphthene	12.898	153	524887	2.61	ppm		87
18) 4,6-dinitro-2-methylph...	14.083	198	218107	20.39	ppm	#	1
19) Fluorene	13.932	166	541721	2.36	ppm		81
22) Hexachlorobenzene	15.065	284	158520	2.46	ppm		92
23) Pentachlorophenol	15.467	266	350600	16.78	ppm		93
24) Phenanthrene	15.853	178	810149	2.44	ppm		97
25) Anthracene	15.962	178	783808	2.63	ppm		91
26) Fluoranthene	18.110	202	873928	2.33	ppm		97
27) Pyrene	18.496	202	872904	2.47	ppm		96
29) Benzo[a]anthracene	20.582	228	627701	2.35	ppm		95
30) Chrysene	20.644	228	741917	2.38	ppm		98
32) Benzo[b]fluoranthene	22.245	252	639587	2.12	ppm		87
33) Benzo[k]fluoranthene	22.283	252	718322	2.24	ppm		87
34) Benzo[a]pyrene	22.697	252	617603	2.11	ppm		93
35) Indeno[1,2,3-cd]pyrene	24.277	276	607573	2.35	ppm		92
36) Dibenz[a,h]anthracene	24.314	278	481114	2.31	ppm		91
37) Benzo[g,h,i]perylene	24.672	276	544846	2.28	ppm		100

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62379.D
Acq On : 20 Jun 2016 11:16 pm
Operator : ashleyd
Sample : ic2942-2.5
Misc : op94419a,e3m2942
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 20 23:41:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 23:15:12 2016
Response via : Initial Calibration

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

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

7.6.50

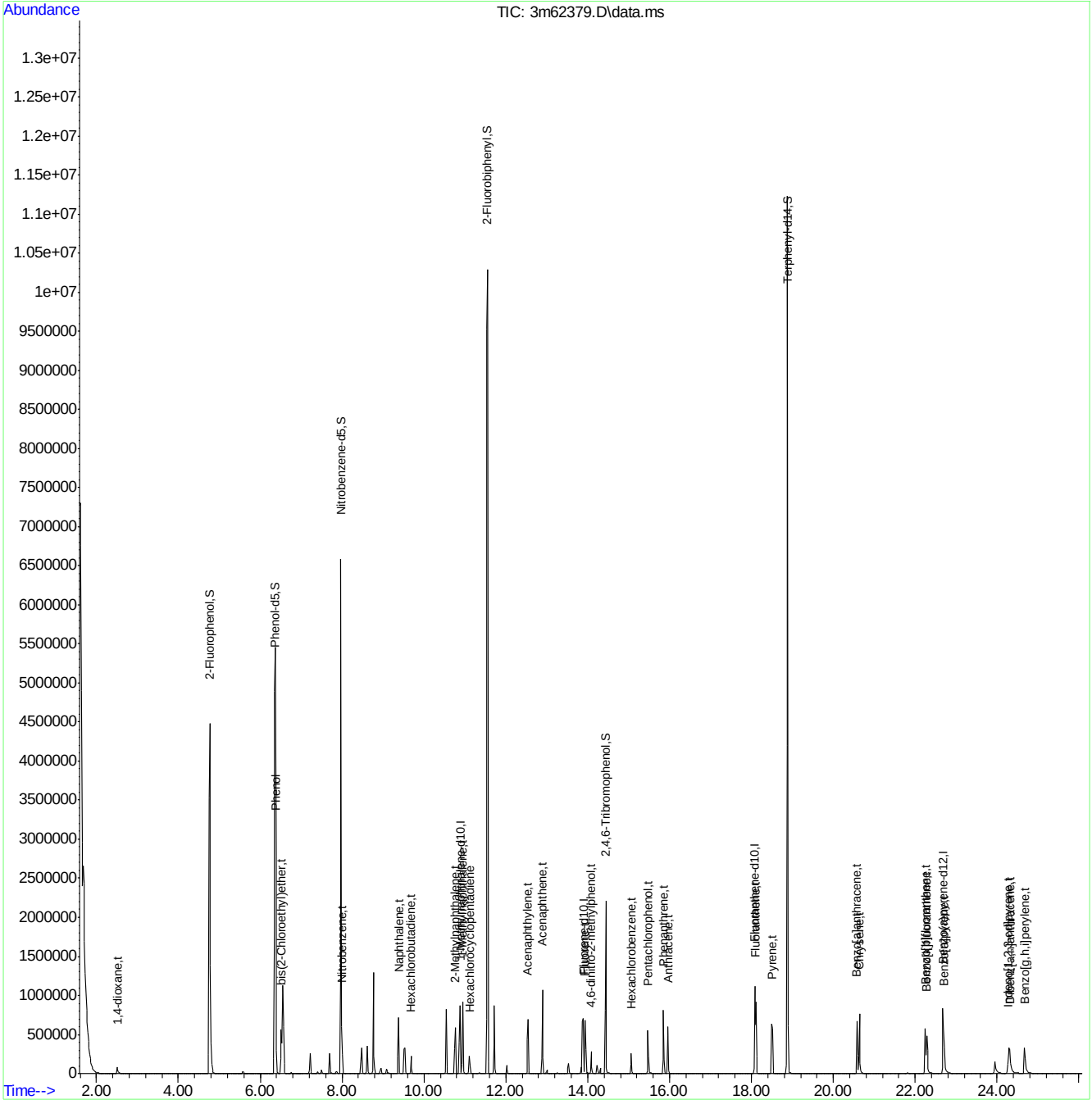
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62379.D
Acq On : 20 Jun 2016 11:16 pm
Operator : ashleyd
Sample : ic2942-2.5
Misc : op94419a,e3m2942
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 20 23:41:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 23:15:12 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62380.D
Acq On : 20 Jun 2016 11:50 pm
Operator : ashleyd
Sample : ic2942-0.05
Misc : op94419a,e3m2942
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 21 08:23:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 23:42:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.886	150	594761	4.00	ppm	0.00
14) Fluorene-d10	13.894	176	828012	4.00	ppm	0.00
21) Fluoranthene-d10	18.079	212	1294659	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.678	264	879559	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.770	112	90272	0.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.92%	
4) Phenol-d5	6.357	99	141589	0.95	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.90%	
7) Nitrobenzene-d5	7.971	82	114319	0.94	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.88%	
15) 2-Fluorobiphenyl	11.537	172	244695	0.96	ppm	-0.02
Spiked Amount 50.000			Recovery	=	1.92%	
20) 2,4,6-Tribromophenol	14.422	330	13226	0.53	ppm	-0.02
Spiked Amount 50.000			Recovery	=	1.06%	
28) Terphenyl-d14	18.867	244	151453	0.78	ppm	-0.02
Spiked Amount 50.000			Recovery	=	1.56%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.514	88	2001	0.05	ppm	85
5) Phenol	6.370	94	38837	0.24	ppm #	87
6) bis(2-Chloroethyl)ether	6.515	93	5740	0.05	ppm	94
8) Nitrobenzene	7.989	77	6320	0.05	ppm #	51
9) Naphthalene	9.383	128	16694	0.05	ppm	95
10) Hexachlorobutadiene	9.684	225	2525	0.05	ppm	72
11) 2-Methylnaphthalene	10.763	141	9457	0.05	ppm	77
12) 1-Methylnaphthalene	10.948	141	10223	0.05	ppm	78
13) Hexachlorocyclopentadiene	11.112	237	2384	0.06	ppm	78
16) Acenaphthylene	12.542	152	12787	0.04	ppm	92
17) Acenaphthene	12.898	153	8657	0.04	ppm	89
18) 4,6-dinitro-2-methylph...	14.102	198	947	0.08	ppm	73
19) Fluorene	13.932	166	9971	0.04	ppm	85
22) Hexachlorobenzene	15.065	284	3106	0.05	ppm	92
23) Pentachlorophenol	15.482	266	2494	0.11	ppm	93
24) Phenanthrene	15.853	178	13421	0.04	ppm	97
25) Anthracene	15.962	178	10109	0.03	ppm	91
26) Fluoranthene	18.110	202	19378	0.05	ppm	97
27) Pyrene	18.496	202	13995	0.04	ppm	96
29) Benzo[a]anthracene	20.582	228	6970	0.03	ppm	97
30) Chrysene	20.644	228	13746	0.04	ppm	96
34) Benzo[a]pyrene	22.697	252	18256	0.07	ppm	98
35) Indeno[1,2,3-cd]pyrene	24.258	276	4614	0.02	ppm	98
36) Dibenz[a,h]anthracene	24.295	278	3158	0.02	ppm	75
37) Benzo[g,h,i]perylene	24.672	276	5641	0.03	ppm	97

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

7.6.51

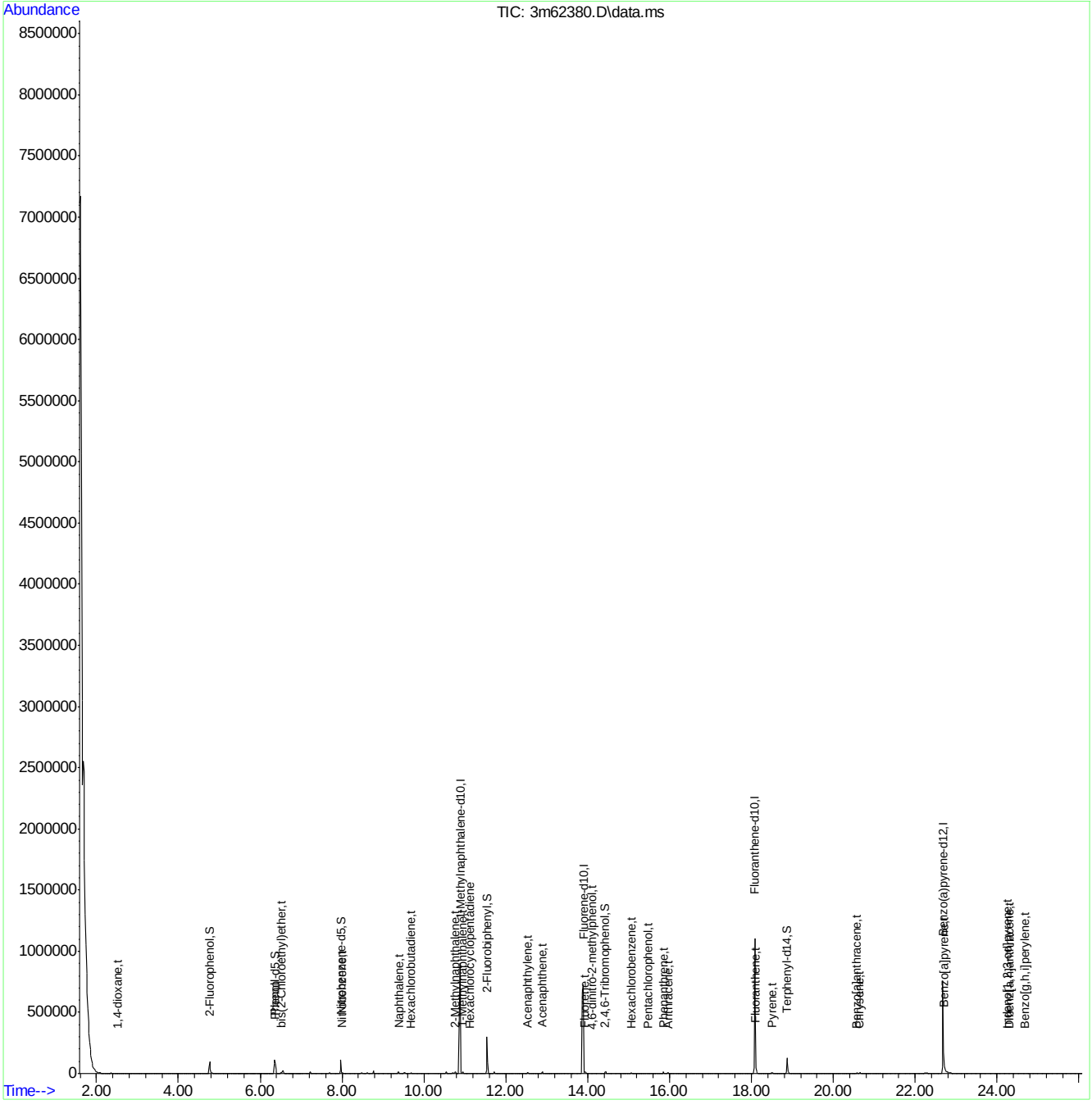
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62380.D
Acq On : 20 Jun 2016 11:50 pm
Operator : ashleyd
Sample : ic2942-0.05
Misc : op94419a,e3m2942
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 21 08:23:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 20 23:42:00 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62382.D
Acq On : 21 Jun 2016 12:56 am
Operator : ashleyd
Sample : icv2942-1.0
Misc : op94419a,e3m2942
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 08:37:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Jun 21 08:25:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.886	150	579092	4.00	ppm	0.00
14) Fluorene-d10	13.894	176	694080	4.00	ppm	0.00
21) Fluoranthene-d10	18.079	212	1041559	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.678	264	654058	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
5) Phenol	6.369	94	676200	4.28	ppm	92
18) 4,6-dinitro-2-methylph...	14.083	198	44531	4.45	ppm #	8
23) Pentachlorophenol	15.467	266	84804	4.22	ppm	90

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

7.6.52

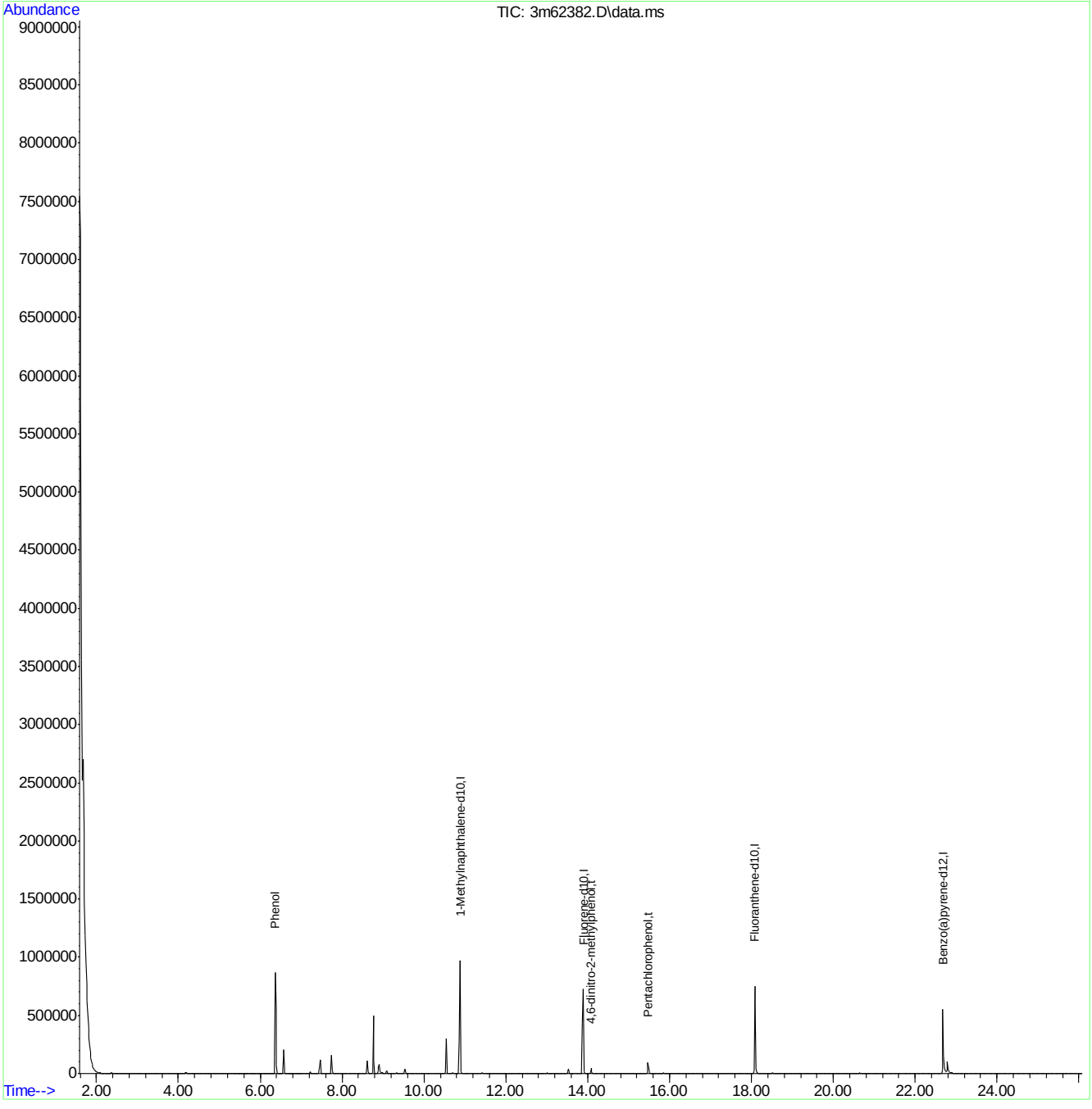
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2942\
Data File : 3m62382.D
Acq On : 21 Jun 2016 12:56 am
Operator : ashleyd
Sample : icv2942-1.0
Misc : op94419a,e3m2942
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 21 08:37:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Jun 21 08:25:24 2016
Response via : Initial Calibration



M3M2942SIM.M Tue Jun 21 08:37:16 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2943\
Data File : 3m62384.D
Acq On : 21 Jun 2016 9:26 am
Operator : linseyk
Sample : icv2942-1
Misc : op94419a,e3m2943
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 21 10:04:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Jun 21 08:25:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.866	150	708145	4.00 ppm	-0.02
14) Fluorene-d10	13.876	176	870402	4.00 ppm	-0.02
21) Fluoranthene-d10	18.079	212	1218863	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.659	264	858647	4.00 ppm	-0.02
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	0	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	2.514	88	45984	1.05 ppm #	65
6) bis(2-Chloroethyl)ether	6.503	93	148876	1.02 ppm	96
8) Nitrobenzene	7.989	77	133582	0.85 ppm	85
9) Naphthalene	9.364	128	430549	1.03 ppm	99
10) Hexachlorobutadiene	9.684	225	58543	0.92 ppm	99
11) 2-Methylnaphthalene	10.743	141	232262	1.06 ppm	97
16) Acenaphthylene	12.527	152	373409	1.15 ppm	95
17) Acenaphthene	12.882	153	246586	1.17 ppm	79
19) Fluorene	13.932	166	260779	1.09 ppm	94
22) Hexachlorobenzene	15.049	284	72681	1.18 ppm	82
24) Phenanthrene	15.838	178	360070	1.16 ppm	93
25) Anthracene	15.946	178	328477	1.13 ppm	94
26) Fluoranthene	18.094	202	379785	1.05 ppm	92
27) Pyrene	18.496	202	395836	1.20 ppm	95
29) Benzo[a]anthracene	20.582	228	323807	1.30 ppm	94
30) Chrysene	20.628	228	315503	1.08 ppm	89
32) Benzo[b]fluoranthene	22.245	252	300702	1.11 ppm	97
33) Benzo[k]fluoranthene	22.283	252	299492	1.03 ppm	97
34) Benzo[a]pyrene	22.697	252	300625	1.05 ppm	97
35) Indeno[1,2,3-cd]pyrene	24.258	276	298235	1.26 ppm	95
36) Dibenz[a,h]anthracene	24.296	278	233523	1.23 ppm	81
37) Benzo[g,h,i]perylene	24.672	276	261582	1.20 ppm	98

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

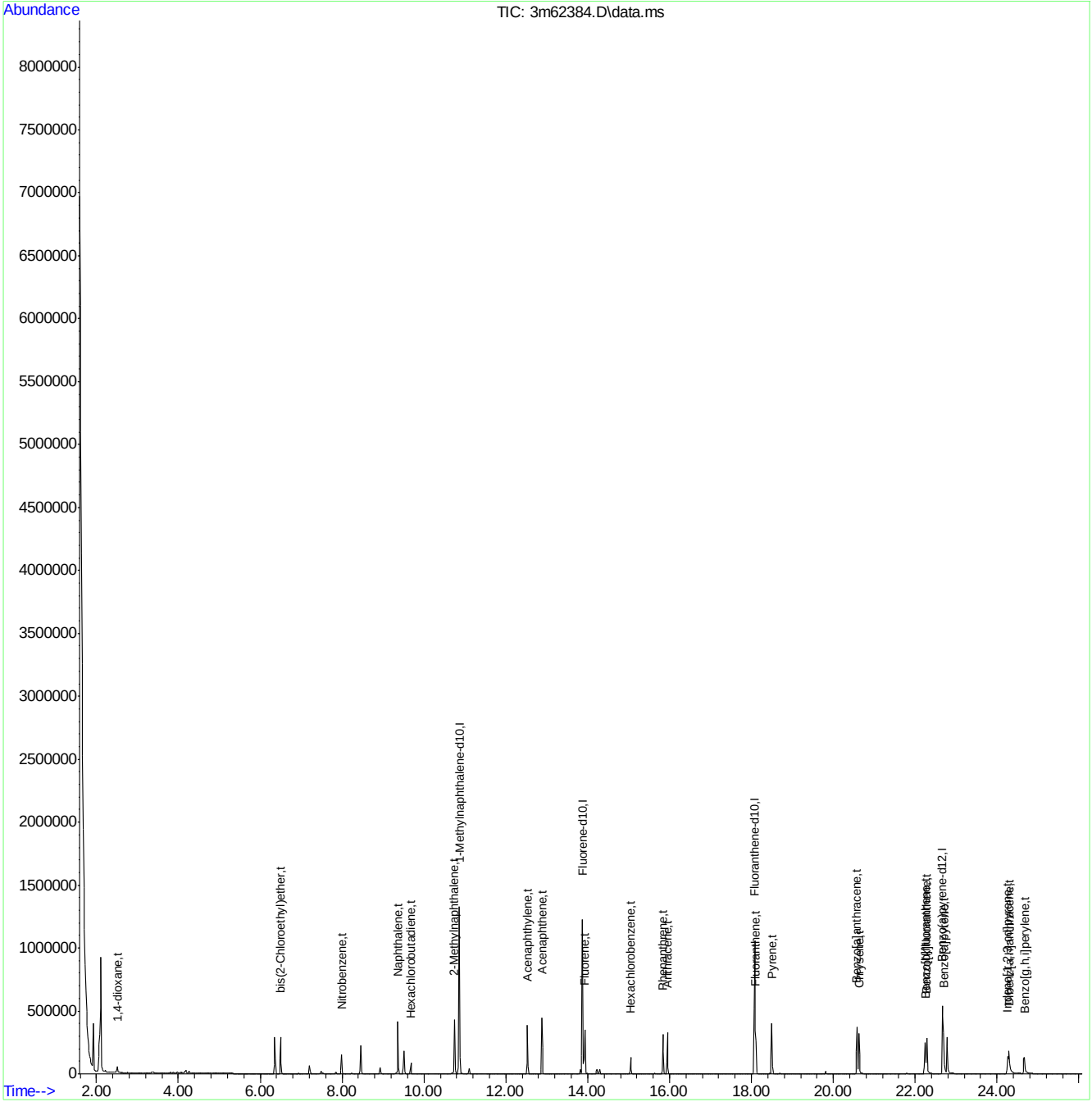
7.6.53

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2943\
Data File : 3m62384.D
Acq On : 21 Jun 2016 9:26 am
Operator : linseyk
Sample : icv2942-1
Misc : op94419a,e3m2943
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 21 10:04:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Jun 21 08:25:24 2016
Response via : Initial Calibration



M3M2942SIM.M Tue Jun 21 14:12:33 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e3m2951\
Data File : 3m62531.D
Acq On : 26 Jun 2016 4:13 pm
Operator : ariellec
Sample : cc2942-1.0
Misc : op94697a,e3m2951
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 27 11:51:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 27 10:40:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.763	150	549903	4.00	ppm	-0.10
14) Fluorene-d10	13.762	176	760000	4.00	ppm	-0.13
21) Fluoranthene-d10	17.955	212	1104631	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.546	264	828824	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.678	112	1827516	21.22	ppm	-0.08
Spiked Amount 50.000			Recovery = 42.44%			
4) Phenol-d5	6.261	99	2846901	20.88	ppm	-0.08
Spiked Amount 50.000			Recovery = 41.76%			
7) Nitrobenzene-d5	7.839	82	2352219	21.09	ppm	-0.12
Spiked Amount 50.000			Recovery = 42.18%			
15) 2-Fluorobiphenyl	11.419	172	4810091	20.67	ppm	-0.12
Spiked Amount 50.000			Recovery = 41.34%			
20) 2,4,6-Tribromophenol	14.309	330	590138	24.03	ppm	-0.11
Spiked Amount 50.000			Recovery = 48.06%			
28) Terphenyl-d14	18.759	244	3753908	22.57	ppm	0.02
Spiked Amount 50.000			Recovery = 45.14%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.421	88	34403	1.01	ppm #	54
5) Phenol	6.285	94	793921	5.29	ppm #	60
6) bis(2-Chloroethyl)ether	6.406	93	118996	1.05	ppm	73
8) Nitrobenzene	7.876	77	143061	1.17	ppm	69
9) Naphthalene	9.251	128	347683	1.07	ppm	99
10) Hexachlorobutadiene	9.571	225	47875	0.97	ppm	99
11) 2-Methylnaphthalene	10.640	141	168315	0.99	ppm #	72
12) 1-Methylnaphthalene	10.825	141	200271	1.02	ppm	72
13) Hexachlorocyclopentadiene	10.989	237	68462	1.99	ppm	82
16) Acenaphthylene	12.403	152	322360	1.13	ppm	97
17) Acenaphthene	12.774	153	208131	1.13	ppm	96
18) 4,6-dinitro-2-methylph...	13.970	198	55770	4.92	ppm	96
19) Fluorene	13.819	166	215498	1.04	ppm	85
22) Hexachlorobenzene	14.926	284	61585	1.10	ppm	73
23) Pentachlorophenol	15.343	266	119236	5.42	ppm	92
24) Phenanthrene	15.730	178	315627	1.12	ppm	97
25) Anthracene	15.823	178	307124	1.17	ppm	98
26) Fluoranthene	17.986	202	341959	1.05	ppm	97
27) Pyrene	18.372	202	337785	1.13	ppm	96
29) Benzo[a]anthracene	20.458	228	273464	1.21	ppm	96
30) Chrysene	20.520	228	289336	1.09	ppm	96
32) Benzo[b]fluoranthene	22.132	252	322274	1.23	ppm	87
33) Benzo[k]fluoranthene	22.170	252	184660	0.66	ppm	93
34) Benzo[a]pyrene	22.584	252	256816	0.93	ppm	94
35) Indeno[1,2,3-cd]pyrene	24.107	276	262025	1.15	ppm	97
36) Dibenz[a,h]anthracene	24.145	278	216639	1.18	ppm	77
37) Benzo[g,h,i]perylene	24.502	276	236671	1.13	ppm	100

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e3m2951\
Data File : 3m62531.D
Acq On : 26 Jun 2016 4:13 pm
Operator : ariellec
Sample : cc2942-1.0
Misc : op94697a,e3m2951
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 27 11:51:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 27 10:40:58 2016
Response via : Initial Calibration

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

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

7.6.54

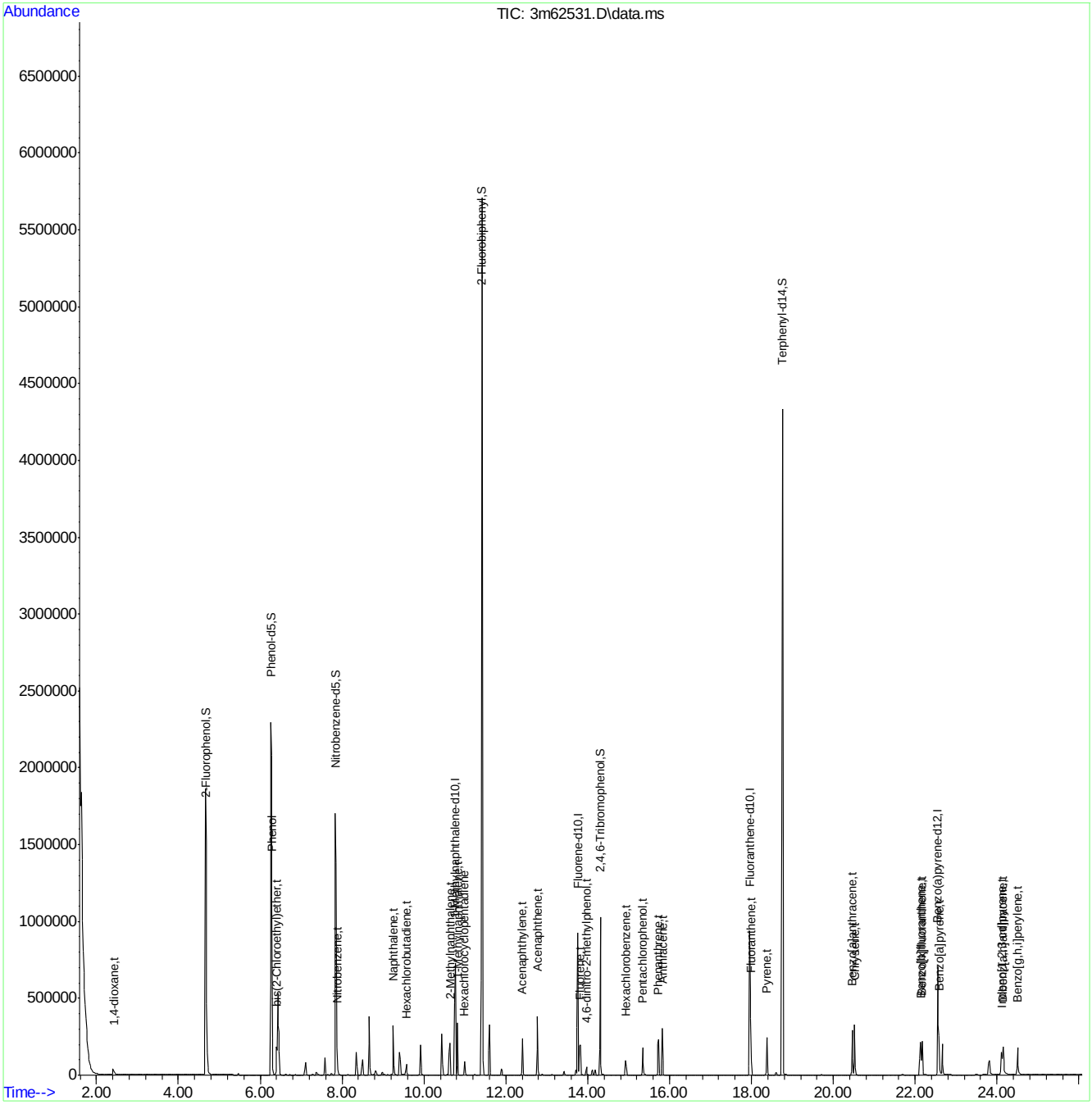
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e3m2951\
Data File : 3m62531.D
Acq On : 26 Jun 2016 4:13 pm
Operator : ariellec
Sample : cc2942-1.0
Misc : op94697a,e3m2951
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 27 11:51:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 27 10:40:58 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
07/11/16 09:20

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62827.D
Acq On : 7 Jul 2016 3:55 pm
Operator : linseyk
Sample : cc2942-1
Misc : op95335a,e3m2967
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 07 16:22:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.702	150	701185	4.00	ppm	-0.06
14) Fluorene-d10	13.687	176	1020160	4.00	ppm	-0.04
21) Fluoranthene-d10	17.904	212	1759504	4.00	ppm	-0.02
31) Benzo(a)pyrene-d12	22.488	264	1534828	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.662	112	1886859	17.18	ppm	-0.05
Spiked Amount 50.000			Recovery = 34.36%			
4) Phenol-d5	6.261	99	2849594	16.39	ppm	-0.02
Spiked Amount 50.000			Recovery = 32.78%			
7) Nitrobenzene-d5	7.782	82	2501143	17.59	ppm	-0.10
Spiked Amount 50.000			Recovery = 35.18%			
15) 2-Fluorobiphenyl	11.358	172	5855657	18.75	ppm	-0.04
Spiked Amount 50.000			Recovery = 37.50%			
20) 2,4,6-Tribromophenol	14.252	330	772695	23.44	ppm	0.00
Spiked Amount 50.000			Recovery = 46.88%			
28) Terphenyl-d14	18.692	244	5287885	19.96	ppm	-0.01
Spiked Amount 50.000			Recovery = 39.92%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.360	88	35930	0.83	ppm	87
5) Phenol	6.285	94	778084	4.07	ppm	97
6) bis(2-Chloroethyl)ether	6.345	93	115876	0.80	ppm	88
8) Nitrobenzene	7.820	77	140563	0.90	ppm	87
9) Naphthalene	9.195	128	400293	0.96	ppm	97
10) Hexachlorobutadiene	9.496	225	64741	1.03	ppm	92
11) 2-Methylnaphthalene	10.579	141	203749	0.94	ppm	96
12) 1-Methylnaphthalene	10.763	141	231787	0.92	ppm	93
13) Hexachlorocyclopentadiene	10.927	237	117210	2.67	ppm	92
16) Acenaphthylene	12.341	152	400478	1.05	ppm	93
17) Acenaphthene	12.712	153	259482	1.05	ppm	83
18) 4,6-dinitro-2-methylph...	13.913	198	167454	8.97	ppm	71
19) Fluorene	13.744	166	293639	1.05	ppm	72
22) Hexachlorobenzene	14.859	284	87020	0.98	ppm	79
23) Pentachlorophenol	15.292	266	104616	3.20	ppm	93
24) Phenanthrene	15.663	178	427000	0.95	ppm	96
25) Anthracene	15.756	178	409917	0.98	ppm	93
26) Fluoranthene	17.935	202	480272	0.92	ppm	96
27) Pyrene	18.321	202	501932	1.05	ppm	96
29) Benzo[a]anthracene	20.407	228	446577	1.24	ppm	94
30) Chrysene	20.469	228	439303	1.04	ppm	94
32) Benzo[b]fluoranthene	22.074	252	562397m	1.16	ppm	
33) Benzo[k]fluoranthene	22.112	252	372510m	0.72	ppm	
34) Benzo[a]pyrene	22.526	252	450483	0.88	ppm	92
35) Indeno[1,2,3-cd]pyrene	24.049	276	495180	1.17	ppm	91
36) Dibenz[a,h]anthracene	24.087	278	401639	1.19	ppm	99
37) Benzo[g,h,i]perylene	24.426	276	447025	1.15	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62827.D
Acq On : 7 Jul 2016 3:55 pm
Operator : linseyk
Sample : cc2942-1
Misc : op95335a,e3m2967
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 07 16:22:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration

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

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

7.6.55

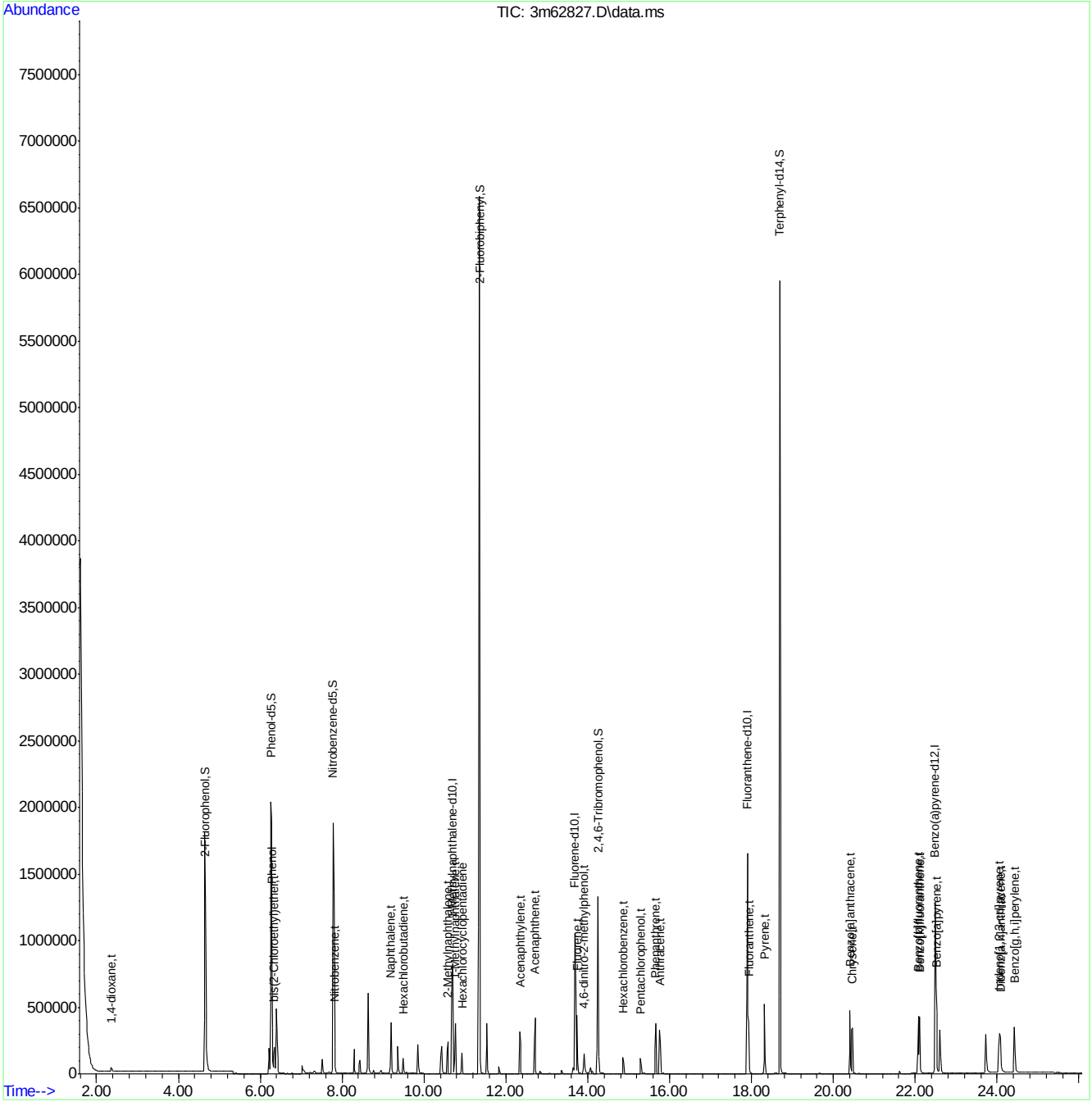
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62827.D
Acq On : 7 Jul 2016 3:55 pm
Operator : linseyk
Sample : cc2942-1
Misc : op95335a,e3m2967
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 07 16:22:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration



Manual Integration Approval Summary

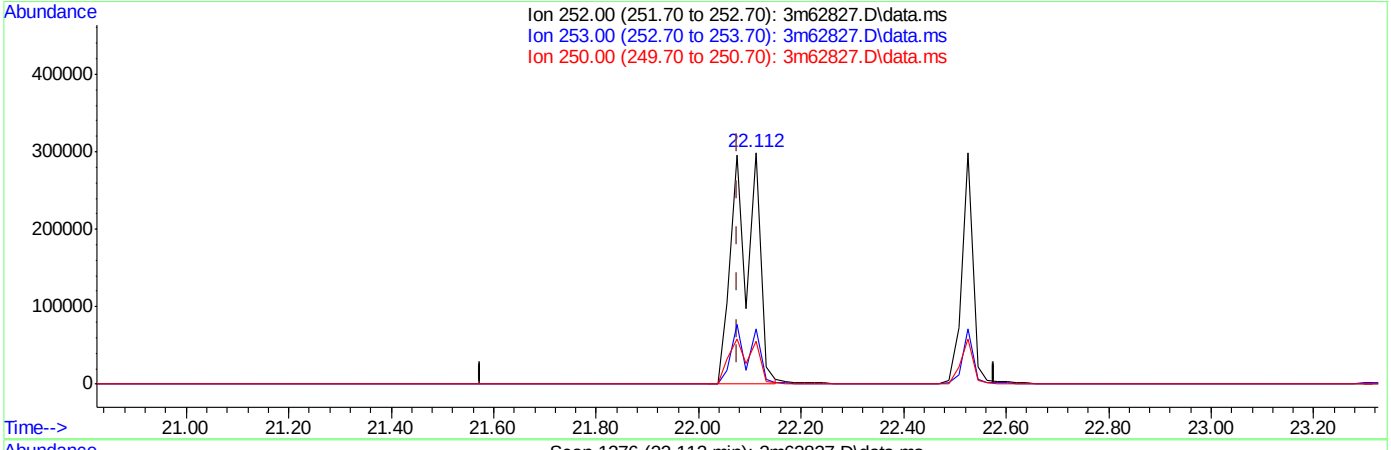
Sample Number:	E3M2967-CC2942	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M62827.D	**Analyst approved:**	07/08/16 10:25 Linsey Kirschmann
Injection Time:	07/07/16 15:55	**Supervisor approved:**	07/11/16 09:20 Nina Pandya

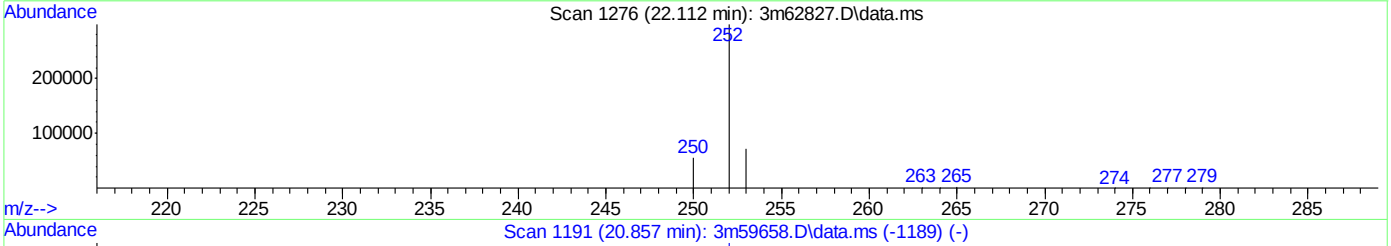
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		22.07	Overlapping peak
Benzo(k)fluoranthene	207-08-9		22.11	Overlapping peak

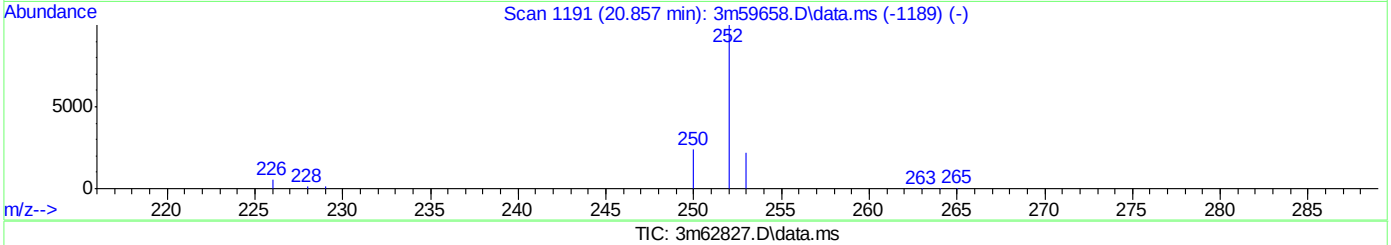
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62827.D
Acq On    :  7 Jul 2016   3:55 pm
Operator  : linseyk
Sample    : cc2942-1
Misc      : op95335a,e3m2967
ALS Vial  : 2   Sample Multiplier: 1

Quant Time: Jul 07 16:21:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title  : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration
```





TIC: 3m62827.D\data.ms

(32) Benzo[b]fluoranthene (t)

22.112min (+0.036) 1.92ppm

response 929711

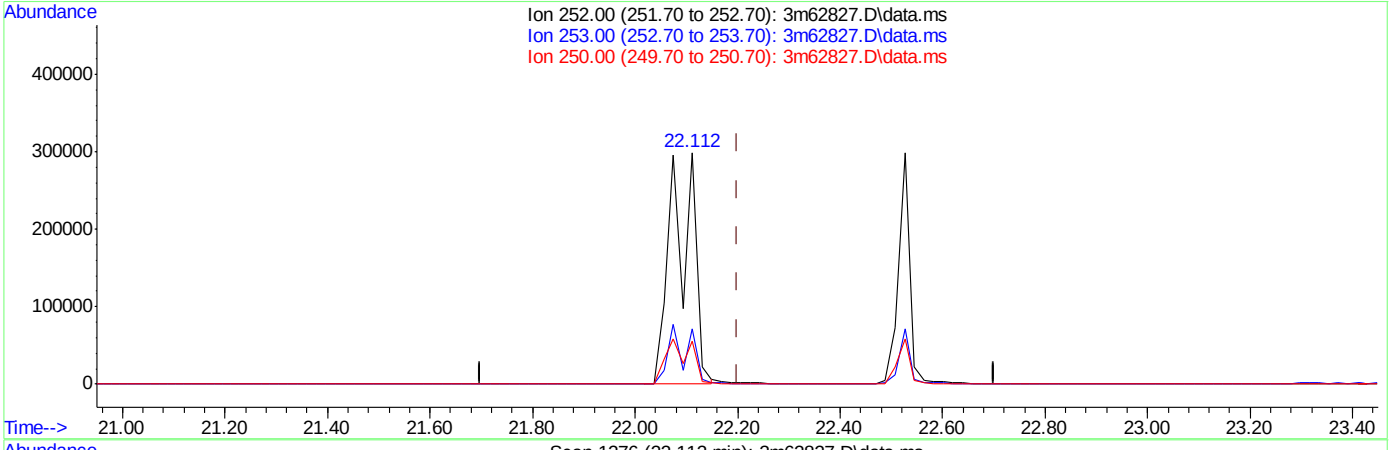
Ion	Exp%	Act%
252.00	100	100
253.00	21.10	23.78
250.00	23.90	18.25
0.00	0.00	0.00

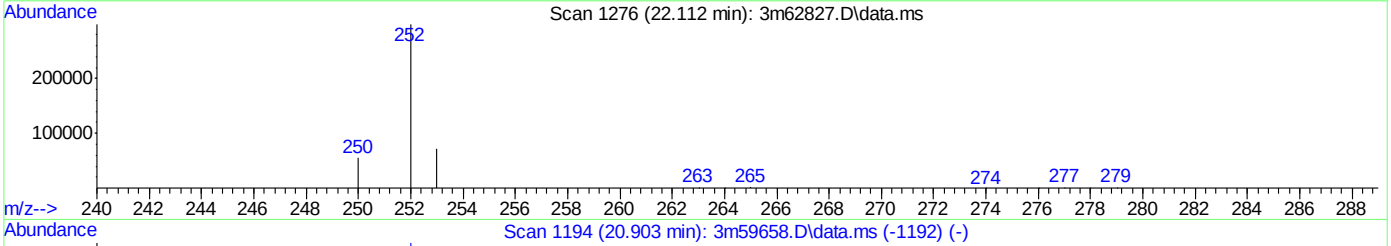
SGS ACCUTEST JC22613

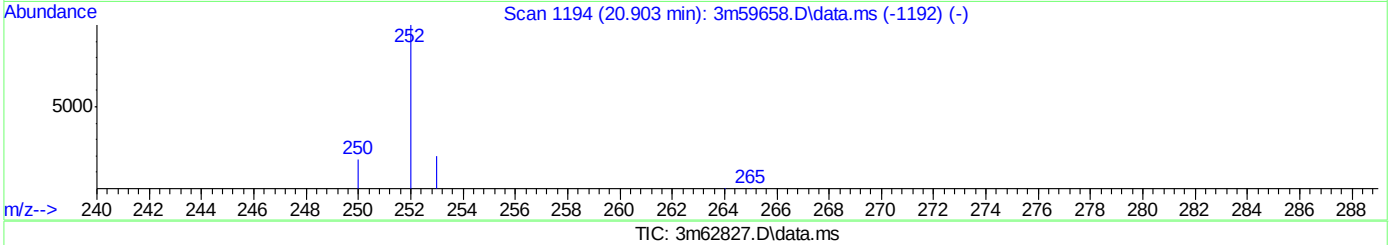
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62827.D
Acq On : 7 Jul 2016 3:55 pm
Operator : linseyk
Sample : cc2942-1
Misc : op95335a,e3m2967
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 07 16:21:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration







TIC: 3m62827.D\data.ms

(33) Benzo[k]fluoranthene (t)

22.112min (-0.088) 1.79ppm

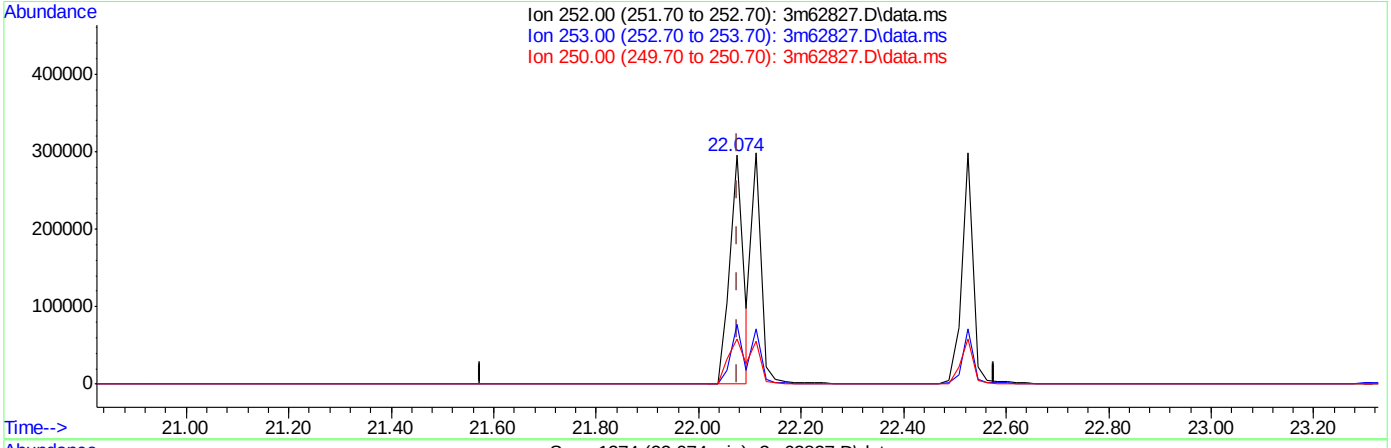
response 929711

Ion	Exp%	Act%
252.00	100	100
253.00	20.30	23.78
250.00	20.70	18.25
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62827.D
Acq On : 7 Jul 2016 3:55 pm
Operator : linseyk
Sample : cc2942-1
Misc : op95335a,e3m2967
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 07 16:22:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration



TIC: 3m62827.D\data.ms

(32) Benzo[b]fluoranthene (t)

22.074min (-0.001) 1.16ppm m

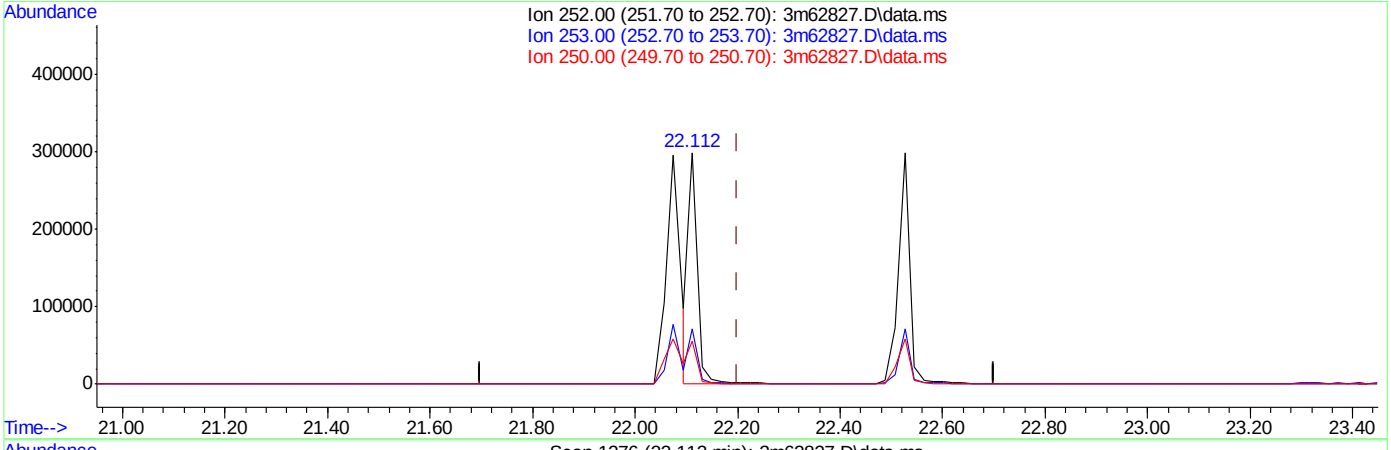
response 562397

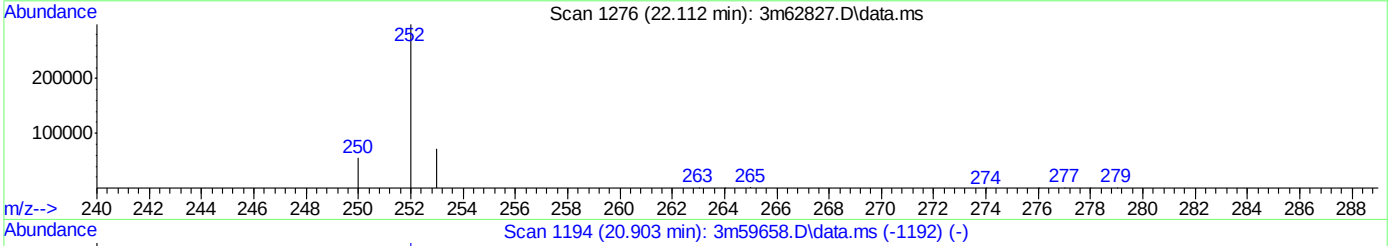
Ion	Exp%	Act%
252.00	100	100
253.00	21.10	25.92
250.00	23.90	19.69
0.00	0.00	0.00

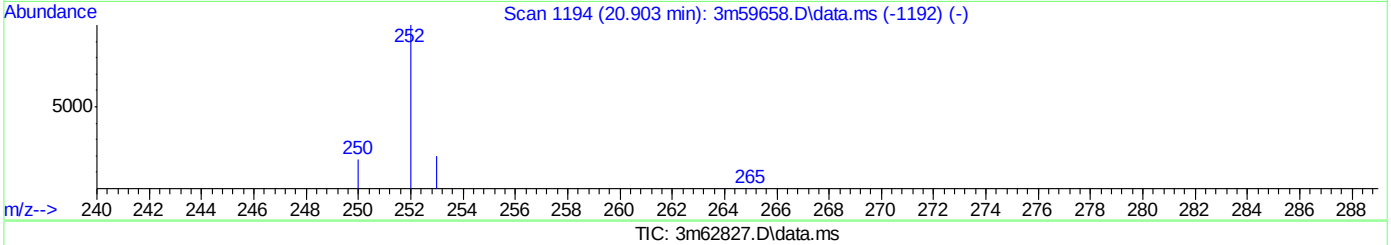
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2967\
Data File : 3m62827.D
Acq On : 7 Jul 2016 3:55 pm
Operator : linseyk
Sample : cc2942-1
Misc : op95335a,e3m2967
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 07 16:22:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2942SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Jul 06 09:00:12 2016
Response via : Initial Calibration







TIC: 3m62827.D\data.ms

(33) Benzo[k]fluoranthene (t)

22.112min (-0.088) 0.72ppm m

response 372510

Ion	Exp%	Act%
252.00	100	100
253.00	20.30	23.94
250.00	20.70	18.38
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
06/21/16 13:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66181.D
Acq On : 20 Jun 2016 11:01 pm
Operator : ashleyd
Sample : ic2974-0.1
Misc : op94799a,e4m2974
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 21 07:55:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.786	152	64579	4.00	ppm	0.00
12) Fluorene-d10	12.764	176	115877	4.00	ppm	0.00
22) Fluoranthene-d10	16.939	212	170187	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	21.547	264	145082	4.00	ppm	0.01
35) 1-Methylnaphthalene-d10a	9.786	152	64579	4.00	ppm	0.00
38) Fluorene-d10a	12.764	176	115877	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.100	112	19610	1.89	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 3.78%#			
3) Phenol-d5	5.497	99	30862	1.85	ppm	0.01
Spiked Amount 50.000			Recovery = 3.70%			
6) Nitrobenzene-d5	6.968	82	26982	1.87	ppm	0.00
Spiked Amount 50.000			Recovery = 3.74%			
11) 2-Fluorobiphenyl	10.430	172	47220	1.81	ppm	0.00
Spiked Amount 50.000			Recovery = 3.62%			
17) 2,4,6-Tribromophenol	13.313	330	9392	1.56	ppm	0.00
Spiked Amount 50.000			Recovery = 3.12%			
25) Terphenyl-d14	17.749	244	48941	1.81	ppm	0.00
Spiked Amount 50.000			Recovery = 3.62%			
Target Compounds						Qvalue
4) Phenol	5.511	94	8289	0.47	ppm	72
5) bis(2-Chloroethyl)ether	5.607	93	1248	0.09	ppm #	54
7) Naphthalene	8.314	128	4103	0.09	ppm	99
8) Hexachlorobutadiene	8.593	225	702	0.09	ppm	97
9) 2-Methylnaphthalene	9.667	142	2236	0.11	ppm	92
10) Hexachlorocyclopentadiene	10.001	237	37m	0.03	ppm	
13) Acenaphthylene	11.431	152	2799	0.08	ppm	87
14) Acenaphthene	11.764	153	1693	0.08	ppm	94
15) Dibenzofuran	12.141	168	2790	0.09	ppm	100
16) Fluorene	12.812	166	3041	0.08	ppm	94
18) Hexachlorobenzene	13.907	284	1011	0.08	ppm	96
19) Pentachlorophenol	14.359	266	1692	0.35	ppm	83
20) Phenanthrene	14.717	178	4186	0.08	ppm	98
21) Anthracene	14.830	178	3932	0.08	ppm	97
23) Fluoranthene	16.977	202	4774	0.09	ppm	99
24) Pyrene	17.372	202	4693	0.09	ppm	97
26) Benzo[a]anthracene	19.462	228	4467	0.10	ppm	95
27) Chrysene	19.518	228	4796	0.11	ppm	96
29) Benzo[b]fluoranthene	21.120	252	4753	0.09	ppm	95
30) Benzo[k]fluoranthene	21.162	252	5024	0.10	ppm	97
31) Benzo[a]pyrene	21.575	252	4913	0.10	ppm	99
32) Indeno[1,2,3-cd]pyrene	23.130	276	5025	0.09	ppm	95
33) Dibenz[a,h]anthracene	23.158	278	4213	0.09	ppm	92
34) Benzo[g,h,i]perylene	23.530	276	4414	0.09	ppm	99
36) 1,4-Dioxane	2.288	88	693	0.15	ppm #	62
37) 1-Methylnaphthalene	9.858	142	1777	0.10	ppm #	66
39) 4,6-dinitro-2-methylph...	13.027	198	963	0.19	ppm	80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66181.D
Acq On : 20 Jun 2016 11:01 pm
Operator : ashleyd
Sample : ic2974-0.1
Misc : op94799a,e4m2974
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 21 07:55:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,2-Diphenylhydrazine	13.170	77	2501	0.07	ppm	96
41) n-nitrosodiphenylamine	13.122	169	1855	0.07	ppm	94

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

7.6.56

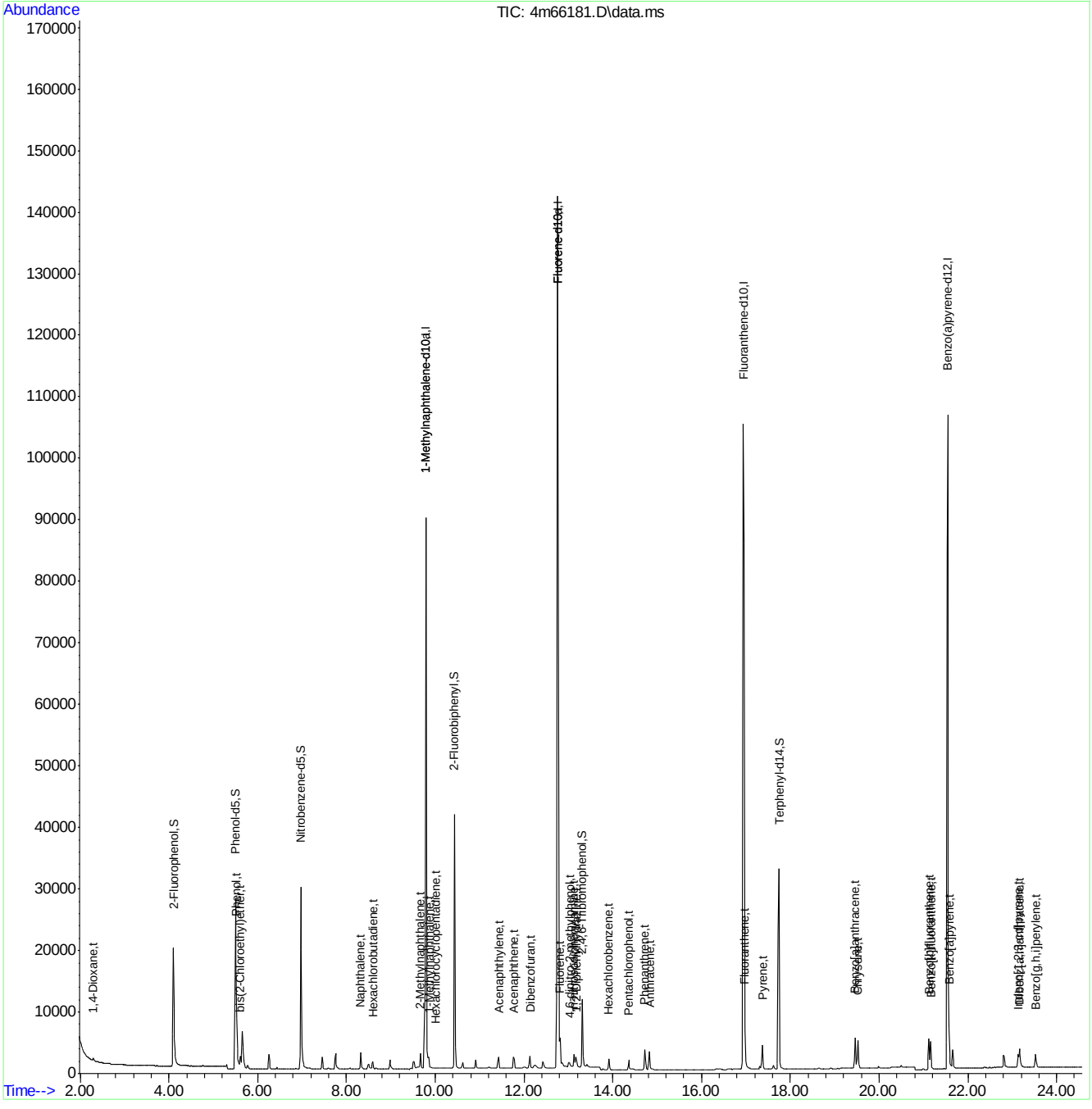
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66181.D
Acq On : 20 Jun 2016 11:01 pm
Operator : ashleyd
Sample : ic2974-0.1
Misc : op94799a,e4m2974
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 21 07:55:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration



M4M2974SIM.M Tue Jun 21 07:55:26 2016 MANAGER Page: 3

Manual Integration Approval Summary

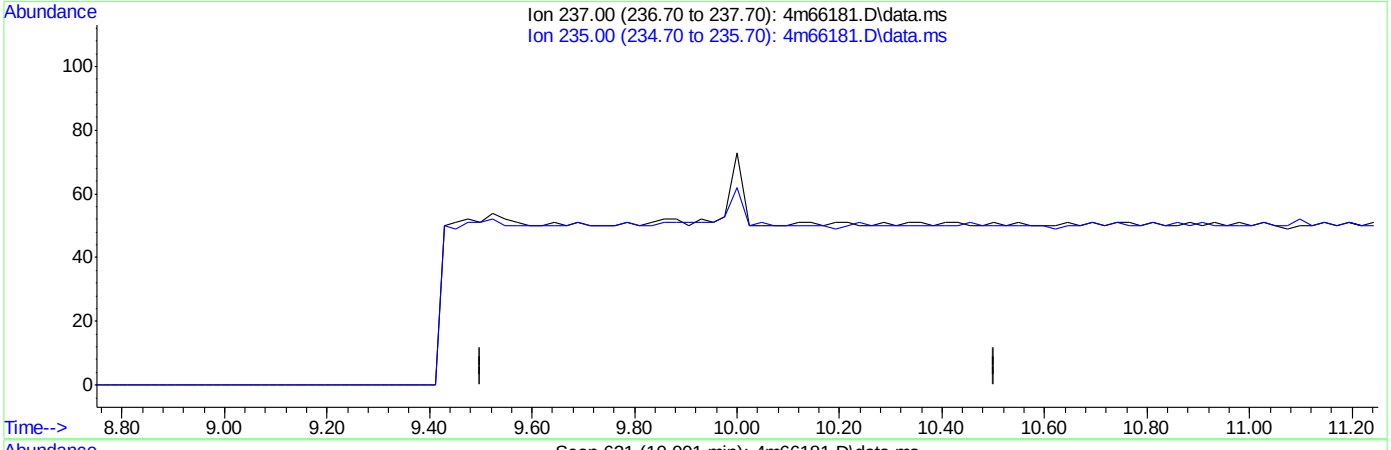
Sample Number:	E4M2974-IC2974	**Method:**	EPA 625 BY SIM
Lab FileID:	4M66181.D	**Analyst approved:**	06/21/16 08:32 Linsey Kirschmann
Injection Time:	06/20/16 23:01	**Supervisor approved:**	06/21/16 13:33 Nina Pandya

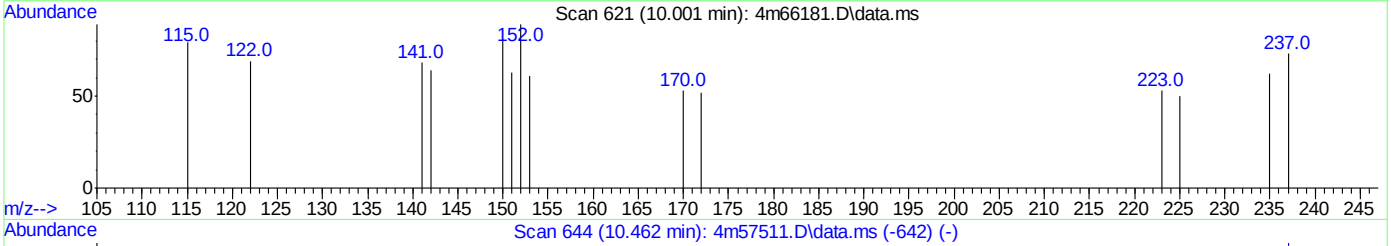
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexachlorocyclopentadiene	77-47-4		10.00	Poor instrument integration

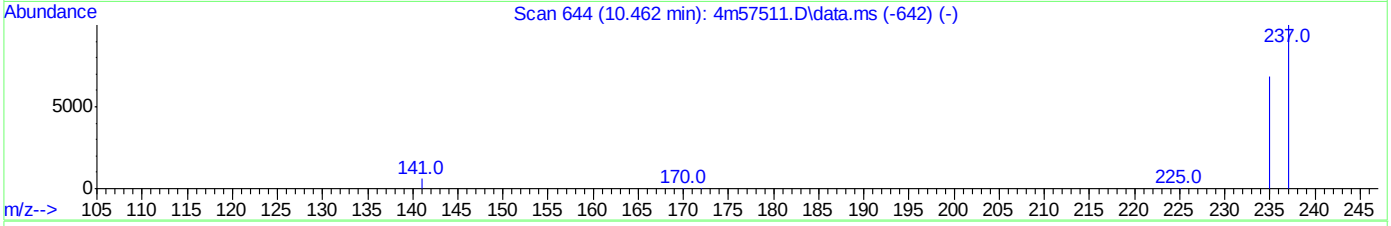
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66181.D
Acq On : 20 Jun 2016 11:01 pm
Operator : ashleyd
Sample : ic2974-0.1
Misc : op94799a,e4m2974
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 21 07:53:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration







TIC: 4m66181.D\data.ms

(10) Hexachlorocyclopentadiene (t)

10.001min (-10.001) 0.00ppm

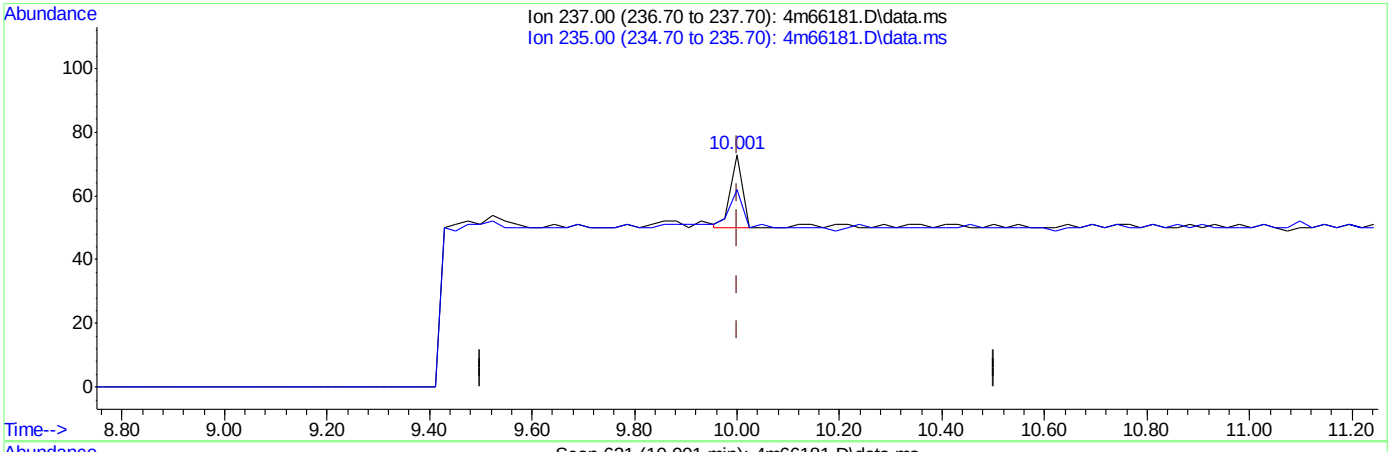
response 0

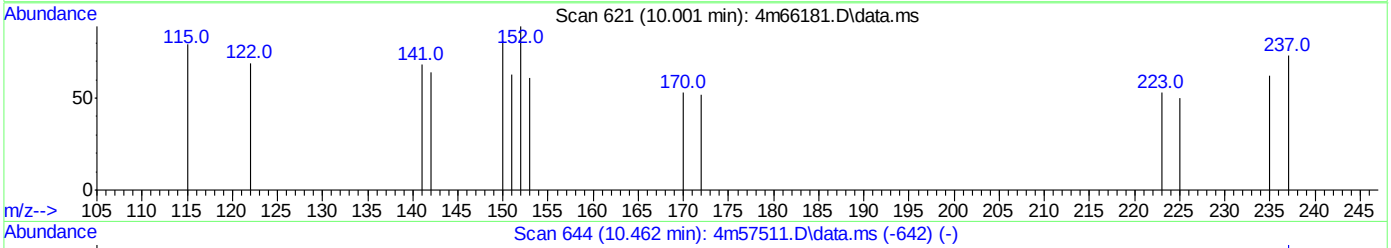
Ion	Exp%	Act%
237.00	100	0.00
235.00	45.30	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

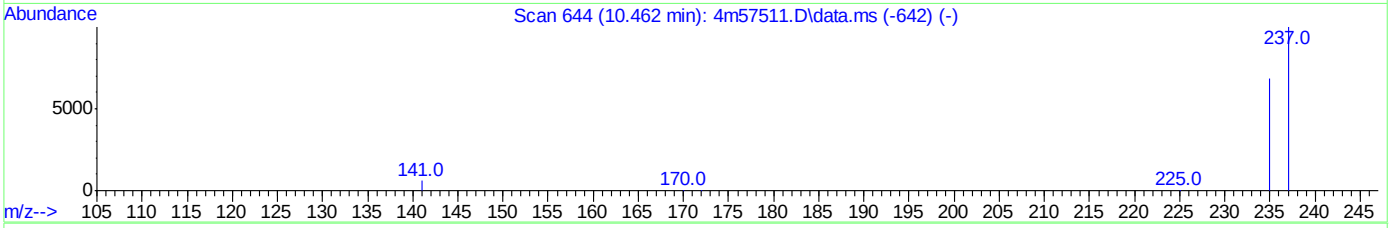
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66181.D
Acq On : 20 Jun 2016 11:01 pm
Operator : ashleyd
Sample : ic2974-0.1
Misc : op94799a,e4m2974
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 21 07:53:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration







TIC: 4m66181.D\data.ms

(10) Hexachlorocyclopentadiene (t)

10.001min (-0.000) 0.03ppm m

response 37

Ion	Exp%	Act%
237.00	100	100
235.00	45.30	84.93#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66182.D
Acq On : 20 Jun 2016 11:31 pm
Operator : ashleyd
Sample : ic2974-0.2
Misc : op94799a,e4m2974
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 21 07:53:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.786	152	61294	4.00	ppm	0.00
12) Fluorene-d10	12.764	176	113007	4.00	ppm	0.00
22) Fluoranthene-d10	16.939	212	178558	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	21.547	264	149298	4.00	ppm	0.01
35) 1-Methylnaphthalene-d10a	9.786	152	61294	4.00	ppm	0.00
38) Fluorene-d10a	12.764	176	113007	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.090	112	42611	4.34	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	8.68%#	
3) Phenol-d5	5.497	99	68267	4.32	ppm	0.01
Spiked Amount 50.000			Recovery	=	8.64%	
6) Nitrobenzene-d5	6.968	82	60266	4.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.78%	
11) 2-Fluorobiphenyl	10.431	172	110649	4.46	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.92%	
17) 2,4,6-Tribromophenol	13.313	330	21661	3.68	ppm	0.00
Spiked Amount 50.000			Recovery	=	7.36%	
25) Terphenyl-d14	17.749	244	108442	3.83	ppm	0.00
Spiked Amount 50.000			Recovery	=	7.66%	
Target Compounds						Qvalue
4) Phenol	5.511	94	18355	1.10	ppm	69
5) bis(2-Chloroethyl)ether	5.607	93	2632	0.20	ppm	81
7) Naphthalene	8.314	128	9200	0.21	ppm	99
8) Hexachlorobutadiene	8.593	225	1576	0.22	ppm	99
9) 2-Methylnaphthalene	9.667	142	4875	0.26	ppm	96
10) Hexachlorocyclopentadiene	10.001	237	160	0.13	ppm	95
13) Acenaphthylene	11.431	152	6261	0.19	ppm	85
14) Acenaphthene	11.764	153	3936	0.19	ppm	97
15) Dibenzofuran	12.141	168	7463	0.24	ppm	100
16) Fluorene	12.812	166	7007	0.19	ppm	98
18) Hexachlorobenzene	13.908	284	2301	0.20	ppm	98
19) Pentachlorophenol	14.360	266	3979	0.84	ppm	81
20) Phenanthrene	14.717	178	9557	0.19	ppm	99
21) Anthracene	14.830	178	8392	0.18	ppm	99
23) Fluoranthene	16.977	202	10535	0.19	ppm	99
24) Pyrene	17.372	202	10107	0.18	ppm	98
26) Benzo[a]anthracene	19.462	228	8951	0.19	ppm	98
27) Chrysene	19.518	228	9210	0.19	ppm	97
29) Benzo[b]fluoranthene	21.120	252	10031	0.18	ppm	98
30) Benzo[k]fluoranthene	21.162	252	10126	0.19	ppm	99
31) Benzo[a]pyrene	21.575	252	9644	0.19	ppm	100
32) Indeno[1,2,3-cd]pyrene	23.131	276	11253	0.19	ppm	91
33) Dibenz[a,h]anthracene	23.158	278	9253	0.19	ppm	94
34) Benzo[g,h,i]perylene	23.516	276	9715	0.19	ppm	100
36) 1,4-Dioxane	2.289	88	1167	0.26	ppm #	76
37) 1-Methylnaphthalene	9.858	142	3686	0.21	ppm #	62
39) 4,6-dinitro-2-methylph...	13.027	198	3021	0.63	ppm	79

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66182.D
Acq On : 20 Jun 2016 11:31 pm
Operator : ashleyd
Sample : ic2974-0.2
Misc : op94799a,e4m2974
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 21 07:53:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) 1,2-Diphenylhydrazine	13.170	77	6335	0.18 ppm	99
41) n-nitrosodiphenylamine	13.122	169	4376	0.17 ppm	97

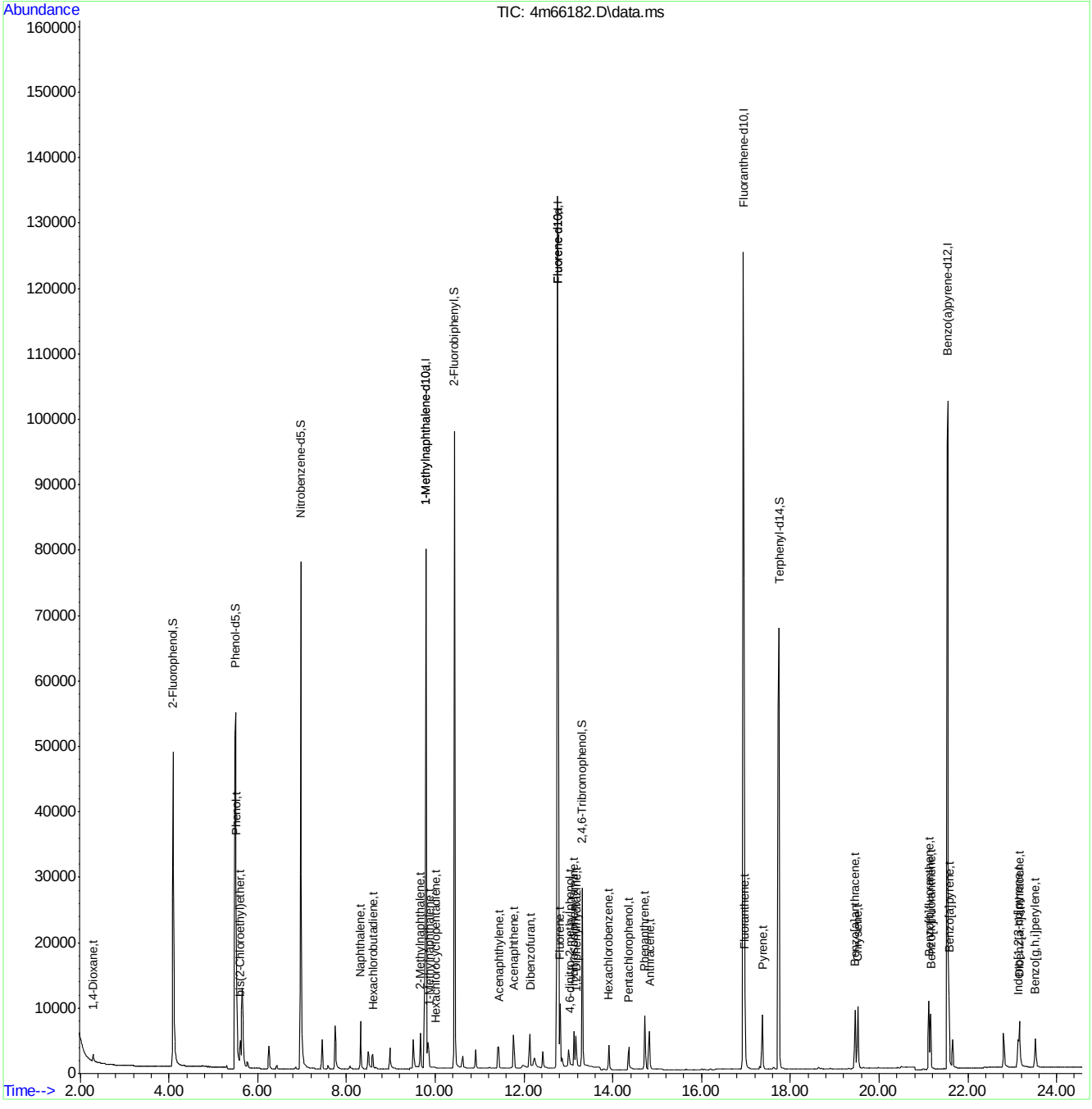
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66182.D
Acq On : 20 Jun 2016 11:31 pm
Operator : ashleyd
Sample : ic2974-0.2
Misc : op94799a,e4m2974
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 21 07:53:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66183.D
Acq On : 21 Jun 2016 12:01 am
Operator : ashleyd
Sample : ic2974-0.5
Misc : op94799a,e4m2974
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 21 07:53:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.786	152	48821	4.00	ppm	0.00
12) Fluorene-d10	12.764	176	79987	4.00	ppm	0.00
22) Fluoranthene-d10	16.939	212	121543	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	21.547	264	101873	4.00	ppm	0.01
35) 1-Methylnaphthalene-d10a	9.786	152	48821	4.00	ppm	0.00
38) Fluorene-d10a	12.764	176	79987	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.090	112	81796	10.45	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 20.90%			
3) Phenol-d5	5.483	99	130374	10.36	ppm	0.00
Spiked Amount 50.000			Recovery = 20.72%			
6) Nitrobenzene-d5	6.968	82	112634	10.31	ppm	0.00
Spiked Amount 50.000			Recovery = 20.62%			
11) 2-Fluorobiphenyl	10.431	172	209046	10.59	ppm	0.00
Spiked Amount 50.000			Recovery = 21.18%			
17) 2,4,6-Tribromophenol	13.313	330	42279	10.15	ppm	0.00
Spiked Amount 50.000			Recovery = 20.30%			
25) Terphenyl-d14	17.749	244	199233	10.33	ppm	0.00
Spiked Amount 50.000			Recovery = 20.66%			
Target Compounds						Qvalue
4) Phenol	5.511	94	34378	2.58	ppm	88
5) bis(2-Chloroethyl)ether	5.607	93	4985	0.47	ppm	78
7) Naphthalene	8.314	128	17593	0.51	ppm	100
8) Hexachlorobutadiene	8.593	225	2951	0.51	ppm	99
9) 2-Methylnaphthalene	9.667	142	8048	0.54	ppm	97
10) Hexachlorocyclopentadiene	10.001	237	599	0.59	ppm	97
13) Acenaphthylene	11.431	152	11956	0.51	ppm	85
14) Acenaphthene	11.764	153	7448	0.50	ppm	97
15) Dibenzofuran	12.141	168	11632	0.53	ppm	100
16) Fluorene	12.812	166	13592	0.51	ppm	99
18) Hexachlorobenzene	13.908	284	4345	0.52	ppm	99
19) Pentachlorophenol	14.360	266	7373	2.21	ppm	78
20) Phenanthrene	14.717	178	18316	0.51	ppm	99
21) Anthracene	14.830	178	16332	0.50	ppm	99
23) Fluoranthene	16.977	202	19846	0.51	ppm	99
24) Pyrene	17.372	202	19391	0.51	ppm	99
26) Benzo[a]anthracene	19.462	228	16744	0.52	ppm	99
27) Chrysene	19.518	228	17050	0.53	ppm	99
29) Benzo[b]fluoranthene	21.120	252	18885	0.50	ppm	98
30) Benzo[k]fluoranthene	21.162	252	18893	0.53	ppm	99
31) Benzo[a]pyrene	21.575	252	16497	0.48	ppm	99
32) Indeno[1,2,3-cd]pyrene	23.117	276	20627	0.51	ppm	99
33) Dibenz[a,h]anthracene	23.158	278	17147	0.51	ppm	97
34) Benzo[g,h,i]perylene	23.516	276	17848	0.52	ppm	100
36) 1,4-Dioxane	2.288	88	1889	0.53	ppm	77
37) 1-Methylnaphthalene	9.858	142	7124	0.52	ppm #	63
39) 4,6-dinitro-2-methylph...	13.003	198	6273	1.84	ppm	64

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66183.D
Acq On : 21 Jun 2016 12:01 am
Operator : ashleyd
Sample : ic2974-0.5
Misc : op94799a,e4m2974
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 21 07:53:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,2-Diphenylhydrazine	13.170	77	12389	0.49	ppm	99
41) n-nitrosodiphenylamine	13.122	169	8582	0.48	ppm	97

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

7.6.58

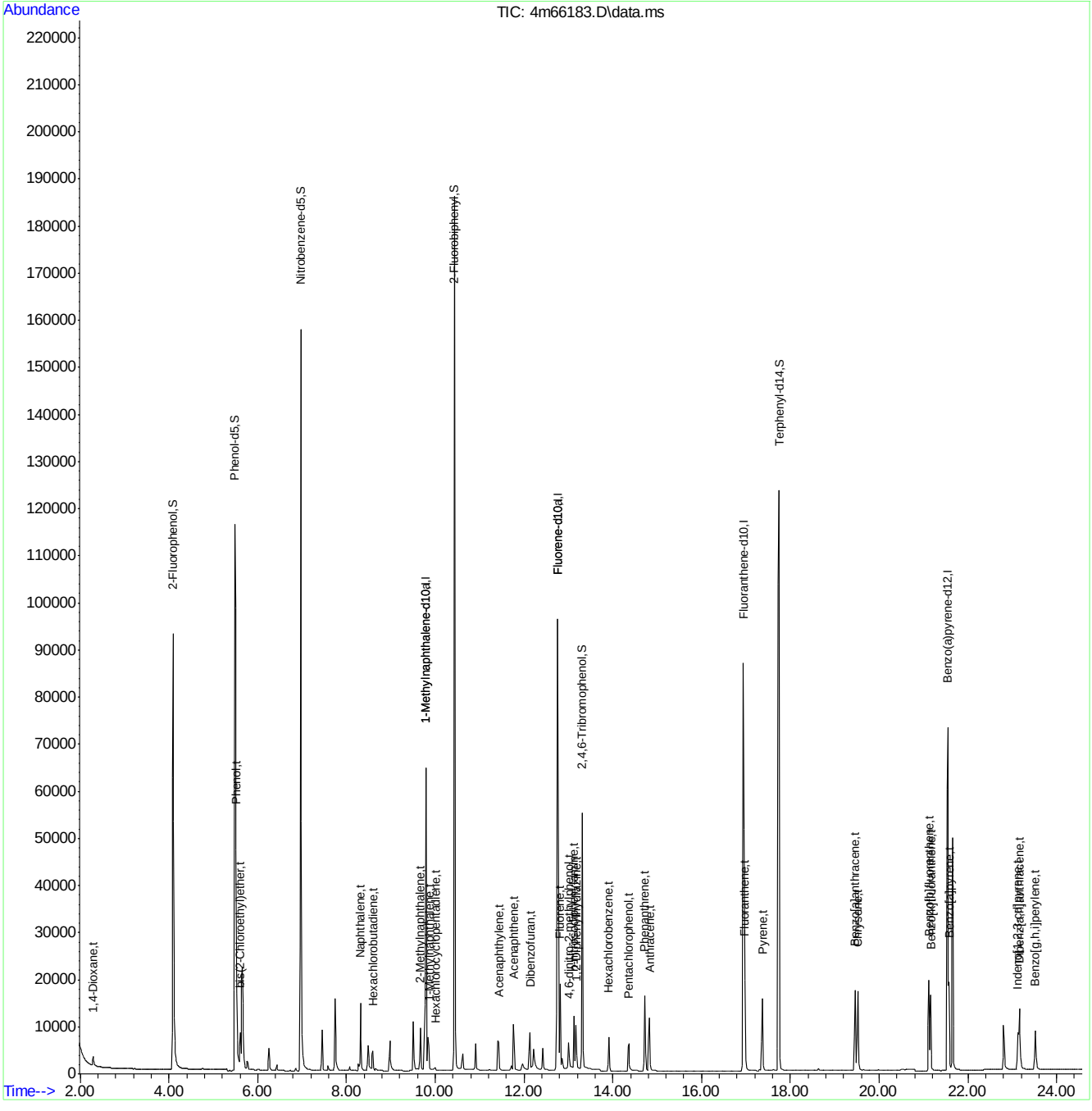
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66183.D
Acq On : 21 Jun 2016 12:01 am
Operator : ashleyd
Sample : ic2974-0.5
Misc : op94799a,e4m2974
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 21 07:53:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66184.D
Acq On : 21 Jun 2016 12:31 am
Operator : ashleyd
Sample : icc2974-1.0
Misc : op94799a,e4m2974
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 21 07:53:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.786	152	53805	4.00	ppm	0.00
12) Fluorene-d10	12.764	176	88678	4.00	ppm	0.00
22) Fluoranthene-d10	16.939	212	136758	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	21.534	264	111755	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	9.786	152	53805	4.00	ppm	0.00
38) Fluorene-d10a	12.764	176	88678	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.090	112	172656	20.02	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 40.04%			
3) Phenol-d5	5.484	99	277285	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
6) Nitrobenzene-d5	6.968	82	240778	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
11) 2-Fluorobiphenyl	10.431	172	435307	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
17) 2,4,6-Tribromophenol	13.313	330	92390	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
25) Terphenyl-d14	17.749	244	434082	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
Target Compounds						Qvalue
4) Phenol	5.511	94	73488	5.00	ppm	100
5) bis(2-Chloroethyl)ether	5.607	93	10826	0.92	ppm	75
7) Naphthalene	8.314	128	38045	1.00	ppm	100
8) Hexachlorobutadiene	8.593	225	6342	1.00	ppm	100
9) 2-Methylnaphthalene	9.667	142	16441	1.00	ppm	100
10) Hexachlorocyclopentadiene	10.001	237	2232	2.00	ppm	100
13) Acenaphthylene	11.409	152	26195	1.00	ppm	100
14) Acenaphthene	11.764	153	16587	1.00	ppm	100
15) Dibenzofuran	12.141	168	24521	1.00	ppm	100
16) Fluorene	12.812	166	29604	1.00	ppm	100
18) Hexachlorobenzene	13.908	284	9238	1.00	ppm	100
19) Pentachlorophenol	14.341	266	18521	5.00	ppm	100
20) Phenanthrene	14.717	178	39729	1.00	ppm	100
21) Anthracene	14.830	178	35891	1.00	ppm	100
23) Fluoranthene	16.977	202	43518	1.00	ppm	100
24) Pyrene	17.372	202	42479	1.00	ppm	100
26) Benzo[a]anthracene	19.462	228	35948	1.00	ppm	99
27) Chrysene	19.519	228	36398	1.00	ppm	100
29) Benzo[b]fluoranthene	21.121	252	41480	1.01	ppm	99
30) Benzo[k]fluoranthene	21.162	252	39891	1.02	ppm	100
31) Benzo[a]pyrene	21.575	252	38047	1.02	ppm	100
32) Indeno[1,2,3-cd]pyrene	23.117	276	44837	1.02	ppm	100
33) Dibenz[a,h]anthracene	23.158	278	37256	1.02	ppm	100
34) Benzo[g,h,i]perylene	23.516	276	38720	1.02	ppm	100
36) 1,4-Dioxane	2.289	88	3599	0.92	ppm	82
37) 1-Methylnaphthalene	9.834	142	15146	1.00	ppm	100
39) 4,6-dinitro-2-methylph...	13.003	198	18936	5.00	ppm	100

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66184.D
Acq On : 21 Jun 2016 12:31 am
Operator : ashleyd
Sample : icc2974-1.0
Misc : op94799a,e4m2974
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 21 07:53:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,2-Diphenylhydrazine	13.170	77	28043	1.00	ppm	100
41) n-nitrosodiphenylamine	13.122	169	19967	1.00	ppm	100

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

7.6.59

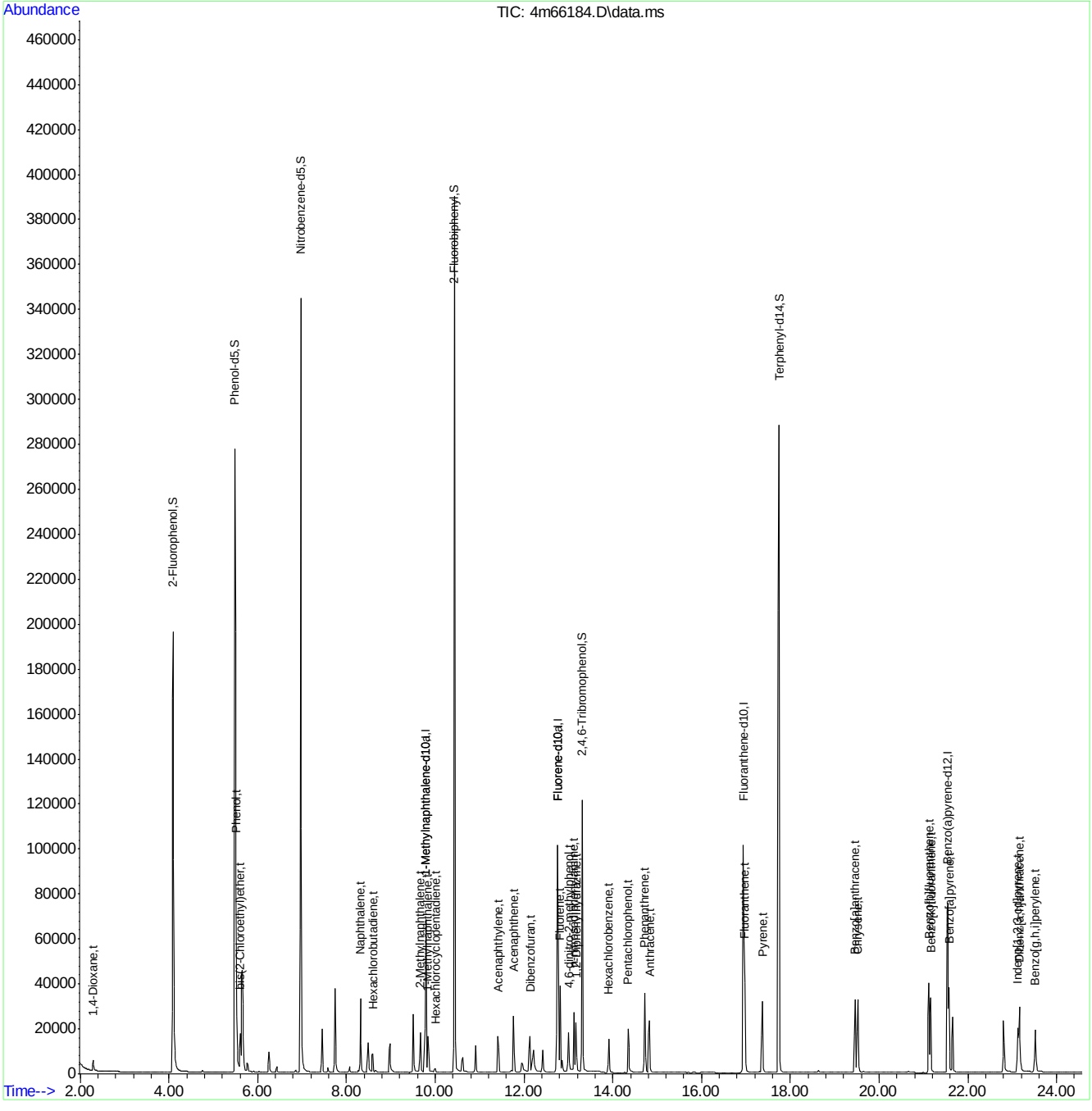
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66184.D
Acq On : 21 Jun 2016 12:31 am
Operator : ashleyd
Sample : icc2974-1.0
Misc : op94799a,e4m2974
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 21 07:53:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66185.D
Acq On : 21 Jun 2016 1:01 am
Operator : ashleyd
Sample : ic2974-0.05
Misc : op94799a,e4m2974
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 21 07:57:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.786	152	65123	4.00	ppm	0.00
12) Fluorene-d10	12.764	176	120426	4.00	ppm	0.00
22) Fluoranthene-d10	16.939	212	194489	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	21.534	264	160931	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	9.786	152	65123	4.00	ppm	0.00
38) Fluorene-d10a	12.764	176	120426	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.100	112	10664	1.02	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery	=	2.04%#	
3) Phenol-d5	5.497	99	16574	0.99	ppm	0.01
Spiked Amount 50.000			Recovery	=	1.98%	
6) Nitrobenzene-d5	6.968	82	14948	1.03	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.06%	
11) 2-Fluorobiphenyl	10.431	172	26966	1.02	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.04%	
17) 2,4,6-Tribromophenol	13.313	330	4974	0.79	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.58%	
25) Terphenyl-d14	17.749	244	26084	0.85	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.70%	
Target Compounds						Qvalue
4) Phenol	5.511	94	4641	0.26	ppm	48
5) bis(2-Chloroethyl)ether	5.607	93	557	0.04	ppm #	53
7) Naphthalene	8.314	128	2263	0.05	ppm	99
8) Hexachlorobutadiene	8.593	225	403	0.05	ppm	98
9) 2-Methylnaphthalene	9.667	142	1475	0.07	ppm	95
13) Acenaphthylene	11.431	152	1507	0.04	ppm	87
14) Acenaphthene	11.764	153	965	0.04	ppm	98
15) Dibenzofuran	12.141	168	2323	0.07	ppm	100
16) Fluorene	12.812	166	1764	0.04	ppm	92
18) Hexachlorobenzene	13.908	284	573	0.05	ppm	98
19) Pentachlorophenol	14.360	266	938	0.19	ppm	86
20) Phenanthrene	14.717	178	2308	0.04	ppm	98
21) Anthracene	14.830	178	2199	0.05	ppm	97
23) Fluoranthene	16.977	202	2773	0.04	ppm	99
24) Pyrene	17.372	202	2482	0.04	ppm	98
26) Benzo[a]anthracene	19.462	228	2163	0.04	ppm	97
27) Chrysene	19.519	228	2438	0.05	ppm	96
29) Benzo[b]fluoranthene	21.121	252	2558	0.04	ppm	97
30) Benzo[k]fluoranthene	21.162	252	2707	0.05	ppm	98
31) Benzo[a]pyrene	21.575	252	2415m	0.04	ppm	
32) Indeno[1,2,3-cd]pyrene	23.131	276	2781	0.04	ppm	96
33) Dibenz[a,h]anthracene	23.158	278	2312	0.04	ppm	84
34) Benzo[g,h,i]perylene	23.530	276	2464	0.05	ppm	100
37) 1-Methylnaphthalene	9.858	142	987	0.05	ppm #	62
39) 4,6-dinitro-2-methylph...	13.027	198	615	0.12	ppm	93
40) 1,2-Diphenylhydrazine	13.170	77	1490	0.04	ppm	100
41) n-nitrosodiphenylamine	13.122	169	1042	0.04	ppm	94

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66185.D
Acq On : 21 Jun 2016 1:01 am
Operator : ashleyd
Sample : ic2974-0.05
Misc : op94799a,e4m2974
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 21 07:57:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

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

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

7.6.60

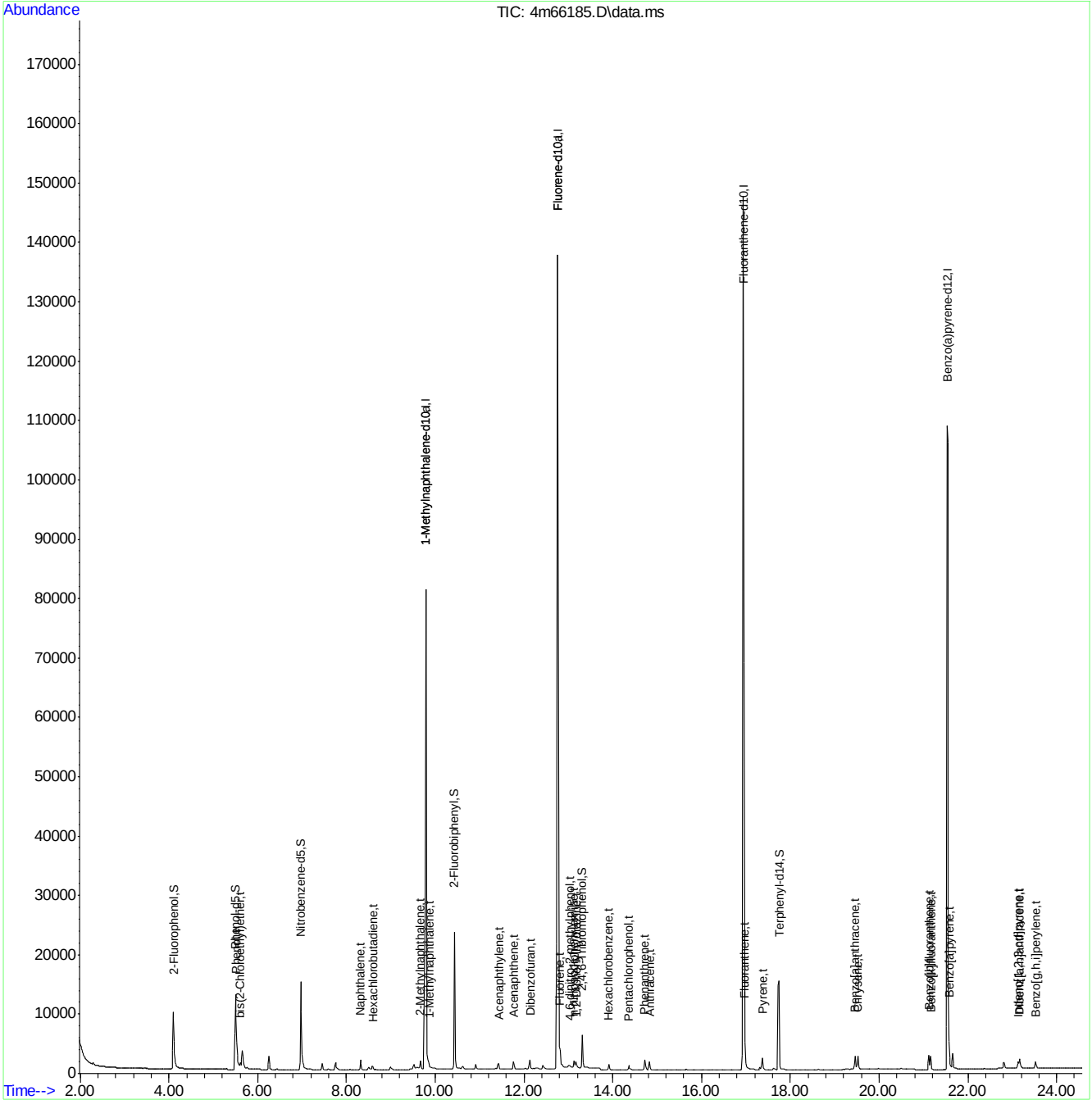
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66185.D
Acq On : 21 Jun 2016 1:01 am
Operator : ashleyd
Sample : ic2974-0.05
Misc : op94799a,e4m2974
ALS Vial : 6 Sample Multiplier: 1

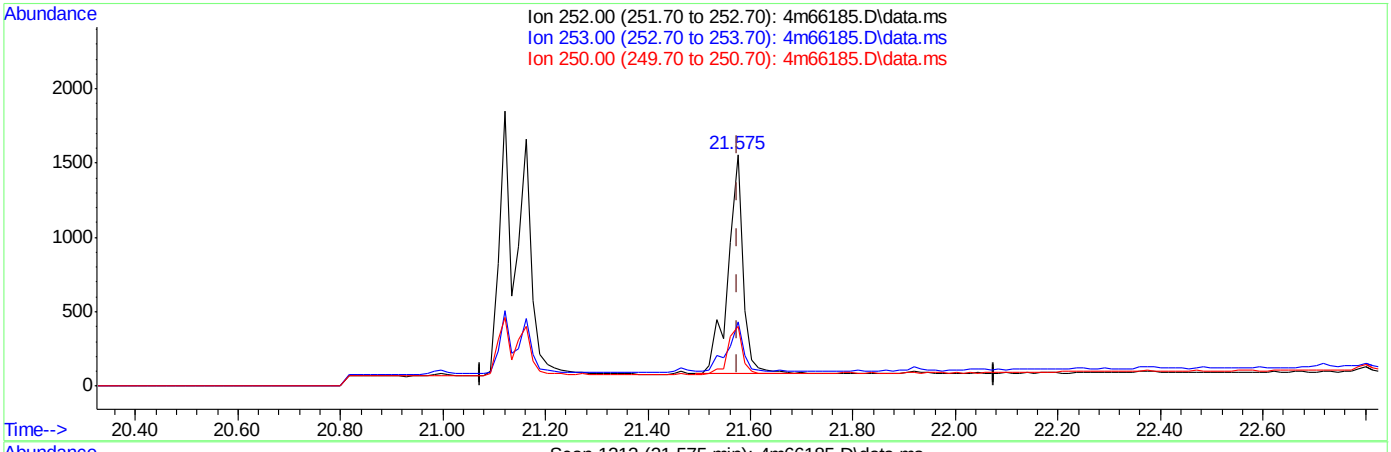
Quant Time: Jun 21 07:57:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

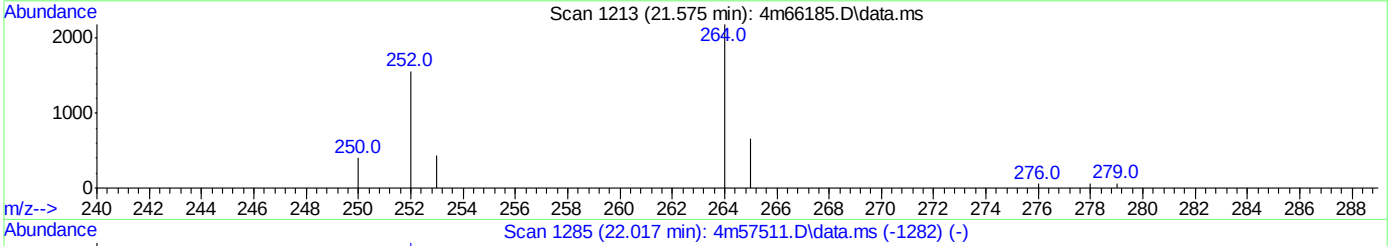


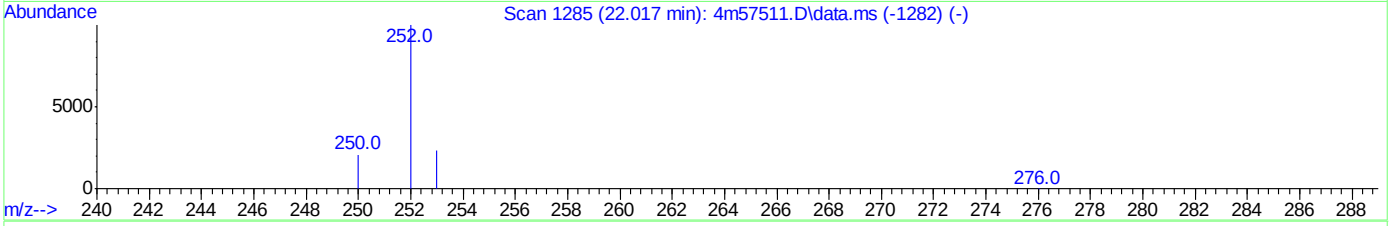
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66185.D
Acq On : 21 Jun 2016 1:01 am
Operator : ashleyd
Sample : ic2974-0.05
Misc : op94799a,e4m2974
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 21 07:53:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration







TIC: 4m66185.D\data.ms

(31) Benzo[a]pyrene (t)

21.575min (0.000) 0.06ppm

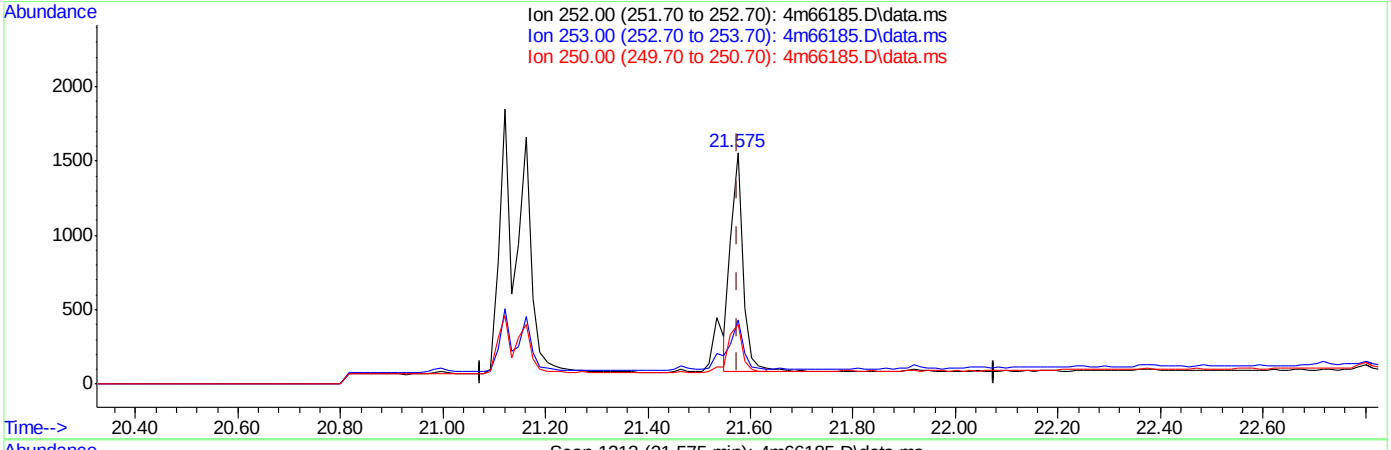
response 2993

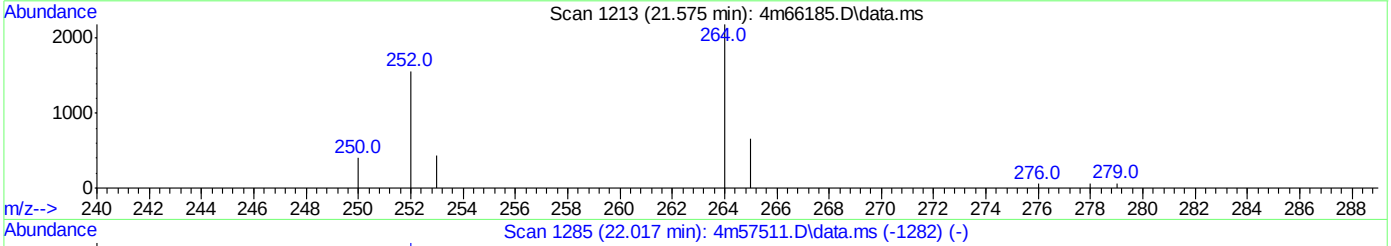
Ion	Exp%	Act%
252.00	100	100
253.00	22.40	22.56
250.00	21.30	21.68
0.00	0.00	0.00

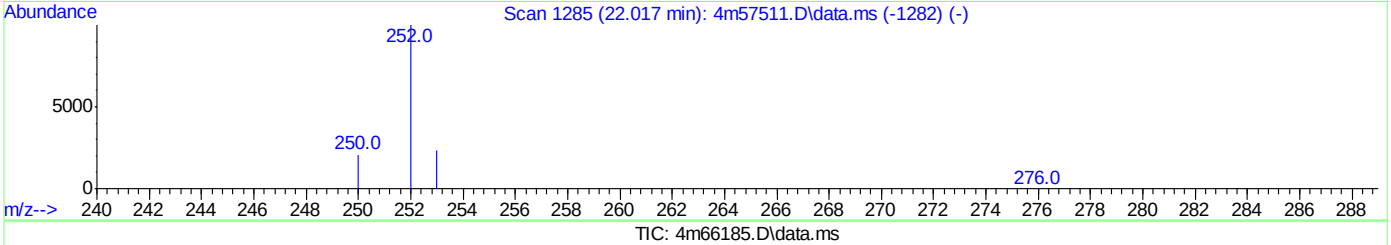
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66185.D
Acq On : 21 Jun 2016 1:01 am
Operator : ashleyd
Sample : ic2974-0.05
Misc : op94799a,e4m2974
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 21 07:53:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration







TIC: 4m66185.D\data.ms

(31) Benzo[a]pyrene (t)

21.575min (0.000) 0.04ppm m

response 2415

Ion	Exp%	Act%
252.00	100	100
253.00	22.40	27.73
250.00	21.30	25.74
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66186.D
Acq On : 21 Jun 2016 1:31 am
Operator : ashleyd
Sample : ic2974-0.02
Misc : op94799a,e4m2974
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 21 07:58:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.786	152	61071	4.00	ppm	0.00
12) Fluorene-d10	12.764	176	110365	4.00	ppm	0.00
22) Fluoranthene-d10	16.939	212	174894	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	21.534	264	142482	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	9.786	152	61071	4.00	ppm	0.00
38) Fluorene-d10a	12.764	176	110365	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.100	112	3577	0.37	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.74%#			
3) Phenol-d5	5.497	99	5671	0.36	ppm	0.01
Spiked Amount 50.000			Recovery = 0.72%			
6) Nitrobenzene-d5	6.984	82	5230	0.38	ppm	0.02
Spiked Amount 50.000			Recovery = 0.76%			
11) 2-Fluorobiphenyl	10.431	172	9683	0.39	ppm	0.00
Spiked Amount 50.000			Recovery = 0.78%			
17) 2,4,6-Tribromophenol	13.313	330	1645	0.29	ppm	0.00
Spiked Amount 50.000			Recovery = 0.58%			
25) Terphenyl-d14	17.749	244	9281	0.33	ppm	0.00
Spiked Amount 50.000			Recovery = 0.66%			
Target Compounds						Qvalue
4) Phenol	5.525	94	1518	0.09	ppm	87
5) bis(2-Chloroethyl)ether	5.607	93	183	0.01	ppm #	63
7) Naphthalene	8.314	128	846	0.02	ppm	97
8) Hexachlorobutadiene	8.593	225	149	0.02	ppm	97
9) 2-Methylnaphthalene	9.667	142	894	0.05	ppm	93
13) Acenaphthylene	11.431	152	573	0.02	ppm	88
14) Acenaphthene	11.764	153	350	0.02	ppm	94
15) Dibenzofuran	12.141	168	1686	0.06	ppm	100
16) Fluorene	12.812	166	615	0.02	ppm	100
18) Hexachlorobenzene	13.908	284	272	0.02	ppm	95
19) Pentachlorophenol	14.360	266	500	0.11	ppm	91
20) Phenanthrene	14.717	178	843	0.02	ppm	97
21) Anthracene	14.830	178	770	0.02	ppm	95
23) Fluoranthene	16.977	202	1130	0.02	ppm	97
24) Pyrene	17.372	202	909	0.02	ppm	96
26) Benzo[a]anthracene	19.462	228	826	0.02	ppm #	94
27) Chrysene	19.518	228	990	0.02	ppm	96
29) Benzo[b]fluoranthene	21.120	252	993	0.02	ppm	95
30) Benzo[k]fluoranthene	21.162	252	1119	0.02	ppm	95
31) Benzo[a]pyrene	21.575	252	1019	0.02	ppm	94
32) Indeno[1,2,3-cd]pyrene	23.131	276	1096	0.02	ppm	99
33) Dibenz[a,h]anthracene	23.158	278	845	0.02	ppm	75
34) Benzo[g,h,i]perylene	23.530	276	924	0.02	ppm	99
37) 1-Methylnaphthalene	9.858	142	384	0.02	ppm #	63
39) 4,6-dinitro-2-methylph...	13.027	198	338	0.07	ppm	84
40) 1,2-Diphenylhydrazine	13.170	77	484	0.01	ppm	96
41) n-nitrosodiphenylamine	13.122	169	347	0.01	ppm	85

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66186.D
Acq On : 21 Jun 2016 1:31 am
Operator : ashleyd
Sample : ic2974-0.02
Misc : op94799a,e4m2974
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 21 07:58:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

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

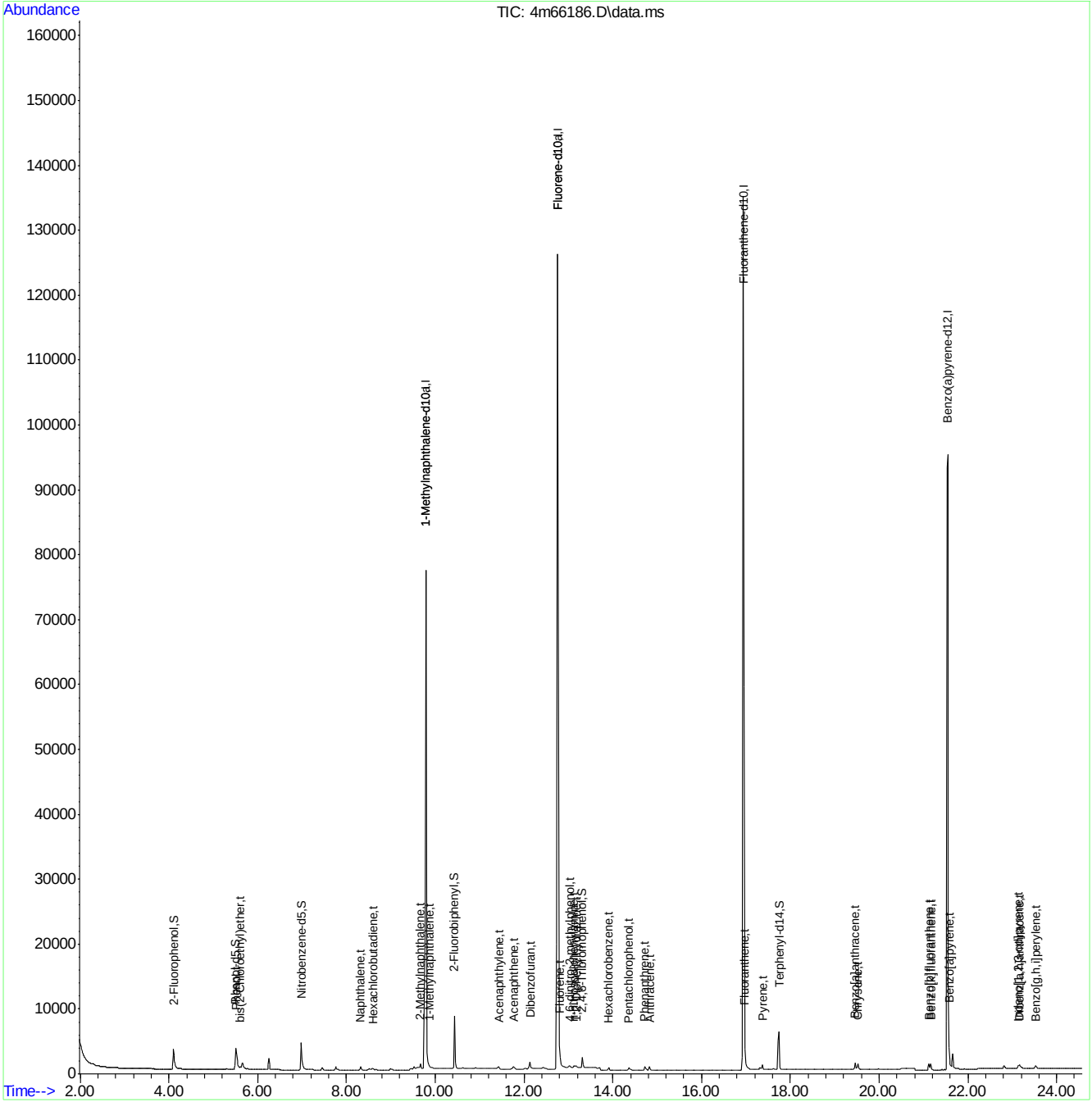
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66186.D
Acq On : 21 Jun 2016 1:31 am
Operator : ashleyd
Sample : ic2974-0.02
Misc : op94799a,e4m2974
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 21 07:58:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

4M66187.D

Manual Integrations APPROVED (compounds with "m" flag)

Nina Pandya
06/21/16 13:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66187.D
Acq On : 21 Jun 2016 2:01 am
Operator : ashleyd
Sample : ic2974-0.01
Misc : op94799a,e4m2974
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 21 07:58:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	9.786	152	52088	4.00	ppm		0.00
12) Fluorene-d10	12.764	176	96797	4.00	ppm		0.00
22) Fluoranthene-d10	16.939	212	149300	4.00	ppm		0.00
28) Benzo(a)pyrene-d12	21.533	264	120485	4.00	ppm		0.00
35) 1-Methylnaphthalene-d10a	9.786	152	52088	4.00	ppm		0.00
38) Fluorene-d10a	12.764	176	96797	4.00	ppm		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	4.110	112	1452	0.17	ppm		0.02
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.34%#				
3) Phenol-d5	5.511	99	2293	0.17	ppm		0.03
Spiked Amount 50.000			Recovery = 0.34%				
6) Nitrobenzene-d5	6.984	82	2159	0.19	ppm		0.02
Spiked Amount 50.000			Recovery = 0.38%				
11) 2-Fluorobiphenyl	10.430	172	4224	0.20	ppm		0.00
Spiked Amount 50.000			Recovery = 0.40%				
17) 2,4,6-Tribromophenol	13.313	330	681	0.14	ppm		0.00
Spiked Amount 50.000			Recovery = 0.28%				
25) Terphenyl-d14	17.749	244	3995	0.17	ppm		0.00
Spiked Amount 50.000			Recovery = 0.34%				
Target Compounds							Qvalue
4) Phenol	5.525	94	640	0.04	ppm		62
7) Naphthalene	8.314	128	363	0.01	ppm		98
9) 2-Methylnaphthalene	9.667	142	639	0.04	ppm		90
13) Acenaphthylene	11.431	152	239	0.01	ppm		93
14) Acenaphthene	11.764	153	148	0.01	ppm		99
15) Dibenzofuran	12.141	168	1318	0.05	ppm		100
16) Fluorene	12.812	166	262	0.01	ppm		97
18) Hexachlorobenzene	13.908	284	92m	0.01	ppm		
19) Pentachlorophenol	14.360	266	329	0.08	ppm		91
20) Phenanthrene	14.717	178	374	0.01	ppm		97
21) Anthracene	14.830	178	349	0.01	ppm		93
23) Fluoranthene	16.977	202	554	0.01	ppm		98
24) Pyrene	17.372	202	401	0.01	ppm		97
26) Benzo[a]anthracene	19.462	228	365	0.01	ppm	#	92
27) Chrysene	19.518	228	436	0.01	ppm		94
29) Benzo[b]fluoranthene	21.120	252	521	0.01	ppm		94
30) Benzo[k]fluoranthene	21.162	252	610	0.01	ppm		95
31) Benzo[a]pyrene	21.575	252	529	0.01	ppm		88
32) Indeno[1,2,3-cd]pyrene	23.131	276	477	0.01	ppm		92
33) Dibenz[a,h]anthracene	23.172	278	406	0.01	ppm		88
34) Benzo[g,h,i]perylene	23.530	276	455	0.01	ppm		99
37) 1-Methylnaphthalene	9.858	142	183	0.01	ppm	#	69
39) 4,6-dinitro-2-methylph...	13.051	198	165	0.04	ppm		75
40) 1,2-Diphenylhydrazine	13.170	77	192	0.01	ppm		96
41) n-nitrosodiphenylamine	13.146	169	162	0.01	ppm		82

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66187.D
Acq On : 21 Jun 2016 2:01 am
Operator : ashleyd
Sample : ic2974-0.01
Misc : op94799a,e4m2974
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 21 07:58:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

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

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

7.6.62

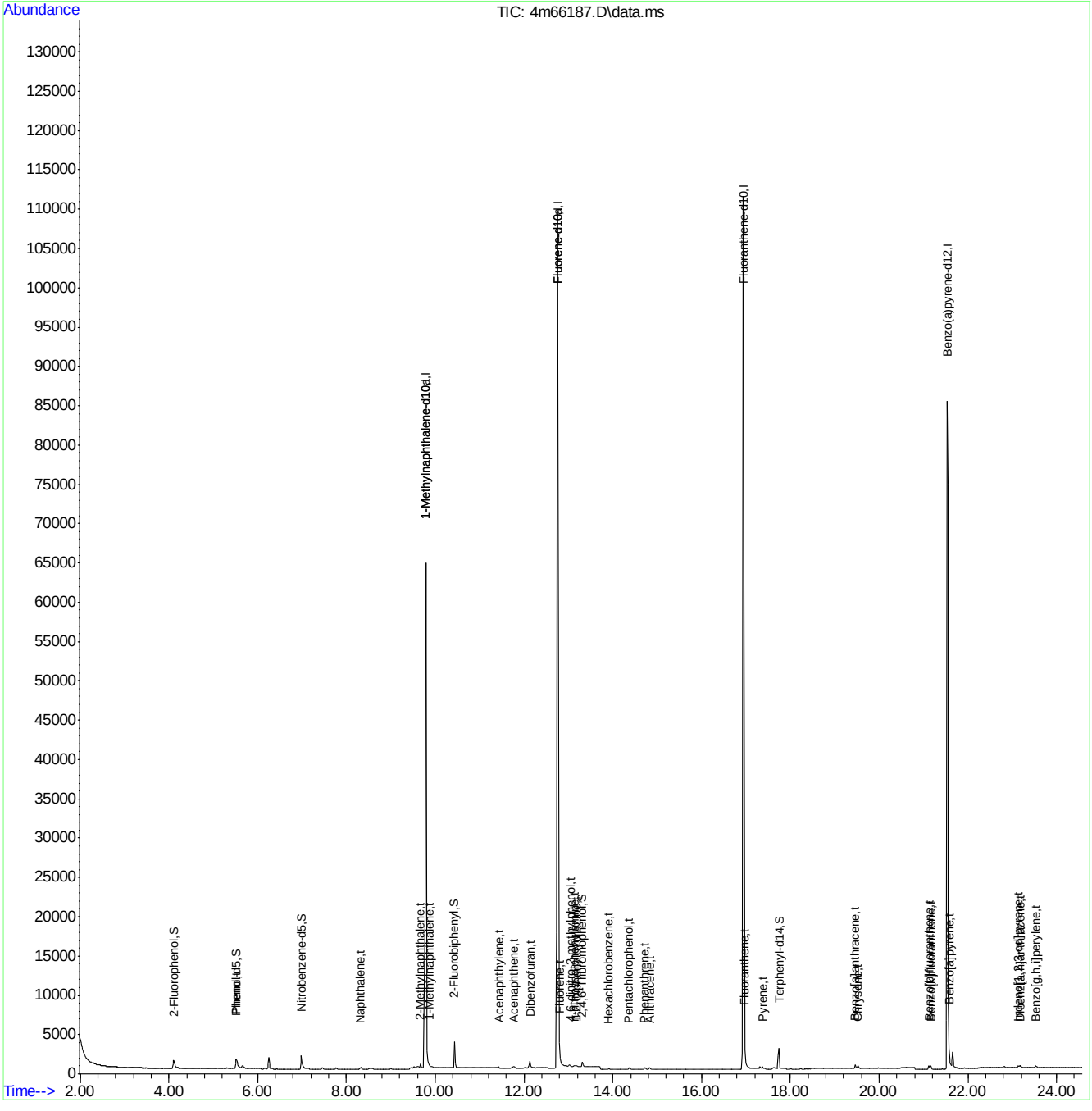
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66187.D
Acq On : 21 Jun 2016 2:01 am
Operator : ashleyd
Sample : ic2974-0.01
Misc : op94799a,e4m2974
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 21 07:58:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration



M4M2974SIM.M Tue Jun 21 07:59:03 2016 MANAGER Page: 3

Manual Integration Approval Summary

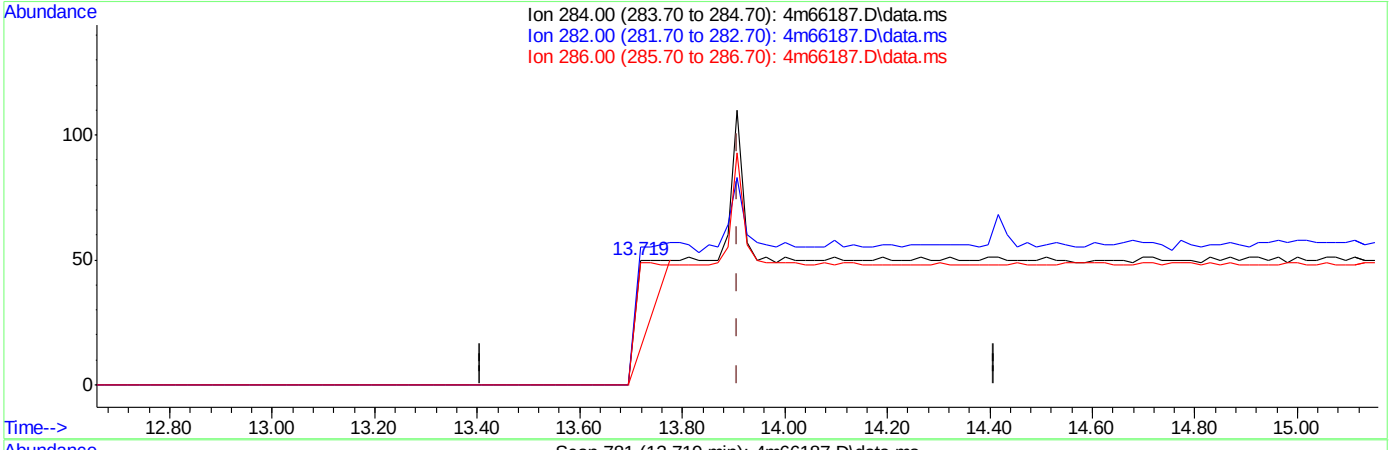
Sample Number:	E4M2974-IC2974	**Method:**	EPA 625 BY SIM
Lab FileID:	4M66187.D	**Analyst approved:**	06/21/16 08:32 Linsey Kirschmann
Injection Time:	06/21/16 02:01	**Supervisor approved:**	06/21/16 13:33 Nina Pandya

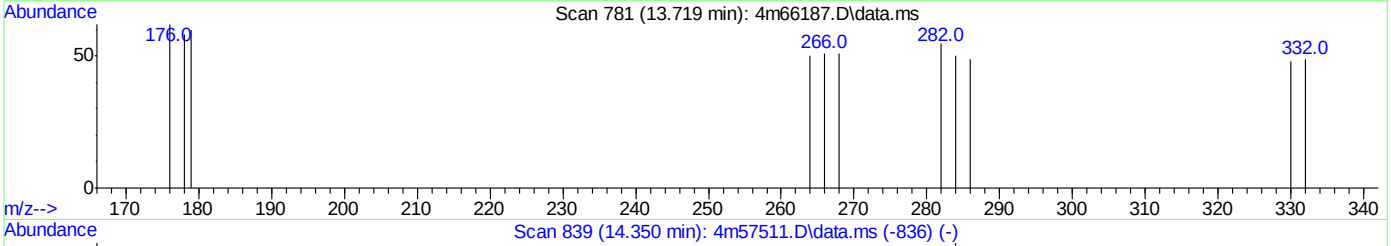
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexachlorobenzene	118-74-1		13.91	Poor instrument integration

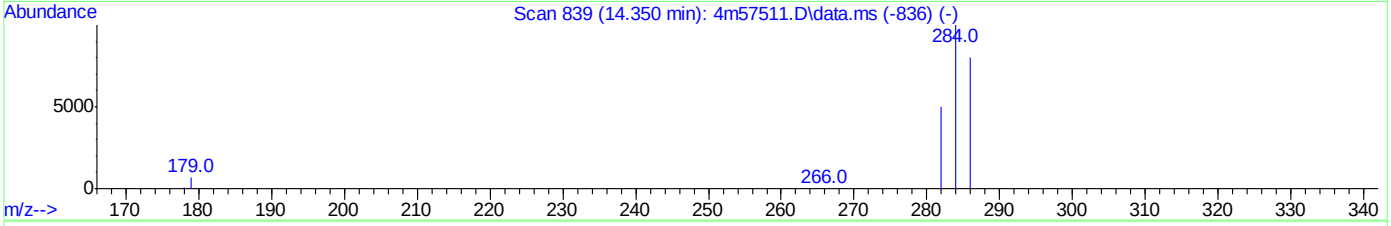
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66187.D
Acq On : 21 Jun 2016 2:01 am
Operator : ashleyd
Sample : ic2974-0.01
Misc : op94799a,e4m2974
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 21 07:53:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration







TIC: 4m66187.D\data.ms

(18) Hexachlorobenzene (t)

13.719min (-0.188) 0.01ppm

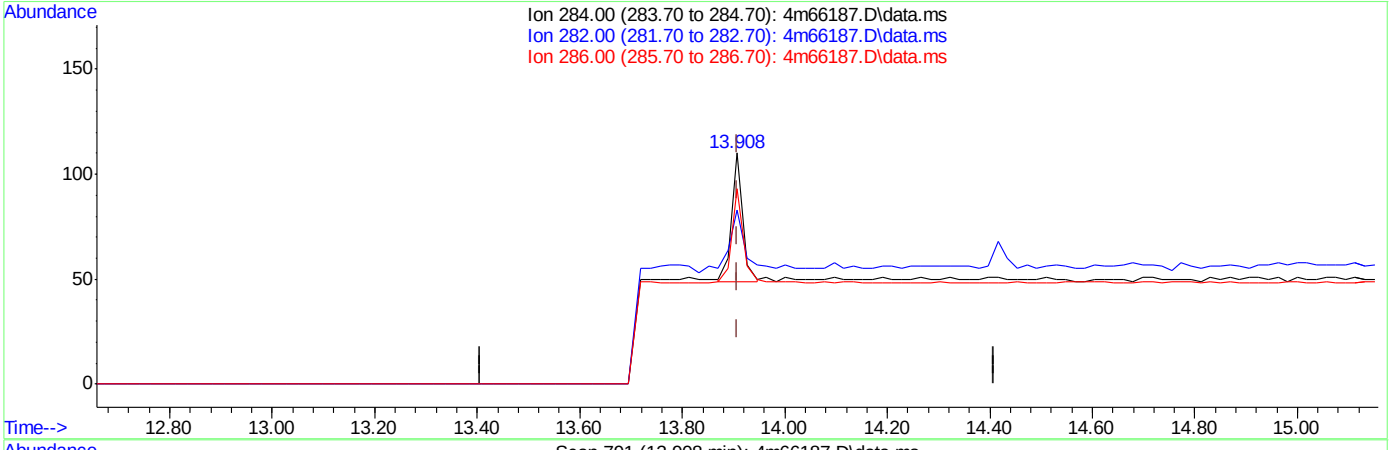
response 121

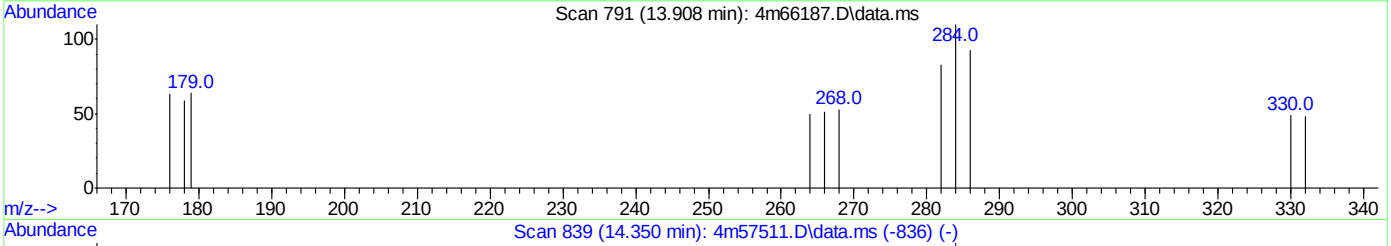
Ion	Exp%	Act%
284.00	100	100
282.00	49.10	106.00#
286.00	81.90	100.00
0.00	0.00	0.00

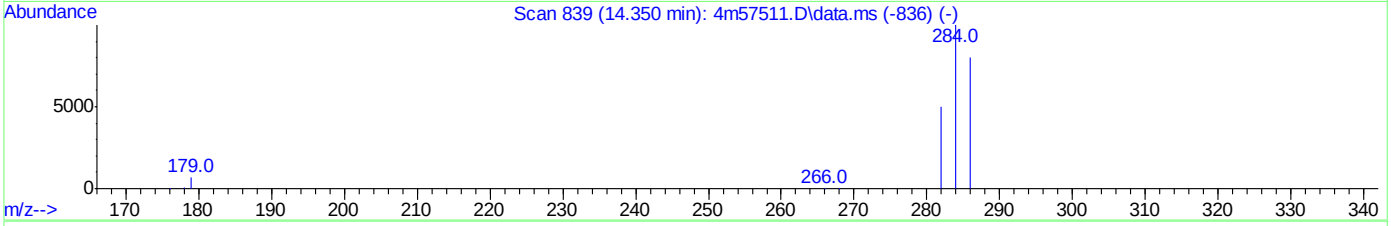
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66187.D
Acq On : 21 Jun 2016 2:01 am
Operator : ashleyd
Sample : ic2974-0.01
Misc : op94799a,e4m2974
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 21 07:53:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration







TIC: 4m66187.D\data.ms

(18) Hexachlorobenzene (t)

13.908min (-0.000) 0.01ppm m

response 92

Ion	Exp%	Act%
284.00	100	100
282.00	49.10	75.45
286.00	81.90	84.55
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66188.D
Acq On : 21 Jun 2016 2:31 am
Operator : ashleyd
Sample : ic2974-5.0
Misc : op94799a,e4m2974
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 21 07:53:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	9.786	152	59276	4.00	ppm		0.00
12) Fluorene-d10	12.764	176	118283	4.00	ppm		0.00
22) Fluoranthene-d10	16.939	212	166736	4.00	ppm		0.00
28) Benzo(a)pyrene-d12	21.547	264	138747	4.00	ppm		0.01
35) 1-Methylnaphthalene-d10a	9.786	152	59276	4.00	ppm		0.00
38) Fluorene-d10a	12.764	176	118283	4.00	ppm		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	4.090	112	886370	93.31	ppm		0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 186.62%#				
3) Phenol-d5	5.497	99	1388174	90.88	ppm		0.01
Spiked Amount 50.000			Recovery = 181.76%				
6) Nitrobenzene-d5	6.984	82	1286964	97.03	ppm		0.02
Spiked Amount 50.000			Recovery = 194.06%				
11) 2-Fluorobiphenyl	10.430	172	1589587	66.29	ppm		0.00
Spiked Amount 50.000			Recovery = 132.58%				
17) 2,4,6-Tribromophenol	13.313	330	390490	63.37	ppm		0.00
Spiked Amount 50.000			Recovery = 126.74%				
25) Terphenyl-d14	17.749	244	1801284	68.07	ppm		0.00
Spiked Amount 50.000			Recovery = 136.14%				
Target Compounds							Qvalue
4) Phenol	5.511	94	382997	23.65	ppm		84
5) bis(2-Chloroethyl)ether	5.607	93	57615	4.45	ppm	#	55
7) Naphthalene	8.314	128	200110	4.77	ppm		100
8) Hexachlorobutadiene	8.593	225	33384	4.78	ppm		99
9) 2-Methylnaphthalene	9.667	142	88068	4.86	ppm		99
10) Hexachlorocyclopentadiene	10.001	237	29396	23.91	ppm		98
13) Acenaphthylene	11.409	152	144680	4.14	ppm		100
14) Acenaphthene	11.764	153	86149	3.89	ppm		99
15) Dibenzofuran	12.141	168	132775	4.06	ppm		100
16) Fluorene	12.812	166	163295	4.14	ppm		99
18) Hexachlorobenzene	13.908	284	48933	3.97	ppm		100
19) Pentachlorophenol	14.341	266	117769	23.84	ppm		96
20) Phenanthrene	14.717	178	209846	3.96	ppm		100
21) Anthracene	14.811	178	201847	4.22	ppm		88
23) Fluoranthene	16.977	202	223507	4.21	ppm		99
24) Pyrene	17.372	202	230182	4.44	ppm		98
26) Benzo[a]anthracene	19.462	228	196135	4.47	ppm		99
27) Chrysene	19.518	228	194015	4.37	ppm		99
29) Benzo[b]fluoranthene	21.120	252	219460	4.30	ppm		99
30) Benzo[k]fluoranthene	21.162	252	201152	4.12	ppm		99
31) Benzo[a]pyrene	21.575	252	192124	4.13	ppm		98
32) Indeno[1,2,3-cd]pyrene	23.117	276	236117	4.31	ppm		100
33) Dibenz[a,h]anthracene	23.158	278	193986	4.26	ppm		96
34) Benzo[g,h,i]perylene	23.516	276	204909	4.34	ppm		100
36) 1,4-Dioxane	2.288	88	19058	4.44	ppm		86
37) 1-Methylnaphthalene	9.834	142	82152	4.92	ppm		100
39) 4,6-dinitro-2-methylph...	13.003	198	117585	23.28	ppm	#	59

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66188.D
Acq On : 21 Jun 2016 2:31 am
Operator : ashleyd
Sample : ic2974-5.0
Misc : op94799a,e4m2974
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 21 07:53:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) 1,2-Diphenylhydrazine	13.170	77	142303	3.80 ppm	97
41) n-nitrosodiphenylamine	13.122	169	99654	3.74 ppm	97

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

7.6.63

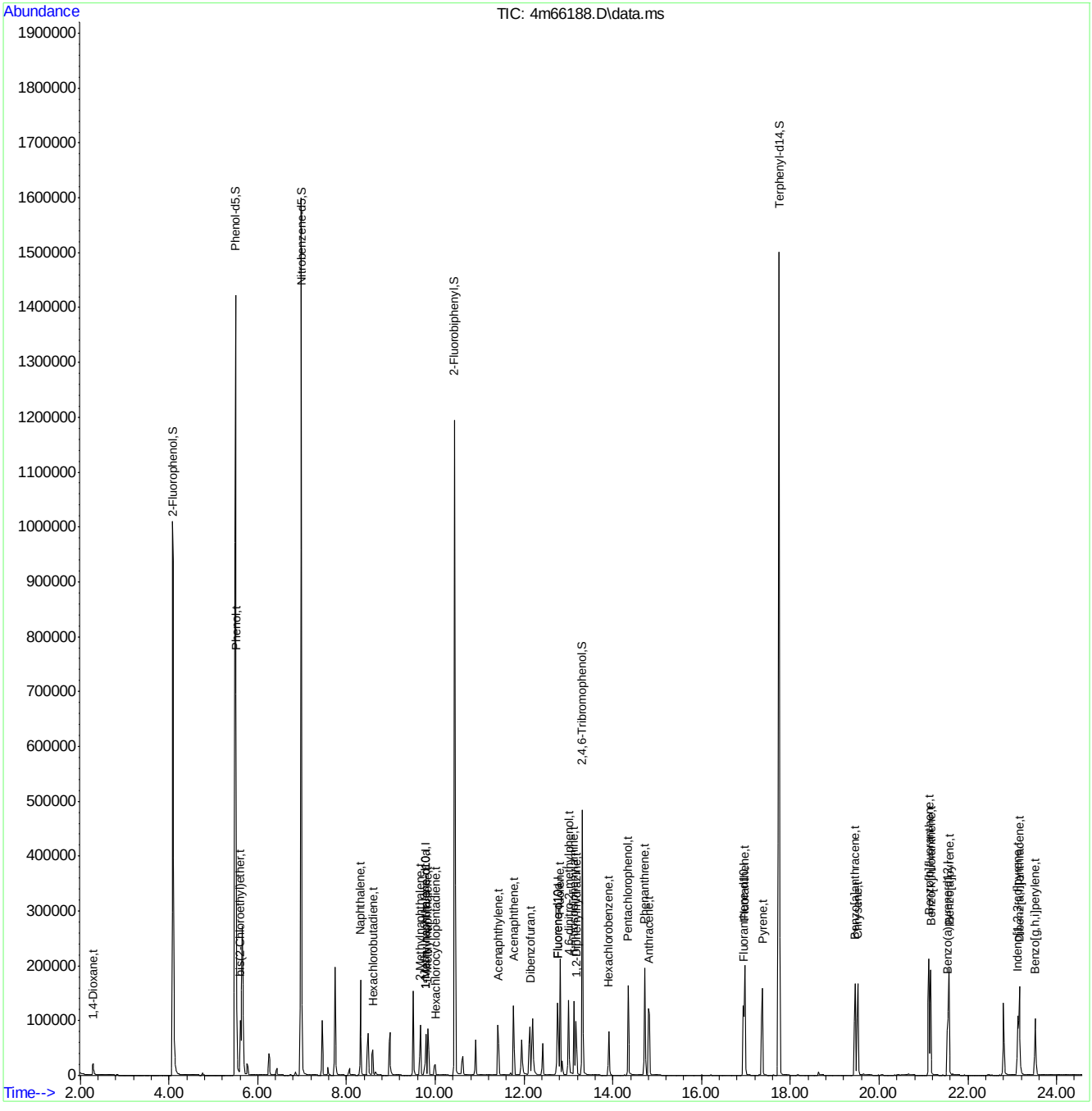
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66188.D
Acq On : 21 Jun 2016 2:31 am
Operator : ashleyd
Sample : ic2974-5.0
Misc : op94799a,e4m2974
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 21 07:53:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66189.D
Acq On : 21 Jun 2016 3:01 am
Operator : ashleyd
Sample : ic2974-2.5
Misc : op94799a,e4m2974
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 21 07:53:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.786	152	54074	4.00	ppm	0.00
12) Fluorene-d10	12.764	176	100500	4.00	ppm	0.00
22) Fluoranthene-d10	16.939	212	157255	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	21.533	264	125988	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	9.786	152	54074	4.00	ppm	0.00
38) Fluorene-d10a	12.764	176	100500	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.089	112	436515	50.37	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 100.74%#			
3) Phenol-d5	5.483	99	668228	47.96	ppm	0.00
Spiked Amount 50.000			Recovery = 95.92%			
6) Nitrobenzene-d5	6.968	82	590009	48.76	ppm	0.00
Spiked Amount 50.000			Recovery = 97.52%			
11) 2-Fluorobiphenyl	10.430	172	966520	44.19	ppm	0.00
Spiked Amount 50.000			Recovery = 88.38%			
17) 2,4,6-Tribromophenol	13.313	330	225826	43.13	ppm	0.00
Spiked Amount 50.000			Recovery = 86.26%			
25) Terphenyl-d14	17.749	244	1074721	43.06	ppm	0.00
Spiked Amount 50.000			Recovery = 86.12%			
Target Compounds						Qvalue
4) Phenol	5.511	94	184009	12.46	ppm	92
5) bis(2-Chloroethyl)ether	5.607	93	27900	2.36	ppm	82
7) Naphthalene	8.314	128	95674	2.50	ppm	99
8) Hexachlorobutadiene	8.593	225	15922	2.50	ppm	98
9) 2-Methylnaphthalene	9.667	142	41641	2.52	ppm	100
10) Hexachlorocyclopentadiene	10.001	237	10207	9.10	ppm	99
13) Acenaphthylene	11.409	152	68190	2.30	ppm	99
14) Acenaphthene	11.764	153	42532	2.26	ppm	100
15) Dibenzofuran	12.141	168	60896	2.19	ppm	100
16) Fluorene	12.812	166	74454	2.22	ppm	97
18) Hexachlorobenzene	13.908	284	22746	2.17	ppm	97
19) Pentachlorophenol	14.341	266	51313	12.22	ppm	94
20) Phenanthrene	14.717	178	100400	2.23	ppm	99
21) Anthracene	14.811	178	93614	2.30	ppm	88
23) Fluoranthene	16.977	202	106922	2.14	ppm	99
24) Pyrene	17.372	202	107550	2.20	ppm	99
26) Benzo[a]anthracene	19.462	228	86425	2.09	ppm	99
27) Chrysene	19.518	228	89562	2.14	ppm	98
29) Benzo[b]fluoranthene	21.120	252	103181	2.22	ppm	99
30) Benzo[k]fluoranthene	21.148	252	98042	2.21	ppm	88
31) Benzo[a]pyrene	21.575	252	92339	2.19	ppm	98
32) Indeno[1,2,3-cd]pyrene	23.117	276	110721	2.22	ppm	100
33) Dibenz[a,h]anthracene	23.158	278	91992	2.22	ppm	97
34) Benzo[g,h,i]perylene	23.516	276	97040	2.26	ppm	100
36) 1,4-Dioxane	2.288	88	8751	2.24	ppm	78
37) 1-Methylnaphthalene	9.834	142	40647	2.67	ppm	97
39) 4,6-dinitro-2-methylph...	13.003	198	61494	14.33	ppm	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66189.D
Acq On : 21 Jun 2016 3:01 am
Operator : ashleyd
Sample : ic2974-2.5
Misc : op94799a,e4m2974
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 21 07:53:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) 1,2-Diphenylhydrazine	13.170	77	74229	2.34 ppm	99
41) n-nitrosodiphenylamine	13.122	169	54024	2.39 ppm	97

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

7.6.64

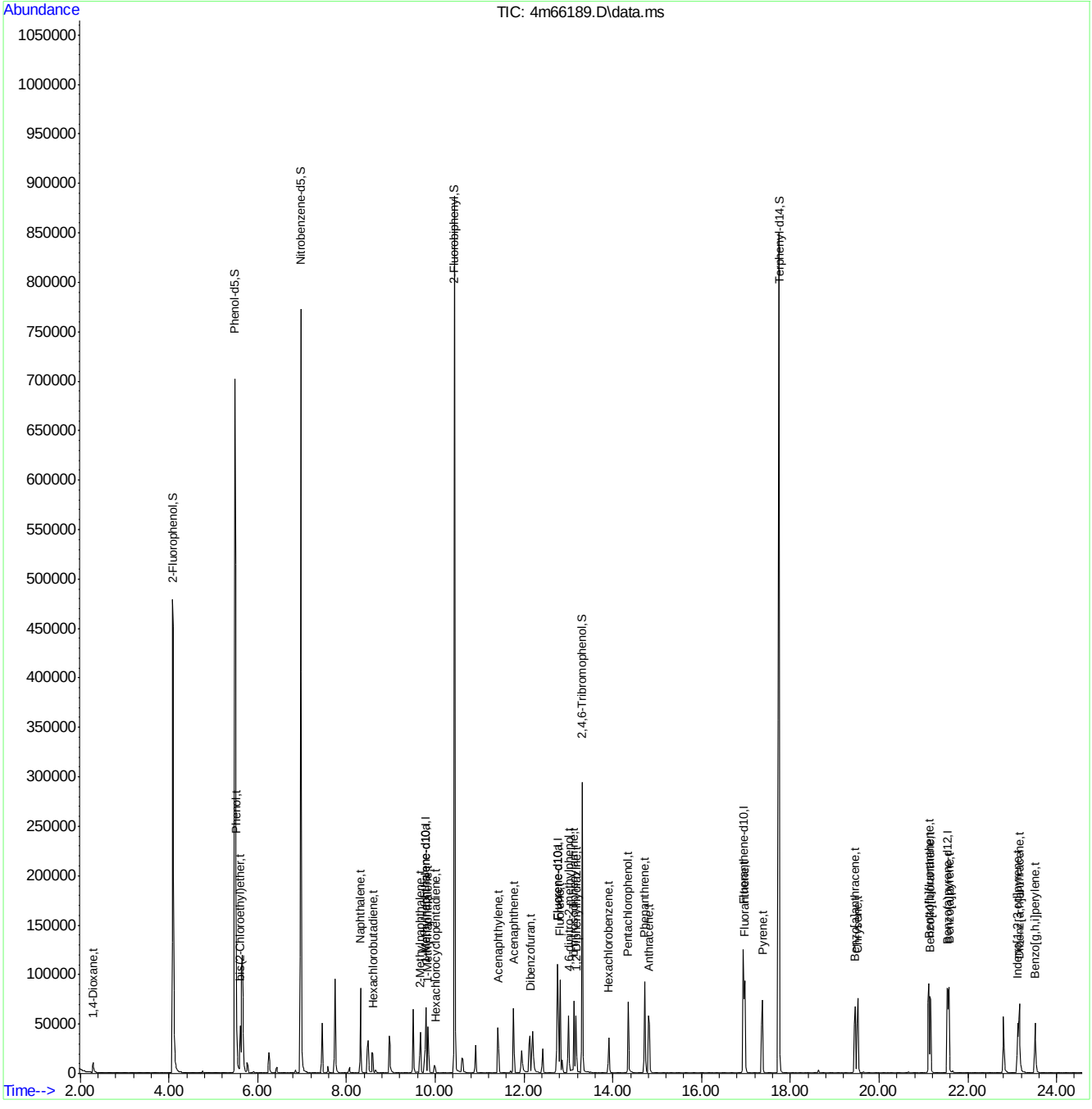
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66189.D
Acq On : 21 Jun 2016 3:01 am
Operator : ashleyd
Sample : ic2974-2.5
Misc : op94799a,e4m2974
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 21 07:53:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 07:53:27 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66190.D
Acq On : 21 Jun 2016 3:30 am
Operator : ashleyd
Sample : icv2974-1.0
Misc : op94799a,e4m2974
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 21 08:27:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.786	152	66763	4.00	ppm	0.00
12) Fluorene-d10	12.764	176	117196	4.00	ppm	0.00
22) Fluoranthene-d10	16.939	212	179820	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	21.534	264	128092	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	9.786	152	66763	4.00	ppm	0.00
38) Fluorene-d10a	12.764	176	117196	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
3) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
6) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
11) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
17) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
5) bis(2-Chloroethyl)ether	5.607	93	12366	0.97	ppm	96
7) Naphthalene	8.314	128	44242	0.95	ppm	99
8) Hexachlorobutadiene	8.577	225	7565	0.95	ppm	72
9) 2-Methylnaphthalene	9.667	142	17698	0.80	ppm	98
10) Hexachlorocyclopentadiene	10.001	237	979	0.91	ppm	97
13) Acenaphthylene	11.409	152	29207	0.94	ppm	99
14) Acenaphthene	11.764	153	18887	0.98	ppm	99
15) Dibenzofuran	12.141	168	27377	0.87	ppm	100
16) Fluorene	12.812	166	31615	0.91	ppm	98
18) Hexachlorobenzene	13.908	284	10114	0.87	ppm	97
20) Phenanthrene	14.717	178	43334	0.93	ppm	99
21) Anthracene	14.812	178	37045	0.86	ppm	88
23) Fluoranthene	16.977	202	44839	0.85	ppm	98
24) Pyrene	17.372	202	44548	0.87	ppm	99
26) Benzo[a]anthracene	19.462	228	35984	0.81	ppm	99
27) Chrysene	19.519	228	36630	0.79	ppm	98
29) Benzo[b]fluoranthene	21.121	252	37951	0.85	ppm	98
30) Benzo[k]fluoranthene	21.162	252	38594	0.90	ppm	97
31) Benzo[a]pyrene	21.575	252	36802	0.92	ppm	98
32) Indeno[1,2,3-cd]pyrene	23.117	276	43358	0.92	ppm	99
33) Dibenz[a,h]anthracene	23.158	278	35154	0.90	ppm	99
34) Benzo[g,h,i]perylene	23.516	276	36971	0.90	ppm	100
36) 1,4-Dioxane	2.299	88	3790	0.82	ppm	87
40) 1,2-Diphenylhydrazine	13.170	77	28295	0.87	ppm	100
41) n-nitrosodiphenylamine	13.122	169	20254	0.88	ppm	98

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66190.D
Acq On : 21 Jun 2016 3:30 am
Operator : ashleyd
Sample : icv2974-1.0
Misc : op94799a,e4m2974
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 21 08:27:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration

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

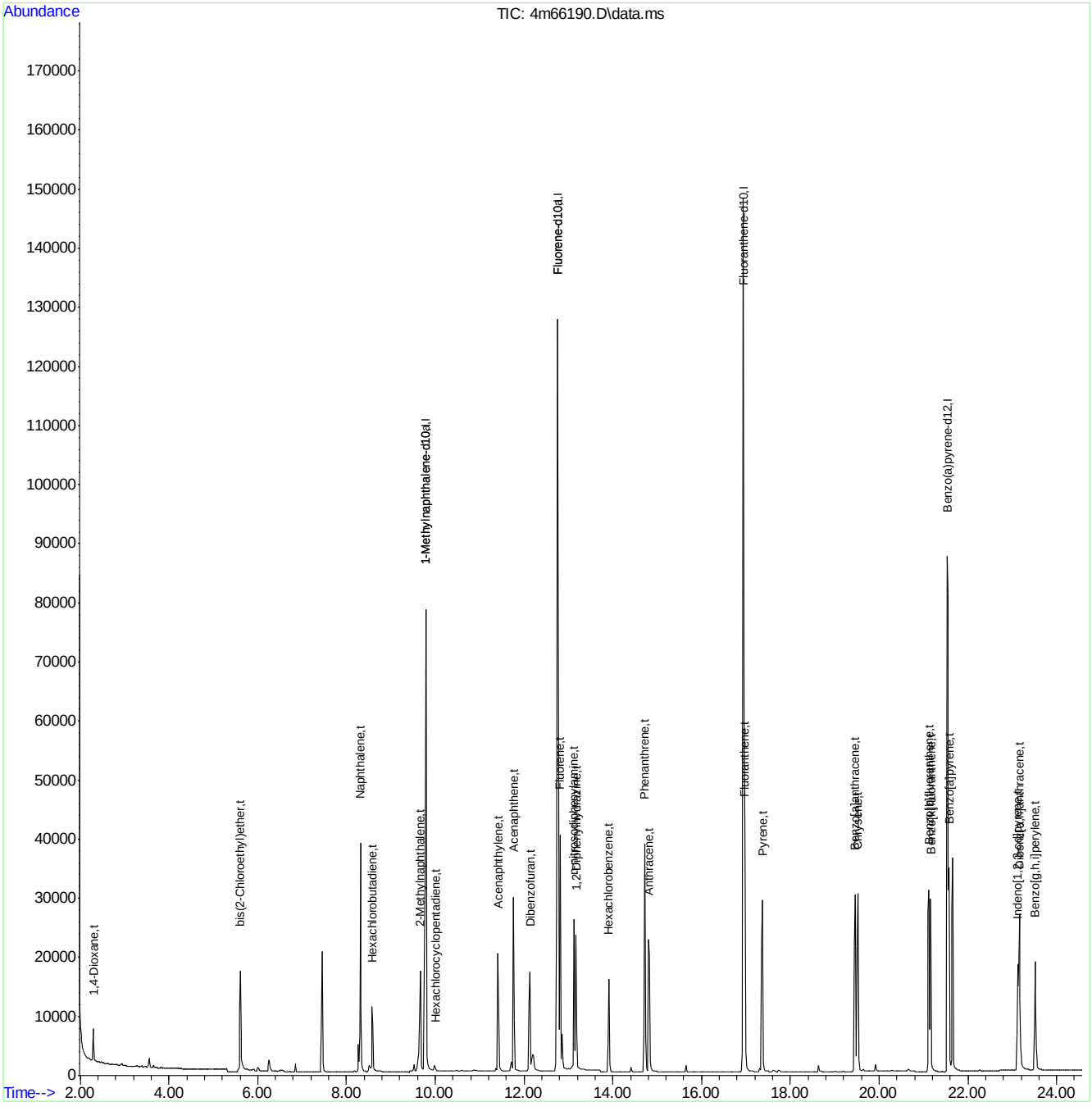
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66190.D
Acq On : 21 Jun 2016 3:30 am
Operator : ashleyd
Sample : icv2974-1.0
Misc : op94799a,e4m2974
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 21 08:27:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66191.D
Acq On : 21 Jun 2016 4:00 am
Operator : ashleyd
Sample : icv2974-1.0
Misc : op94799a,e4m2974
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 21 08:06:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	9.786	152	50054	4.00	ppm	0.00
12) Fluorene-d10	12.764	176	78597	4.00	ppm	0.00
22) Fluoranthene-d10	16.939	212	127549	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	21.533	264	101417	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	9.786	152	50054	4.00	ppm	0.00
38) Fluorene-d10a	12.764	176	78597	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
3) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
6) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
11) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
17) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
4) Phenol	5.511	94	69922	5.14	ppm	85
19) Pentachlorophenol	14.341	266	16205	5.66	ppm	99
39) 4,6-dinitro-2-methylph...	13.003	198	18235	4.84	ppm	97

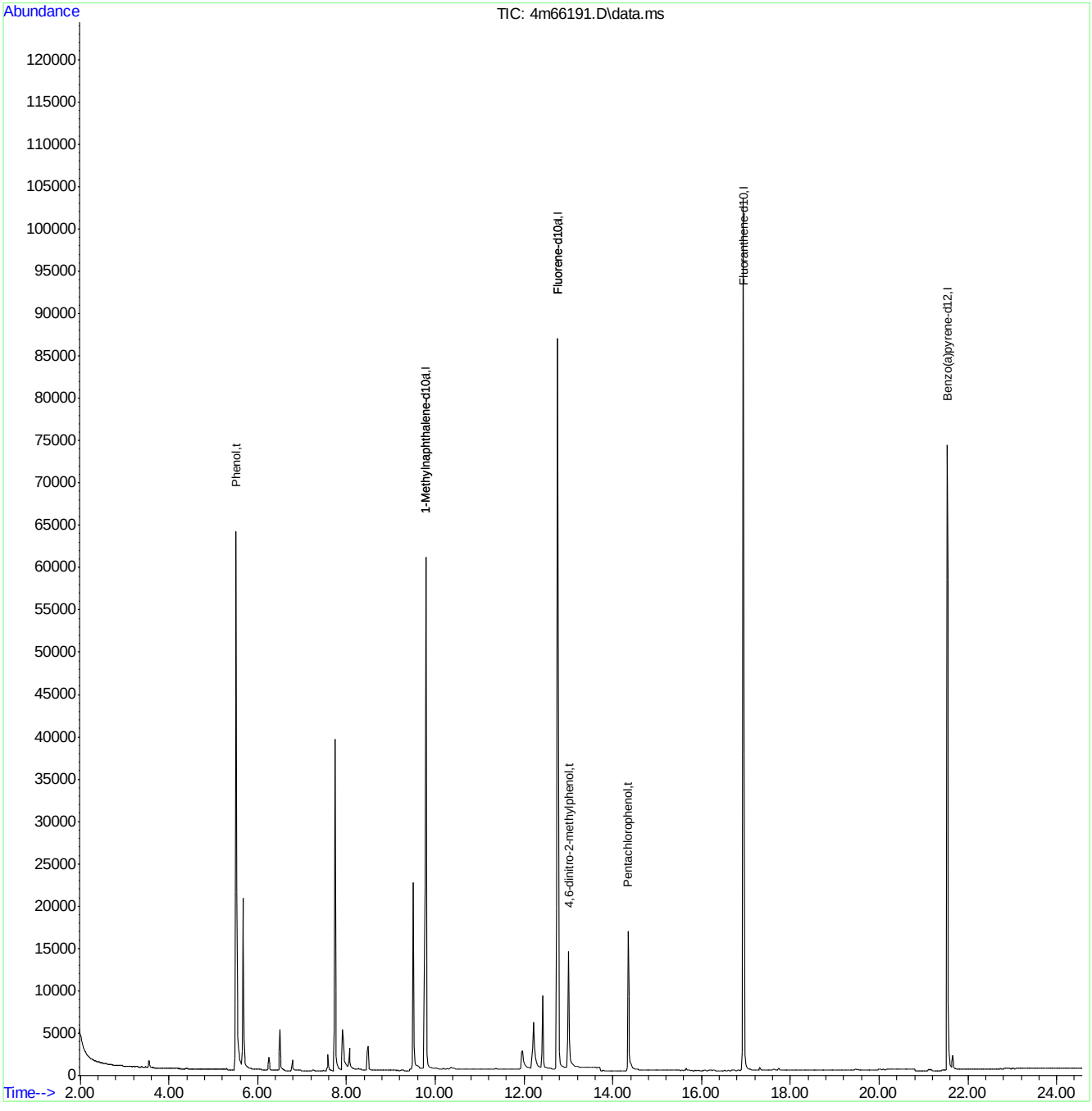
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2974\
Data File : 4m66191.D
Acq On : 21 Jun 2016 4:00 am
Operator : ashleyd
Sample : icv2974-1.0
Misc : op94799a,e4m2974
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 21 08:06:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66577.D
Acq On : 5 Jul 2016 10:11 am
Operator : linseyk
Sample : cc2974-.5
Misc : op94994a,e4m2995
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 05 15:29:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	9.715	152	63959	4.00	ppm		-0.07
12) Fluorene-d10	12.696	176	71109	4.00	ppm		-0.07
22) Fluoranthene-d10	16.878	212	165691	4.00	ppm		-0.06
28) Benzo(a)pyrene-d12	21.473	264	140017	4.00	ppm		-0.05
35) 1-Methylnaphthalene-d10a	9.715	152	63959	4.00	ppm		-0.07
38) Fluorene-d10a	12.696	176	71109	4.00	ppm		-0.07
System Monitoring Compounds							
2) 2-Fluorophenol	4.090	112	81447	7.99	ppm		0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 15.98%				
3) Phenol-d5	5.525	99	132096	8.22	ppm		0.04
Spiked Amount 50.000			Recovery = 16.44%				
6) Nitrobenzene-d5	6.907	82	121605	8.51	ppm		-0.06
Spiked Amount 50.000			Recovery = 17.02%				
11) 2-Fluorobiphenyl	10.359	172	196691	7.64	ppm		-0.07
Spiked Amount 50.000			Recovery = 15.28%				
17) 2,4,6-Tribromophenol	13.266	330	39463	11.91	ppm		-0.05
Spiked Amount 50.000			Recovery = 23.82%				
25) Terphenyl-d14	17.668	244	220367	9.42	ppm		-0.08
Spiked Amount 50.000			Recovery = 18.84%				
Target Compounds							Qvalue
4) Phenol	5.539	94	36156	2.08	ppm		43
5) bis(2-Chloroethyl)ether	5.552	93	5731	0.47	ppm		76
7) Naphthalene	8.252	128	18156	0.41	ppm		99
8) Hexachlorobutadiene	8.515	225	3213	0.42	ppm		89
9) 2-Methylnaphthalene	9.595	142	9211	0.44	ppm		92
10) Hexachlorocyclopentadiene	9.906	237	1011	0.94	ppm	#	46
13) Acenaphthylene	11.361	152	12850	0.68	ppm		88
14) Acenaphthene	11.697	153	8393	0.72	ppm		96
15) Dibenzofuran	12.075	168	11625	0.61	ppm		100
16) Fluorene	12.740	166	13577	0.65	ppm		95
18) Hexachlorobenzene	13.827	284	4643	0.66	ppm		89
19) Pentachlorophenol	14.317	266	7123	2.75	ppm		80
20) Phenanthrene	14.656	178	18637	0.66	ppm		96
21) Anthracene	14.750	178	18559	0.71	ppm		94
23) Fluoranthene	16.915	202	20582	0.43	ppm		96
24) Pyrene	17.292	202	21381	0.45	ppm		85
26) Benzo[a]anthracene	19.382	228	20088	0.49	ppm		99
27) Chrysene	19.438	228	19060	0.45	ppm		94
29) Benzo[b]fluoranthene	21.047	252	24703	0.51	ppm		99
30) Benzo[k]fluoranthene	21.088	252	18875	0.40	ppm		98
31) Benzo[a]pyrene	21.501	252	20495	0.47	ppm		98
32) Indeno[1,2,3-cd]pyrene	23.043	276	25503	0.50	ppm		98
33) Dibenz[a,h]anthracene	23.071	278	21638	0.51	ppm		97
34) Benzo[g,h,i]perylene	23.429	276	22301	0.50	ppm		97
36) 1,4-Dioxane	2.247	88	2508	0.54	ppm	#	12
37) 1-Methylnaphthalene	9.786	142	7744	0.40	ppm	#	66
39) 4,6-dinitro-2-methylph...	12.955	198	7686	2.50	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66577.D
Acq On : 5 Jul 2016 10:11 am
Operator : linseyk
Sample : cc2974-.5
Misc : op94994a,e4m2995
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 05 15:29:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 1,2-Diphenylhydrazine	13.098	77	13097	0.67	ppm		97
41) n-nitrosodiphenylamine	13.075	169	8647	0.62	ppm	#	71

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

7.6.67

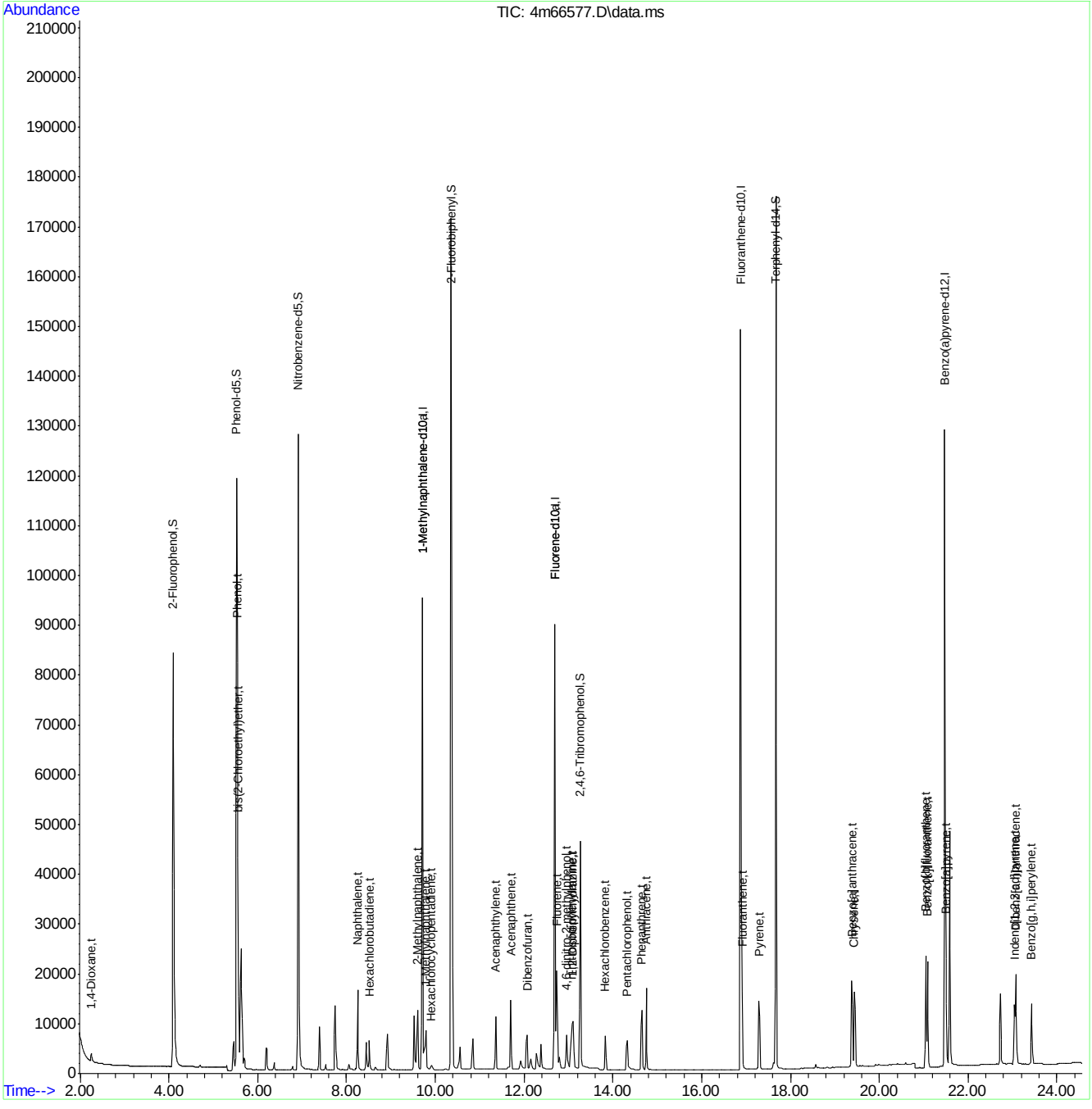
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2995\
Data File : 4m66577.D
Acq On : 5 Jul 2016 10:11 am
Operator : linseyk
Sample : cc2974-.5
Misc : op94994a,e4m2995
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 05 15:29:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2974SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Jun 21 08:02:51 2016
Response via : Initial Calibration



M4M2974SIM.M Tue Jul 05 15:30:01 2016 MANAGER Page: 3

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/06/16 18:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16669.D
Acq On : 6 Jun 2016 10:09 am
Operator : linseyk
Sample : ic887-.5
Misc : op94376a,e4p887
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 06 14:58:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.761	150	153971	4.00	ppm	-0.02
13) Fluorene-d10	10.709	176	270211	4.00	ppm	0.00
23) Fluoranthene-d10	14.903	212	351043	4.00	ppm	-0.02
33) Benzo(a)pyrene-d12	19.526	264	250702	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.628	112	223858	10.14	ppm	0.00
Spiked Amount 50.000			Recovery = 20.28%			
4) Phenol-d5	3.750	99	431626	11.02	ppm	0.00
Spiked Amount 50.000			Recovery = 22.04%			
7) Nitrobenzene-d5	5.081	82	280913	9.82	ppm	0.00
Spiked Amount 50.000			Recovery = 19.64%			
14) 2-Fluorobiphenyl	8.425	172	741019	14.76	ppm	0.00
Spiked Amount 50.000			Recovery = 29.52%			
22) 2,4,6-Tribromophenol	11.236	330	84025	12.73	ppm	0.00
Spiked Amount 50.000			Recovery = 25.46%			
30) Terphenyl-d14	15.764	244	505399	10.03	ppm	0.00
Spiked Amount 50.000			Recovery = 20.06%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.422	88	7232	0.61	ppm #	47
5) Phenol	3.768	94	110286	2.55	ppm #	90
6) bis(2-Chloroethyl)ether	3.854	93	17240	0.56	ppm #	73
8) Naphthalene	6.343	128	56010	0.54	ppm	97
9) Hexachlorobutadiene	6.648	225	9132	0.51	ppm	93
10) 2-Methylnaphthalene	7.646	141	27259	0.57	ppm	92
11) 1-Methylnaphthalene	7.829	141	35343	0.57	ppm	91
12) Hexachlorocyclopentadiene	8.013	237	12502	0.86	ppm	95
15) Acenaphthylene	9.365	152	56972	0.68	ppm	96
16) Acenaphthene	9.731	153	31936	0.54	ppm	92
17) Dibenzofuran	10.075	168	50345	0.66	ppm	83
18) Fluorene	10.758	166	37057	0.53	ppm	93
19) 4,6-dinitro-2-methylph...	10.957	198	10213	2.18	ppm	97
20) n-nitrosodiphenylamine	11.081	169	23017	0.70	ppm	89
21) 1,2-Diphenylhydrazine	11.131	77	36374	0.58	ppm	90
24) Hexachlorobenzene	11.840	284	10945	0.52	ppm #	68
25) Pentachlorophenol	12.287	266	19260	2.27	ppm	96
26) Phenanthrene	12.631	178	54274	0.50	ppm	98
27) Anthracene	12.717	178	50089	0.51	ppm	87
28) Fluoranthene	14.938	202	57572	0.52	ppm	98
29) Pyrene	15.333	202	57518	0.51	ppm	98
31) Benzo[a]anthracene	17.452	228	42623	0.51	ppm	91
32) Chrysene	17.510	228	48895	0.51	ppm	96
34) Benzo[b]fluoranthene	19.112	252	50063	0.54	ppm	97
35) Benzo[k]fluoranthene	19.147	252	41380	0.50	ppm	91
36) Benzo[a]pyrene	19.561	252	43937	0.54	ppm	97
37) Indeno[1,2,3-cd]pyrene	20.977	276	50056m	0.52	ppm	
38) Dibenz[a,h]anthracene	21.015	278	40869	0.53	ppm	98
39) Benzo[g,h,i]perylene	21.265	276	44005	0.53	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16669.D
Acq On : 6 Jun 2016 10:09 am
Operator : linseyk
Sample : ic887-.5
Misc : op94376a,e4p887
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 06 14:58:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

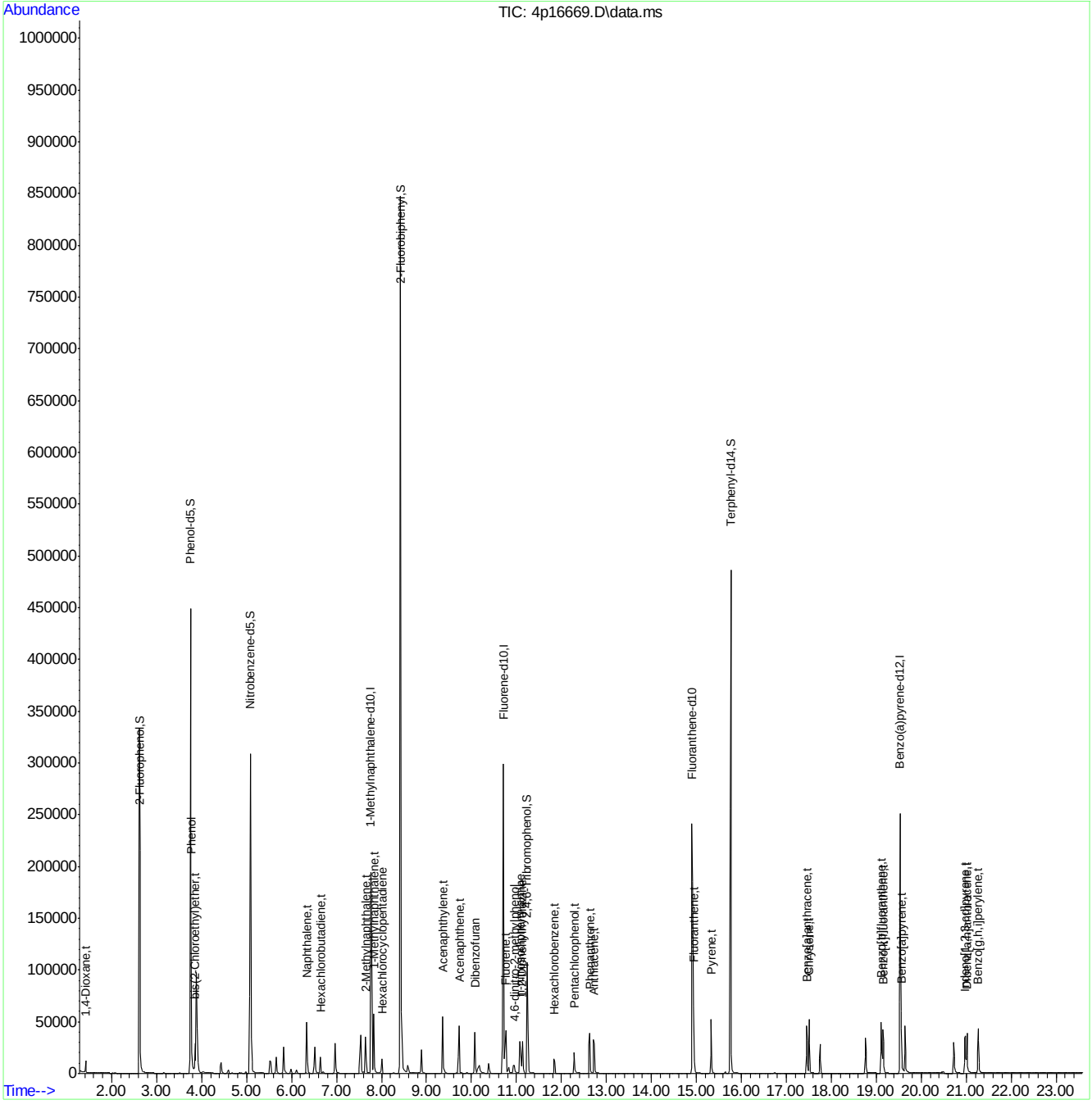
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16669.D
Acq On : 6 Jun 2016 10:09 am
Operator : linseyk
Sample : ic887-.5
Misc : op94376a,e4p887
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 06 14:58:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration



M4P887SIM.M Mon Jun 06 14:59:02 2016 Page: 3

Manual Integration Approval Summary

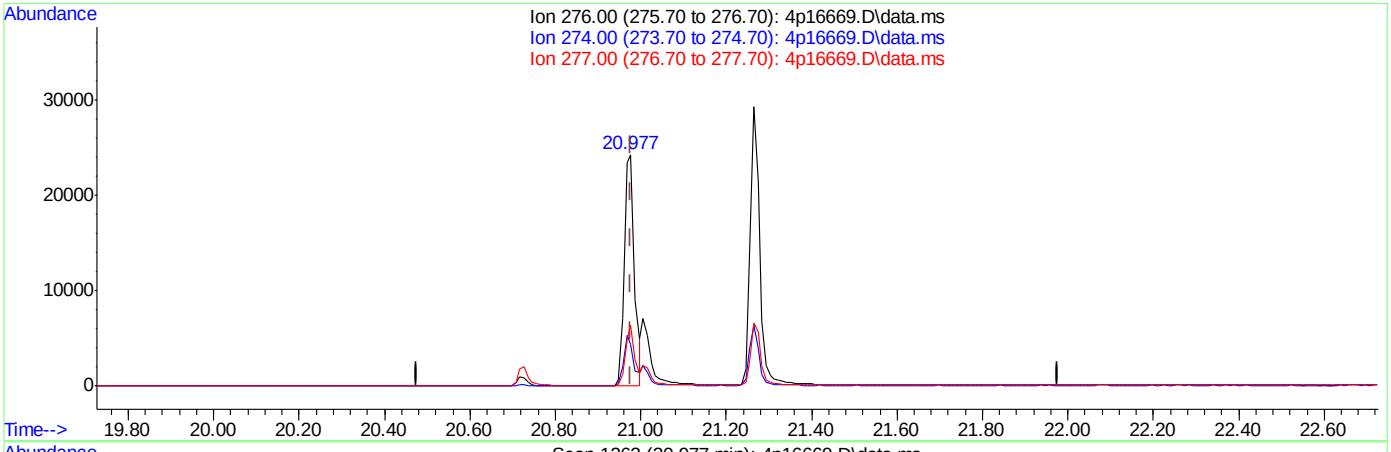
Sample Number:	E4P887-IC887	**Method:**	SW846 8270D BY SIM
Lab FileID:	4P16669.D	**Analyst approved:**	06/06/16 15:58 Linsey Kirschmann
Injection Time:	06/06/16 10:09	**Supervisor approved:**	06/06/16 18:07 Kristi Schollenberger

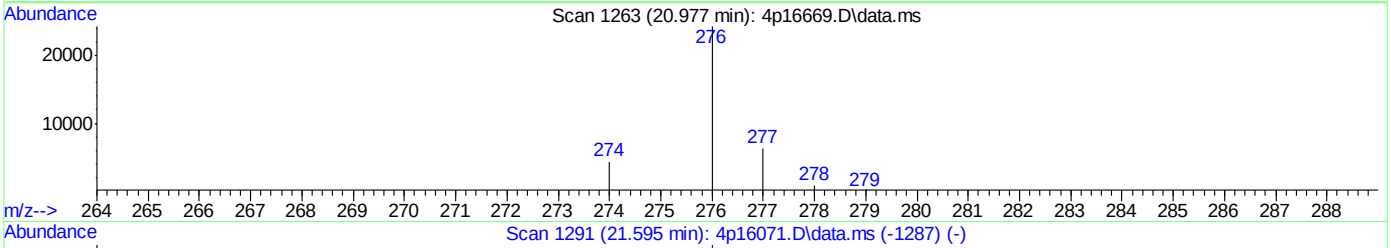
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.98	Split peak

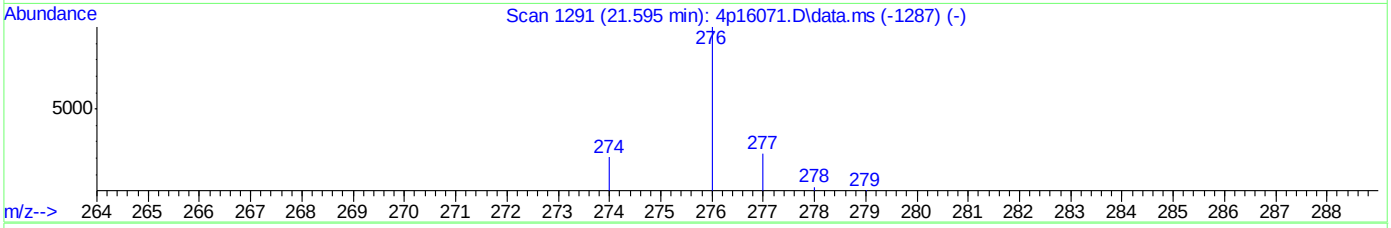
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16669.D
Acq On : 6 Jun 2016 10:09 am
Operator : linseyk
Sample : ic887-.5
Misc : op94376a,e4p887
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 06 14:53:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16669.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.977min (+0.000) 0.41ppm

response 39745

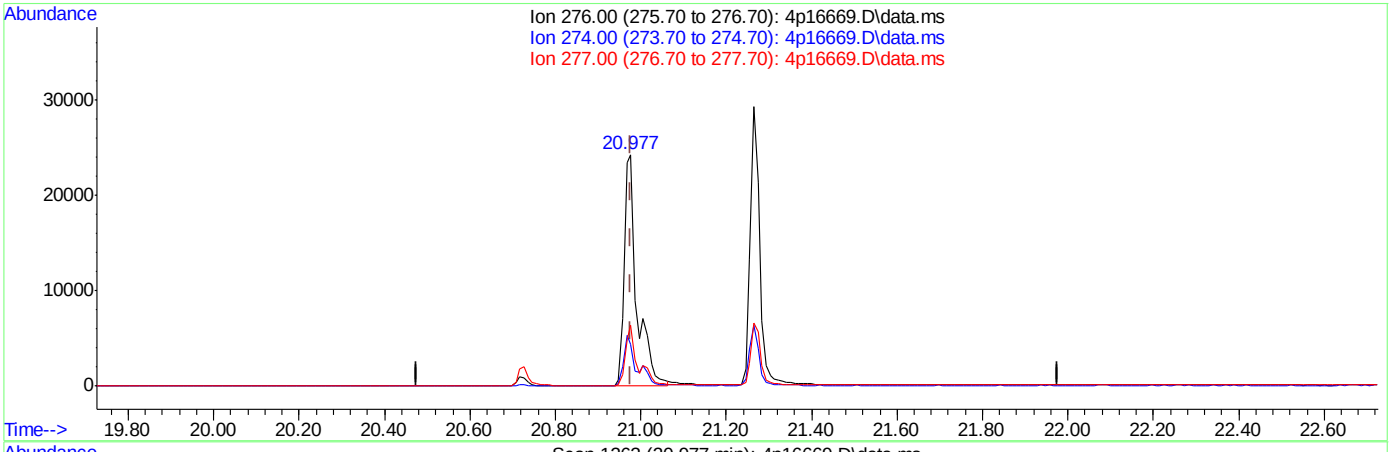
Ion	Exp%	Act%
276.00	100	100
274.00	18.30	16.52
277.00	25.70	26.01
0.00	0.00	0.00

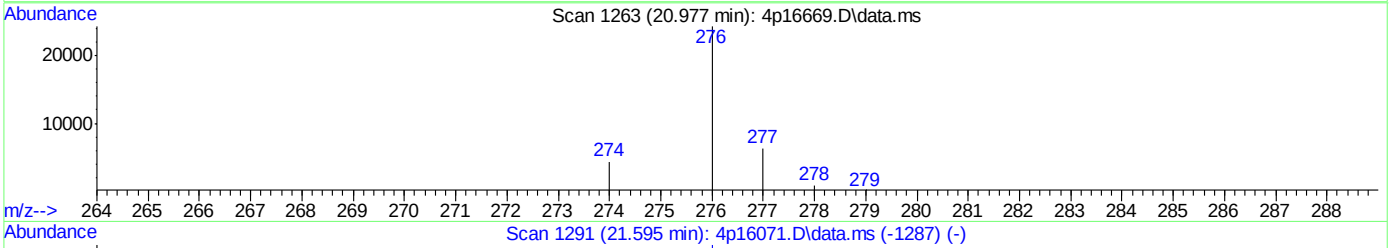
SGS ACCUTEST JC22613

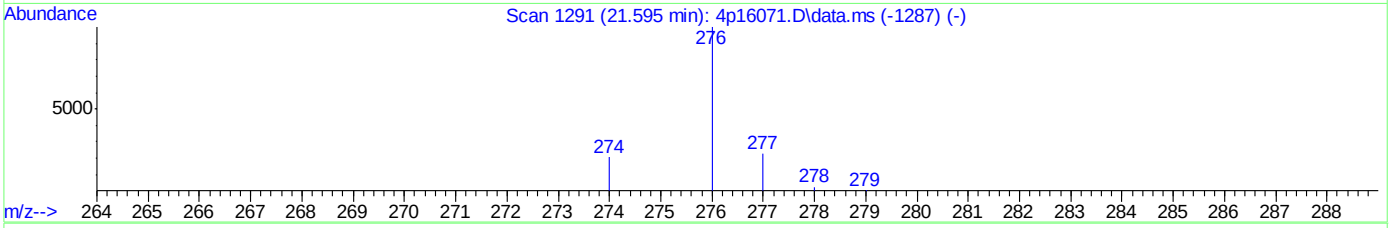
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16669.D
Acq On : 6 Jun 2016 10:09 am
Operator : linseyk
Sample : ic887-.5
Misc : op94376a,e4p887
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 06 14:53:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16669.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.977min (+0.000) 0.52ppm m

response 50056

Ion	Exp%	Act%
276.00	100	100
274.00	18.30	17.88
277.00	25.70	26.32
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/06/16 18:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16670.D
Acq On : 6 Jun 2016 10:50 am
Operator : linseyk
Sample : icc887-1
Misc : op94376a,e4p887
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 06 14:59:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.783	150	136500	4.00	ppm	0.00
13) Fluorene-d10	10.709	176	284719	4.00	ppm	0.00
23) Fluoranthene-d10	14.920	212	320892	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.526	264	229091	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.628	112	391348	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
4) Phenol-d5	3.750	99	694640	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
7) Nitrobenzene-d5	5.081	82	507125	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
14) 2-Fluorobiphenyl	8.425	172	1057858	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
22) 2,4,6-Tribromophenol	11.236	330	139073	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
30) Terphenyl-d14	15.764	244	921642	20.00	ppm	0.00
Spiked Amount 50.000			Recovery = 40.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.421	88	10560	1.00	ppm	100
5) Phenol	3.767	94	191913	5.00	ppm	100
6) bis(2-Chloroethyl)ether	3.853	93	27239	1.00	ppm	100
8) Naphthalene	6.343	128	91410	1.00	ppm	100
9) Hexachlorobutadiene	6.648	225	15791	1.00	ppm	100
10) 2-Methylnaphthalene	7.646	141	42437	1.00	ppm	100
11) 1-Methylnaphthalene	7.829	141	54825	1.00	ppm	100
12) Hexachlorocyclopentadiene	8.013	237	25756	2.00	ppm	100
15) Acenaphthylene	9.365	152	88156	1.00	ppm	100
16) Acenaphthene	9.731	153	62653	1.00	ppm	100
17) Dibenzofuran	10.075	168	80165	1.00	ppm	100
18) Fluorene	10.758	166	74135	1.00	ppm	100
19) 4,6-dinitro-2-methylph...	10.957	198	24665	5.00	ppm	100
20) n-nitrosodiphenylamine	11.081	169	34488	1.00	ppm	100
21) 1,2-Diphenylhydrazine	11.131	77	65796	1.00	ppm	100
24) Hexachlorobenzene	11.857	284	19156	1.00	ppm	100
25) Pentachlorophenol	12.287	266	38855	5.00	ppm	100
26) Phenanthrene	12.631	178	98291	1.00	ppm	100
27) Anthracene	12.735	178	90621	1.00	ppm	100
28) Fluoranthene	14.938	202	101901	1.00	ppm	100
29) Pyrene	15.333	202	102940	1.00	ppm	100
31) Benzo[a]anthracene	17.462	228	76163	1.00	ppm	100
32) Chrysene	17.510	228	87069	1.00	ppm	100
34) Benzo[b]fluoranthene	19.112	252	84877	1.00	ppm	100
35) Benzo[k]fluoranthene	19.158	252	75867	1.01	ppm	100
36) Benzo[a]pyrene	19.561	252	72834	0.98	ppm	100
37) Indeno[1,2,3-cd]pyrene	20.977	276	86544m	0.99	ppm	
38) Dibenz[a,h]anthracene	21.015	278	70718	1.00	ppm	100
39) Benzo[g,h,i]perylene	21.265	276	76199	1.00	ppm	100

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16670.D
Acq On : 6 Jun 2016 10:50 am
Operator : linseyk
Sample : icc887-1
Misc : op94376a,e4p887
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 06 14:59:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

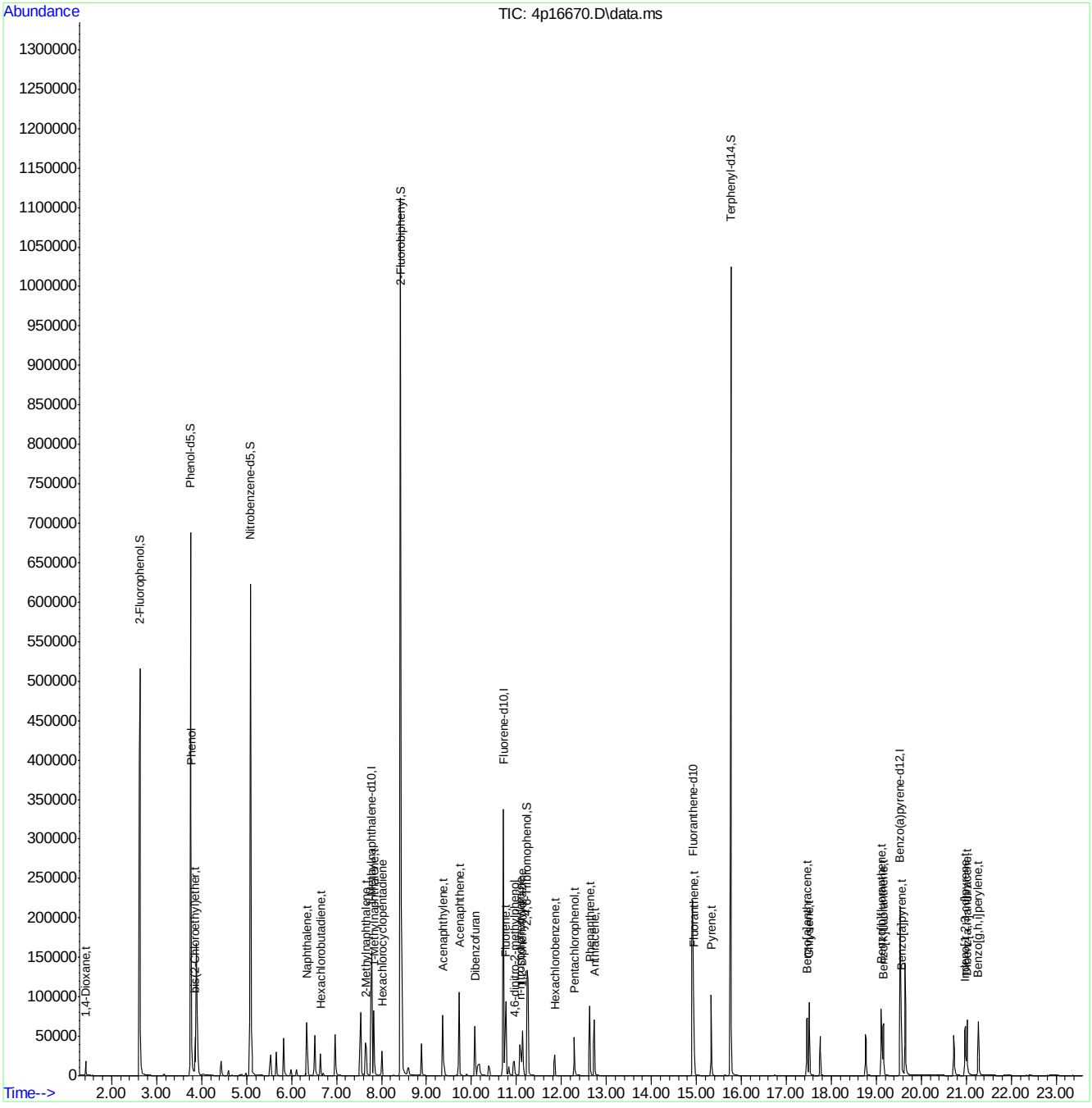
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16670.D
Acq On : 6 Jun 2016 10:50 am
Operator : linseyk
Sample : icc887-1
Misc : op94376a,e4p887
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 06 14:59:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration



Manual Integration Approval Summary

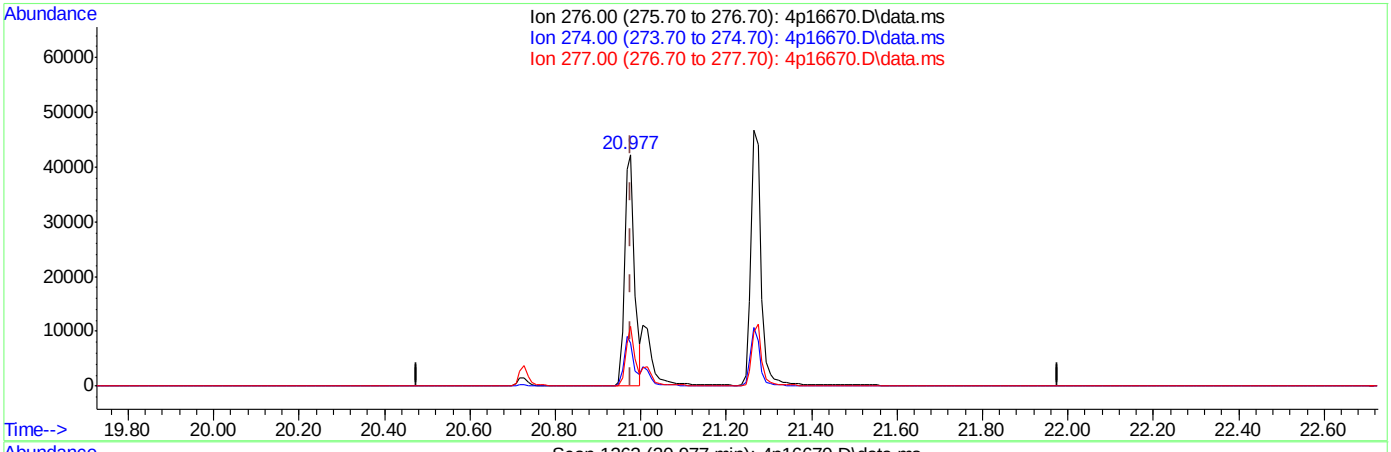
Sample Number:	E4P887-ICC887	**Method:**	SW846 8270D BY SIM
Lab FileID:	4P16670.D	**Analyst approved:**	06/06/16 15:58 Linsey Kirschmann
Injection Time:	06/06/16 10:50	**Supervisor approved:**	06/06/16 18:07 Kristi Schollenberger

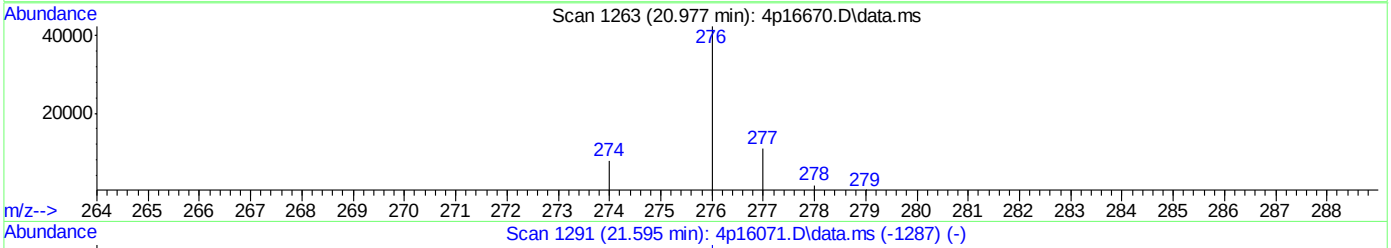
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.98	Split peak

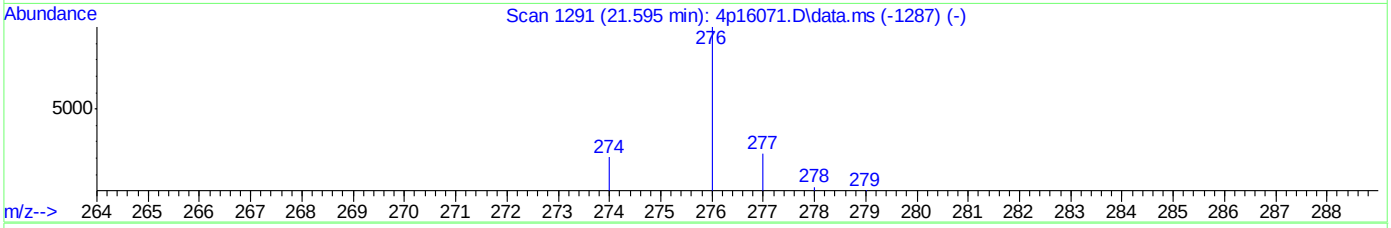
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16670.D
Acq On : 6 Jun 2016 10:50 am
Operator : linseyk
Sample : icc887-1
Misc : op94376a,e4p887
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 06 14:54:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16670.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.977min (0.000) 0.77ppm

response 67074

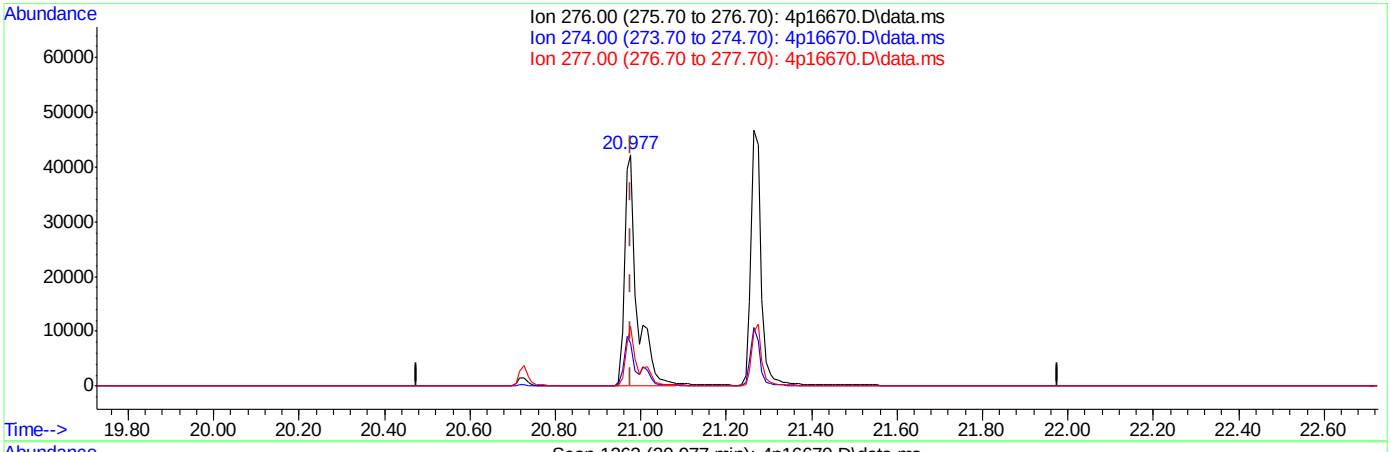
Ion	Exp%	Act%
276.00	100	100
274.00	18.30	17.43
277.00	25.70	25.44
0.00	0.00	0.00

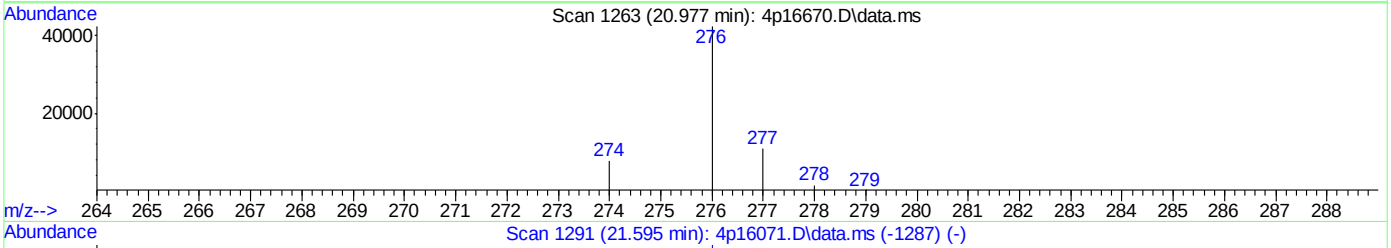
SGS ACCUTEST JC22613

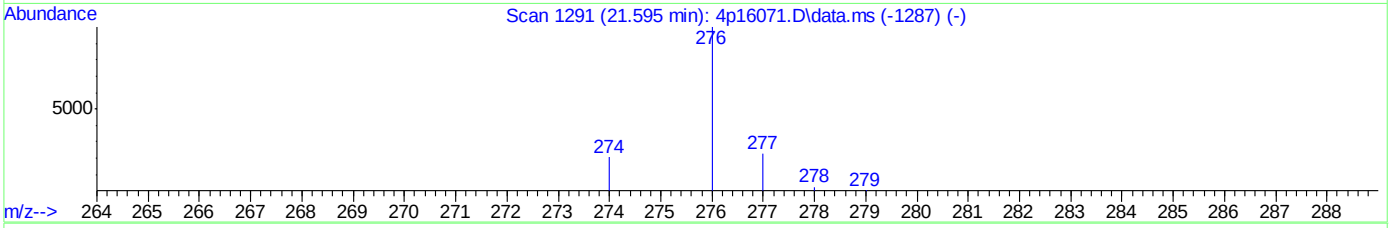
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16670.D
Acq On : 6 Jun 2016 10:50 am
Operator : linseyk
Sample : icc887-1
Misc : op94376a,e4p887
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 06 14:54:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16670.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.977min (0.000) 0.99ppm m

response 86544

Ion	Exp%	Act%
276.00	100	100
274.00	18.30	18.34
277.00	25.70	25.74
0.00	0.00	0.00

SGS ACCUTEST JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/06/16 18:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16671.D
Acq On : 6 Jun 2016 11:20 am
Operator : linseyk
Sample : ic887-.2
Misc : op94376a,e4p887
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 06 15:00:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.762	150	141449	4.00	ppm	-0.02
13) Fluorene-d10	10.711	176	234168	4.00	ppm	0.00
23) Fluoranthene-d10	14.918	212	342226	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.524	264	247365	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.628	112	88312	4.36	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.72%	
4) Phenol-d5	3.750	99	156719	4.35	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.70%	
7) Nitrobenzene-d5	5.083	82	97994	3.73	ppm	0.00
Spiked Amount 50.000			Recovery	=	7.46%	
14) 2-Fluorobiphenyl	8.427	172	305481	7.02	ppm	0.00
Spiked Amount 50.000			Recovery	=	14.04%	
22) 2,4,6-Tribromophenol	11.234	330	26953	4.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.42%	
30) Terphenyl-d14	15.762	244	197256	4.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.02%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.422	88	2120	0.19	ppm	83
5) Phenol	3.768	94	40539	1.02	ppm	96
6) bis(2-Chloroethyl)ether	3.854	93	5442	0.19	ppm	92
8) Naphthalene	6.344	128	20563	0.22	ppm	96
9) Hexachlorobutadiene	6.650	225	3170	0.19	ppm	90
10) 2-Methylnaphthalene	7.648	141	10993	0.25	ppm	86
11) 1-Methylnaphthalene	7.831	141	13795	0.24	ppm	85
12) Hexachlorocyclopentadiene	8.015	237	2868	0.21	ppm	95
15) Acenaphthylene	9.367	152	20610	0.28	ppm	95
16) Acenaphthene	9.733	153	10559	0.20	ppm	89
17) Dibenzofuran	10.077	168	22538	0.34	ppm	89
18) Fluorene	10.760	166	12692	0.21	ppm	92
19) 4,6-dinitro-2-methylph...	10.959	198	2416	0.60	ppm	82
20) n-nitrosodiphenylamine	11.083	169	7579	0.27	ppm	90
21) 1,2-Diphenylhydrazine	11.129	77	11638	0.22	ppm	97
24) Hexachlorobenzene	11.855	284	4162	0.20	ppm	98
25) Pentachlorophenol	12.285	266	5371	0.65	ppm	100
26) Phenanthrene	12.629	178	19392	0.18	ppm	100
27) Anthracene	12.733	178	16834	0.17	ppm	99
28) Fluoranthene	14.936	202	21513	0.20	ppm	99
29) Pyrene	15.331	202	20291	0.18	ppm	99
31) Benzo[a]anthracene	17.450	228	13633	0.17	ppm	89
32) Chrysene	17.508	228	17473	0.19	ppm	98
34) Benzo[b]fluoranthene	19.110	252	16740	0.18	ppm	99
35) Benzo[k]fluoranthene	19.145	252	15342	0.19	ppm	86
36) Benzo[a]pyrene	19.559	252	16315	0.20	ppm	99
37) Indeno[1,2,3-cd]pyrene	20.975	276	18033m	0.19	ppm	
38) Dibenz[a,h]anthracene	21.013	278	14607	0.19	ppm	99
39) Benzo[g,h,i]perylene	21.263	276	16723	0.20	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16671.D
Acq On : 6 Jun 2016 11:20 am
Operator : linseyk
Sample : ic887-.2
Misc : op94376a,e4p887
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 06 15:00:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

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

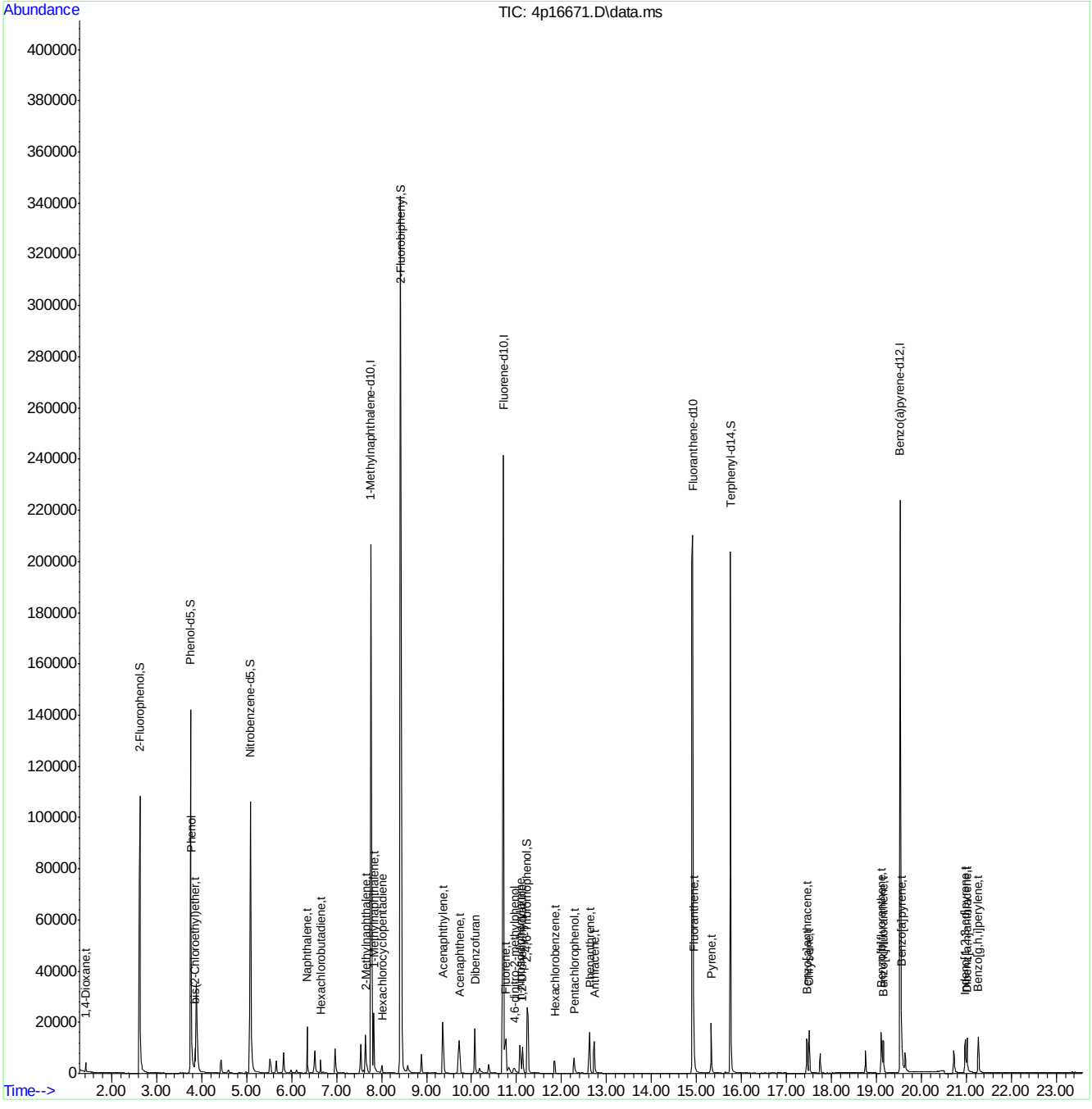
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16671.D
Acq On : 6 Jun 2016 11:20 am
Operator : linseyk
Sample : ic887-.2
Misc : op94376a,e4p887
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 06 15:00:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration



Manual Integration Approval Summary

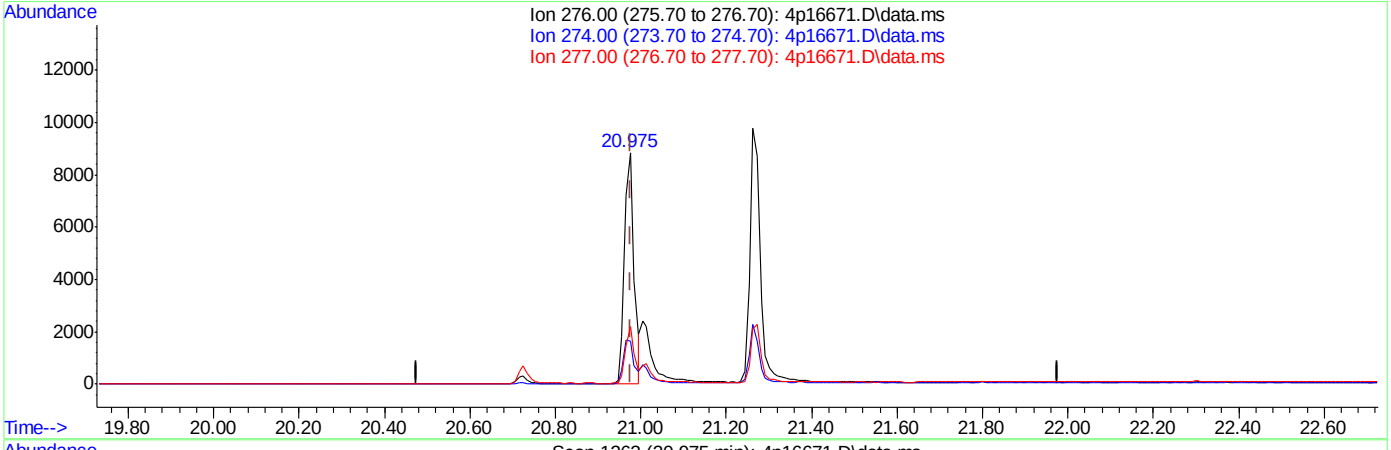
Sample Number:	E4P887-IC887	**Method:**	SW846 8270D BY SIM
Lab FileID:	4P16671.D	**Analyst approved:**	06/06/16 15:58 Linsey Kirschmann
Injection Time:	06/06/16 11:20	**Supervisor approved:**	06/06/16 18:07 Kristi Schollenberger

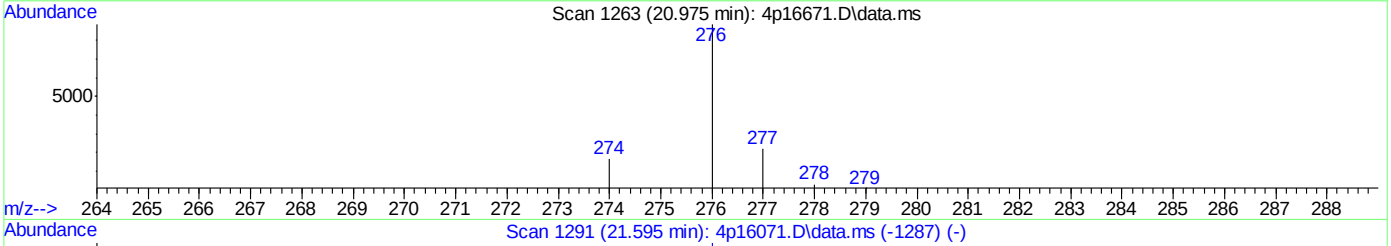
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.97	Split peak

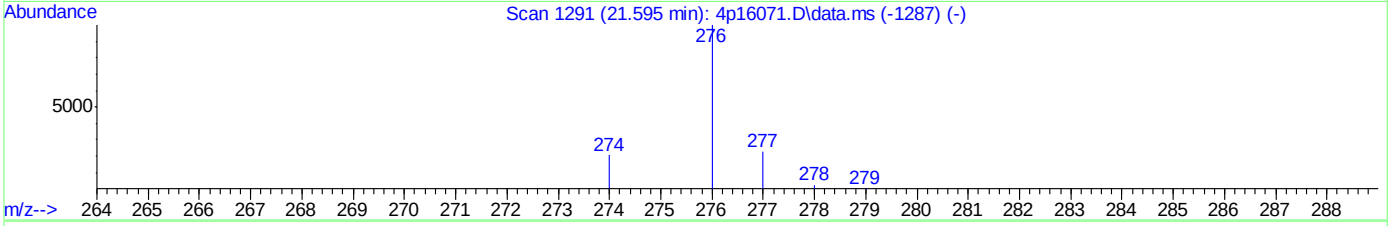
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16671.D
Acq On : 6 Jun 2016 11:20 am
Operator : linseyk
Sample : ic887-.2
Misc : op94376a,e4p887
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 06 14:54:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16671.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.975min (-0.002) 0.14ppm

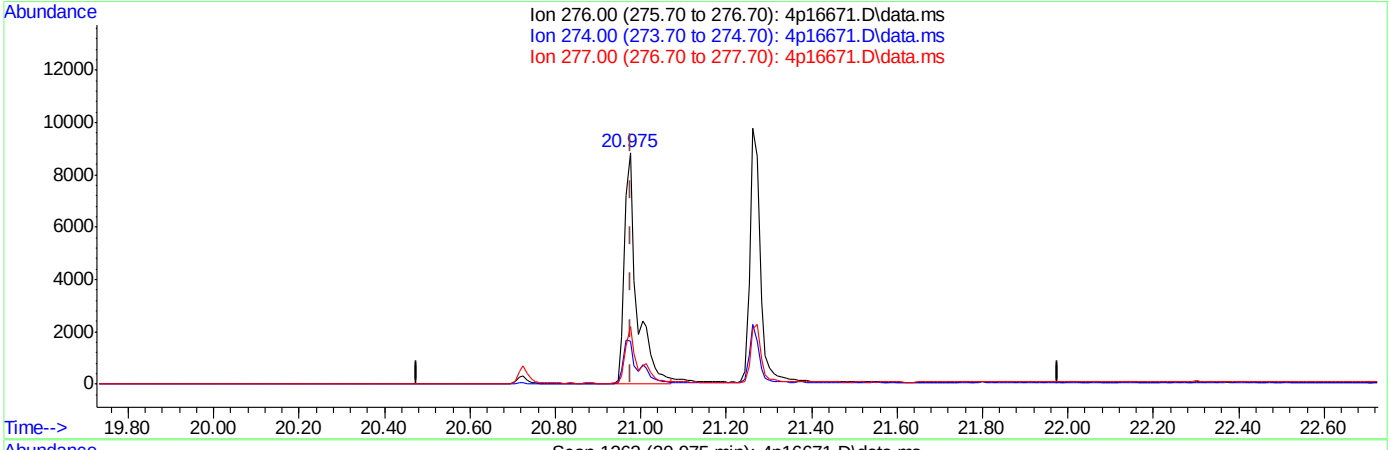
response 13642

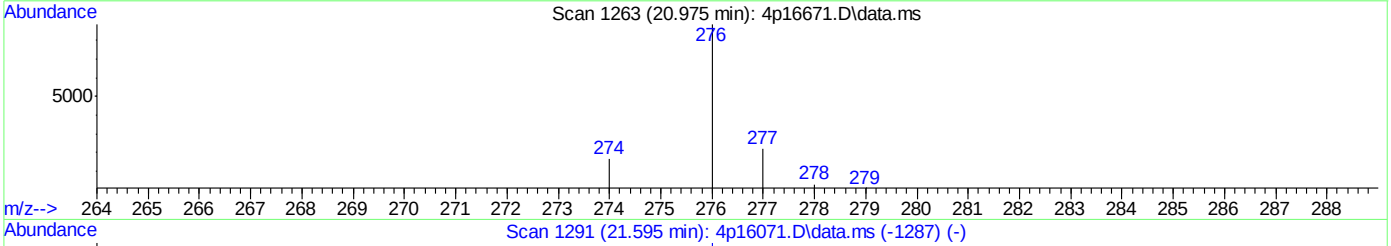
Ion	Exp%	Act%
276.00	100	100
274.00	18.30	17.85
277.00	25.70	24.14
0.00	0.00	0.00

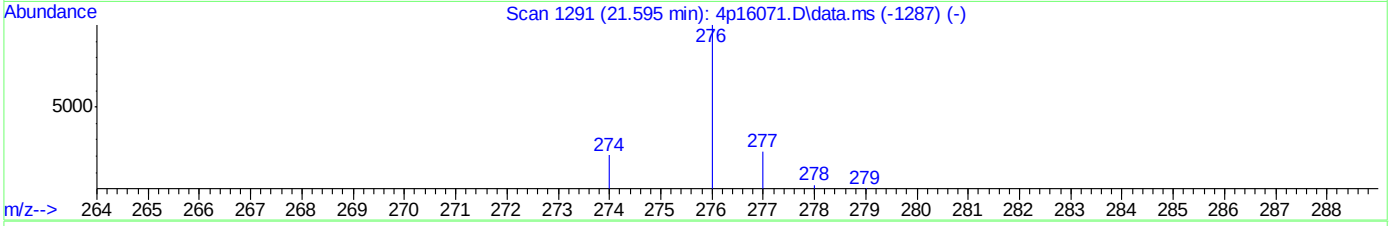
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16671.D
Acq On : 6 Jun 2016 11:20 am
Operator : linseyk
Sample : ic887-.2
Misc : op94376a,e4p887
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 06 14:54:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16671.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.975min (-0.002) 0.19ppm m

response 18033

Ion	Exp%	Act%
276.00	100	100
274.00	18.30	18.75
277.00	25.70	24.87
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/06/16 18:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16672.D
Acq On : 6 Jun 2016 11:50 am
Operator : linseyk
Sample : ic887-.1
Misc : op94376a,e4p887
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 06 15:00:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.761	150	137127	4.00	ppm	-0.02
13) Fluorene-d10	10.709	176	241781	4.00	ppm	0.00
23) Fluoranthene-d10	14.903	212	332029	4.00	ppm	-0.02
33) Benzo(a)pyrene-d12	19.526	264	237840	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.628	112	39922	2.03	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.06%	
4) Phenol-d5	3.750	99	65970	1.89	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.78%	
7) Nitrobenzene-d5	5.081	82	46633	1.83	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.66%	
14) 2-Fluorobiphenyl	8.425	172	132374	2.95	ppm	0.00
Spiked Amount 50.000			Recovery	=	5.90%	
22) 2,4,6-Tribromophenol	11.236	330	11239	1.90	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.80%	
30) Terphenyl-d14	15.764	244	83507	1.75	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.50%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.422	88	1004	0.09	ppm	88
5) Phenol	3.768	94	17931	0.47	ppm #	89
6) bis(2-Chloroethyl)ether	3.854	93	2561	0.09	ppm #	32
8) Naphthalene	6.343	128	8883	0.10	ppm	98
9) Hexachlorobutadiene	6.648	225	1498	0.09	ppm	92
10) 2-Methylnaphthalene	7.646	141	4524	0.11	ppm	91
11) 1-Methylnaphthalene	7.829	141	5941	0.11	ppm	92
12) Hexachlorocyclopentadiene	8.013	237	1067	0.08	ppm	94
15) Acenaphthylene	9.365	152	8634	0.12	ppm	97
16) Acenaphthene	9.731	153	4891	0.09	ppm	92
17) Dibenzofuran	10.075	168	7684	0.11	ppm	97
18) Fluorene	10.759	166	6410	0.10	ppm	95
19) 4,6-dinitro-2-methylph...	10.957	198	716	0.17	ppm	90
20) n-nitrosodiphenylamine	11.081	169	3268	0.11	ppm	93
21) 1,2-Diphenylhydrazine	11.131	77	5151	0.09	ppm	92
24) Hexachlorobenzene	11.840	284	1831	0.09	ppm #	69
25) Pentachlorophenol	12.287	266	1683	0.21	ppm	95
26) Phenanthrene	12.631	178	8303	0.08	ppm	99
27) Anthracene	12.735	178	6875	0.07	ppm	99
28) Fluoranthene	14.938	202	9979	0.09	ppm	97
29) Pyrene	15.333	202	8466	0.08	ppm	97
31) Benzo[a]anthracene	17.452	228	5429	0.07	ppm	92
32) Chrysene	17.510	228	7188	0.08	ppm	94
34) Benzo[b]fluoranthene	19.112	252	7333	0.08	ppm	97
35) Benzo[k]fluoranthene	19.147	252	5932	0.08	ppm	91
36) Benzo[a]pyrene	19.549	252	7922	0.10	ppm	91
37) Indeno[1,2,3-cd]pyrene	20.975	276	7813m	0.09	ppm	
38) Dibenz[a,h]anthracene	21.013	278	5913	0.08	ppm	98
39) Benzo[g,h,i]perylene	21.263	276	7255	0.09	ppm	100

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16672.D
Acq On : 6 Jun 2016 11:50 am
Operator : linseyk
Sample : ic887-.1
Misc : op94376a,e4p887
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 06 15:00:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

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

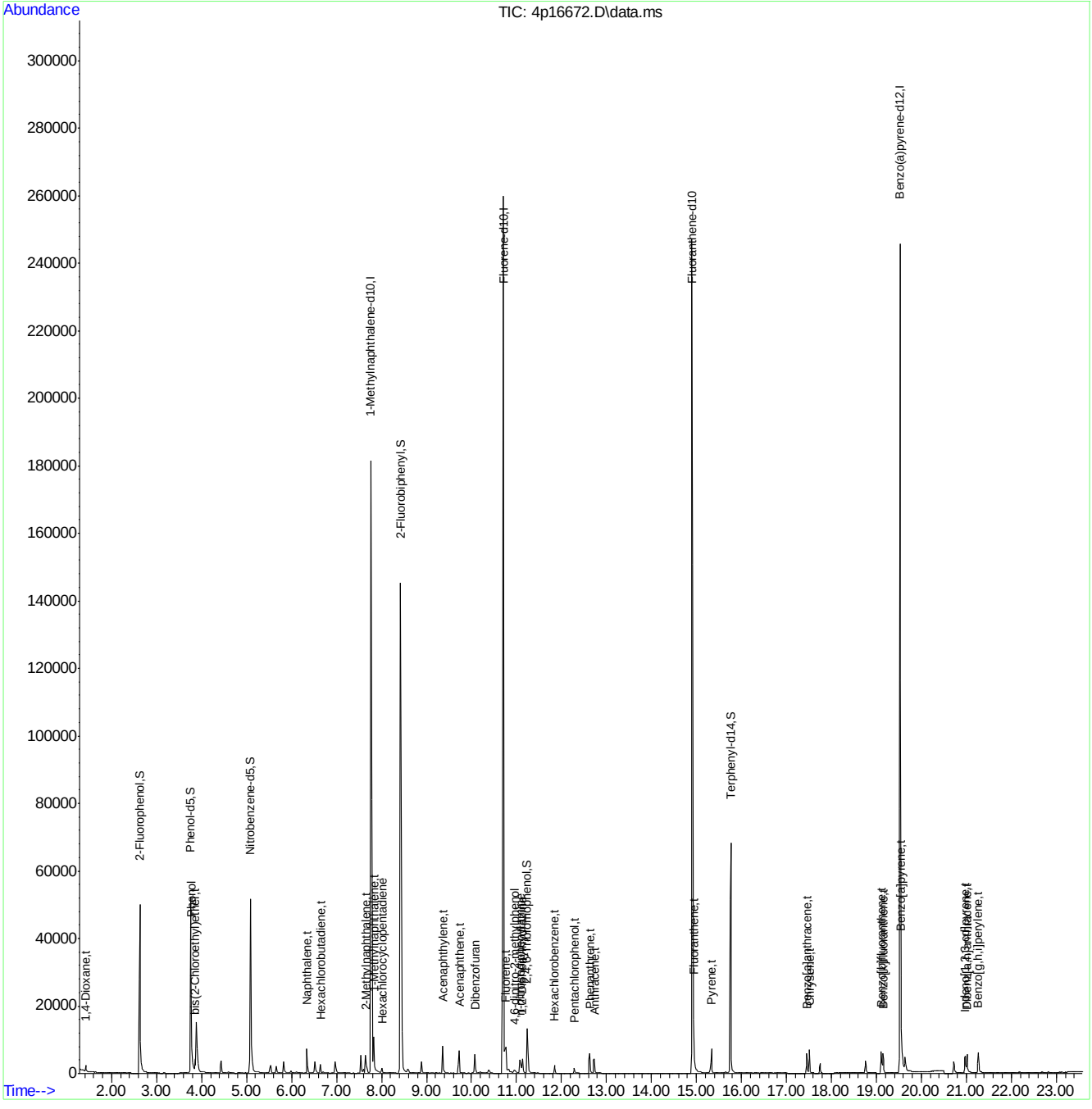
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16672.D
Acq On : 6 Jun 2016 11:50 am
Operator : linseyk
Sample : ic887-.1
Misc : op94376a,e4p887
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 06 15:00:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Manual Integration Approval Summary

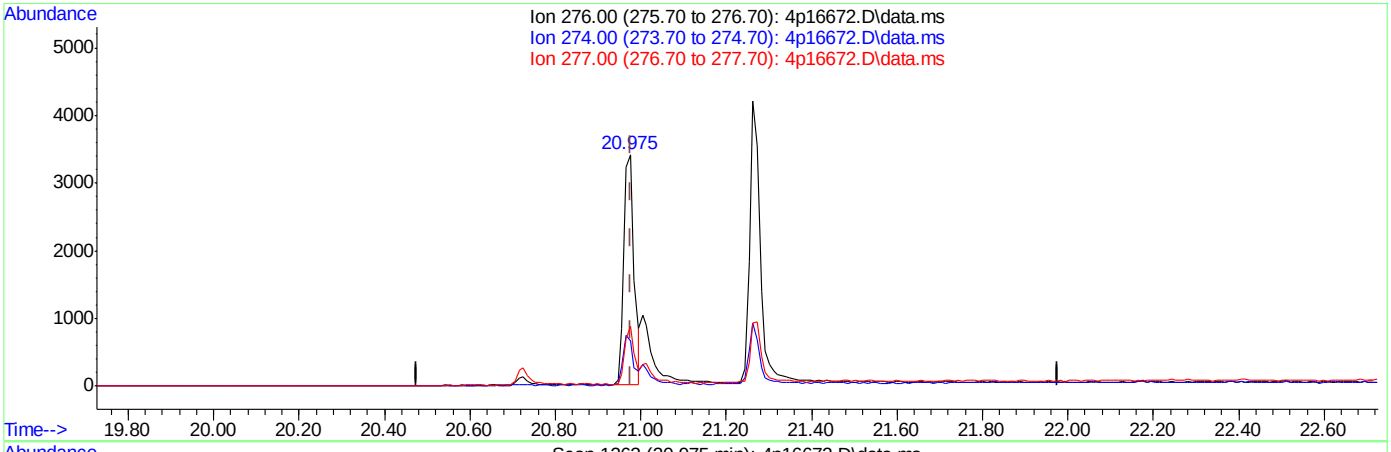
Sample Number:	E4P887-IC887	**Method:**	SW846 8270D BY SIM
Lab FileID:	4P16672.D	**Analyst approved:**	06/06/16 15:58 Linsey Kirschmann
Injection Time:	06/06/16 11:50	**Supervisor approved:**	06/06/16 18:07 Kristi Schollenberger

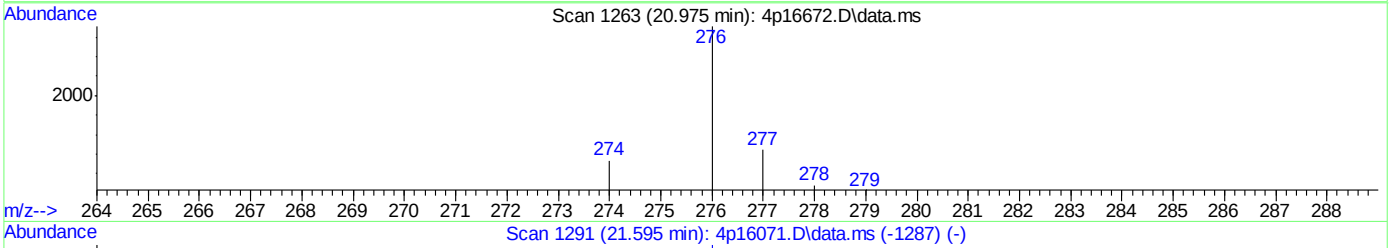
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.97	Split peak

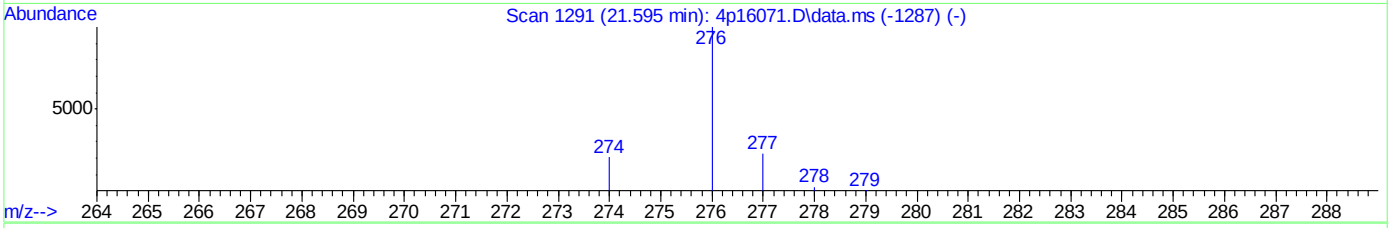
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16672.D
Acq On : 6 Jun 2016 11:50 am
Operator : linseyk
Sample : ic887-.1
Misc : op94376a,e4p887
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 06 14:54:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16672.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.975min (-0.002) 0.06ppm

response 5714

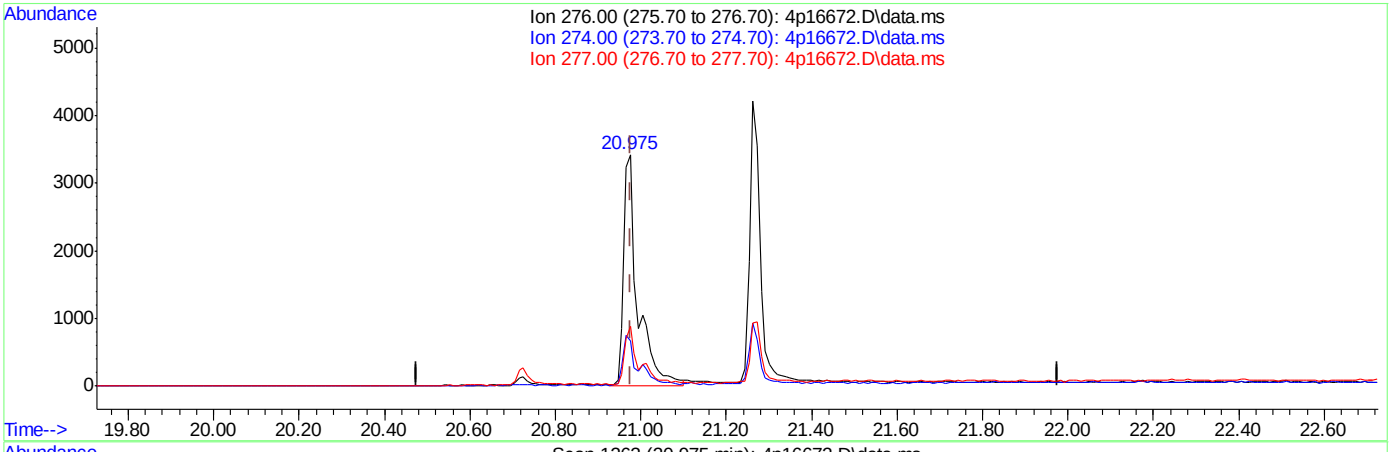
Ion	Exp%	Act%
276.00	100	100
274.00	18.30	18.09
277.00	25.70	25.57
0.00	0.00	0.00

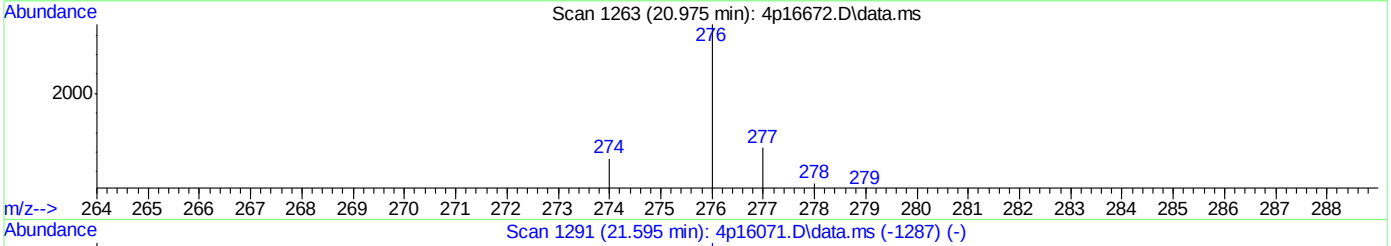
SGS ACCUTEST JC22613

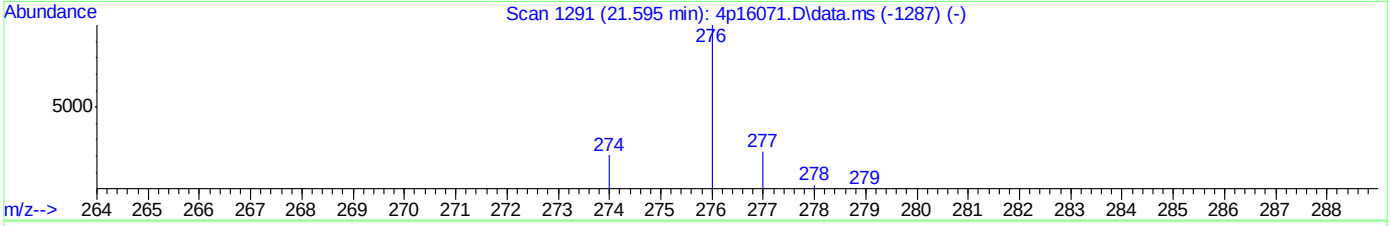
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16672.D
Acq On : 6 Jun 2016 11:50 am
Operator : linseyk
Sample : ic887-.1
Misc : op94376a,e4p887
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 06 14:54:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16672.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.975min (-0.002) 0.09ppm m

response 7813

Ion	Exp%	Act%
276.00	100	100
274.00	18.30	19.43
277.00	25.70	26.03
0.00	0.00	0.00

SGS ACCUTEST JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/06/16 18:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16673.D
Acq On : 6 Jun 2016 12:19 pm
Operator : linseyk
Sample : ic887-.05
Misc : op94376a,e4p887
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 06 15:01:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.762	150	144888	4.00	ppm	-0.02
13) Fluorene-d10	10.711	176	230572	4.00	ppm	0.00
23) Fluoranthene-d10	14.905	212	352035	4.00	ppm	-0.02
33) Benzo(a)pyrene-d12	19.530	264	236115	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.628	112	20270	0.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.96%	
4) Phenol-d5	3.750	99	30849	0.84	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.68%	
7) Nitrobenzene-d5	5.083	82	22019	0.82	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.64%	
14) 2-Fluorobiphenyl	8.427	172	69496	1.62	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.24%	
22) 2,4,6-Tribromophenol	11.238	330	5804	1.03	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.06%	
30) Terphenyl-d14	15.748	244	41958	0.83	ppm	-0.02
Spiked Amount 50.000			Recovery	=	1.66%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.422	88	508	0.05	ppm #	57
5) Phenol	3.767	94	8555	0.21	ppm #	80
6) bis(2-Chloroethyl)ether	3.853	93	1239	0.04	ppm #	31
8) Naphthalene	6.344	128	4578	0.05	ppm	98
9) Hexachlorobutadiene	6.650	225	781	0.05	ppm	89
10) 2-Methylnaphthalene	7.648	141	2892	0.06	ppm	87
11) 1-Methylnaphthalene	7.831	141	3213	0.06	ppm	87
12) Hexachlorocyclopentadiene	8.015	237	358	0.03	ppm	90
15) Acenaphthylene	9.366	152	4446	0.06	ppm	95
16) Acenaphthene	9.733	153	2340	0.05	ppm	89
17) Dibenzofuran	10.077	168	6334	0.10	ppm	88
18) Fluorene	10.760	166	3320	0.06	ppm	94
19) 4,6-dinitro-2-methylph...	10.959	198	281	0.07	ppm #	46
20) n-nitrosodiphenylamine	11.083	169	1743	0.06	ppm	89
21) 1,2-Diphenylhydrazine	11.133	77	2236	0.04	ppm	89
24) Hexachlorobenzene	11.842	284	972	0.05	ppm	76
25) Pentachlorophenol	12.289	266	912	0.11	ppm	95
26) Phenanthrene	12.633	178	4186	0.04	ppm	97
27) Anthracene	12.719	178	3493	0.04	ppm	88
28) Fluoranthene	14.939	202	5266	0.05	ppm	96
29) Pyrene	15.335	202	4376	0.04	ppm	97
31) Benzo[a]anthracene	17.456	228	2780	0.03	ppm	97
32) Chrysene	17.504	228	3540	0.04	ppm	99
34) Benzo[b]fluoranthene	19.116	252	3212	0.04	ppm	94
35) Benzo[k]fluoranthene	19.150	252	3352	0.04	ppm	91
36) Benzo[a]pyrene	19.553	252	3497m	0.05	ppm	
37) Indeno[1,2,3-cd]pyrene	20.969	276	3790m	0.04	ppm	
38) Dibenz[a,h]anthracene	21.017	278	2844	0.04	ppm	91
39) Benzo[g,h,i]perylene	21.267	276	3562	0.05	ppm	99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16673.D
Acq On : 6 Jun 2016 12:19 pm
Operator : linseyk
Sample : ic887-.05
Misc : op94376a,e4p887
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 06 15:01:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

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

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

7.6.72

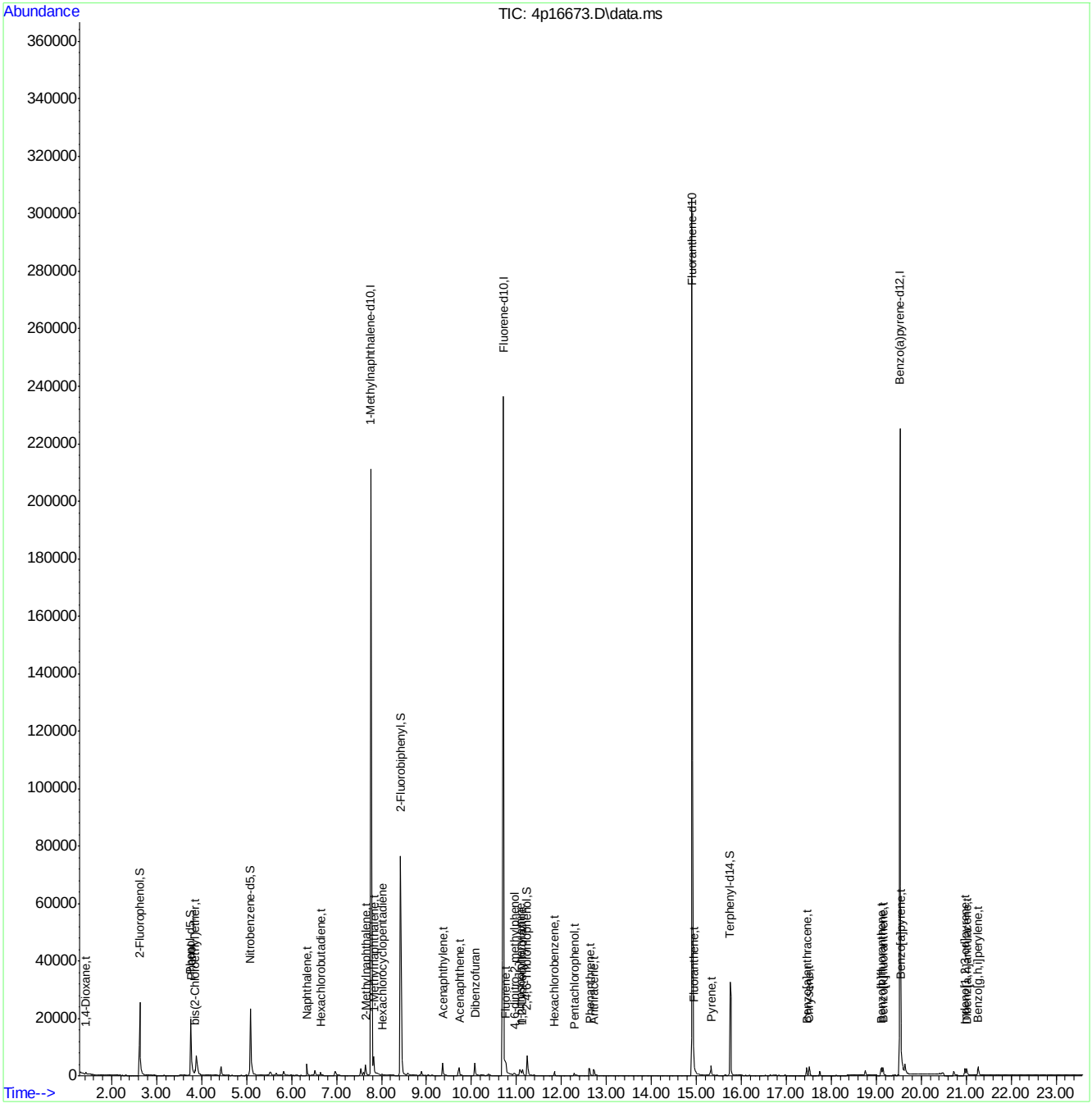
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16673.D
Acq On : 6 Jun 2016 12:19 pm
Operator : linseyk
Sample : ic887-.05
Misc : op94376a,e4p887
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 06 15:01:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration



Manual Integration Approval Summary

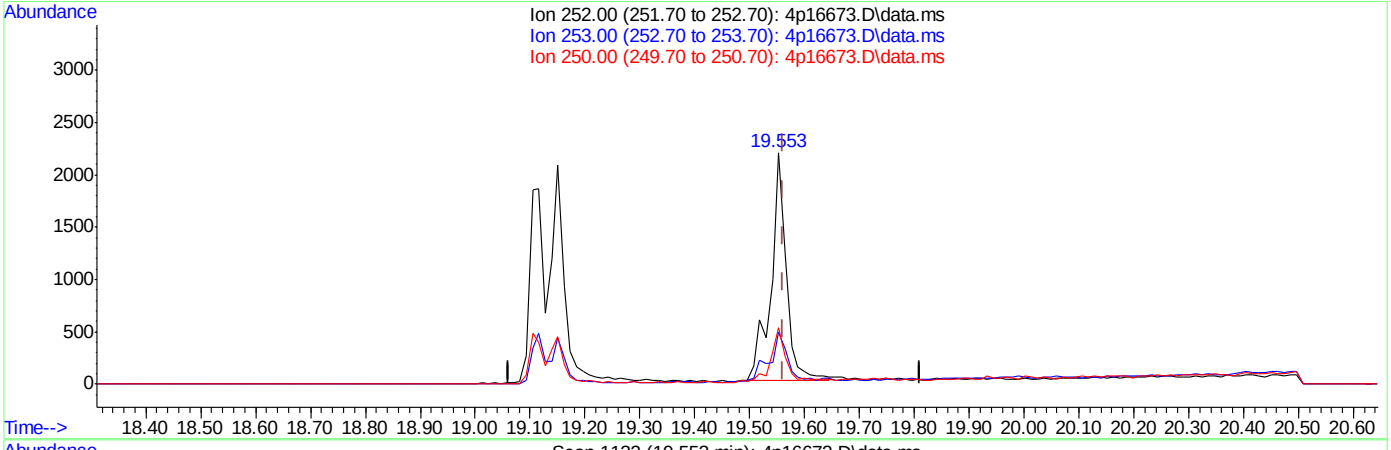
Sample Number:	E4P887-IC887	**Method:**	SW846 8270D BY SIM
Lab FileID:	4P16673.D	**Analyst approved:**	06/06/16 15:58 Linsey Kirschmann
Injection Time:	06/06/16 12:19	**Supervisor approved:**	06/06/16 18:07 Kristi Schollenberger

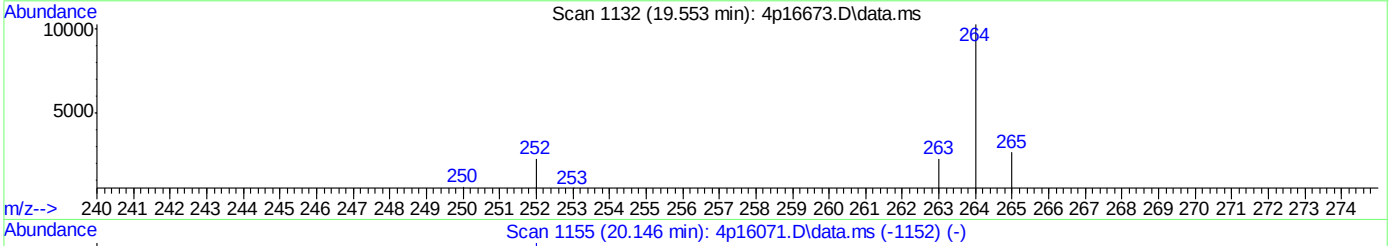
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(a)pyrene	50-32-8		19.55	Poor instrument integration
Indeno(1,2,3-cd)pyrene	193-39-5		20.97	Split peak

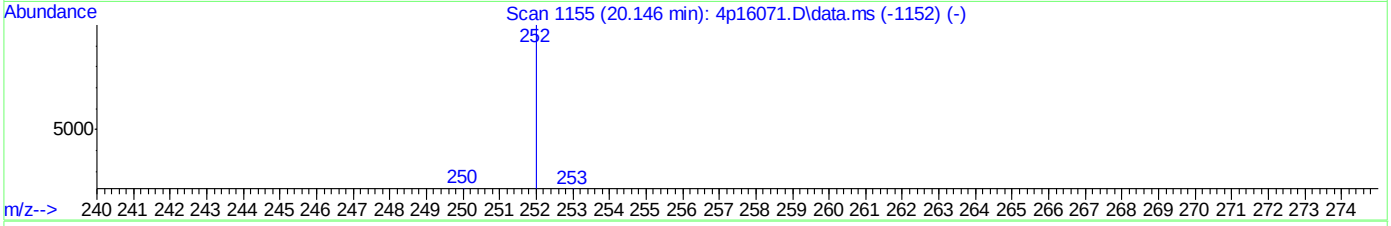
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16673.D
Acq On : 6 Jun 2016 12:19 pm
Operator : linseyk
Sample : ic887-.05
Misc : op94376a,e4p887
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 06 14:54:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16673.D\data.ms

(36) Benzo[a]pyrene (t)

19.553min (-0.008) 0.06ppm

response 4239

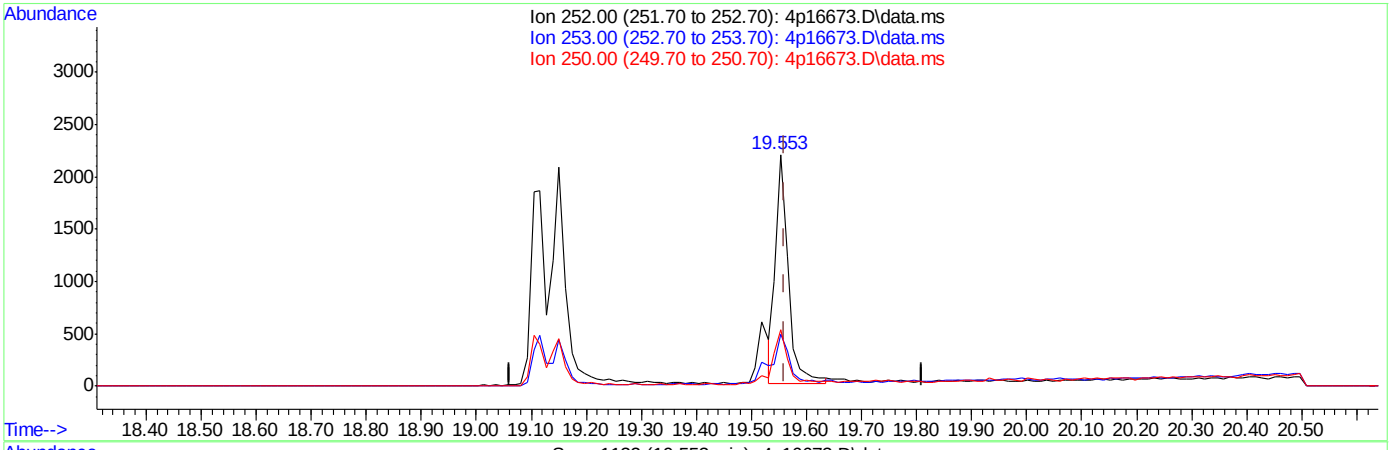
Ion	Exp%	Act%
252.00	100	100
253.00	23.50	21.23
250.00	20.80	22.90
0.00	0.00	0.00

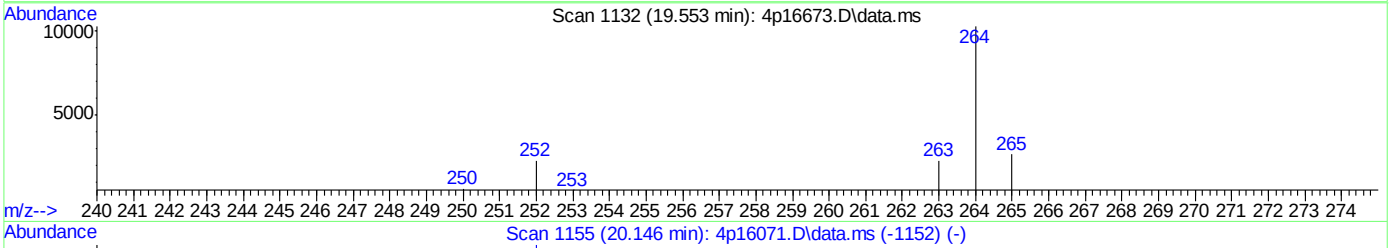
SGS ACCUTEST JC22613

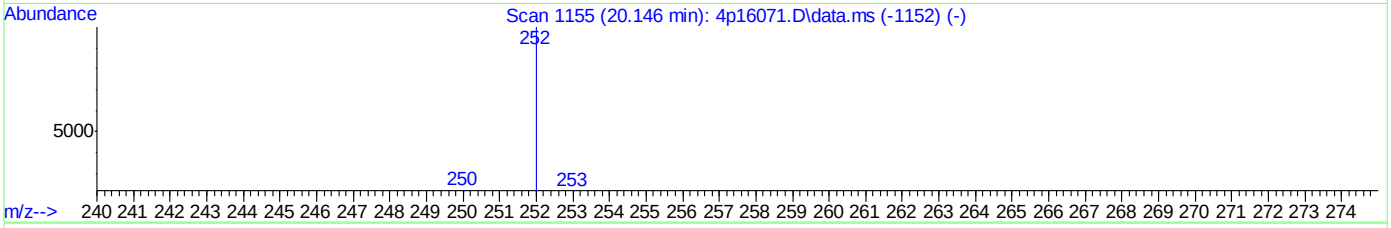
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16673.D
Acq On : 6 Jun 2016 12:19 pm
Operator : linseyk
Sample : ic887-.05
Misc : op94376a,e4p887
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 06 14:54:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16673.D\data.ms

(36) Benzo[a]pyrene (t)

19.553min (-0.008) 0.05ppm m

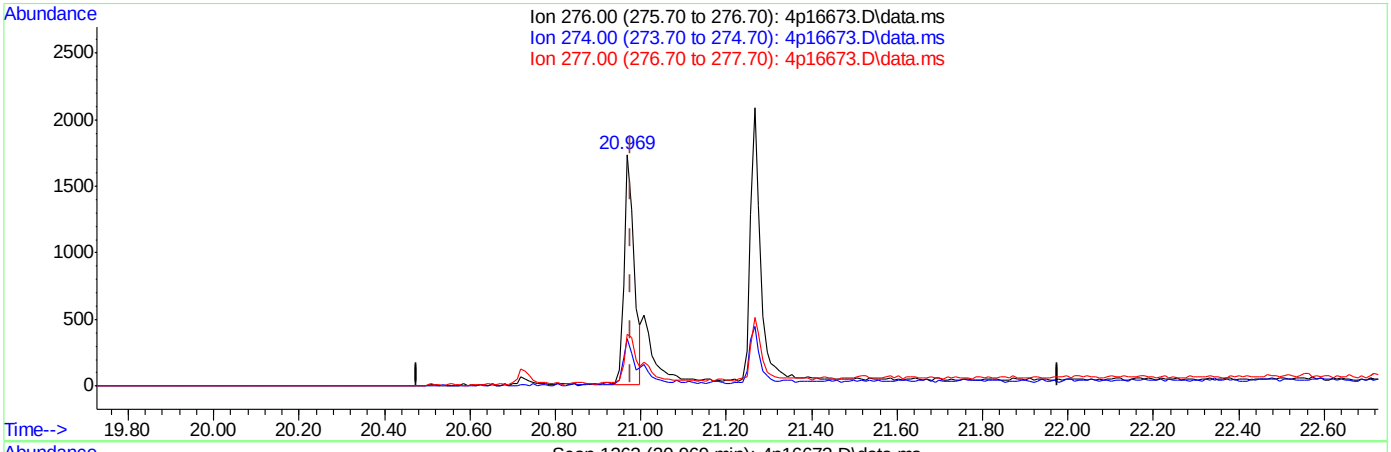
response 3497

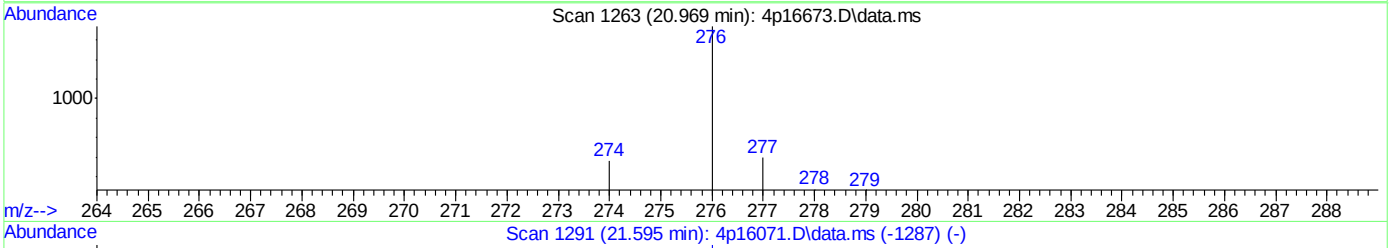
Ion	Exp%	Act%
252.00	100	100
253.00	23.50	22.54
250.00	20.80	24.21
0.00	0.00	0.00

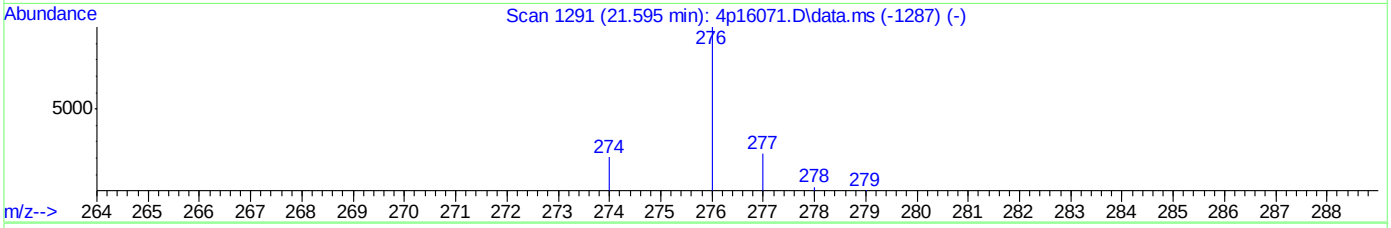
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16673.D
Acq On : 6 Jun 2016 12:19 pm
Operator : linseyk
Sample : ic887-.05
Misc : op94376a,e4p887
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 06 14:54:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16673.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.969min (-0.008) 0.03ppm

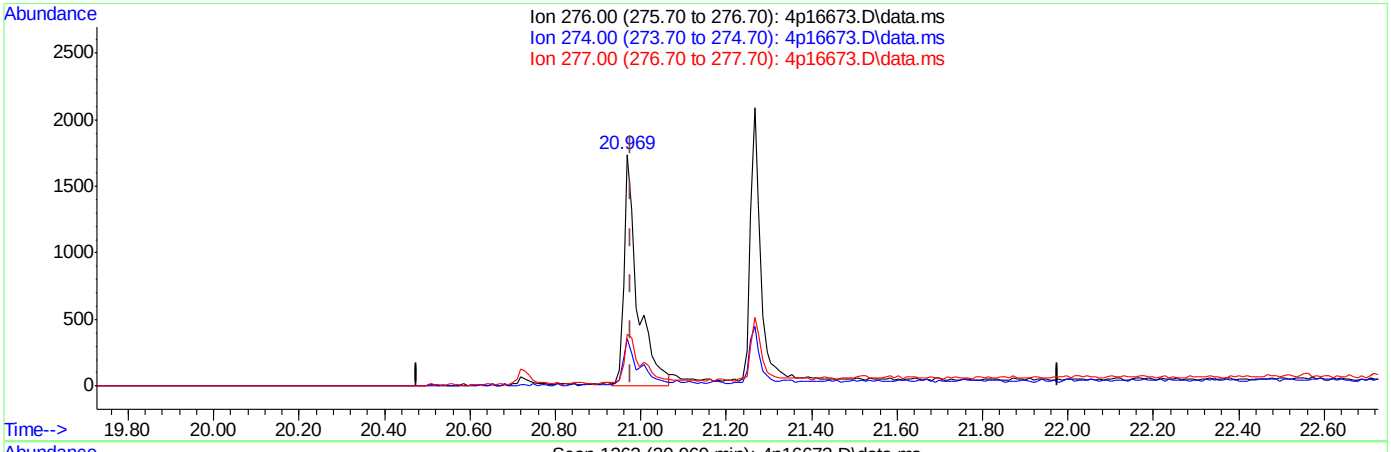
response 2821

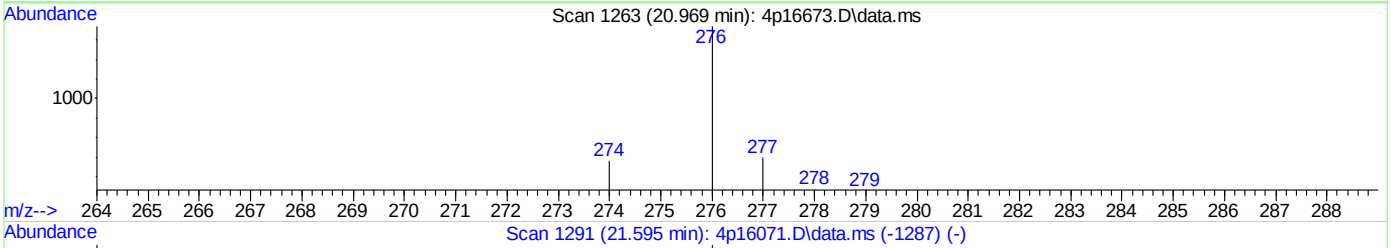
Ion	Exp%	Act%
276.00	100	100
274.00	18.30	18.95
277.00	25.70	20.35
0.00	0.00	0.00

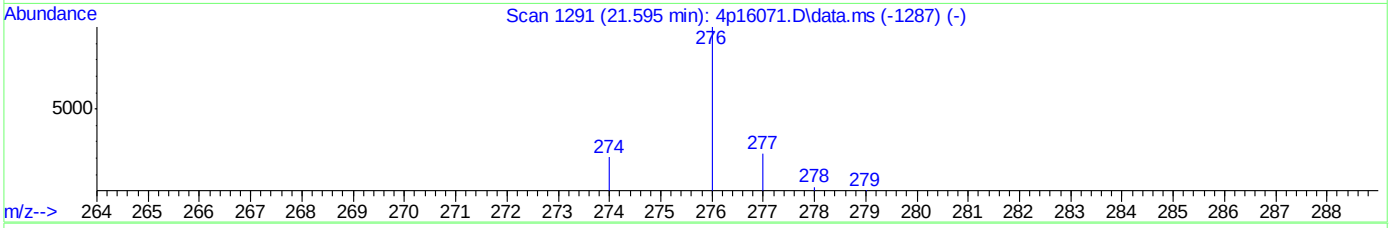
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16673.D
Acq On : 6 Jun 2016 12:19 pm
Operator : linseyk
Sample : ic887-.05
Misc : op94376a,e4p887
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 06 14:54:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16673.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.969min (-0.008) 0.04ppm m

response 3790

Ion	Exp%	Act%
276.00	100	100
274.00	18.30	20.64
277.00	25.70	22.66
0.00	0.00	0.00

SGS ACCUTEST JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/06/16 18:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16674.D
Acq On : 6 Jun 2016 12:49 pm
Operator : linseyk
Sample : ic887-.02
Misc : op94376a,e4p887
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 06 15:02:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.761	150	140143	4.00	ppm	-0.02
13) Fluorene-d10	10.709	176	229403	4.00	ppm	0.00
23) Fluoranthene-d10	14.903	212	329353	4.00	ppm	-0.02
33) Benzo(a)pyrene-d12	19.526	264	223750	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.628	112	7471	0.37	ppm	0.00
Spiked Amount 50.000			Recovery = 0.74%			
4) Phenol-d5	3.750	99	11083	0.31	ppm	0.00
Spiked Amount 50.000			Recovery = 0.62%			
7) Nitrobenzene-d5	5.081	82	9589	0.37	ppm	0.00
Spiked Amount 50.000			Recovery = 0.74%			
14) 2-Fluorobiphenyl	8.425	172	25390	0.60	ppm	0.00
Spiked Amount 50.000			Recovery = 1.20%			
22) 2,4,6-Tribromophenol	11.236	330	1881	0.34	ppm	0.00
Spiked Amount 50.000			Recovery = 0.68%			
30) Terphenyl-d14	15.764	244	15163	0.32	ppm	0.00
Spiked Amount 50.000			Recovery = 0.64%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.422	88	359	0.03	ppm	91
5) Phenol	3.768	94	3233	0.08	ppm #	74
6) bis(2-Chloroethyl)ether	3.854	93	698	0.02	ppm #	60
8) Naphthalene	6.343	128	1762	0.02	ppm	98
9) Hexachlorobutadiene	6.649	225	359	0.02	ppm	91
10) 2-Methylnaphthalene	7.646	141	1691	0.04	ppm	90
11) 1-Methylnaphthalene	7.829	141	1316	0.02	ppm	87
12) Hexachlorocyclopentadiene	8.013	237	114	0.01	ppm #	39
15) Acenaphthylene	9.365	152	1698	0.02	ppm	96
16) Acenaphthene	9.731	153	928	0.02	ppm	90
17) Dibenzofuran	10.075	168	4626	0.07	ppm	97
18) Fluorene	10.759	166	1166	0.02	ppm	97
19) 4,6-dinitro-2-methylph...	10.957	198	179	0.05	ppm #	1
20) n-nitrosodiphenylamine	11.081	169	653	0.02	ppm	95
21) 1,2-Diphenylhydrazine	11.131	77	987	0.02	ppm	91
24) Hexachlorobenzene	11.840	284	404	0.02	ppm	71
25) Pentachlorophenol	12.287	266	551	0.07	ppm	88
26) Phenanthrene	12.631	178	1732	0.02	ppm	98
27) Anthracene	12.735	178	1513	0.02	ppm	97
28) Fluoranthene	14.938	202	2262	0.02	ppm	96
29) Pyrene	15.333	202	1666	0.02	ppm	98
31) Benzo[a]anthracene	17.452	228	935	0.01	ppm	90
32) Chrysene	17.510	228	1320	0.01	ppm	95
34) Benzo[b]fluoranthene	19.112	252	1283	0.02	ppm	96
35) Benzo[k]fluoranthene	19.147	252	1042	0.01	ppm	85
36) Benzo[a]pyrene	19.549	252	1176	0.02	ppm	92
37) Indeno[1,2,3-cd]pyrene	20.967	276	1233m	0.01	ppm	
38) Dibenz[a,h]anthracene	21.015	278	1047	0.02	ppm	91
39) Benzo[g,h,i]perylene	21.265	276	1385	0.02	ppm	98

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16674.D
Acq On : 6 Jun 2016 12:49 pm
Operator : linseyk
Sample : ic887-.02
Misc : op94376a,e4p887
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 06 15:02:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

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

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

7.6.73

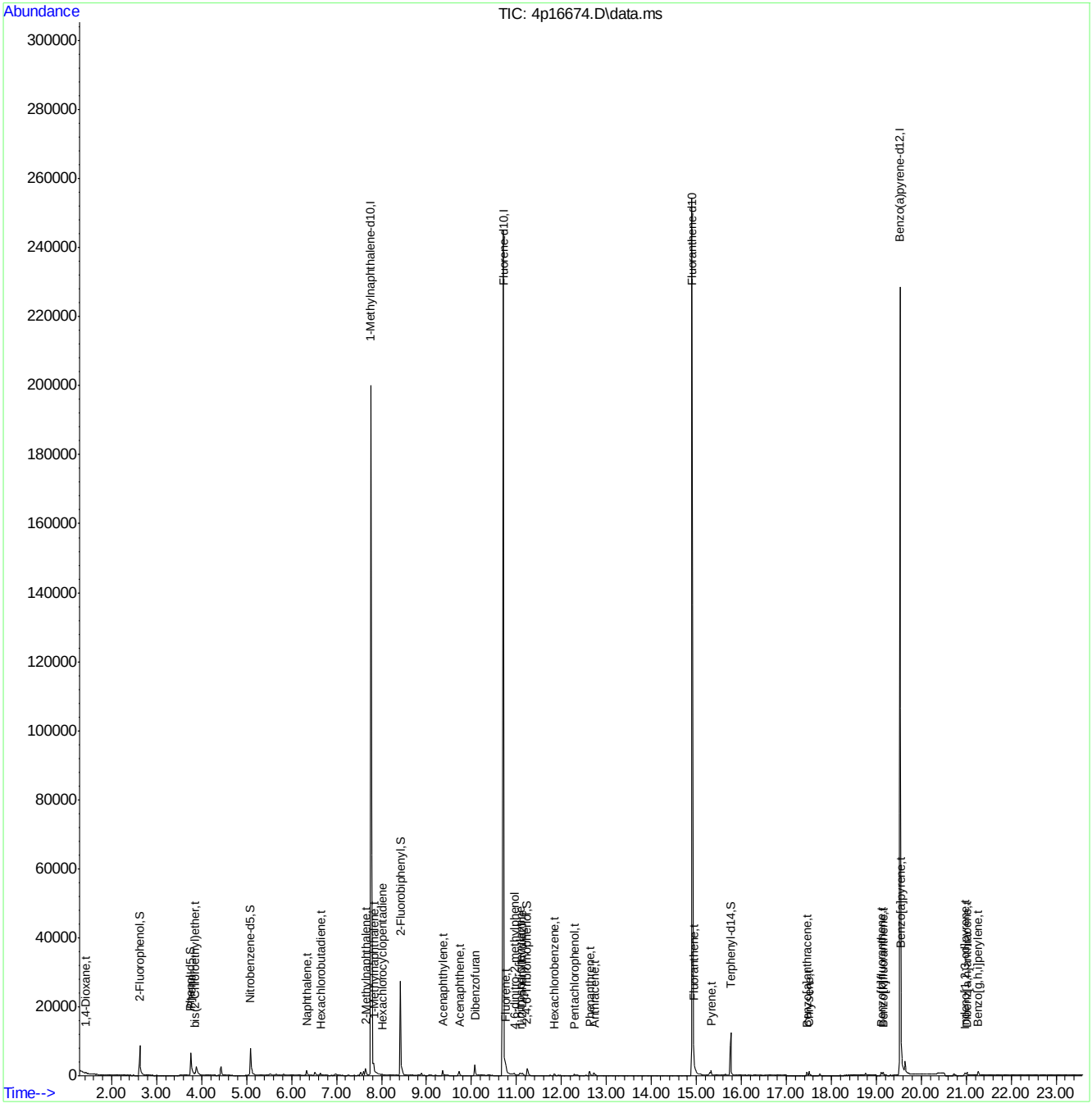
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16674.D
Acq On : 6 Jun 2016 12:49 pm
Operator : linseyk
Sample : ic887-.02
Misc : op94376a,e4p887
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 06 15:02:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Manual Integration Approval Summary

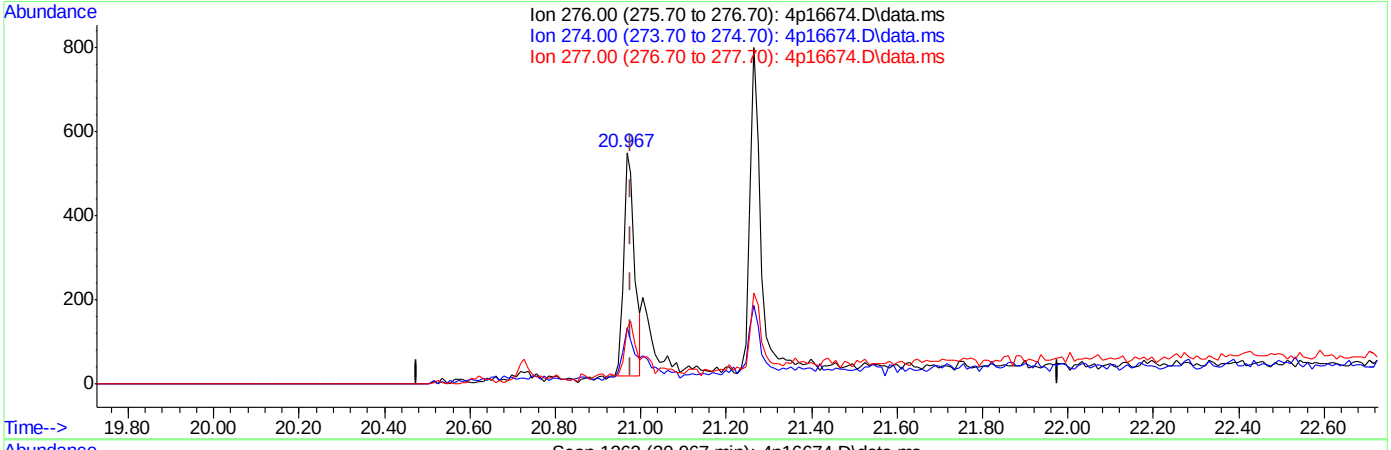
Sample Number:	E4P887-IC887	**Method:**	SW846 8270D BY SIM
Lab FileID:	4P16674.D	**Analyst approved:**	06/06/16 15:58 Linsey Kirschmann
Injection Time:	06/06/16 12:49	**Supervisor approved:**	06/06/16 18:07 Kristi Schollenberger

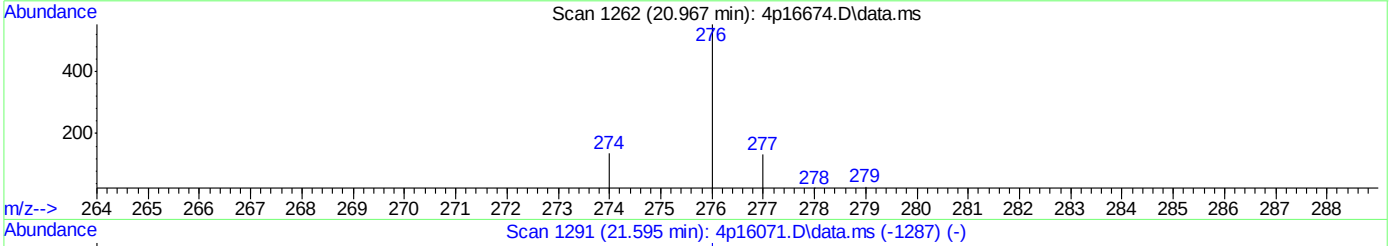
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.97	Split peak

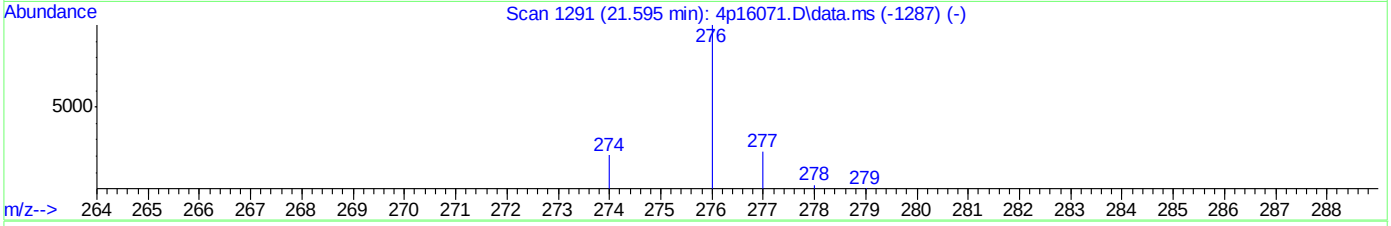
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16674.D
Acq On : 6 Jun 2016 12:49 pm
Operator : linseyk
Sample : ic887-.02
Misc : op94376a,e4p887
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 06 14:54:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16674.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.967min (-0.009) 0.01ppm

response 935

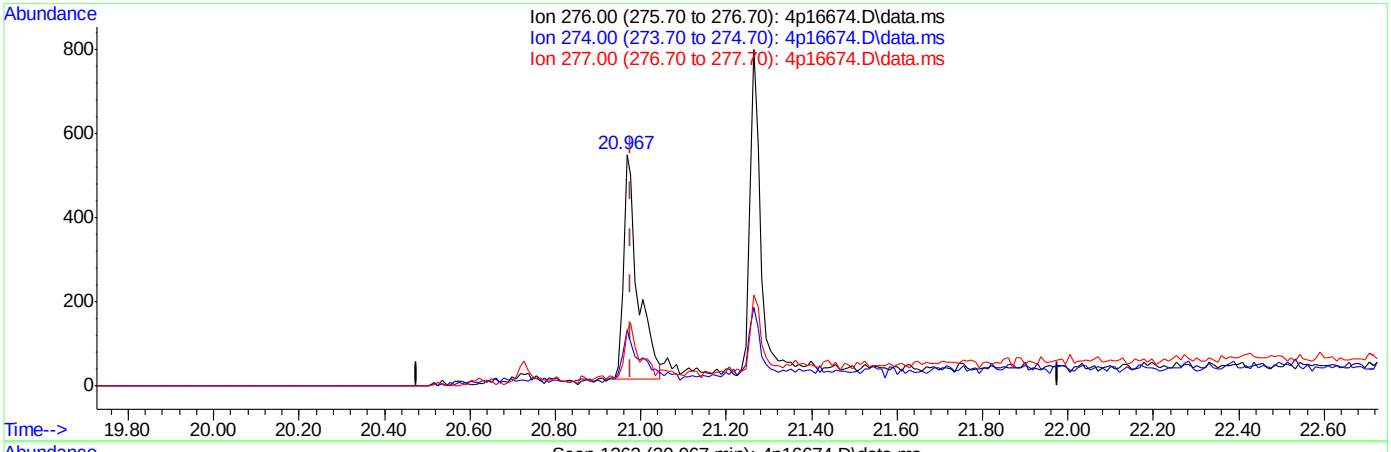
Ion	Exp%	Act%
276.00	100	100
274.00	18.30	20.81
277.00	25.70	20.70
0.00	0.00	0.00

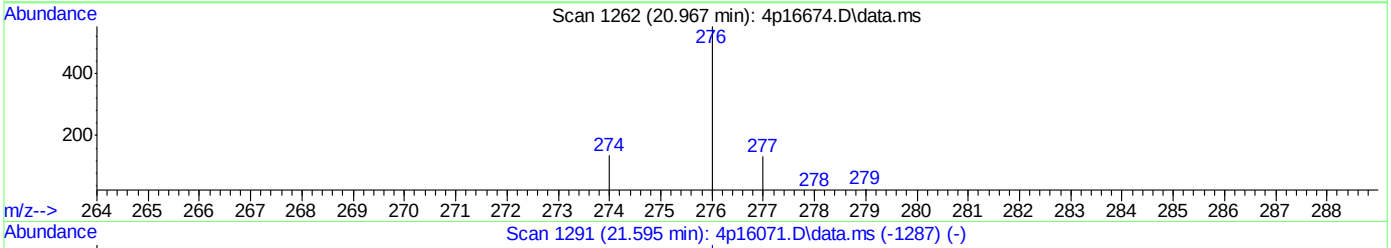
SGS ACCUTEST JC22613

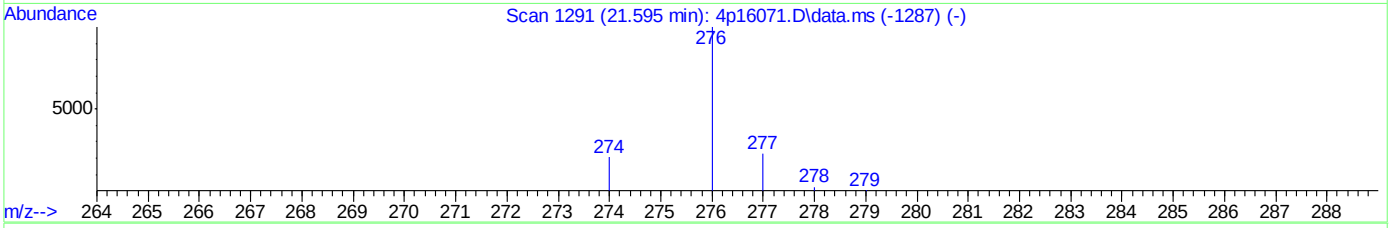
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16674.D
Acq On : 6 Jun 2016 12:49 pm
Operator : linseyk
Sample : ic887-.02
Misc : op94376a,e4p887
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 06 14:54:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16674.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.967min (-0.009) 0.01ppm m

response 1233

Ion	Exp%	Act%
276.00	100	100
274.00	18.30	24.50
277.00	25.70	24.14
0.00	0.00	0.00

4P16675.D

Manual Integrations APPROVED (compounds with "m" flag)

Kristi Schollenberger 06/06/16 18:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16675.D
Acq On : 6 Jun 2016 1:19 pm
Operator : linseyk
Sample : ic887-.01
Misc : op94376a,e4p887
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 06 15:02:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	7.761	150	140162	4.00 ppm	-0.02
13) Fluorene-d10	10.709	176	238239	4.00 ppm	0.00
23) Fluoranthene-d10	14.903	212	339097	4.00 ppm	-0.02
33) Benzo(a)pyrene-d12	19.526	264	230936	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	2.628	112	3619	0.18 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.36%	
4) Phenol-d5	3.768	99	4928	0.14 ppm	0.02
Spiked Amount 50.000			Recovery	= 0.28%	
7) Nitrobenzene-d5	5.081	82	4592	0.18 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.36%	
14) 2-Fluorobiphenyl	8.425	172	12697	0.29 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.58%	
22) 2,4,6-Tribromophenol	11.236	330	846	0.15 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.30%	
30) Terphenyl-d14	15.764	244	7128	0.15 ppm	0.00
Spiked Amount 50.000			Recovery	= 0.30%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.422	88	191	0.02 ppm	90
5) Phenol	3.768	94	1583	0.04 ppm #	42
6) bis(2-Chloroethyl)ether	3.854	93	263	0.01 ppm #	71
8) Naphthalene	6.343	128	945	0.01 ppm	95
9) Hexachlorobutadiene	6.649	225	187	0.01 ppm	91
10) 2-Methylnaphthalene	7.646	141	1286	0.03 ppm	92
11) 1-Methylnaphthalene	7.829	141	677	0.01 ppm	87
12) Hexachlorocyclopentadiene	8.013	237	81	0.01 ppm #	1
15) Acenaphthylene	9.365	152	854	0.01 ppm	96
16) Acenaphthene	9.731	153	485	0.01 ppm	88
17) Dibenzofuran	10.075	168	4160	0.06 ppm	97
18) Fluorene	10.684	166	609	0.01 ppm #	18
19) 4,6-dinitro-2-methylph...	10.982	198	116	0.03 ppm #	22
20) n-nitrosodiphenylamine	11.081	169	348	0.01 ppm #	81
21) 1,2-Diphenylhydrazine	11.131	77	560	0.01 ppm	83
24) Hexachlorobenzene	11.840	284	204	0.01 ppm	70
25) Pentachlorophenol	12.287	266	431	0.05 ppm	93
26) Phenanthrene	12.631	178	834	0.01 ppm	98
27) Anthracene	12.735	178	737	0.01 ppm	98
28) Fluoranthene	14.938	202	1345	0.01 ppm	97
29) Pyrene	15.334	202	860	0.01 ppm	98
31) Benzo[a]anthracene	17.452	228	493	0.01 ppm	94
32) Chrysene	17.510	228	696	0.01 ppm	95
34) Benzo[b]fluoranthene	19.112	252	645	0.01 ppm	93
35) Benzo[k]fluoranthene	19.147	252	492	0.01 ppm	97
36) Benzo[a]pyrene	19.549	252	611	0.01 ppm	84
37) Indeno[1,2,3-cd]pyrene	20.975	276	615m	0.01 ppm	
38) Dibenz[a,h]anthracene	21.013	278	499	0.01 ppm	79
39) Benzo[g,h,i]perylene	21.263	276	621	0.01 ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16675.D
Acq On : 6 Jun 2016 1:19 pm
Operator : linseyk
Sample : ic887-.01
Misc : op94376a,e4p887
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 06 15:02:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

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

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

7.6.74

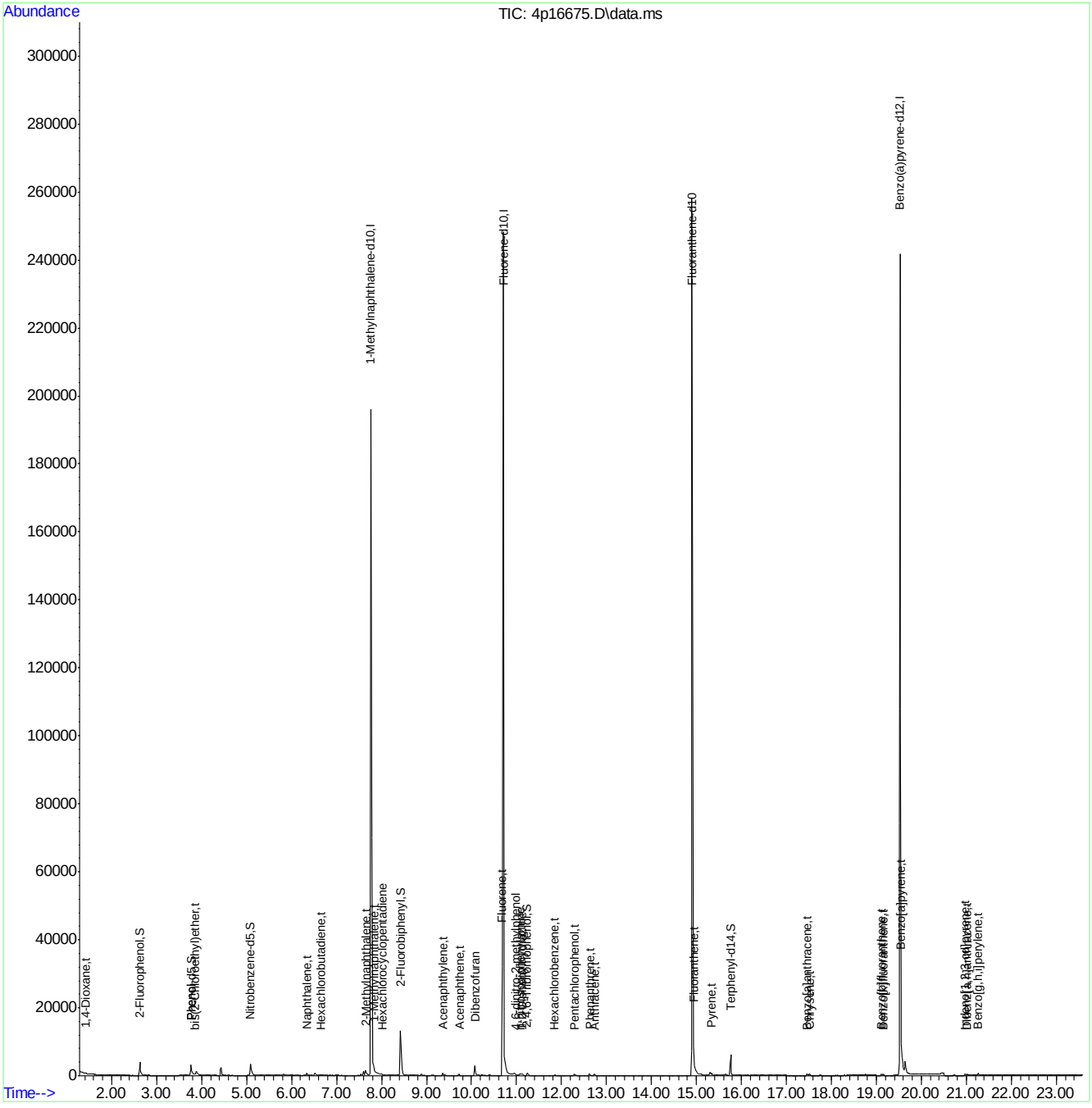
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16675.D
Acq On : 6 Jun 2016 1:19 pm
Operator : linseyk
Sample : ic887-.01
Misc : op94376a,e4p887
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 06 15:02:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration



Manual Integration Approval Summary

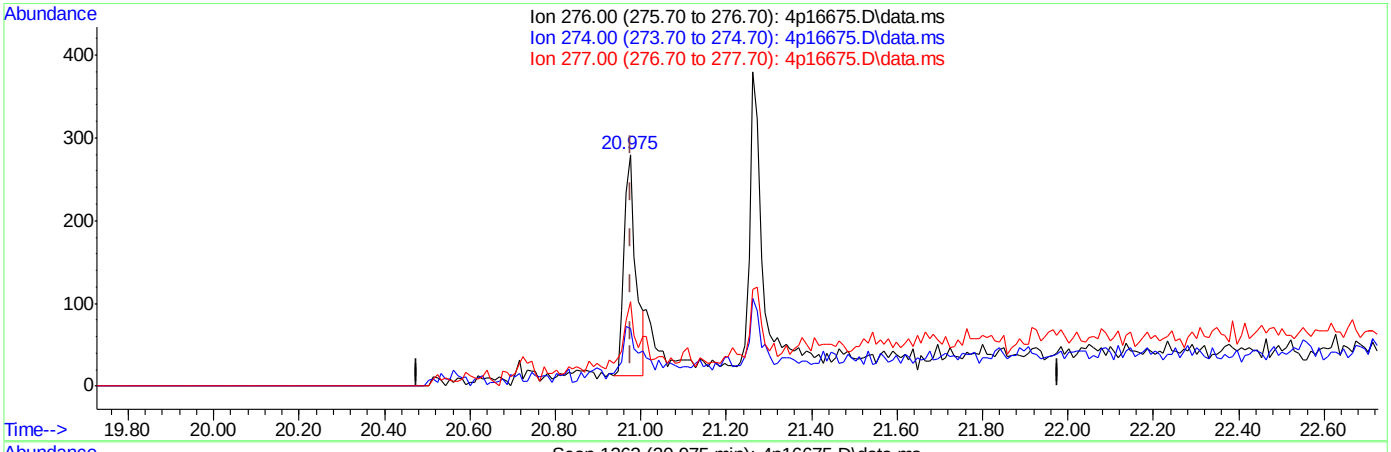
Sample Number:	E4P887-IC887	**Method:**	SW846 8270D BY SIM
Lab FileID:	4P16675.D	**Analyst approved:**	06/06/16 15:58 Linsey Kirschmann
Injection Time:	06/06/16 13:19	**Supervisor approved:**	06/06/16 18:07 Kristi Schollenberger

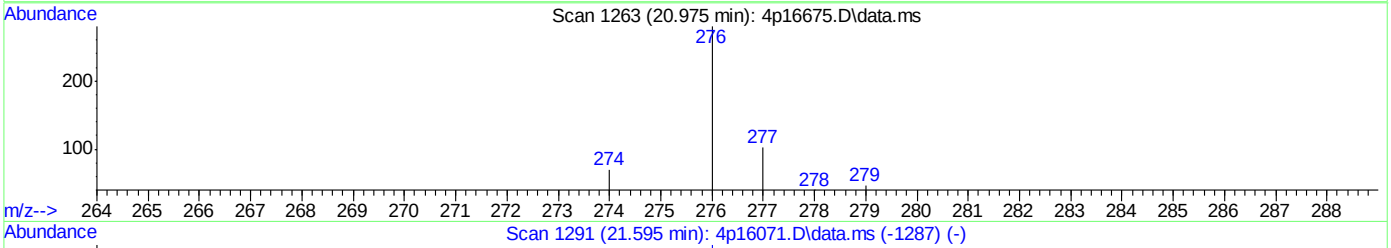
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.97	Split peak

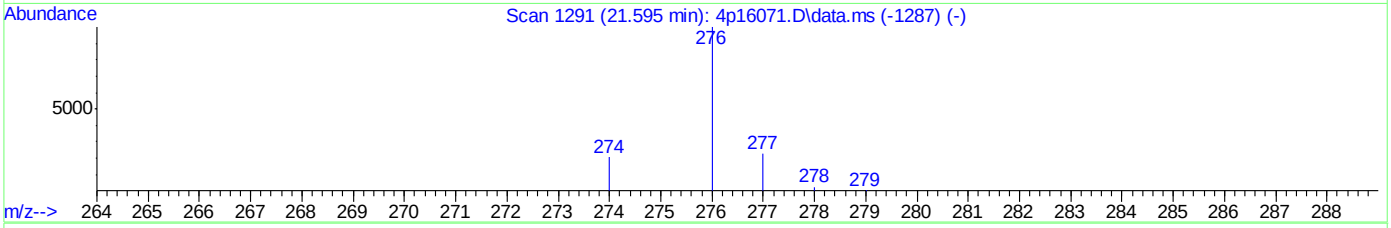
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16675.D
Acq On : 6 Jun 2016 1:19 pm
Operator : linseyk
Sample : ic887-.01
Misc : op94376a,e4p887
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 06 14:54:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16675.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.975min (-0.002) 0.01ppm

response 508

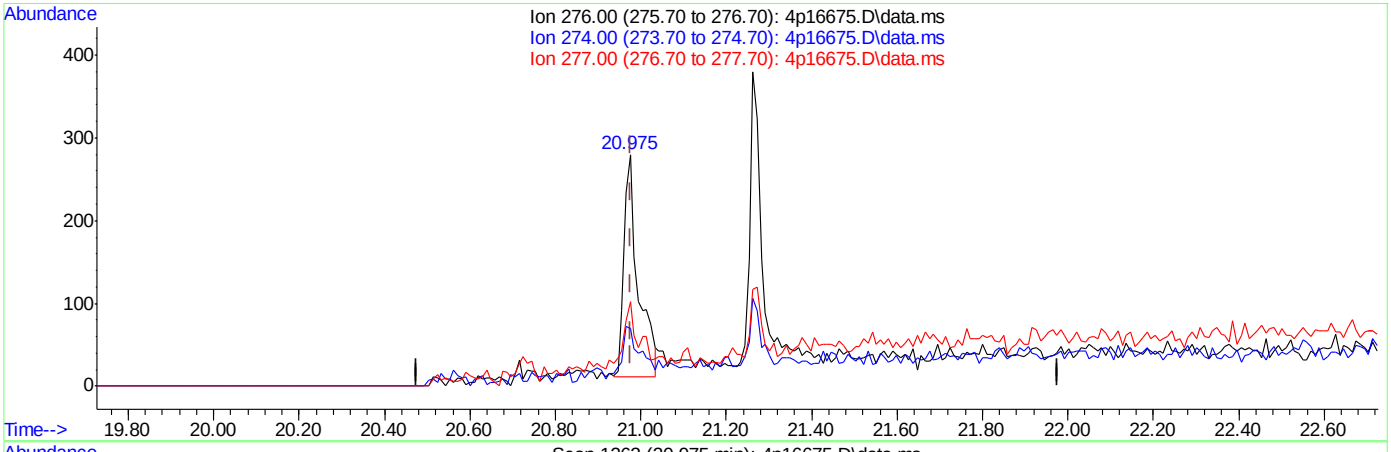
Ion	Exp%	Act%
276.00	100	100
274.00	18.30	17.54
277.00	25.70	25.66
0.00	0.00	0.00

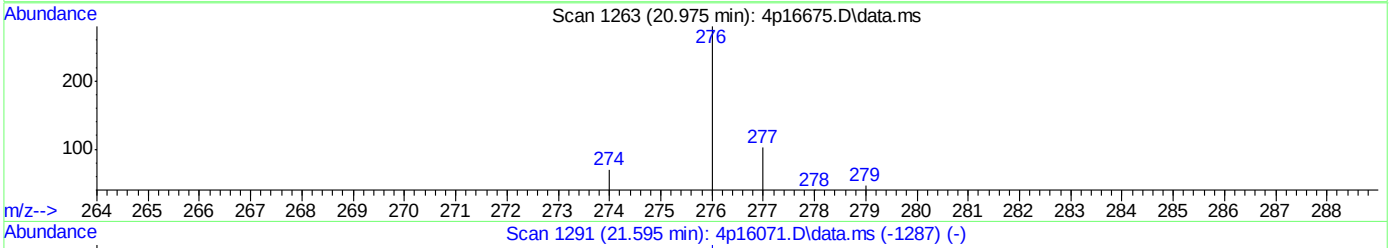
SGS ACCUTEST JC22613

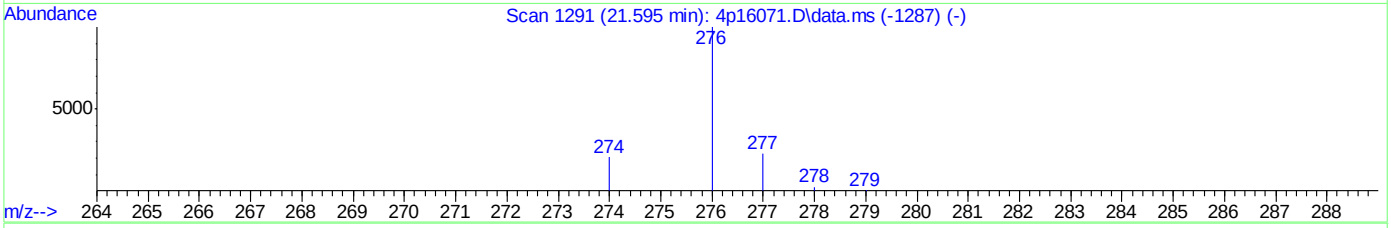
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16675.D
Acq On : 6 Jun 2016 1:19 pm
Operator : linseyk
Sample : ic887-.01
Misc : op94376a,e4p887
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 06 14:54:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16675.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.975min (-0.002) 0.01ppm m

response 615

Ion	Exp%	Act%
276.00	100	100
274.00	18.30	24.64
277.00	25.70	36.43
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/06/16 18:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16676.D
Acq On : 6 Jun 2016 1:49 pm
Operator : linseyk
Sample : ic887-5
Misc : op94376a,e4p887
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 06 15:04:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.760	150	149118	4.00	ppm	-0.02
13) Fluorene-d10	10.709	176	284210	4.00	ppm	0.00
23) Fluoranthene-d10	14.903	212	345134	4.00	ppm	-0.02
33) Benzo(a)pyrene-d12	19.526	264	240786	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.628	112	1759448	82.31	ppm	0.00
Spiked Amount 50.000			Recovery = 164.62%			
4) Phenol-d5	3.750	99	2743485	72.31	ppm	0.00
Spiked Amount 50.000			Recovery = 144.62%			
7) Nitrobenzene-d5	5.081	82	2586948	93.39	ppm	0.00
Spiked Amount 50.000			Recovery = 186.78%			
14) 2-Fluorobiphenyl	8.425	172	4364591	82.67	ppm	0.00
Spiked Amount 50.000			Recovery = 165.34%			
22) 2,4,6-Tribromophenol	11.236	330	670138	96.54	ppm	0.00
Spiked Amount 50.000			Recovery = 193.08%			
30) Terphenyl-d14	15.763	244	3628905	73.22	ppm	0.00
Spiked Amount 50.000			Recovery = 146.44%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.421	88	59274	5.14	ppm #	64
5) Phenol	3.767	94	980114	23.37	ppm #	88
6) bis(2-Chloroethyl)ether	3.853	93	131134	4.41	ppm	94
8) Naphthalene	6.342	128	474623	4.75	ppm	97
9) Hexachlorobutadiene	6.648	225	76074	4.41	ppm	91
10) 2-Methylnaphthalene	7.646	141	255720	5.52	ppm	85
11) 1-Methylnaphthalene	7.829	141	306701	5.12	ppm	86
12) Hexachlorocyclopentadiene	8.013	237	134664	9.57	ppm	97
15) Acenaphthylene	9.364	152	512142	5.82	ppm	96
16) Acenaphthene	9.731	153	258924	4.14	ppm	87
17) Dibenzofuran	10.075	168	442043	5.52	ppm	86
18) Fluorene	10.758	166	303626	4.10	ppm	91
19) 4,6-dinitro-2-methylph...	10.957	198	187060	37.99	ppm	93
20) n-nitrosodiphenylamine	11.081	169	207101	6.01	ppm	92
21) 1,2-Diphenylhydrazine	11.131	77	362832	5.52	ppm	92
24) Hexachlorobenzene	11.840	284	94851	4.60	ppm	71
25) Pentachlorophenol	12.270	266	229031	27.40	ppm	77
26) Phenanthrene	12.631	178	465208	4.40	ppm	96
27) Anthracene	12.717	178	480688	4.93	ppm	89
28) Fluoranthene	14.937	202	512839	4.68	ppm	97
29) Pyrene	15.333	202	506073	4.57	ppm	95
31) Benzo[a]anthracene	17.452	228	376444	4.60	ppm	93
32) Chrysene	17.510	228	431063	4.60	ppm	93
34) Benzo[b]fluoranthene	19.112	252	432420	4.85	ppm	95
35) Benzo[k]fluoranthene	19.146	252	367625	4.64	ppm	90
36) Benzo[a]pyrene	19.549	252	368276	4.71	ppm	90
37) Indeno[1,2,3-cd]pyrene	20.967	276	397850m	4.32	ppm	
38) Dibenz[a,h]anthracene	21.015	278	331914	4.47	ppm	98
39) Benzo[g,h,i]perylene	21.265	276	366364	4.57	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16676.D
Acq On : 6 Jun 2016 1:49 pm
Operator : linseyk
Sample : ic887-5
Misc : op94376a,e4p887
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 06 15:04:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

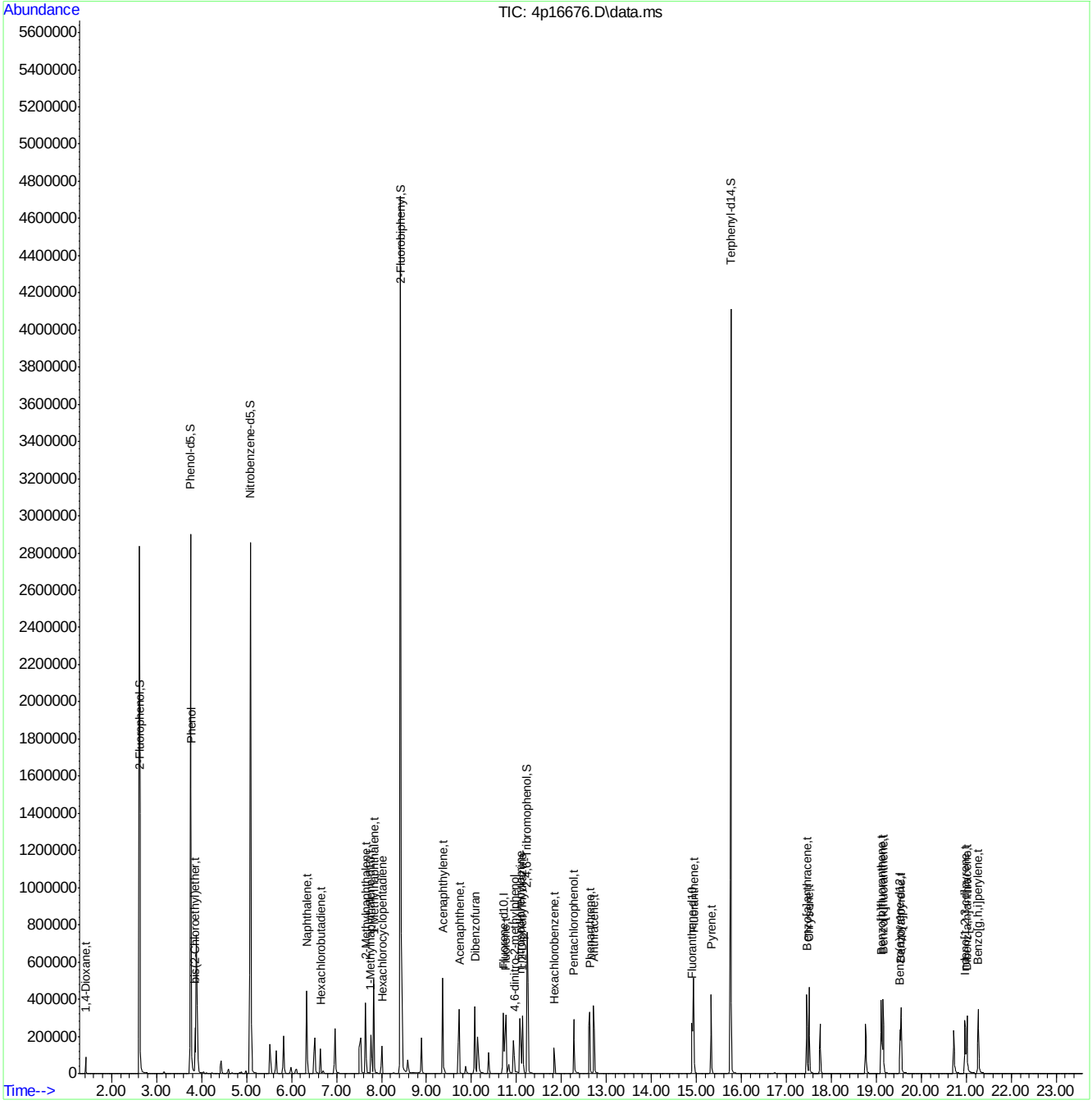
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16676.D
Acq On : 6 Jun 2016 1:49 pm
Operator : linseyk
Sample : ic887-5
Misc : op94376a,e4p887
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 06 15:04:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration



M4P887SIM.M Mon Jun 06 15:04:45 2016 Page: 3

Manual Integration Approval Summary

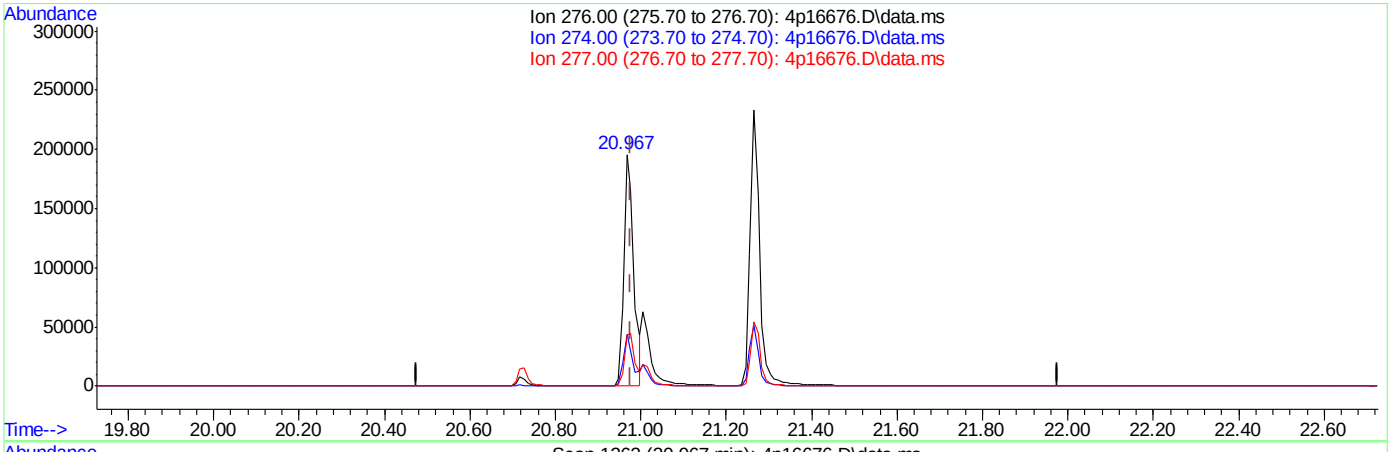
Sample Number:	E4P887-IC887	**Method:**	SW846 8270D BY SIM
Lab FileID:	4P16676.D	**Analyst approved:**	06/06/16 15:58 Linsey Kirschmann
Injection Time:	06/06/16 13:49	**Supervisor approved:**	06/06/16 18:07 Kristi Schollenberger

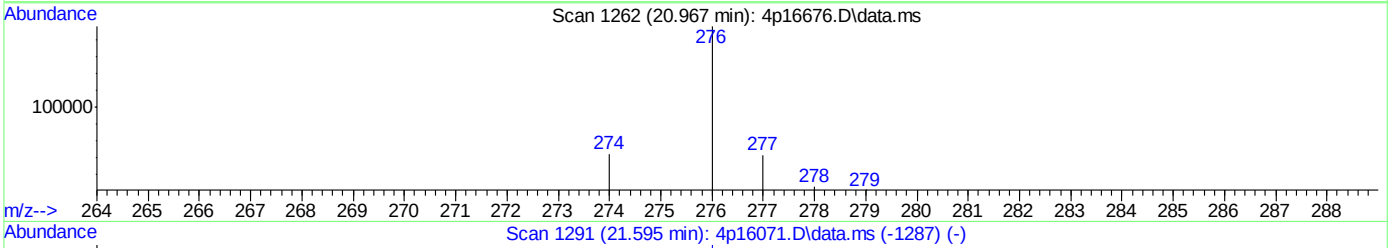
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.97	Split peak

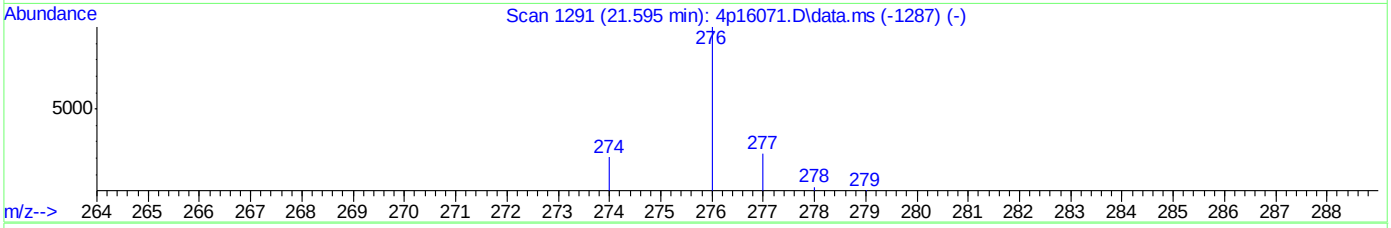
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16676.D
Acq On : 6 Jun 2016 1:49 pm
Operator : linseyk
Sample : ic887-5
Misc : op94376a,e4p887
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 06 14:54:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16676.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.967min (-0.010) 3.38ppm

response 311476

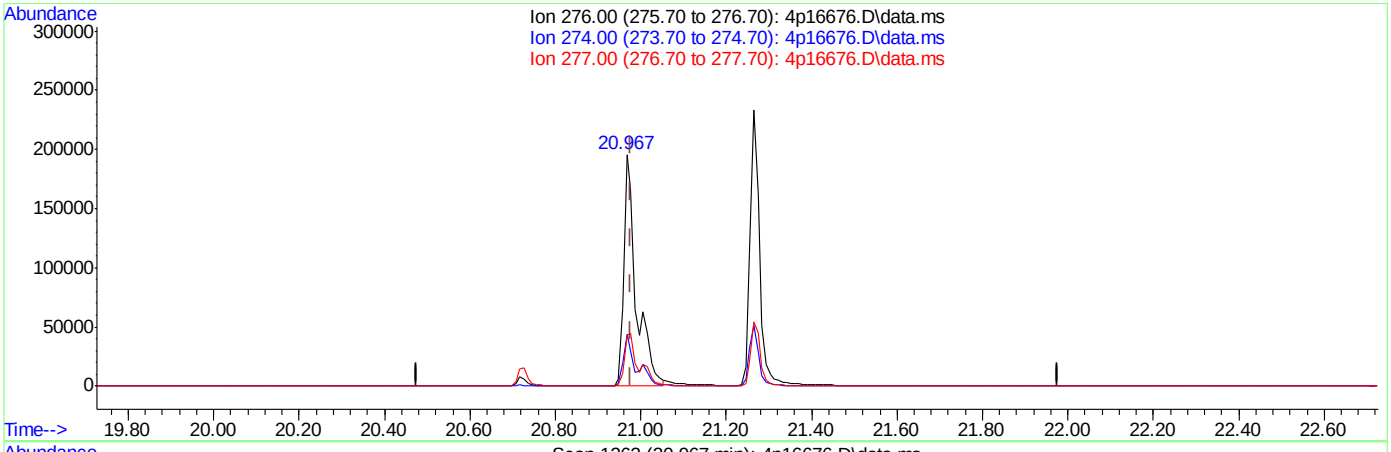
Ion	Exp%	Act%
276.00	100	100
274.00	18.30	21.77
277.00	25.70	21.29
0.00	0.00	0.00

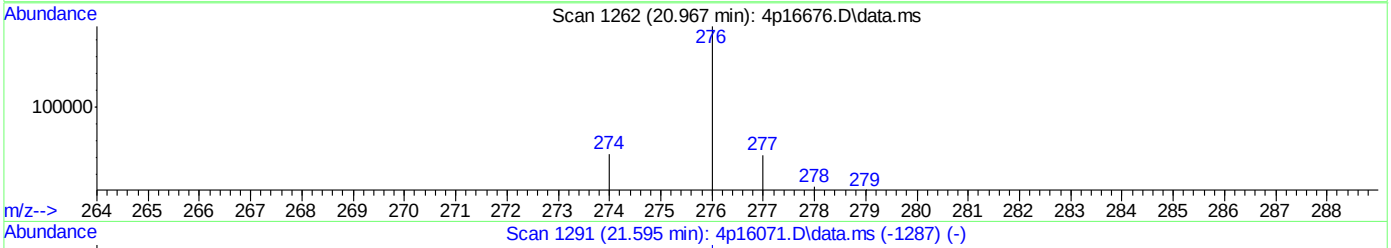
SGS ACCUTEST JC22613

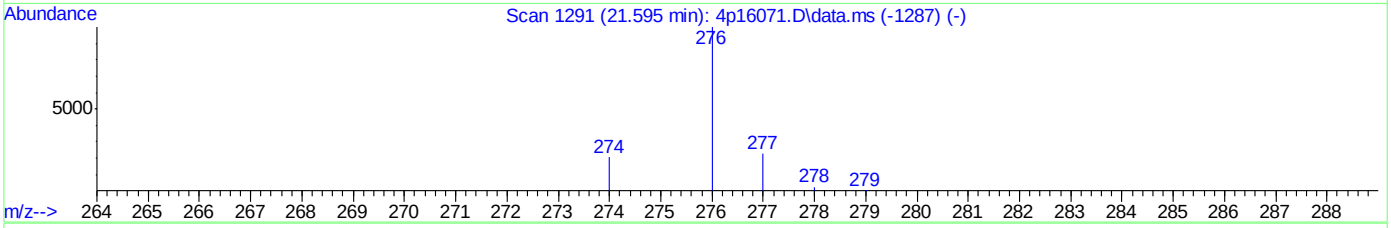
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16676.D
Acq On : 6 Jun 2016 1:49 pm
Operator : linseyk
Sample : ic887-5
Misc : op94376a,e4p887
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 06 14:54:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16676.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.967min (-0.010) 4.32ppm m

response 397850

Ion	Exp%	Act%
276.00	100	100
274.00	18.30	22.50
277.00	25.70	21.83
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/06/16 18:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16677.D
Acq On : 6 Jun 2016 2:19 pm
Operator : linseyk
Sample : ic887-2.5
Misc : op94376a,e4p887
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 06 15:05:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.763	150	165682	4.00	ppm	-0.02
13) Fluorene-d10	10.711	176	242175	4.00	ppm	0.00
23) Fluoranthene-d10	14.901	212	340044	4.00	ppm	-0.02
33) Benzo(a)pyrene-d12	19.524	264	238884	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.628	112	946423	39.85	ppm	0.00
Spiked Amount 50.000			Recovery = 79.70%			
4) Phenol-d5	3.750	99	1687489	40.03	ppm	0.00
Spiked Amount 50.000			Recovery = 80.06%			
7) Nitrobenzene-d5	5.064	82	1181453	38.39	ppm	-0.02
Spiked Amount 50.000			Recovery = 76.78%			
14) 2-Fluorobiphenyl	8.427	172	2925127	65.02	ppm	0.00
Spiked Amount 50.000			Recovery = 130.04%			
22) 2,4,6-Tribromophenol	11.234	330	366664	61.99	ppm	0.00
Spiked Amount 50.000			Recovery = 123.98%			
30) Terphenyl-d14	15.762	244	2139174	43.81	ppm	0.00
Spiked Amount 50.000			Recovery = 87.62%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.422	88	30818	2.40	ppm #	66
5) Phenol	3.768	94	441103	9.47	ppm #	86
6) bis(2-Chloroethyl)ether	3.854	93	74286	2.25	ppm	80
8) Naphthalene	6.345	128	253306	2.28	ppm	95
9) Hexachlorobutadiene	6.650	225	37667	1.96	ppm	87
10) 2-Methylnaphthalene	7.648	141	140683	2.73	ppm	80
11) 1-Methylnaphthalene	7.831	141	160754	2.42	ppm	79
12) Hexachlorocyclopentadiene	8.015	237	57044	3.65	ppm	97
15) Acenaphthylene	9.367	152	264051	3.52	ppm	93
16) Acenaphthene	9.733	153	127236	2.39	ppm	82
17) Dibenzofuran	10.077	168	247379	3.63	ppm	72
18) Fluorene	10.760	166	144977	2.30	ppm	87
19) 4,6-dinitro-2-methylph...	10.959	198	77090	18.37	ppm	87
20) n-nitrosodiphenylamine	11.083	169	115329	3.93	ppm	83
21) 1,2-Diphenylhydrazine	11.129	77	178150	3.18	ppm	95
24) Hexachlorobenzene	11.838	284	49028	2.42	ppm #	67
25) Pentachlorophenol	12.268	266	98586	11.97	ppm	70
26) Phenanthrene	12.630	178	235371	2.26	ppm	98
27) Anthracene	12.733	178	237821	2.48	ppm	97
28) Fluoranthene	14.936	202	258464	2.39	ppm	98
29) Pyrene	15.332	202	260974	2.39	ppm	99
31) Benzo[a]anthracene	17.450	228	177952	2.20	ppm	90
32) Chrysene	17.508	228	219042	2.37	ppm	96
34) Benzo[b]fluoranthene	19.110	252	208728	2.36	ppm	99
35) Benzo[k]fluoranthene	19.145	252	186489	2.37	ppm	89
36) Benzo[a]pyrene	19.559	252	183988	2.37	ppm	99
37) Indeno[1,2,3-cd]pyrene	20.975	276	199663m	2.19	ppm	
38) Dibenz[a,h]anthracene	21.013	278	164397	2.23	ppm	99
39) Benzo[g,h,i]perylene	21.263	276	184829	2.33	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16677.D
Acq On : 6 Jun 2016 2:19 pm
Operator : linseyk
Sample : ic887-2.5
Misc : op94376a,e4p887
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 06 15:05:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration

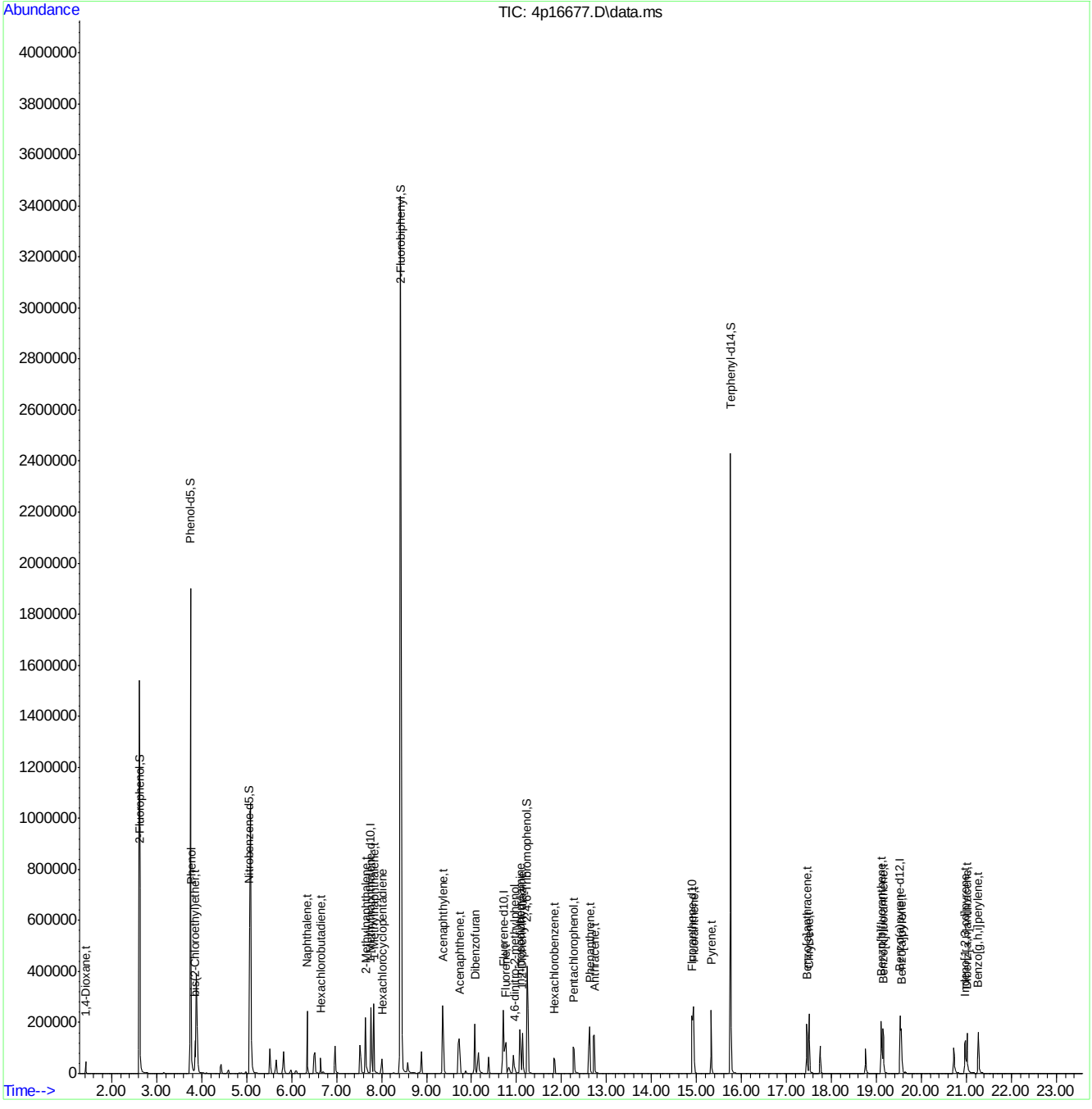
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16677.D
Acq On : 6 Jun 2016 2:19 pm
Operator : linseyk
Sample : ic887-2.5
Misc : op94376a,e4p887
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 06 15:05:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration



M4P887SIM.M Mon Jun 06 15:05:18 2016 Page: 3

Manual Integration Approval Summary

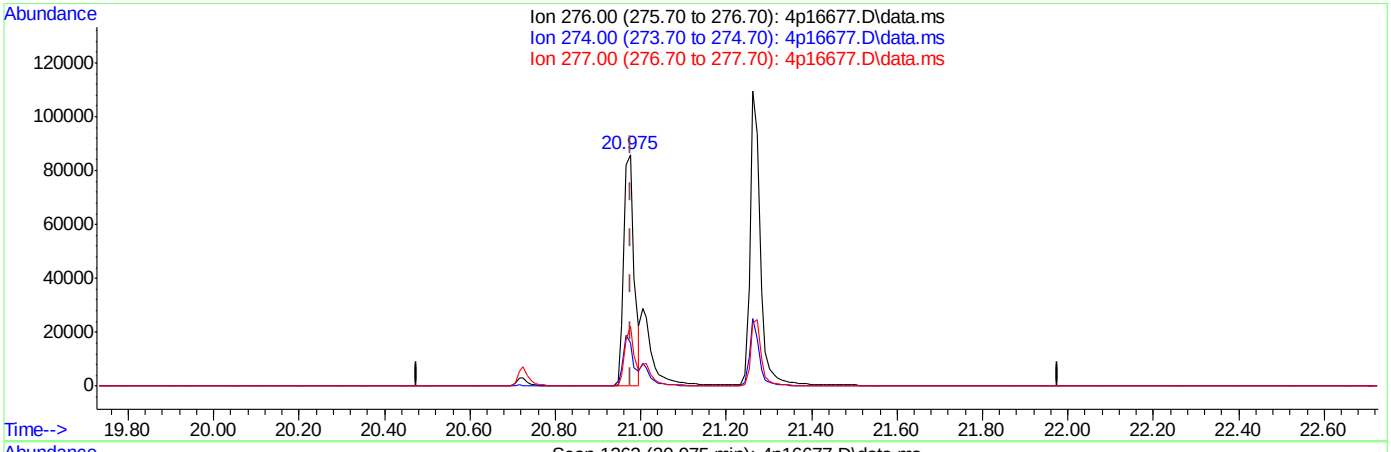
Sample Number:	E4P887-IC887	**Method:**	SW846 8270D BY SIM
Lab FileID:	4P16677.D	**Analyst approved:**	06/06/16 15:58 Linsey Kirschmann
Injection Time:	06/06/16 14:19	**Supervisor approved:**	06/06/16 18:07 Kristi Schollenberger

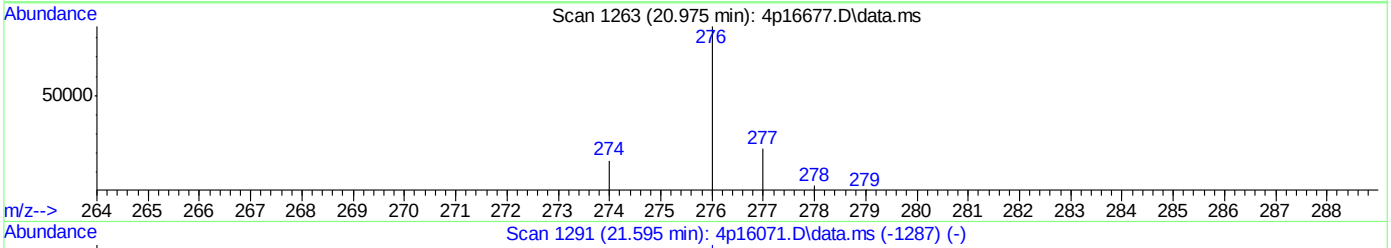
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.97	Split peak

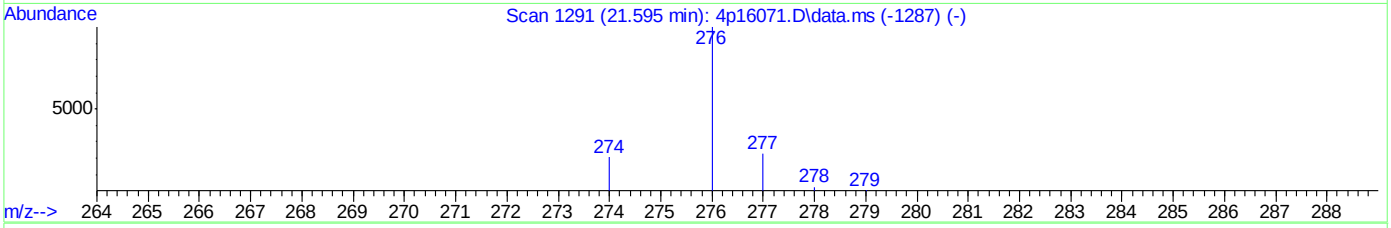
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16677.D
Acq On : 6 Jun 2016 2:19 pm
Operator : linseyk
Sample : ic887-2.5
Misc : op94376a,e4p887
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 06 14:54:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16677.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.975min (-0.002) 1.60ppm

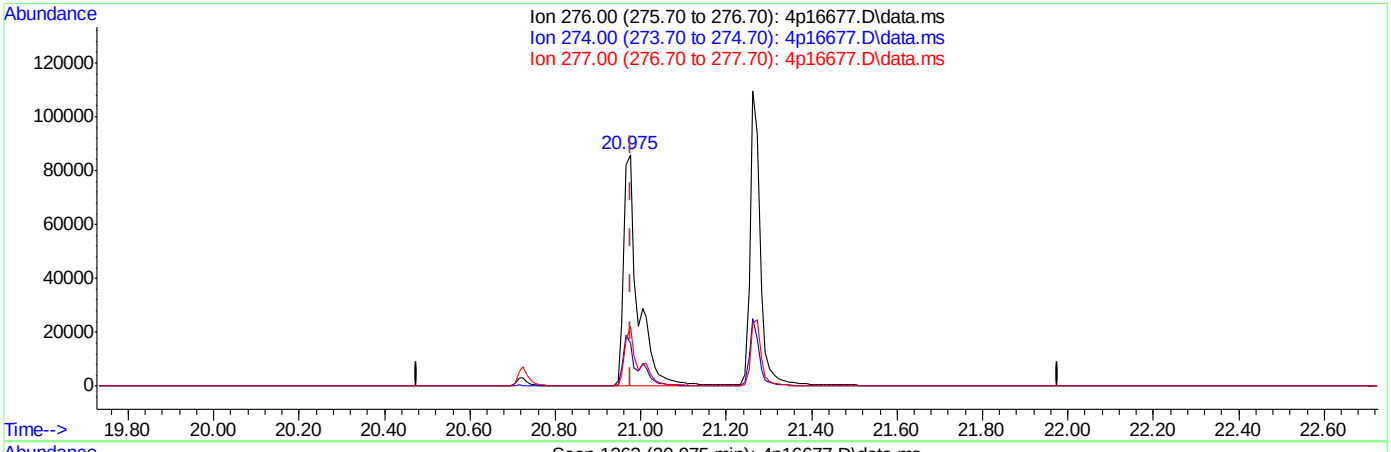
response 146521

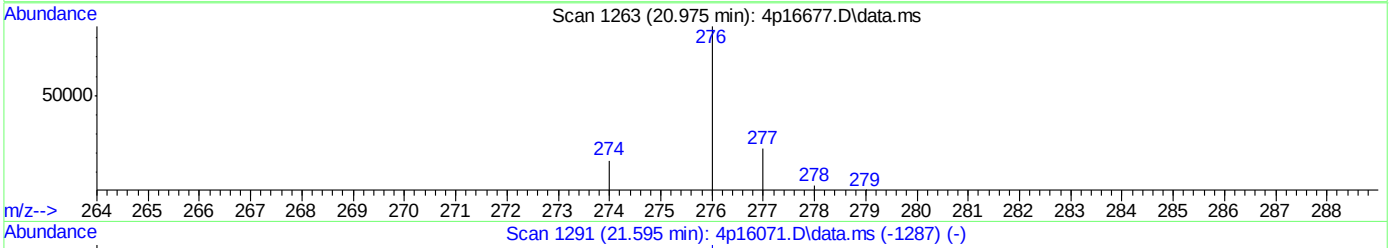
Ion	Exp%	Act%
276.00	100	100
274.00	18.30	17.82
277.00	25.70	25.86
0.00	0.00	0.00

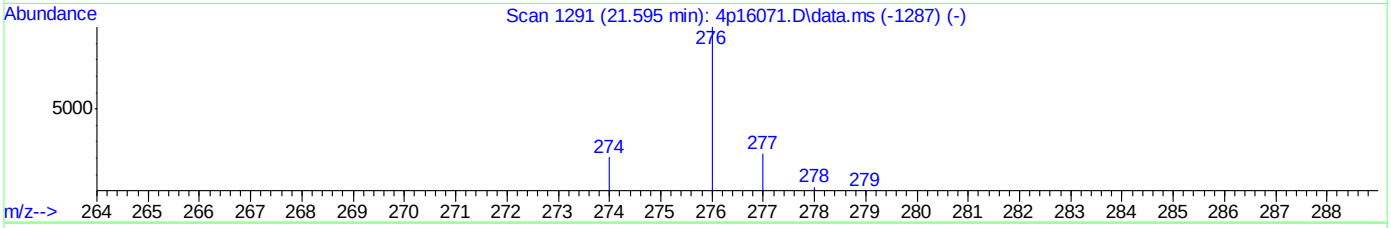
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16677.D
Acq On : 6 Jun 2016 2:19 pm
Operator : linseyk
Sample : ic887-2.5
Misc : op94376a,e4p887
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Jun 06 14:54:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 14:53:49 2016
Response via : Initial Calibration







TIC: 4p16677.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.975min (-0.002) 2.19ppm m

response 199663

Ion	Exp%	Act%
276.00	100	100
274.00	18.30	18.72
277.00	25.70	25.95
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16678.D
Acq On : 6 Jun 2016 2:49 pm
Operator : linseyk
Sample : icv887-1
Misc : op94376a,e4p887
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 06 15:16:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 15:07:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	7.762	150	166306	4.00 ppm	0.00
13) Fluorene-d10	10.711	176	196073	4.00 ppm	0.00
23) Fluoranthene-d10	14.905	212	300747	4.00 ppm	0.00
33) Benzo(a)pyrene-d12	19.530	264	187947	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	3.767	94	148801	3.48 ppm	# 85
19) 4,6-dinitro-2-methylph...	10.959	198	17477	4.31 ppm	93
25) Pentachlorophenol	12.272	266	26708	4.10 ppm	79

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

7.6.77

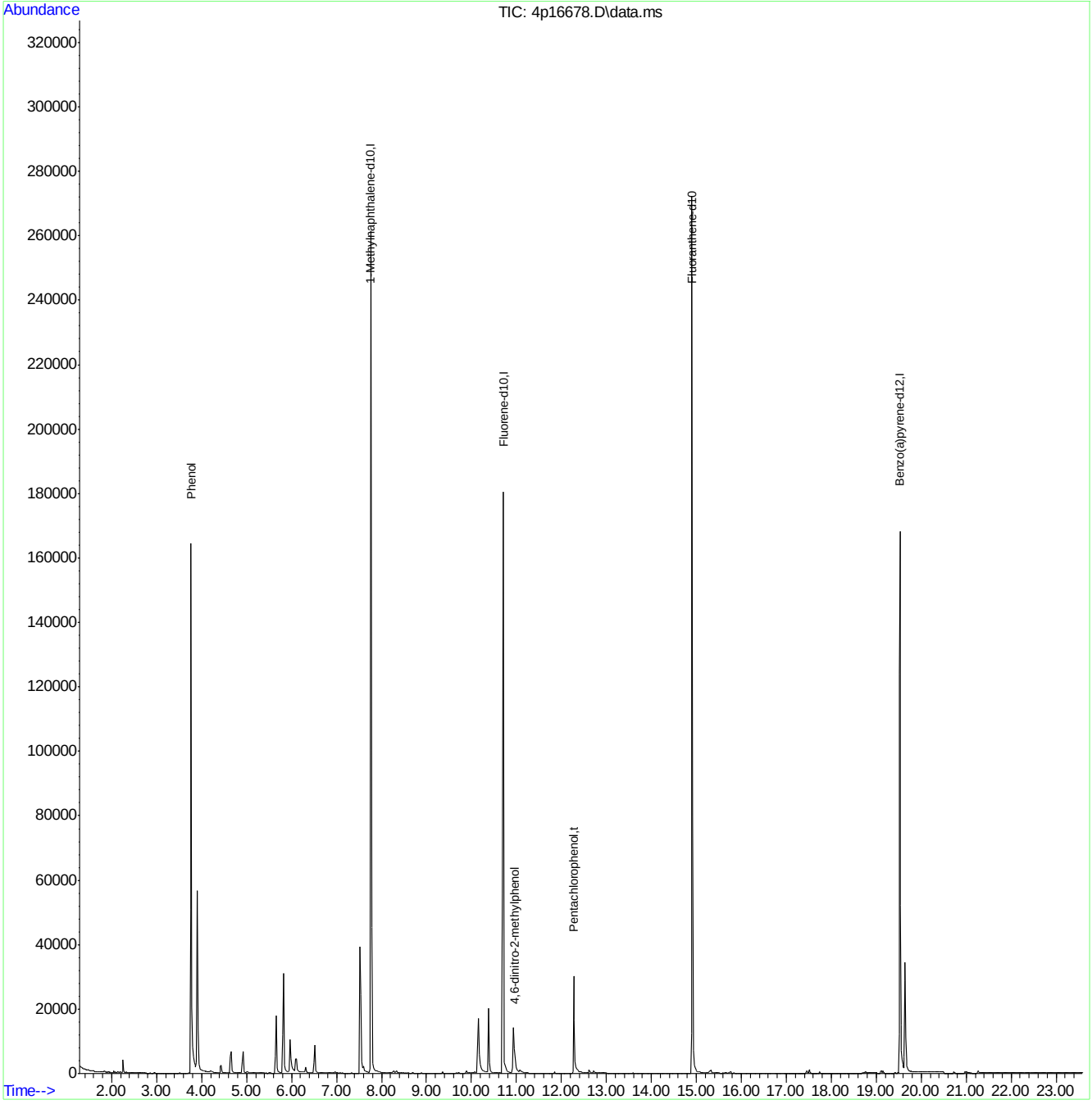
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16678.D
Acq On : 6 Jun 2016 2:49 pm
Operator : linseyk
Sample : icv887-1
Misc : op94376a,e4p887
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 06 15:16:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 15:07:18 2016
Response via : Initial Calibration



M4P887SIM.M Mon Jun 06 15:17:01 2016 Page: 2

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 06/06/16 18:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16679.D
Acq On : 6 Jun 2016 3:19 pm
Operator : linseyk
Sample : icv887-1
Misc : op94376a,e4p887
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 06 15:45:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 15:07:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	7.762	150	201495	4.00 ppm	0.00
13) Fluorene-d10	10.711	176	243000	4.00 ppm	0.00
23) Fluoranthene-d10	14.905	212	334707	4.00 ppm	0.00
33) Benzo(a)pyrene-d12	19.528	264	191849	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	1.435	88	12653	0.81 ppm	# 36
6) bis(2-Chloroethyl)ether	3.854	93	40190	1.02 ppm	88
8) Naphthalene	6.344	128	134299	1.01 ppm	97
9) Hexachlorobutadiene	6.650	225	18643	0.82 ppm	94
10) 2-Methylnaphthalene	7.648	141	68316	0.96 ppm	94
15) Acenaphthylene	9.367	152	114643	1.22 ppm	98
16) Acenaphthene	9.733	153	63593	1.25 ppm	96
17) Dibenzofuran	10.077	168	114493	1.30 ppm	85
18) Fluorene	10.760	166	65851	1.05 ppm	97
20) n-nitrosodiphenylamine	11.083	169	48826	1.32 ppm	94
21) 1,2-Diphenylhydrazine	11.133	77	74009	1.17 ppm	82
24) Hexachlorobenzene	11.842	284	21911	1.12 ppm	74
26) Phenanthrene	12.616	178	111116	1.22 ppm	87
27) Anthracene	12.719	178	95184	1.08 ppm	91
28) Fluoranthene	14.939	202	108650	1.04 ppm	94
29) Pyrene	15.335	202	102873	1.07 ppm	94
31) Benzo[a]anthracene	17.454	228	83563	1.22 ppm	99
32) Chrysene	17.512	228	93836	1.13 ppm	96
34) Benzo[b]fluoranthene	19.114	252	59634	0.88 ppm	96
35) Benzo[k]fluoranthene	19.148	252	71250	1.21 ppm	94
36) Benzo[a]pyrene	19.551	252	62521	1.02 ppm	93
37) Indeno[1,2,3-cd]pyrene	20.969	276	66608m	0.98 ppm	
38) Dibenz[a,h]anthracene	21.017	278	54267	0.98 ppm	92
39) Benzo[g,h,i]perylene	21.267	276	63559	1.02 ppm	98

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

7.6.78

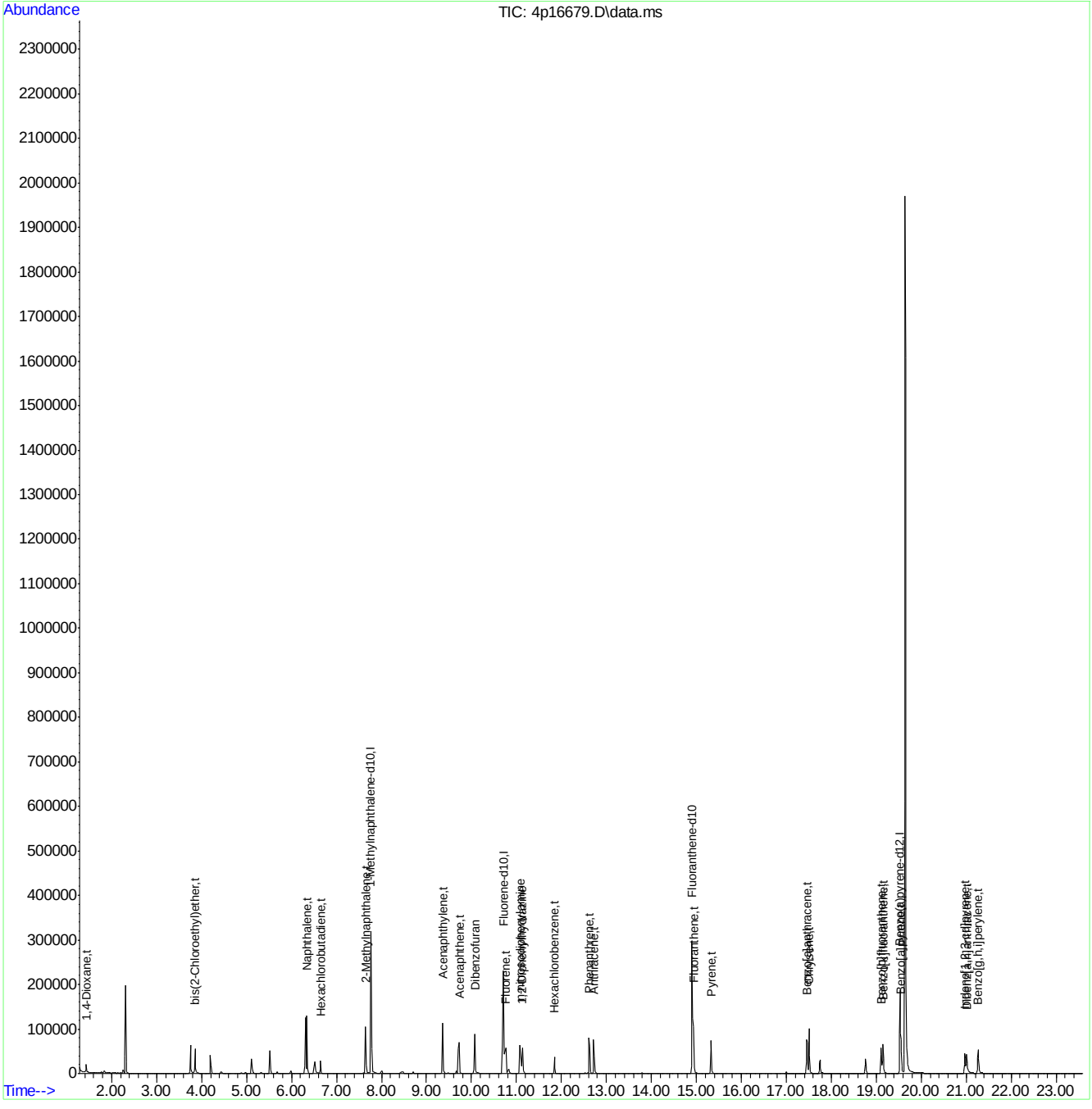
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16679.D
Acq On : 6 Jun 2016 3:19 pm
Operator : linseyk
Sample : icv887-1
Misc : op94376a,e4p887
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 06 15:45:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 15:07:18 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Manual Integration Approval Summary

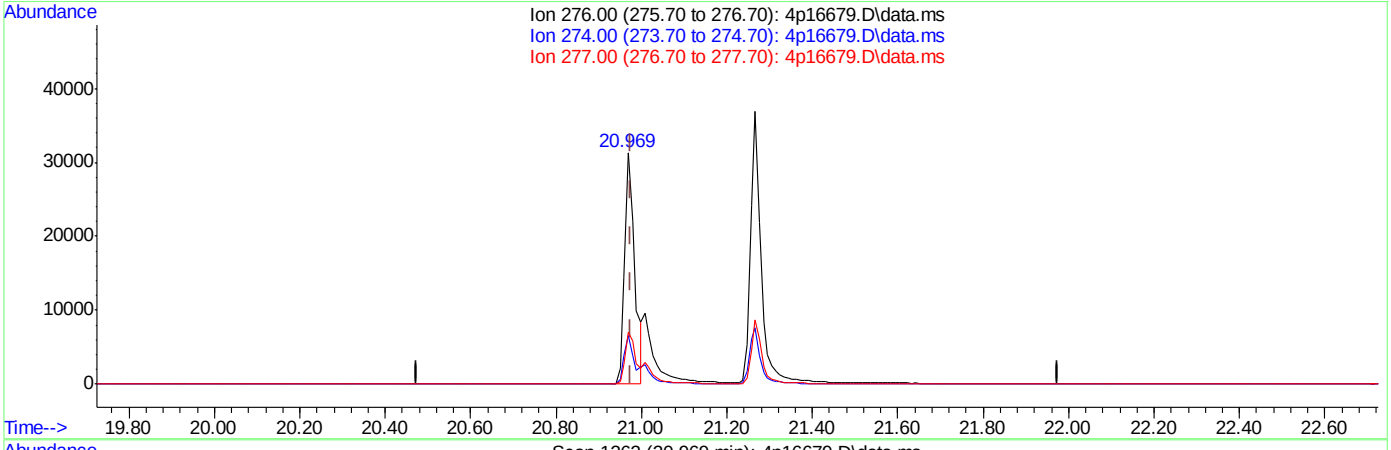
Sample Number:	E4P887-ICV887	**Method:**	SW846 8270D BY SIM
Lab FileID:	4P16679.D	**Analyst approved:**	06/06/16 15:58 Linsey Kirschmann
Injection Time:	06/06/16 15:19	**Supervisor approved:**	06/06/16 18:07 Kristi Schollenberger

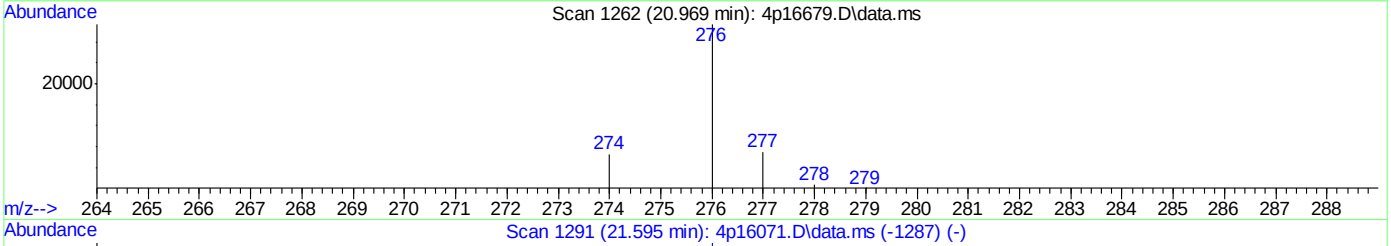
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.97	Split peak

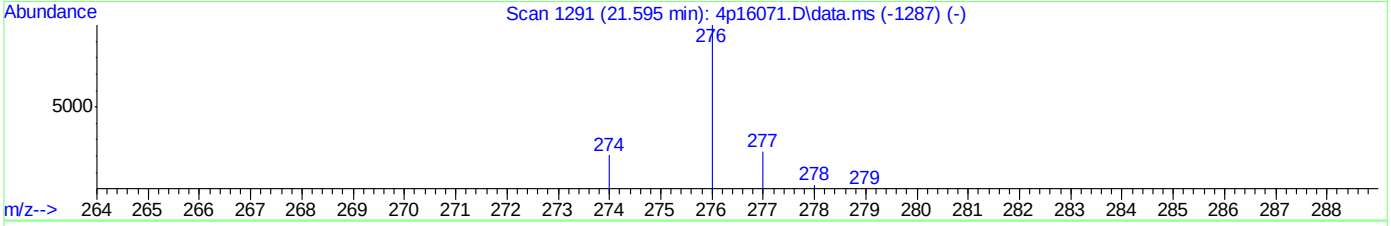
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16679.D
Acq On : 6 Jun 2016 3:19 pm
Operator : linseyk
Sample : icv887-1
Misc : op94376a,e4p887
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 06 15:43:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 15:07:18 2016
Response via : Initial Calibration







TIC: 4p16679.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.969min (-0.006) 0.75ppm

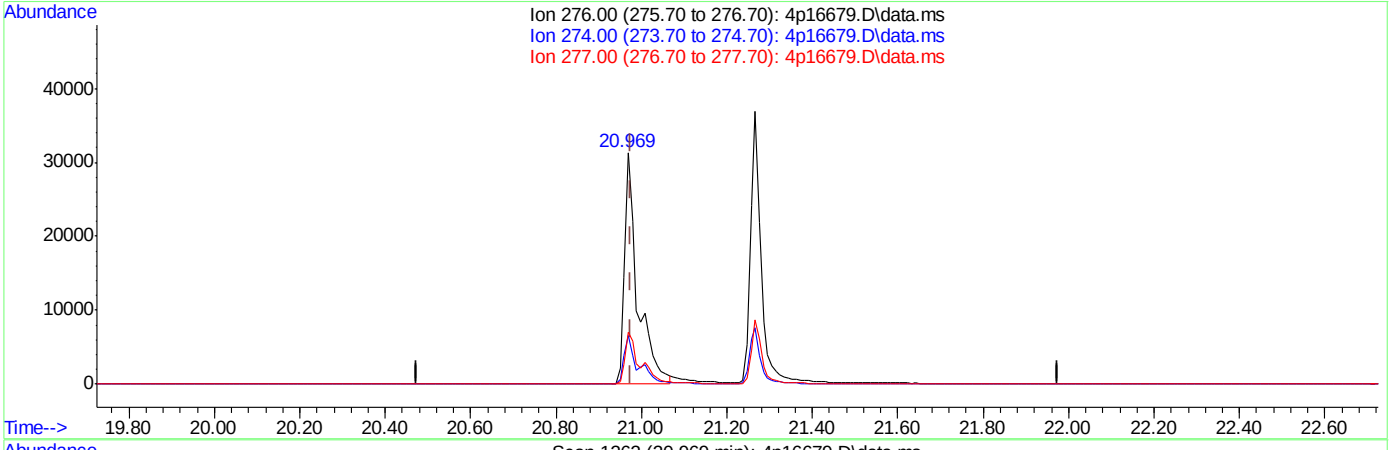
response 50960

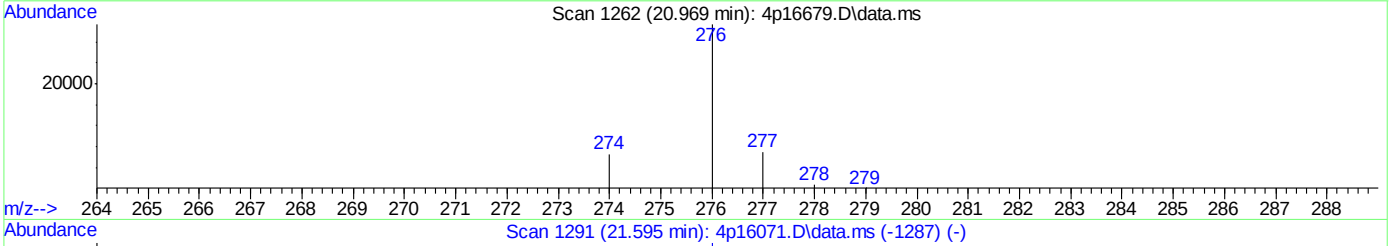
Ion	Exp%	Act%
276.00	100	100
274.00	18.70	19.88
277.00	24.90	21.87
0.00	0.00	0.00

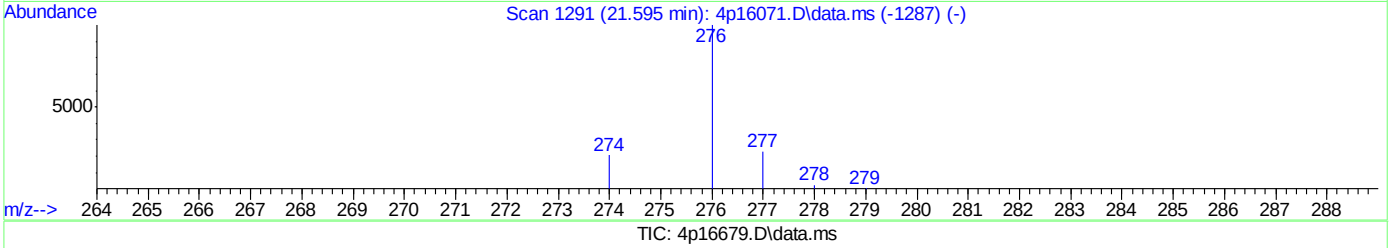
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4P887\
Data File : 4p16679.D
Acq On : 6 Jun 2016 3:19 pm
Operator : linseyk
Sample : icv887-1
Misc : op94376a,e4p887
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 06 15:43:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Jun 06 15:07:18 2016
Response via : Initial Calibration







TIC: 4p16679.D\data.ms

(37) Indeno[1,2,3-cd]pyrene (t)

20.969min (-0.006) 0.98ppm m

response 66608

Ion	Exp%	Act%
276.00	100	100
274.00	18.70	20.87
277.00	24.90	22.47
0.00	0.00	0.00

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P933\
Data File : 4p17517.D
Acq On : 5 Jul 2016 3:45 pm
Operator : linseyk
Sample : cc887-.5
Misc : op94634a,e4p933
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 05 23:05:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Jul 05 23:05:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	7.525	150	201849	4.00	ppm	0.00
13) Fluorene-d10	10.462	176	286403	4.00	ppm	0.00
23) Fluoranthene-d10	14.667	212	403713	4.00	ppm	0.00
33) Benzo(a)pyrene-d12	19.318	264	301985	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	2.469	112	217708	7.87	ppm	-0.11
Spiked Amount 50.000			Recovery = 15.74%			
4) Phenol-d5	3.579	99	346851	7.43	ppm	-0.06
Spiked Amount 50.000			Recovery = 14.86%			
7) Nitrobenzene-d5	4.857	82	324558	9.52	ppm	-0.05
Spiked Amount 50.000			Recovery = 19.04%			
14) 2-Fluorobiphenyl	8.189	172	776173	10.09	ppm	-0.04
Spiked Amount 50.000			Recovery = 20.18%			
22) 2,4,6-Tribromophenol	10.992	330	72900	9.21	ppm	0.02
Spiked Amount 50.000			Recovery = 18.42%			
30) Terphenyl-d14	15.528	244	552377	10.92	ppm	0.01
Spiked Amount 50.000			Recovery = 21.84%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.315	88	6224	0.40	ppm #	49
5) Phenol	3.597	94	94203	1.81	ppm #	86
6) bis(2-Chloroethyl)ether	3.665	93	17907	0.45	ppm	93
8) Naphthalene	6.118	128	47455	0.36	ppm	96
9) Hexachlorobutadiene	6.405	225	8946	0.39	ppm	82
11) 1-Methylnaphthalene	7.594	141	32006	0.36	ppm	97
12) Hexachlorocyclopentadiene	7.754	237	5671	0.34	ppm	86
15) Acenaphthylene	9.129	152	42386	0.38	ppm	88
16) Acenaphthene	9.473	153	31571	0.53	ppm #	65
17) Dibenzofuran	9.839	168	45220	0.44	ppm	82
18) Fluorene	10.511	166	33783	0.46	ppm	88
19) 4,6-dinitro-2-methylph...	10.735	198	13450	2.65	ppm	82
20) n-nitrosodiphenylamine	10.859	169	21017	0.48	ppm	79
21) 1,2-Diphenylhydrazine	10.884	77	26205	0.35	ppm	89
24) Hexachlorobenzene	11.604	284	10644	0.45	ppm	75
25) Pentachlorophenol	12.051	266	22028	2.59	ppm	89
26) Phenanthrene	12.378	178	47968	0.44	ppm	96
27) Anthracene	12.482	178	45293	0.43	ppm	95
28) Fluoranthene	14.702	202	56510	0.45	ppm	99
29) Pyrene	15.098	202	53237	0.46	ppm	96
31) Benzo[a]anthracene	17.246	228	39443	0.48	ppm	99
32) Chrysene	17.294	228	51759	0.52	ppm	100
34) Benzo[b]fluoranthene	18.904	252	47992	0.45	ppm	94
35) Benzo[k]fluoranthene	18.939	252	45371	0.49	ppm	95
36) Benzo[a]pyrene	19.341	252	45285	0.47	ppm	95
37) Indeno[1,2,3-cd]pyrene	20.774	276	50881	0.47	ppm	100
38) Dibenz[a,h]anthracene	20.813	278	41133	0.47	ppm	80
39) Benzo[g,h,i]perylene	21.062	276	46899	0.48	ppm	98

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P933\
Data File : 4p17517.D
Acq On : 5 Jul 2016 3:45 pm
Operator : linseyk
Sample : cc887-.5
Misc : op94634a,e4p933
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 05 23:05:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Jul 05 23:05:15 2016
Response via : Initial Calibration

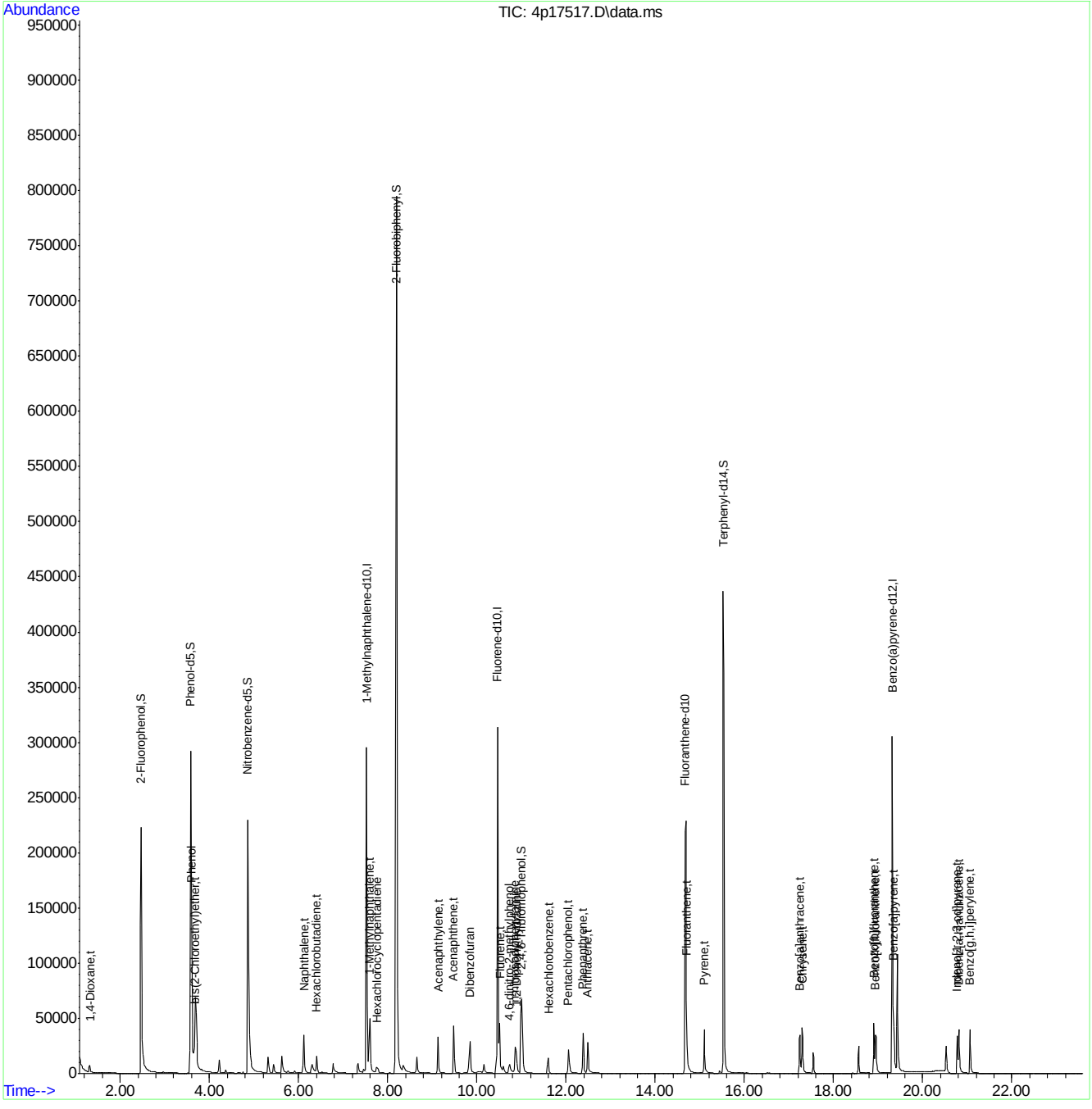
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4P933\
Data File : 4p17517.D
Acq On : 5 Jul 2016 3:45 pm
Operator : linseyk
Sample : cc887-.5
Misc : op94634a,e4p933
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jul 05 23:05:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4P887SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Jul 05 23:05:15 2016
Response via : Initial Calibration



M4P887SIM.M Tue Jul 05 23:05:44 2016 Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125262.D
Acq On : 16 Jun 2016 12:56 pm
Operator : ashleyd
Sample : ic5307-2
Misc : op94571,em5307
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 09:36:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.879	152	797615	40.00	ppm	0.00
24) Naphthalene-d8	6.054	136	2834494	40.00	ppm	0.00
47) Acenaphthene-d10	8.452	164	1807490	40.00	ppm	0.00
69) Phenanthrene-d10	11.101	188	3249550	40.00	ppm	0.00
83) Chrysene-d12	16.282	240	3397129	40.00	ppm	0.00
91) Perylene-d12	18.904	264	3343846	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.879	152	797615	40.00	ppm	0.00
103) Acenaphthene-d10a	8.452	164	1807490	40.00	ppm	0.00
106) Chrysene-d12a	16.282	240	3397129	40.00	ppm	0.00
109) Phenanthrene-d10a	11.101	188	3249550	40.00	ppm	0.00
111) Naphthalene-d8a	6.054	136	2834494	40.00	ppm	0.00
113) Chrysene-d12b	16.282	240	3397129	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.885	112	50454	2.02	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.04%	
8) Phenol-d5	4.585	99	63502	1.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.94%	
25) Nitrobenzene-d5	5.343	82	55464	2.12	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.24%	
51) 2-Fluorobiphenyl	7.416	172	138775	2.20	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.40%	
73) 2,4,6-Tribromophenol	9.814	330	17315	1.84	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.68%	
85) Terphenyl-d14	14.279	244	159622	1.99	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.98%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.454	88	28421	2.39	ppm	95
3) Pyridine	2.796	79	48446	1.86	ppm	85
4) N-Nitrosodimethylamine	2.742	42	27799	2.13	ppm	97
6) Indene	5.092	116	99830	2.23	ppm	97
7) Cumene	4.275	105	134520	2.21	ppm	94
9) Phenol	4.596	94	74843	2.12	ppm	96
10) Aniline	4.622	93	81639	2.27	ppm	95
11) bis(2-Chloroethyl)ether	4.665	93	51862	2.12	ppm	98
12) 2-Chlorophenol	4.713	128	62154	2.22	ppm	94
13) Decane	4.751	43	55980	2.28	ppm	98
14) 1,3-Dichlorobenzene	4.836	146	70331	2.22	ppm	99
15) 1,4-Dichlorobenzene	4.890	146	67922	2.24	ppm	98
16) Benzyl alcohol	4.986	108	33062	1.97	ppm	97
17) 1,2-Dichlorobenzene	5.018	146	66377	2.29	ppm	99
18) Acetophenone	5.205	105	75038	2.27	ppm	98
19) 2-Methylphenol	5.076	108	51211	2.14	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.098	121	18792	2.22	ppm #	76

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125262.D
Acq On : 16 Jun 2016 12:56 pm
Operator : ashleyd
Sample : ic5307-2
Misc : op94571,em5307
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 09:36:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.199	108	52679	2.07	ppm		94
22) n-Nitroso-di-n-propyla...	5.205	70	36496	2.10	ppm		94
23) Hexachloroethane	5.311	201	25428	2.23	ppm		94
26) Nitrobenzene	5.360	77	54920	2.12	ppm		96
27) Quinoline	6.454	129	120920	2.17	ppm		97
28) Isophorone	5.579	82	93988	2.01	ppm		90
29) 2-Nitrophenol	5.659	139	29934	2.08	ppm		89
30) 2,4-Dimethylphenol	5.691	107	50369	2.27	ppm		93
32) bis(2-Chloroethoxy)met...	5.781	93	59542	2.14	ppm		97
33) 2,4-Dichlorophenol	5.899	162	49451	2.15	ppm		95
34) 2,6-Dichlorophenol	6.139	162	50249	2.29	ppm		94
35) 1,3,5-Trichlorobenzene	5.669	180	64928	2.37	ppm		89
36) 1,2,4-Trichlorobenzene	5.990	180	61615	2.29	ppm		92
37) 1,2,3-Trichlorobenzene	6.235	180	60506	2.36	ppm		95
38) Naphthalene	6.075	128	173183	2.26	ppm		99
39) 4-Chloroaniline	6.129	127	72827	2.24	ppm		95
40) 2,3-Dichloroaniline	7.288	161	65052	2.22	ppm		98
41) Caprolactam	6.497	55	18952	1.88	ppm	#	84
42) Hexachlorobutadiene	6.219	225	33378	2.35	ppm		96
43) 4-Chloro-3-methylphenol	6.700	107	47564	2.18	ppm		89
44) 2-Methylnaphthalene	6.903	141	104344	2.23	ppm		98
45) 1-Methylnaphthalene	7.037	142	126019	2.25	ppm		99
46) Dimethylnaphthalene	7.795	156	114924	2.26	ppm		97
48) Hexachlorocyclopentadiene	7.127	237	53977	3.64	ppm		98
49) 2,4,6-Trichlorophenol	7.293	196	37489	2.21	ppm		80
50) 2,4,5-Trichlorophenol	7.341	196	40728	2.16	ppm		90
52) 2-Chloronaphthalene	7.581	162	119320	2.23	ppm		98
53) Biphenyl	7.560	154	160646	2.28	ppm		99
54) 2-Nitroaniline	7.736	65	26137	1.92	ppm		93
55) Dimethylphthalate	8.041	163	131925	2.13	ppm		99
56) Acenaphthylene	8.217	152	188682	2.16	ppm		98
57) 2,6-Dinitrotoluene	8.121	165	24451	1.85	ppm		91
58) 3-Nitroaniline	8.388	138	27216	1.79	ppm		98
59) Acenaphthene	8.505	153	118926	2.18	ppm		98
60) 2,4-Dinitrophenol	8.575	184	6766	8.26	ppm		79
61) 4-Nitrophenol	8.708	109	10907	1.72	ppm		84
62) Dibenzofuran	8.794	168	173367	2.26	ppm		98
63) 2,4-Dinitrotoluene	8.788	165	34685	2.01	ppm		93
64) 2,3,4,6-Tetrachlorophenol	9.023	232	25597	1.83	ppm		89
65) Diethylphthalate	9.253	149	128054	2.19	ppm		93
66) Fluorene	9.387	166	140650	2.17	ppm		98
67) 4-Chlorophenyl-phenyle...	9.419	204	70200	2.25	ppm		91
68) 4-Nitroaniline	9.435	138	26449	1.78	ppm		93
70) 4,6-Dinitro-2-methylph...	9.504	198	7908	3.87	ppm		76
71) n-Nitrosodiphenylamine	9.627	169	92088	1.99	ppm		96
72) 1,2-Diphenylhydrazine	9.696	77	106280	1.95	ppm		94
74) 4-Bromophenyl-phenylether	10.300	248	40845	2.10	ppm		98
75) Hexachlorobenzene	10.391	284	47541	2.17	ppm		97
76) Pentachlorophenol	10.775	266	8759	8.78	ppm		97
77) Phenanthrene	11.139	178	203143	2.15	ppm		96

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125262.D
Acq On : 16 Jun 2016 12:56 pm
Operator : ashleyd
Sample : ic5307-2
Misc : op94571,em5307
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 09:36:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Anthracene	11.235	178	194460	2.04	ppm	98
79)	Carbazole	11.571	167	191422	2.09	ppm	98
80)	Di-n-butylphthalate	12.383	149	203073	1.99	ppm	99
81)	Fluoranthene	13.441	202	229143	2.09	ppm	100
82)	Octadecane	11.085	57	63004	1.98	ppm	94
84)	Pyrene	13.868	202	242450	2.02	ppm	99
86)	Butylbenzylphthalate	15.331	149	88002	1.84	ppm	99
87)	Benzo[a]anthracene	16.261	228	222097	2.08	ppm	99
88)	3,3'-Dichlorobenzidine	16.282	252	68526	1.88	ppm	95
89)	Chrysene	16.325	228	221775	2.09	ppm	98
90)	bis(2-Ethylhexyl)phtha...	16.554	149	113708	1.79	ppm	95
92)	Di-n-octylphthalate	17.778	149	190555	1.86	ppm	96
93)	Benzo[b]fluoranthene	18.253	252	239081	2.24	ppm	96
94)	Benzo[k]fluoranthene	18.301	252	221566	2.19	ppm	98
95)	Benzo[a]pyrene	18.798	252	213810	2.21	ppm	98
96)	Indeno[1,2,3-cd]pyrene	20.672	276	192598	2.07	ppm	98
97)	Dibenz(a,h)acridine	20.288	279	175054	2.07	ppm	97
98)	Dibenz[a,h]anthracene	20.726	278	203531	2.08	ppm	98
99)	7,12-Dimethylbenz(a)an...	18.264	256	94367	2.29	ppm	96
100)	Benzo[g,h,i]perylene	21.158	276	216532	2.14	ppm	95

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

7.6.80

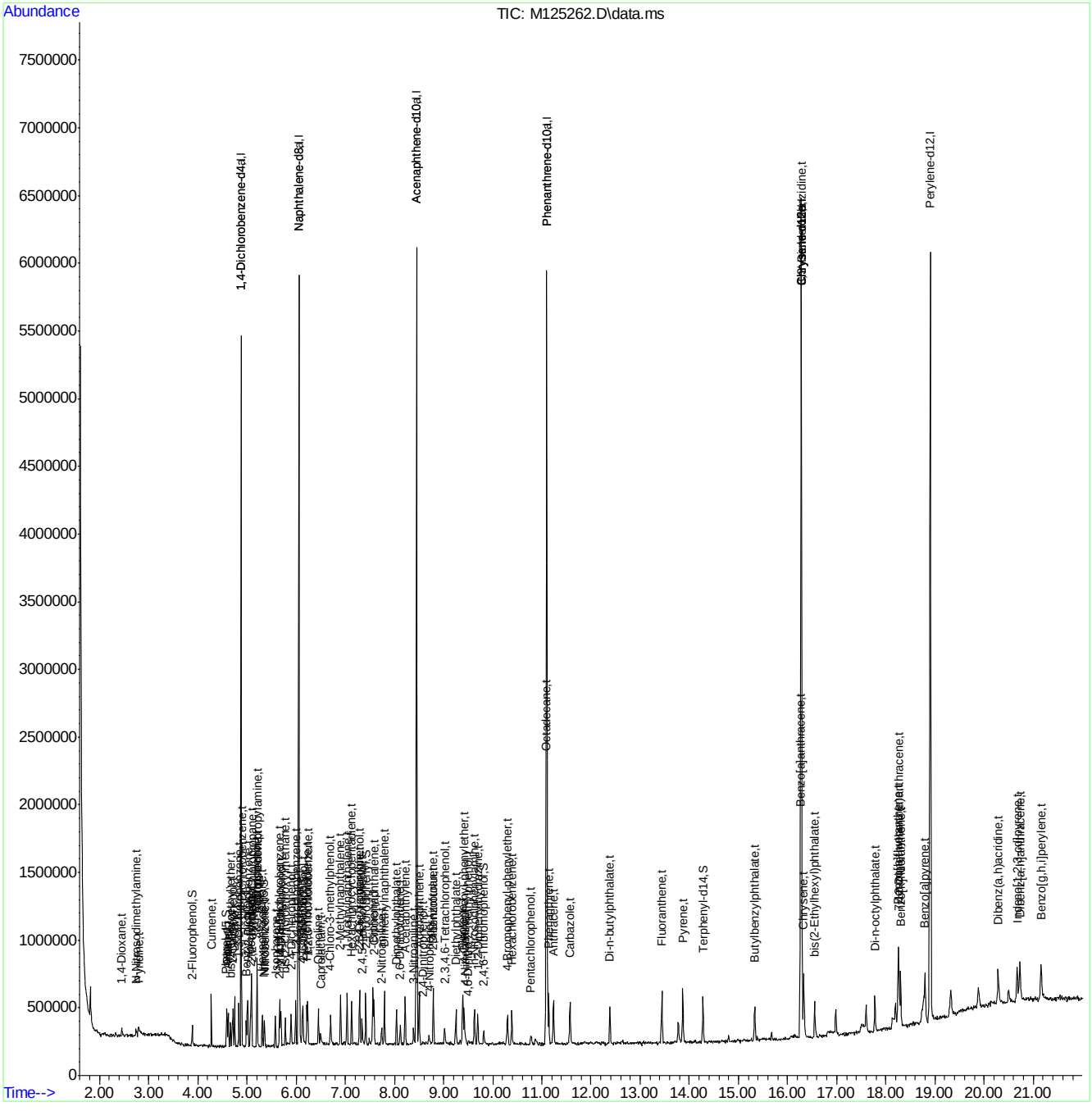
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125262.D
Acq On : 16 Jun 2016 12:56 pm
Operator : ashleyd
Sample : ic5307-2
Misc : op94571,em5307
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 20 09:36:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125263.D
Acq On : 16 Jun 2016 1:25 pm
Operator : ashleyd
Sample : ic5307-1
Misc : op94571,em5307
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 20 09:42:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:37:43 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.878	152	880452	40.00	ppm	0.00
24) Naphthalene-d8	6.053	136	3144618	40.00	ppm	0.00
47) Acenaphthene-d10	8.451	164	1957640	40.00	ppm	0.00
69) Phenanthrene-d10	11.101	188	3540876	40.00	ppm	0.00
83) Chrysene-d12	16.281	240	3764659	40.00	ppm	0.00
91) Perylene-d12	18.909	264	3682484	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.878	152	880452	40.00	ppm	0.00
103) Acenaphthene-d10a	8.451	164	1957640	40.00	ppm	0.00
106) Chrysene-d12a	16.281	240	3764659	40.00	ppm	0.00
109) Phenanthrene-d10a	11.101	188	3540876	40.00	ppm	0.00
111) Naphthalene-d8a	6.053	136	3144618	40.00	ppm	0.00
113) Chrysene-d12b	16.281	240	3764659	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.885	112	29137	1.05	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.10%	
8) Phenol-d5	4.590	99	37529	1.05	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.10%	
25) Nitrobenzene-d5	5.343	82	31487	1.08	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.16%	
51) 2-Fluorobiphenyl	7.415	172	81938	1.20	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.40%	
73) 2,4,6-Tribromophenol	9.829	330	9368	0.91	ppm	0.01
Spiked Amount 50.000			Recovery	=	1.82%	
85) Terphenyl-d14	14.278	244	94234	1.06	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.12%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.459	88	15598	1.19	ppm	95
3) Pyridine	2.827	79	24546	0.85	ppm	92
4) N-Nitrosodimethylamine	2.747	42	16414	1.14	ppm	96
6) Indene	5.092	116	59468	1.21	ppm	94
7) Cumene	4.275	105	77645	1.16	ppm	98
9) Phenol	4.600	94	41576	1.07	ppm	92
10) Aniline	4.622	93	44666	1.13	ppm	69
11) bis(2-Chloroethyl)ether	4.665	93	33633	1.25	ppm	96
12) 2-Chlorophenol	4.718	128	35184	1.14	ppm	91
13) Decane	4.750	43	31406	1.16	ppm	93
14) 1,3-Dichlorobenzene	4.835	146	39711	1.14	ppm	97
15) 1,4-Dichlorobenzene	4.889	146	38759	1.16	ppm	94
16) Benzyl alcohol	4.990	108	19057	1.03	ppm	94
17) 1,2-Dichlorobenzene	5.017	146	38182	1.19	ppm	97
18) Acetophenone	5.209	105	42279	1.16	ppm	94
19) 2-Methylphenol	5.076	108	27620	1.04	ppm	93
20) 2,2'-oxybis(1-Chloropr...	5.097	121	10504	1.12	ppm	97

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125263.D
Acq On : 16 Jun 2016 1:25 pm
Operator : ashleyd
Sample : ic5307-1
Misc : op94571,em5307
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 20 09:42:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:37:43 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.204	108	32563	1.16	ppm	#	79
22) n-Nitroso-di-n-propyla...	5.204	70	21678	1.13	ppm		84
23) Hexachloroethane	5.311	201	14053	1.12	ppm		92
26) Nitrobenzene	5.359	77	32672	1.13	ppm		100
27) Quinoline	6.454	129	68325	1.10	ppm		99
28) Isophorone	5.578	82	60642	1.17	ppm		92
29) 2-Nitrophenol	5.663	139	15441	0.97	ppm		88
30) 2,4-Dimethylphenol	5.690	107	25470	1.04	ppm		89
32) bis(2-Chloroethoxy)met...	5.781	93	33994	1.10	ppm		87
33) 2,4-Dichlorophenol	5.898	162	27580	1.08	ppm		93
34) 2,6-Dichlorophenol	6.139	162	26947	1.11	ppm		99
35) 1,3,5-Trichlorobenzene	5.674	180	37699	1.24	ppm		98
36) 1,2,4-Trichlorobenzene	5.989	180	35426	1.19	ppm		97
37) 1,2,3-Trichlorobenzene	6.235	180	34783	1.22	ppm		93
38) Naphthalene	6.075	128	101897	1.20	ppm		98
39) 4-Chloroaniline	6.128	127	41498	1.15	ppm		96
40) 2,3-Dichloroaniline	7.287	161	38661	1.19	ppm		86
41) Caprolactam	6.507	55	10969	0.98	ppm		97
42) Hexachlorobutadiene	6.219	225	18375	1.16	ppm		96
43) 4-Chloro-3-methylphenol	6.705	107	26198	1.08	ppm		90
44) 2-Methylnaphthalene	6.902	141	61365	1.18	ppm		93
45) 1-Methylnaphthalene	7.036	142	74473	1.20	ppm		94
46) Dimethylnaphthalene	7.794	156	67047	1.19	ppm		98
48) Hexachlorocyclopentadiene	7.132	237	28591	1.78	ppm		89
49) 2,4,6-Trichlorophenol	7.298	196	20950	1.14	ppm		90
50) 2,4,5-Trichlorophenol	7.346	196	20047	0.98	ppm		80
52) 2-Chloronaphthalene	7.581	162	71670	1.24	ppm		98
53) Biphenyl	7.559	154	91006	1.19	ppm		96
54) 2-Nitroaniline	7.741	65	12838	0.87	ppm		98
55) Dimethylphthalate	8.040	163	81273	1.21	ppm		99
56) Acenaphthylene	8.216	152	107876	1.14	ppm		97
57) 2,6-Dinitrotoluene	8.120	165	12622	0.88	ppm		83
58) 3-Nitroaniline	8.387	138	13926	0.85	ppm		98
59) Acenaphthene	8.505	153	71001	1.20	ppm		95
62) Dibenzofuran	8.799	168	99074	1.19	ppm		94
63) 2,4-Dinitrotoluene	8.788	165	17144	0.92	ppm		99
64) 2,3,4,6-Tetrachlorophenol	9.028	232	12506	0.82	ppm		78
65) Diethylphthalate	9.253	149	68566	1.08	ppm		93
66) Fluorene	9.386	166	82374	1.17	ppm		93
67) 4-Chlorophenyl-phenyle...	9.418	204	40785	1.20	ppm		94
68) 4-Nitroaniline	9.434	138	14155	0.88	ppm		91
71) n-Nitrosodiphenylamine	9.632	169	57299	1.14	ppm		97
72) 1,2-Diphenylhydrazine	9.696	77	58182	0.98	ppm		95
74) 4-Bromophenyl-phenylether	10.305	248	23683	1.12	ppm		85
75) Hexachlorobenzene	10.390	284	28557	1.20	ppm		97
77) Phenanthrene	11.143	178	118384	1.15	ppm		98
78) Anthracene	11.239	178	116004	1.12	ppm		95
79) Carbazole	11.576	167	108223	1.08	ppm		97
80) Di-n-butylphthalate	12.382	149	110491	1.00	ppm		100
81) Fluoranthene	13.440	202	126904	1.06	ppm		97

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125263.D
Acq On : 16 Jun 2016 1:25 pm
Operator : ashleyd
Sample : ic5307-1
Misc : op94571,em5307
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 20 09:42:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:37:43 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
82) Octadecane	11.085	57	37591	1.09	ppm	99
84) Pyrene	13.867	202	143003	1.08	ppm	96
86) Butylbenzylphthalate	15.336	149	45411	0.86	ppm	90
87) Benzo[a]anthracene	16.260	228	128842	1.09	ppm	94
88) 3,3'-Dichlorobenzidine	16.281	252	37226	0.92	ppm	81
89) Chrysene	16.324	228	131814	1.12	ppm	96
90) bis(2-Ethylhexyl)phtha...	16.554	149	63063	0.90	ppm	91
92) Di-n-octylphthalate	17.777	149	110056	0.98	ppm	95
93) Benzo[b]fluoranthene	18.252	252	133333	1.13	ppm	98
94) Benzo[k]fluoranthene	18.300	252	134457	1.21	ppm	94
95) Benzo[a]pyrene	18.797	252	117711	1.11	ppm	94
96) Indeno[1,2,3-cd]pyrene	20.672	276	109618	1.07	ppm	93
97) Dibenz(a,h)acridine	20.293	279	97504	1.04	ppm	80
98) Dibenz[a,h]anthracene	20.730	278	111692	1.04	ppm	97
99) 7,12-Dimethylbenz(a)an...	18.263	256	41939	0.93	ppm	92
100) Benzo[g,h,i]perylene	21.158	276	121236	1.09	ppm	96

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

7.6.81

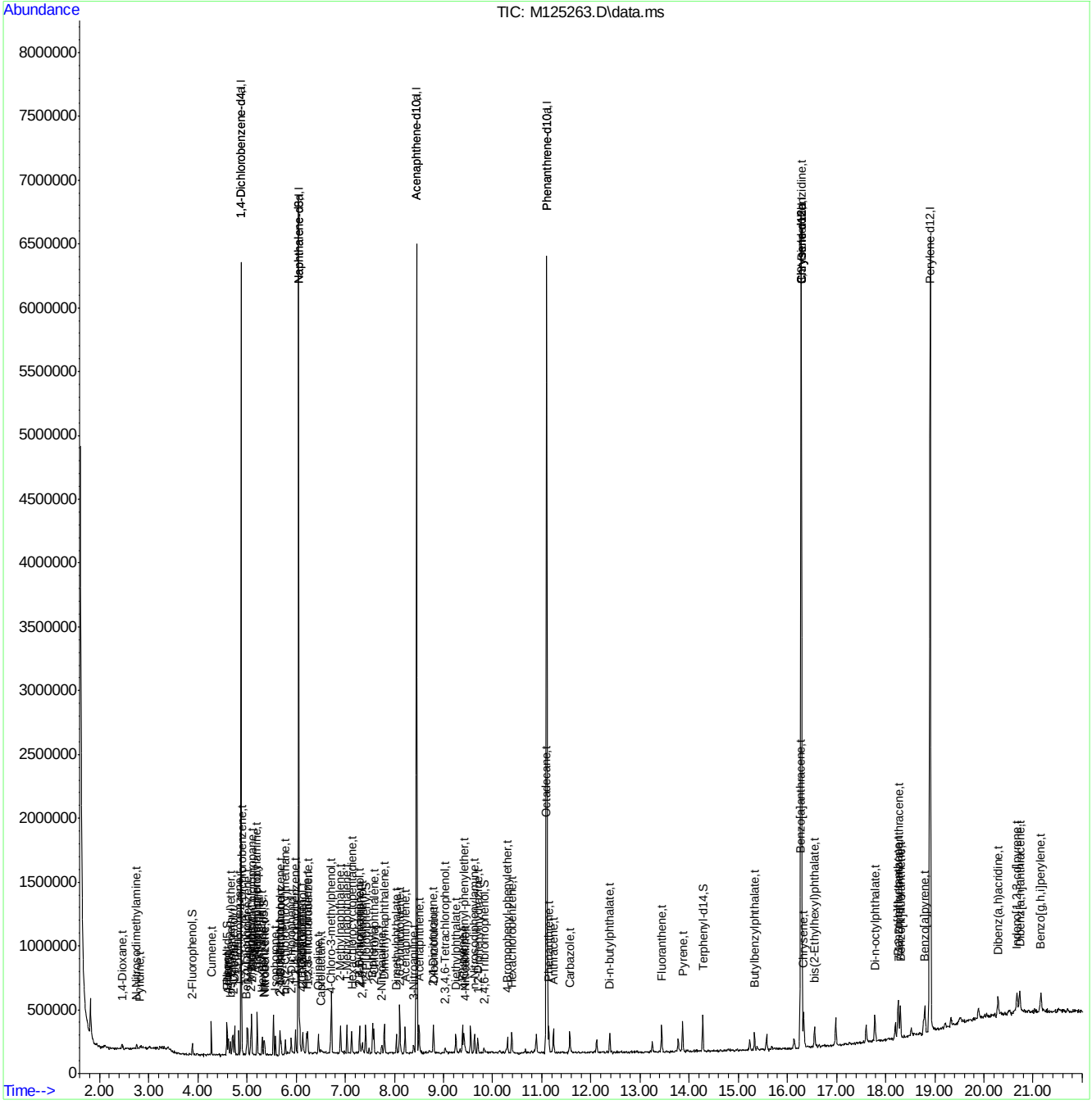
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125263.D
Acq On : 16 Jun 2016 1:25 pm
Operator : ashleyd
Sample : ic5307-1
Misc : op94571,em5307
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 20 09:42:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:37:43 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
06/20/16 12:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125264.D
Acq On : 16 Jun 2016 1:54 pm
Operator : ashleyd
Sample : ic5307-100
Misc : op94571,em5307
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 09:45:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.881	152	995838	40.00	ppm	0.00
24) Naphthalene-d8	6.056	136	3558783	40.00	ppm	0.00
47) Acenaphthene-d10	8.460	164	2192240	40.00	ppm	0.00
69) Phenanthrene-d10	11.109	188	3631686	40.00	ppm	0.00
83) Chrysene-d12	16.300	240	3293523	40.00	ppm	0.02
91) Perylene-d12	18.917	264	4081206	40.00	ppm	0.01
101) 1,4-Dichlorobenzene-d4a	4.881	152	995838	40.00	ppm	0.00
103) Acenaphthene-d10a	8.460	164	2192240	40.00	ppm	0.00
106) Chrysene-d12a	16.300	240	3293523	40.00	ppm	0.02
109) Phenanthrene-d10a	11.109	188	3631686	40.00	ppm	0.01
111) Naphthalene-d8a	6.056	136	3558783	40.00	ppm	0.00
113) Chrysene-d12b	16.300	240	3293523	40.00	ppm	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.888	112	3005978	96.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	192.34%	
8) Phenol-d5	4.598	99	3642324	90.35	ppm	0.01
Spiked Amount 50.000			Recovery	=	180.70%	
25) Nitrobenzene-d5	5.351	82	2990382	90.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	181.92%	
51) 2-Fluorobiphenyl	7.423	172	6031413	79.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	158.02%	
73) 2,4,6-Tribromophenol	9.832	330	1099720	104.47	ppm	0.01
Spiked Amount 50.000			Recovery	=	208.94%	
85) Terphenyl-d14	14.292	244	7411974	95.48	ppm	0.01
Spiked Amount 50.000			Recovery	=	190.96%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.445	88	1307019	87.86	ppm	97
3) Pyridine	2.761	79	3277783	100.82	ppm	98
4) N-Nitrosodimethylamine	2.729	42	1565503	96.13	ppm	93
6) Indene	5.095	116	4154798	74.47	ppm	97
7) Cumene	4.272	105	5773921	75.95	ppm	96
9) Phenol	4.609	94	3678765	83.48	ppm	96
10) Aniline	4.625	93	3336991	74.41	ppm	88
11) bis(2-Chloroethyl)ether	4.673	93	2554485	83.73	ppm	97
12) 2-Chlorophenol	4.721	128	2849594	81.66	ppm	96
13) Decane	4.753	43	2336747	76.23	ppm	97
14) 1,3-Dichlorobenzene	4.838	146	3148146	79.58	ppm	94
15) 1,4-Dichlorobenzene	4.892	146	3028359	79.95	ppm	97
16) Benzyl alcohol	4.993	108	1914685	91.56	ppm	94
17) 1,2-Dichlorobenzene	5.020	146	2757867	76.07	ppm	96
18) Acetophenone	5.218	105	3063678	74.26	ppm	98
19) 2-Methylphenol	5.084	108	2486767	83.17	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.100	121	860495	81.38	ppm	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125264.D
Acq On : 16 Jun 2016 1:54 pm
Operator : ashleyd
Sample : ic5307-100
Misc : op94571,em5307
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 09:45:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21)	3&4-Methylphenol	5.212	108	2573585	81.11	ppm		90
22)	n-Nitroso-di-n-propyla...	5.218	70	1750774	80.88	ppm		98
23)	Hexachloroethane	5.314	201	1185757	83.22	ppm		95
26)	Nitrobenzene	5.367	77	2835311	86.97	ppm		95
27)	Quinoline	6.489	129	6214359	88.64	ppm		99
28)	Isophorone	5.591	82	5118161	87.33	ppm		96
29)	2-Nitrophenol	5.666	139	1655214	91.61	ppm		92
30)	2,4-Dimethylphenol	5.698	107	2589648	93.07	ppm		96
32)	bis(2-Chloroethoxy)met...	5.789	93	2974029	85.18	ppm		99
33)	2,4-Dichlorophenol	5.907	162	2477944	85.65	ppm		96
34)	2,6-Dichlorophenol	6.147	162	2283598	82.74	ppm		97
35)	1,3,5-Trichlorobenzene	5.677	180	2535933	73.86	ppm		97
36)	1,2,4-Trichlorobenzene	5.997	180	2630848	77.87	ppm		97
37)	1,2,3-Trichlorobenzene	6.243	180	2463456	76.48	ppm		95
38)	Naphthalene	6.083	128	7363863	76.54	ppm		95
39)	4-Chloroaniline	6.141	127	3206390	78.66	ppm		96
40)	2,3-Dichloroaniline	7.295	161	2903838	79.07	ppm		98
41)	Caprolactam	6.574	55	1325226m	104.96	ppm		
42)	Hexachlorobutadiene	6.222	225	1419767	79.46	ppm		97
43)	4-Chloro-3-methylphenol	6.724	107	2431596	88.73	ppm		97
44)	2-Methylnaphthalene	6.911	141	4624146	78.66	ppm		98
45)	1-Methylnaphthalene	7.044	142	5583365	79.29	ppm		99
46)	Dimethylnaphthalene	7.808	156	5008705	78.61	ppm		100
48)	Hexachlorocyclopentadiene	7.135	237	3203362	177.98	ppm		99
49)	2,4,6-Trichlorophenol	7.306	196	1741501	84.54	ppm		99
50)	2,4,5-Trichlorophenol	7.359	196	2105494	92.06	ppm		98
52)	2-Chloronaphthalene	7.594	162	5053628	77.80	ppm		95
53)	Biphenyl	7.573	154	6599508	77.07	ppm		97
54)	2-Nitroaniline	7.760	65	1657041	100.35	ppm		95
55)	Dimethylphthalate	8.059	163	6272355	83.65	ppm		98
56)	Acenaphthylene	8.230	152	8466484	79.84	ppm		95
57)	2,6-Dinitrotoluene	8.144	165	1572843	98.26	ppm		96
58)	3-Nitroaniline	8.411	138	1866771	101.17	ppm		98
59)	Acenaphthene	8.518	153	5356059	80.97	ppm		97
60)	2,4-Dinitrophenol	8.588	184	2223425	198.73	ppm	#	71
61)	4-Nitrophenol	8.732	109	910777	113.97	ppm		91
62)	Dibenzofuran	8.807	168	7089756	76.21	ppm		96
63)	2,4-Dinitrotoluene	8.812	165	1824102	87.13	ppm		95
64)	2,3,4,6-Tetrachlorophenol	9.031	232	1771236	104.32	ppm		98
65)	Diethylphthalate	9.271	149	6010554	84.78	ppm		99
66)	Fluorene	9.400	166	6362474	80.91	ppm		97
67)	4-Chlorophenyl-phenyle...	9.426	204	3029801	79.92	ppm		99
68)	4-Nitroaniline	9.480	138	1890061	104.65	ppm		98
70)	4,6-Dinitro-2-methylph...	9.528	198	1544211	99.34	ppm		97
71)	n-Nitrosodiphenylamine	9.651	169	4674292	90.36	ppm		100
72)	1,2-Diphenylhydrazine	9.709	77	5728644	94.05	ppm		99
74)	4-Bromophenyl-phenylether	10.313	248	1922072	88.51	ppm		95
75)	Hexachlorobenzene	10.409	284	2093449	85.47	ppm		100
76)	Pentachlorophenol	10.788	266	2815549	196.57	ppm		96
77)	Phenanthrene	11.162	178	8927467	84.47	ppm		97

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125264.D
Acq On : 16 Jun 2016 1:54 pm
Operator : ashleyd
Sample : ic5307-100
Misc : op94571,em5307
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 09:45:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Anthracene	11.258	178	9055680	84.97	ppm	97
79)	Carbazole	11.595	167	8871281	86.57	ppm	97
80)	Di-n-butylphthalate	12.396	149	10070619	88.43	ppm	97
81)	Fluoranthene	13.459	202	10536702	85.96	ppm	96
82)	Octadecane	11.093	57	3276349	92.28	ppm	99
84)	Pyrene	13.891	202	10889031	93.63	ppm	96
86)	Butylbenzylphthalate	15.344	149	5048305	109.08	ppm	98
87)	Benzo[a]anthracene	16.279	228	9892803	95.76	ppm	98
88)	3,3'-Dichlorobenzidine	16.306	252	3655579	103.18	ppm	98
89)	Chrysene	16.359	228	9730894	94.37	ppm	97
90)	bis(2-Ethylhexyl)phtha...	16.562	149	6517118	105.94	ppm	98
92)	Di-n-octylphthalate	17.790	149	11075657	88.61	ppm	95
93)	Benzo[b]fluoranthene	18.292	252	10904876	83.56	ppm	93
94)	Benzo[k]fluoranthene	18.351	252	9215843m	74.58	ppm	
95)	Benzo[a]pyrene	18.832	252	9707473	82.35	ppm	99
96)	Indeno[1,2,3-cd]pyrene	20.723	276	10431448	91.76	ppm	98
97)	Dibenz(a,h)acridine	20.327	279	9169852	88.64	ppm	99
98)	Dibenz[a,h]anthracene	20.781	278	10339219	86.62	ppm	99
99)	7,12-Dimethylbenz(a)an...	18.303	256	4483727	89.31	ppm	97
100)	Benzo[g,h,i]perylene	21.230	276	10811260	87.36	ppm	98

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

7.6.82

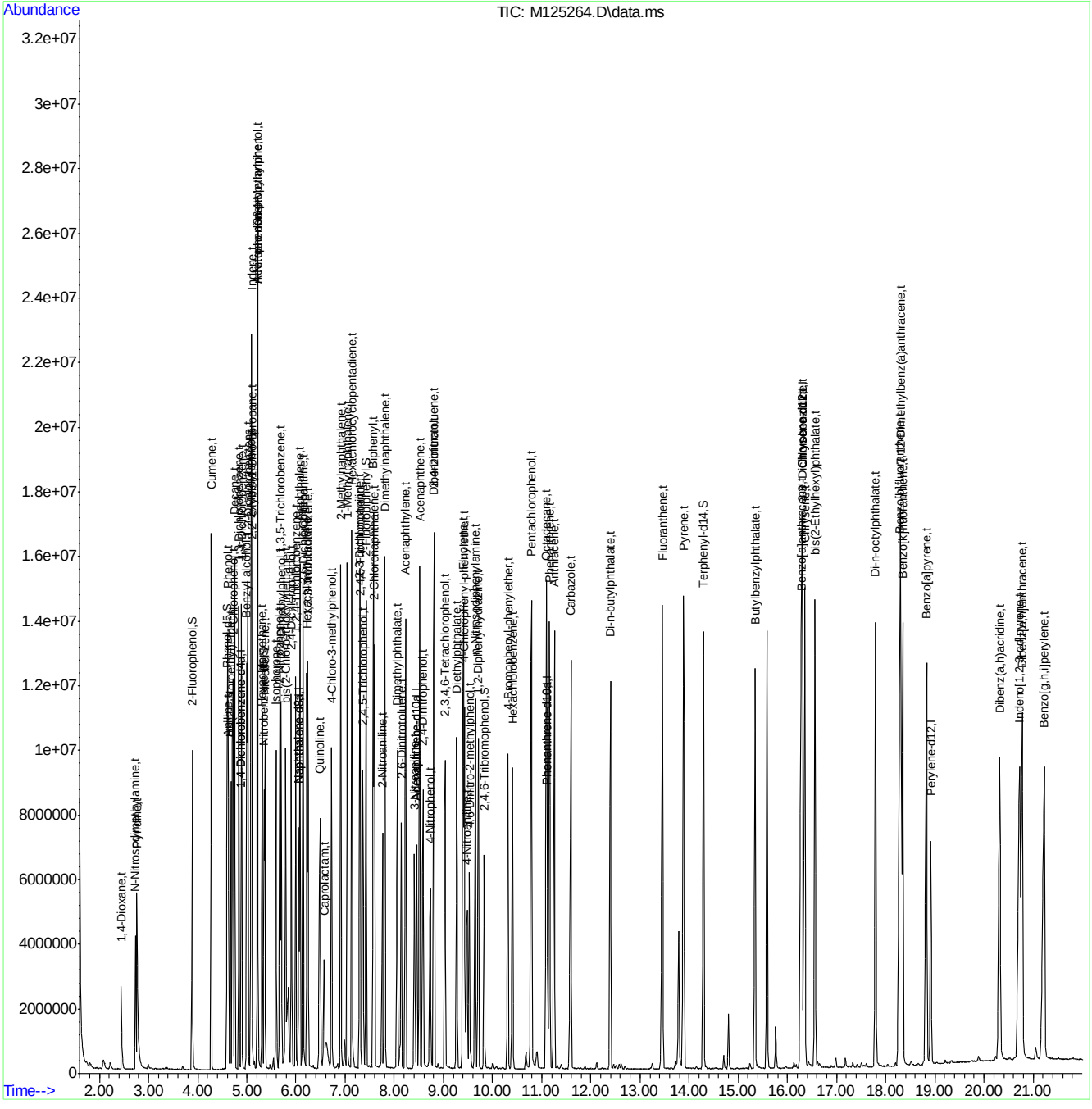
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125264.D
Acq On : 16 Jun 2016 1:54 pm
Operator : ashleyd
Sample : ic5307-100
Misc : op94571,em5307
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 09:45:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Manual Integration Approval Summary

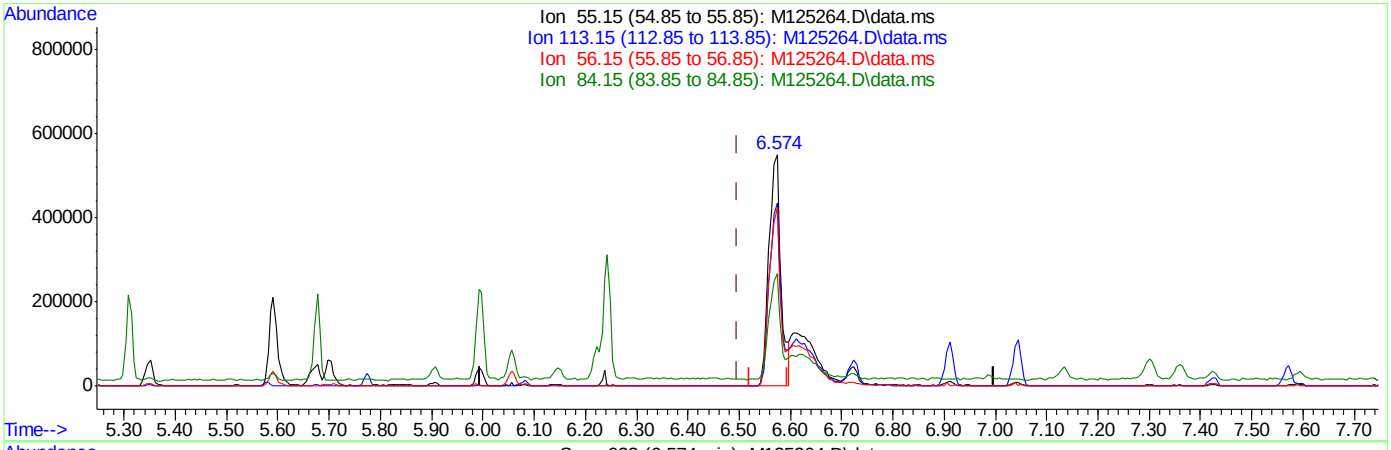
Sample Number:	EM5307-IC5307	**Method:**	SW846 8270D
Lab FileID:	M125264.D	**Analyst approved:**	06/20/16 09:53 Ashley Dye
Injection Time:	06/16/16 13:54	**Supervisor approved:**	06/20/16 12:38 Nina Pandya

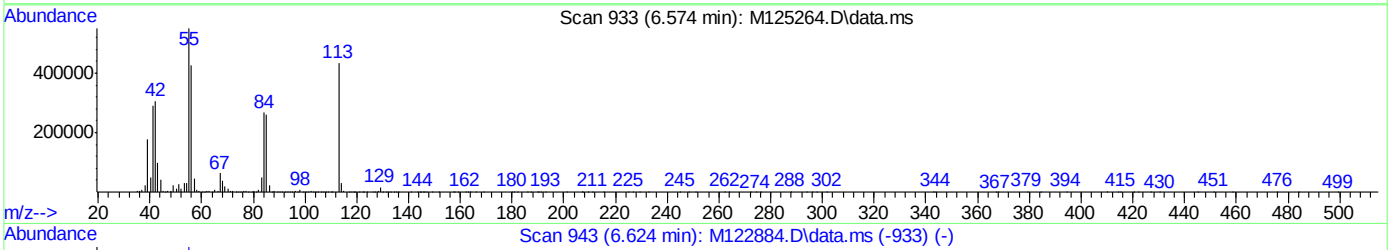
Parameter	CAS	Sig#	R.T. (min.)	Reason
Caprolactam	105-60-2		6.57	Overlapping peak
Benzo(k)fluoranthene	207-08-9		18.35	Overlapping peak

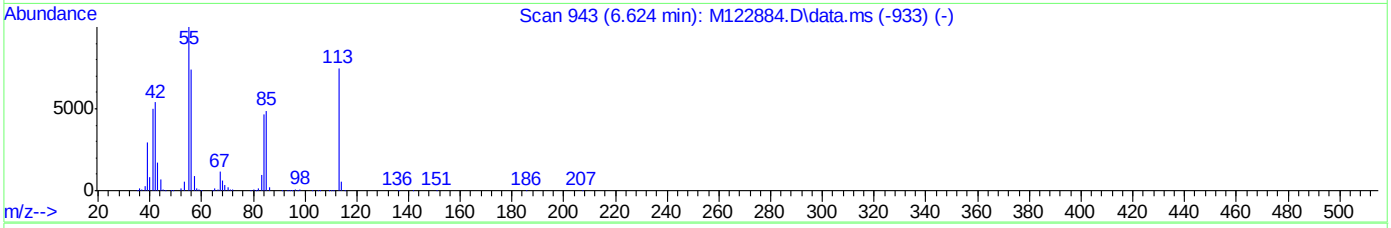
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125264.D
Acq On : 16 Jun 2016 1:54 pm
Operator : ashleyd
Sample : ic5307-100
Misc : op94571,em5307
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 09:44:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration







TIC: M125264.D\data.ms

(41) Caprolactam (t)

6.574min (+0.077) 69.65ppm

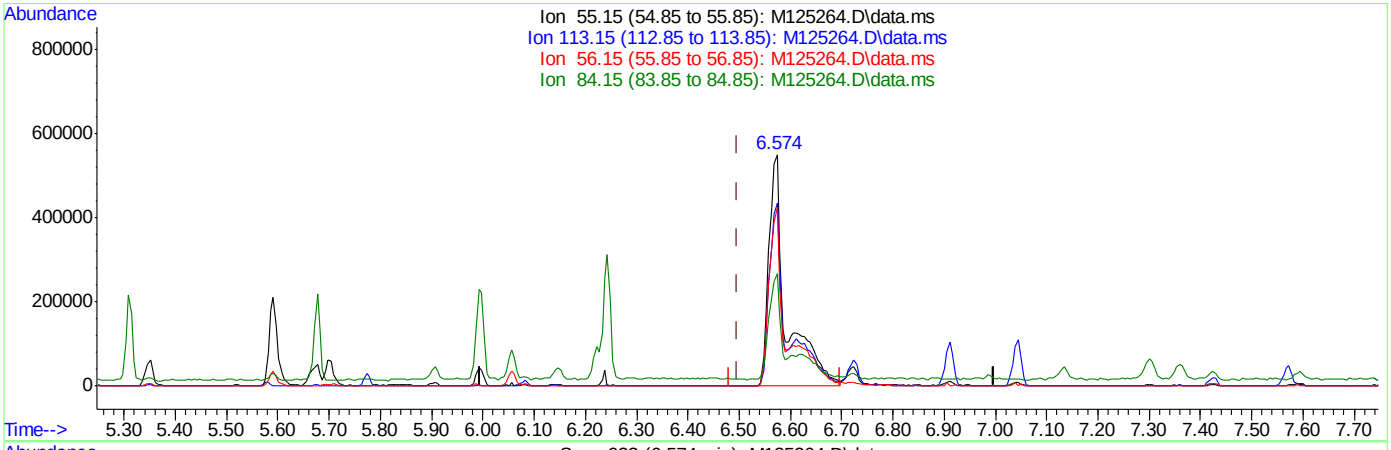
response 879326

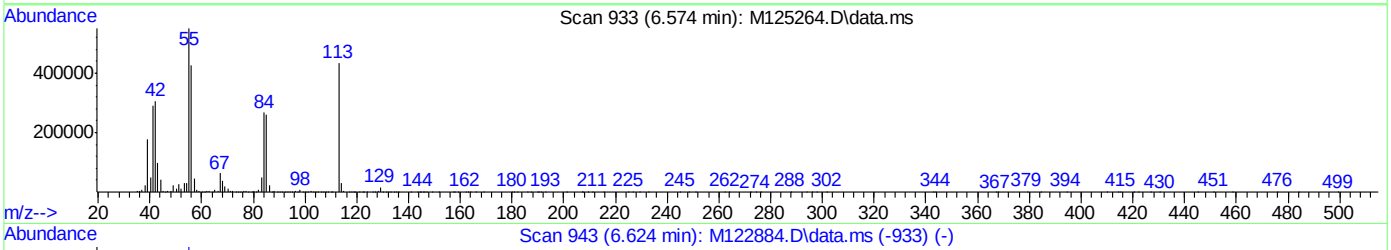
Ion	Exp%	Act%
55.15	100	100
113.15	80.20	78.82
56.15	76.20	76.33
84.15	43.80	45.19

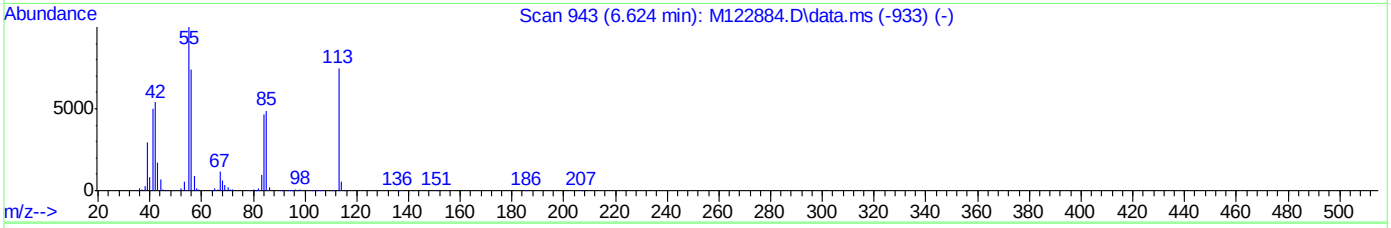
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125264.D
Acq On : 16 Jun 2016 1:54 pm
Operator : ashleyd
Sample : ic5307-100
Misc : op94571,em5307
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 09:44:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration







TIC: M125264.D\data.ms

(41) Caprolactam (t)

6.574min (+0.077) 104.96ppm m

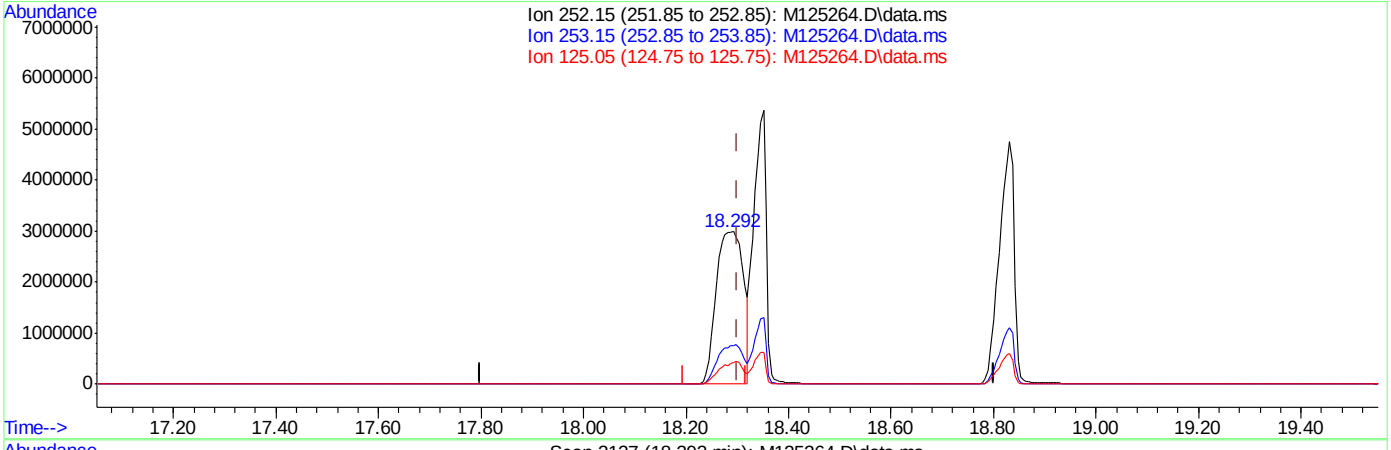
response 1325226

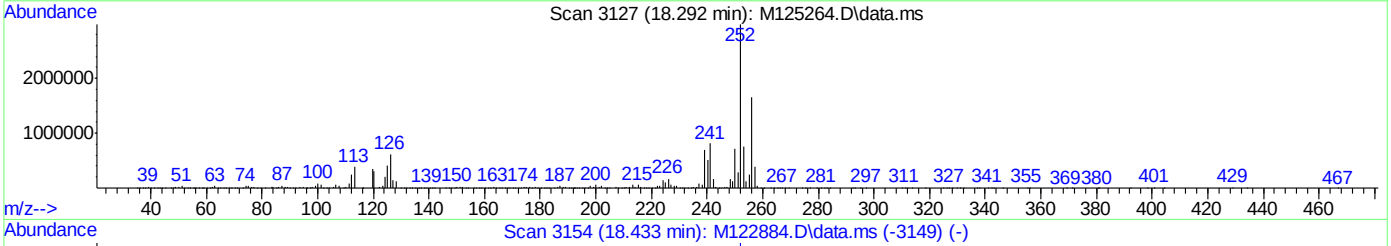
Ion	Exp%	Act%
55.15	100	100
113.15	80.20	79.01
56.15	76.20	77.11
84.15	43.80	48.37

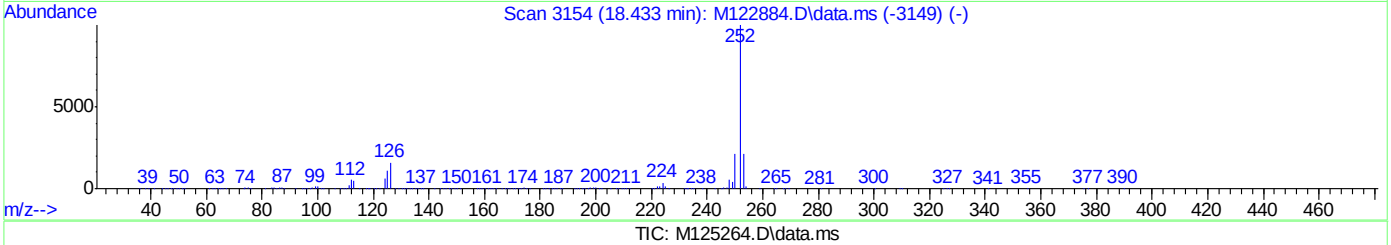
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125264.D
Acq On : 16 Jun 2016 1:54 pm
Operator : ashleyd
Sample : ic5307-100
Misc : op94571,em5307
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 09:44:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration







TIC: M125264.D\data.ms

(94) Benzo[k]fluoranthene (t)

18.292min (-0.008) 88.25ppm

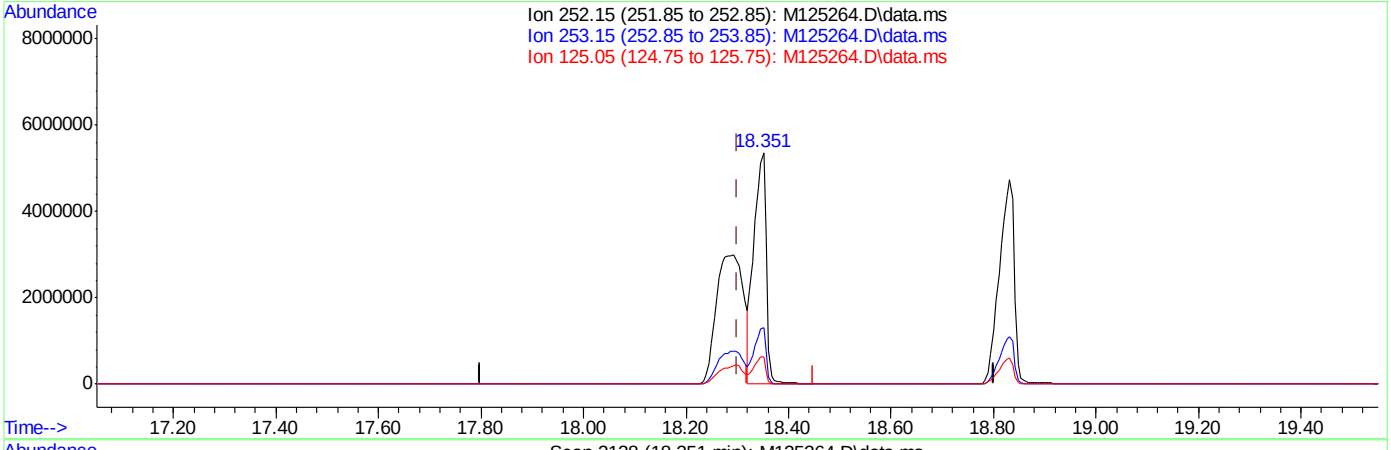
response 10904876

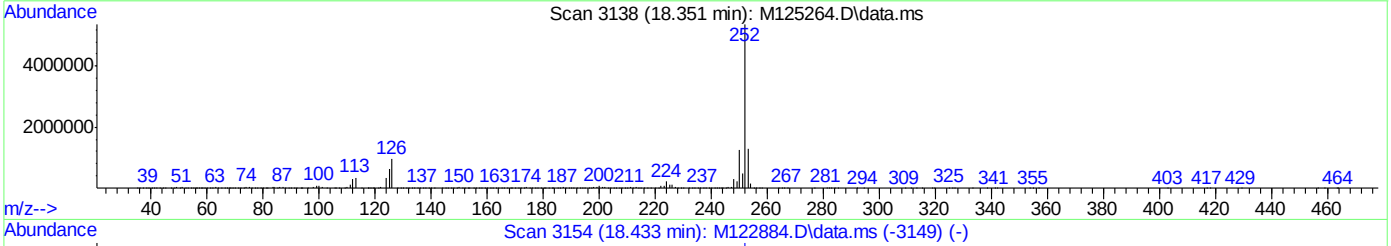
Ion	Exp%	Act%
252.15	100	100
253.15	22.00	25.86
125.05	10.50	14.81
0.00	0.00	0.00

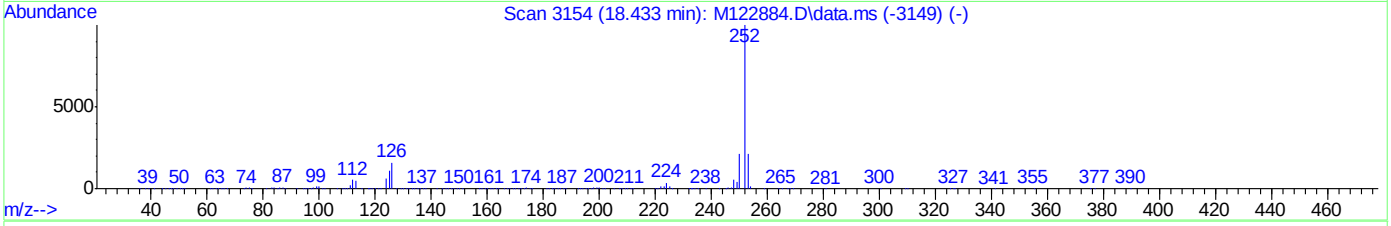
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125264.D
Acq On : 16 Jun 2016 1:54 pm
Operator : ashleyd
Sample : ic5307-100
Misc : op94571,em5307
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 20 09:44:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration







TIC: M125264.D\data.ms

(94) Benzo[k]fluoranthene (t)

18.351min (+0.050) 74.58ppm m

response 9215843

Ion	Exp%	Act%
252.15	100	100
253.15	22.00	24.29
125.05	10.50	11.73
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125265.D
Acq On : 16 Jun 2016 2:23 pm
Operator : ashleyd
Sample : ic5307-80
Misc : op94571,em5307
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 20 09:46:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 16 16:00:16 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.878	152	777597	40.00	ppm	0.00
24) Naphthalene-d8	6.053	136	2842166	40.00	ppm	0.00
47) Acenaphthene-d10	8.456	164	1739912	40.00	ppm	0.00
69) Phenanthrene-d10	11.106	188	2876436	40.00	ppm	0.00
83) Chrysene-d12	16.292	240	2737729	40.00	ppm	0.00
91) Perylene-d12	18.909	264	3229041	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.878	152	777597	40.00	ppm	0.00
103) Acenaphthene-d10a	8.456	164	1739912	40.00	ppm	0.00
106) Chrysene-d12a	16.292	240	2737729	40.00	ppm	0.00
109) Phenanthrene-d10a	11.106	188	2876436	40.00	ppm	0.00
111) Naphthalene-d8a	6.053	136	2842166	40.00	ppm	0.00
113) Chrysene-d12b	16.292	240	2737729	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.885	112	1929361	79.20	ppm	0.00
Spiked Amount 50.000			Recovery	=	158.40%	
8) Phenol-d5	4.595	99	2409033	78.99	ppm	0.00
Spiked Amount 50.000			Recovery	=	157.98%	
25) Nitrobenzene-d5	5.348	82	1923100	74.56	ppm	0.00
Spiked Amount 50.000			Recovery	=	149.12%	
51) 2-Fluorobiphenyl	7.420	172	4151422	72.31	ppm	0.00
Spiked Amount 50.000			Recovery	=	144.62%	
73) 2,4,6-Tribromophenol	9.824	330	728242	86.14	ppm	0.00
Spiked Amount 50.000			Recovery	=	172.28%	
85) Terphenyl-d14	14.289	244	5029254	79.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	158.52%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.442	88	837466	71.01	ppm	99
3) Pyridine	2.758	79	2050741	79.71	ppm	98
4) N-Nitrosodimethylamine	2.726	42	981567	75.26	ppm	89
6) Indene	5.092	116	2852510	69.65	ppm	98
7) Cumene	4.274	105	4070534	72.28	ppm	98
9) Phenol	4.606	94	2472257	73.82	ppm	99
10) Aniline	4.622	93	2199092	65.09	ppm	95
11) bis(2-Chloroethyl)ether	4.670	93	1698768	74.48	ppm	96
12) 2-Chlorophenol	4.718	128	1914860	72.65	ppm	98
13) Decane	4.750	43	1592105	69.76	ppm	98
14) 1,3-Dichlorobenzene	4.835	146	2150184	72.68	ppm	98
15) 1,4-Dichlorobenzene	4.894	146	2075908	72.60	ppm	100
16) Benzyl alcohol	4.990	108	1264630	78.84	ppm	93
17) 1,2-Dichlorobenzene	5.022	146	1883350	70.10	ppm	97
18) Acetophenone	5.214	105	2097409	68.94	ppm	91
19) 2-Methylphenol	5.081	108	1670134	73.50	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.097	121	566601	71.57	ppm	100

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125265.D
Acq On : 16 Jun 2016 2:23 pm
Operator : ashleyd
Sample : ic5307-80
Misc : op94571,em5307
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 20 09:46:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 16 16:00:16 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.209	108	1735540	73.56	ppm	87
22) n-Nitroso-di-n-propyla...	5.214	70	1167109	73.00	ppm	98
23) Hexachloroethane	5.311	201	790575	72.88	ppm	99
26) Nitrobenzene	5.364	77	1872183	74.02	ppm	97
27) Quinoline	6.475	129	3992148	72.09	ppm	100
28) Isophorone	5.583	82	3358581	74.25	ppm	98
29) 2-Nitrophenol	5.663	139	1093762	75.97	ppm	94
30) 2,4-Dimethylphenol	5.695	107	1666735	72.44	ppm	96
32) bis(2-Chloroethoxy)met...	5.786	93	1970934	73.05	ppm	99
33) 2,4-Dichlorophenol	5.903	162	1692764	74.79	ppm	99
34) 2,6-Dichlorophenol	6.144	162	1521975	69.91	ppm	99
35) 1,3,5-Trichlorobenzene	5.674	180	1735318	67.06	ppm	99
36) 1,2,4-Trichlorobenzene	5.994	180	1789678	69.76	ppm	100
37) 1,2,3-Trichlorobenzene	6.240	180	1676967	67.98	ppm	96
38) Naphthalene	6.080	128	5193607	71.15	ppm	98
39) 4-Chloroaniline	6.133	127	2154928	68.26	ppm	98
40) 2,3-Dichloroaniline	7.292	161	1953212	69.66	ppm	99
41) Caprolactam	6.550	55	833816	80.14	ppm	97
42) Hexachlorobutadiene	6.219	225	952455	68.69	ppm	98
43) 4-Chloro-3-methylphenol	6.715	107	1594229	73.06	ppm	97
44) 2-Methylnaphthalene	6.908	141	3147807	70.44	ppm	99
45) 1-Methylnaphthalene	7.041	142	3774765	70.09	ppm	97
46) Dimethylnaphthalene	7.805	156	3393931	69.50	ppm	99
48) Hexachlorocyclopentadiene	7.132	237	2202377	159.31	ppm	100
49) 2,4,6-Trichlorophenol	7.303	196	1160384	72.16	ppm	97
50) 2,4,5-Trichlorophenol	7.356	196	1378142	75.47	ppm	97
52) 2-Chloronaphthalene	7.591	162	3414455	70.20	ppm	97
53) Biphenyl	7.565	154	4576070	70.39	ppm	99
54) 2-Nitroaniline	7.751	65	1040690	78.62	ppm	97
55) Dimethylphthalate	8.056	163	4167228	73.27	ppm	99
56) Acenaphthylene	8.221	152	5823612	72.64	ppm	98
57) 2,6-Dinitrotoluene	8.136	165	1023841	80.60	ppm	96
58) 3-Nitroaniline	8.403	138	1197673	81.43	ppm	98
59) Acenaphthene	8.515	153	3617329	72.45	ppm	100
60) 2,4-Dinitrophenol	8.579	184	1388725	224.02	ppm	91
61) 4-Nitrophenol	8.724	109	571354	87.33	ppm	94
62) Dibenzofuran	8.804	168	4878783	70.01	ppm	99
63) 2,4-Dinitrotoluene	8.804	165	1239108	76.67	ppm	97
64) 2,3,4,6-Tetrachlorophenol	9.028	232	1156906	83.14	ppm	98
65) Diethylphthalate	9.268	149	3995239	72.47	ppm	99
66) Fluorene	9.397	166	4332446	72.99	ppm	97
67) 4-Chlorophenyl-phenyle...	9.423	204	2037989	70.98	ppm	99
68) 4-Nitroaniline	9.461	138	1183995	81.95	ppm	99
70) 4,6-Dinitro-2-methylph...	9.519	198	964478	107.76	ppm	97
71) n-Nitrosodiphenylamine	9.642	169	3105161	78.67	ppm	99
72) 1,2-Diphenylhydrazine	9.706	77	3784998	79.96	ppm	99
74) 4-Bromophenyl-phenylether	10.310	248	1291372	76.63	ppm	99
75) Hexachlorobenzene	10.401	284	1398536	74.65	ppm	99
76) Pentachlorophenol	10.780	266	1878034	228.84	ppm	99
77) Phenanthrene	11.154	178	6045566	75.06	ppm	98

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125265.D
Acq On : 16 Jun 2016 2:23 pm
Operator : ashleyd
Sample : ic5307-80
Misc : op94571,em5307
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 20 09:46:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 16 16:00:16 2016
Response via : Initial Calibration

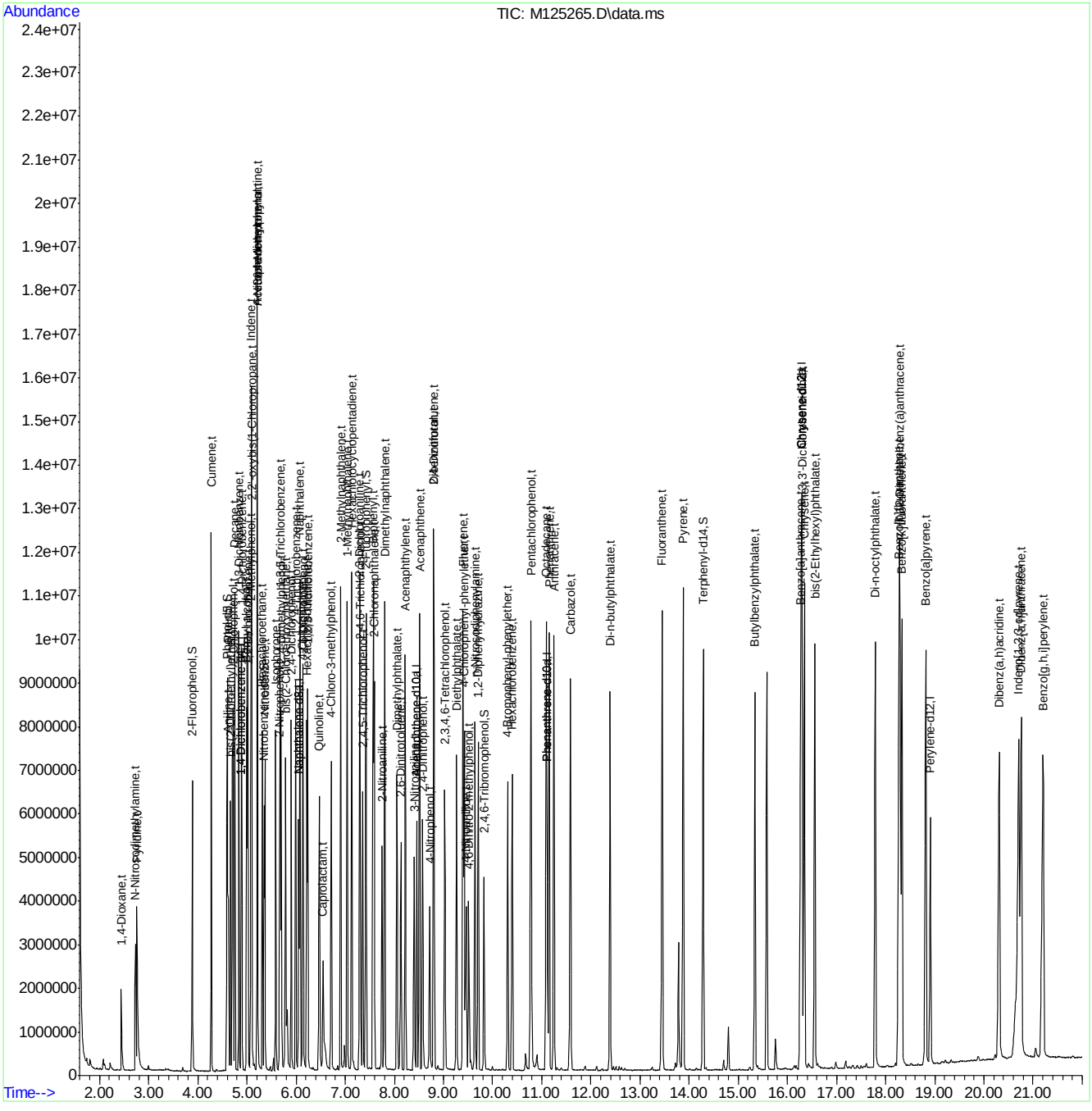
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Anthracene	11.250	178	6209366	77.19	ppm	99
79)	Carbazole	11.586	167	5997703	76.05	ppm	99
80)	Di-n-butylphthalate	12.393	149	7012550	79.49	ppm	99
81)	Fluoranthene	13.450	202	7185495	76.43	ppm	99
82)	Octadecane	11.090	57	2184746	79.02	ppm	98
84)	Pyrene	13.883	202	7425257	78.56	ppm	97
86)	Butylbenzylphthalate	15.341	149	3334932	83.59	ppm	99
87)	Benzo[a]anthracene	16.270	228	6648655	77.84	ppm	99
88)	3,3'-Dichlorobenzidine	16.297	252	2476371	82.61	ppm	100
89)	Chrysene	16.345	228	6613551	78.06	ppm	98
90)	bis(2-Ethylhexyl)phtha...	16.559	149	4416567	84.83	ppm	100
92)	Di-n-octylphthalate	17.787	149	7744474	81.27	ppm	99
93)	Benzo[b]fluoranthene	18.273	252	6970623	70.67	ppm	99
94)	Benzo[k]fluoranthene	18.332	252	6739573	74.13	ppm	98
95)	Benzo[a]pyrene	18.818	252	6513863	72.52	ppm	99
96)	Indeno[1,2,3-cd]pyrene	20.709	276	6765358	76.64	ppm	99
97)	Dibenz(a,h)acridine	20.314	279	6119826	76.80	ppm	99
98)	Dibenz[a,h]anthracene	20.762	278	7040521	76.99	ppm	99
99)	7,12-Dimethylbenz(a)an...	18.289	256	3028776	72.86	ppm	98
100)	Benzo[g,h,i]perylene	21.206	276	7219014	76.05	ppm	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125265.D
Acq On : 16 Jun 2016 2:23 pm
Operator : ashleyd
Sample : ic5307-80
Misc : op94571,em5307
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 20 09:46:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 16 16:00:16 2016
Response via : Initial Calibration



MM5307.M Mon Jun 20 09:46:19 2016 MSM

Page: 4

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125266.D
Acq On : 16 Jun 2016 2:51 pm
Operator : ashleyd
Sample : icc5307-50
Misc : op94571,em5307
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 09:46:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 16 15:59:09 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.877	152	686658	40.00	ppm	0.00
24) Naphthalene-d8	6.053	136	2529110	40.00	ppm	0.00
47) Acenaphthene-d10	8.456	164	1566264	40.00	ppm	0.00
69) Phenanthrene-d10	11.100	188	2705757	40.00	ppm	0.00
83) Chrysene-d12	16.286	240	2675701	40.00	ppm	-0.01
91) Perylene-d12	18.908	264	2944147	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.877	152	686658	40.00	ppm	0.00
103) Acenaphthene-d10a	8.456	164	1566264	40.00	ppm	0.00
106) Chrysene-d12a	16.286	240	2675701	40.00	ppm	-0.01
109) Phenanthrene-d10a	11.100	188	2705757	40.00	ppm	0.00
111) Naphthalene-d8a	6.053	136	2529110	40.00	ppm	0.00
113) Chrysene-d12b	16.286	240	2675701	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.884	112	1104603	52.05	ppm	0.00
Spiked Amount 50.000			Recovery	=	104.10%	
8) Phenol-d5	4.589	99	1417494	54.05	ppm	0.00
Spiked Amount 50.000			Recovery	=	108.10%	
25) Nitrobenzene-d5	5.342	82	1143171	49.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	99.42%	
51) 2-Fluorobiphenyl	7.420	172	2591130	50.21	ppm	0.00
Spiked Amount 50.000			Recovery	=	100.42%	
73) 2,4,6-Tribromophenol	9.823	330	422737	54.89	ppm	0.00
Spiked Amount 50.000			Recovery	=	109.78%	
85) Terphenyl-d14	14.283	244	3148919	51.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	102.34%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.447	88	499756	47.04	ppm	95
3) Pyridine	2.762	79	1234990	56.84	ppm	93
4) N-Nitrosodimethylamine	2.725	42	589482	51.80	ppm	91
6) Indene	5.091	116	1843627	51.48	ppm	98
7) Cumene	4.274	105	2573397	52.67	ppm	96
9) Phenol	4.600	94	1556973	54.08	ppm	96
10) Aniline	4.621	93	1567953	53.93	ppm	99
11) bis(2-Chloroethyl)ether	4.664	93	1024274	51.29	ppm	95
12) 2-Chlorophenol	4.717	128	1171190	50.48	ppm	94
13) Decane	4.749	43	1012703	50.37	ppm	97
14) 1,3-Dichlorobenzene	4.835	146	1319445	50.77	ppm	97
15) 1,4-Dichlorobenzene	4.894	146	1281650	51.15	ppm	98
16) Benzyl alcohol	4.984	108	752871	54.89	ppm	88
17) 1,2-Dichlorobenzene	5.016	146	1179318	49.56	ppm	96
18) Acetophenone	5.209	105	1358873	50.87	ppm	84
19) 2-Methylphenol	5.080	108	1050117	53.59	ppm	100
20) 2,2'-oxybis(1-Chloropr...	5.096	121	347464	49.56	ppm #	66

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125266.D
Acq On : 16 Jun 2016 2:51 pm
Operator : ashleyd
Sample : icc5307-50
Misc : op94571,em5307
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 09:46:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 16 15:59:09 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.203	108	1104210	54.64	ppm	97
22) n-Nitroso-di-n-propyla...	5.209	70	728583	52.45	ppm	90
23) Hexachloroethane	5.310	201	480716	50.28	ppm	96
26) Nitrobenzene	5.364	77	1143360	51.21	ppm	95
27) Quinoline	6.458	129	2485664	50.67	ppm	98
28) Isophorone	5.577	82	2122783	54.22	ppm	94
29) 2-Nitrophenol	5.657	139	665811	53.02	ppm	85
30) 2,4-Dimethylphenol	5.695	107	1027269	50.26	ppm	99
32) bis(2-Chloroethoxy)met...	5.785	93	1216530	51.01	ppm	99
33) 2,4-Dichlorophenol	5.898	162	1037509	52.30	ppm	96
34) 2,6-Dichlorophenol	6.143	162	973732	50.39	ppm	99
35) 1,3,5-Trichlorobenzene	5.673	180	1104421	47.01	ppm	99
36) 1,2,4-Trichlorobenzene	5.994	180	1114977	48.28	ppm	99
37) 1,2,3-Trichlorobenzene	6.239	180	1067919	48.00	ppm	97
38) Naphthalene	6.079	128	3263035	50.36	ppm	96
39) 4-Chloroaniline	6.133	127	1450162	52.47	ppm	97
40) 2,3-Dichloroaniline	7.292	161	1259573	50.73	ppm	98
41) Caprolactam	6.533	55	495890	55.54	ppm	92
42) Hexachlorobutadiene	6.218	225	601662	48.17	ppm	97
43) 4-Chloro-3-methylphenol	6.709	107	987576	51.30	ppm	94
44) 2-Methylnaphthalene	6.907	141	1994020	50.22	ppm	99
45) 1-Methylnaphthalene	7.035	142	2393172	49.91	ppm	99
46) Dimethylnaphthalene	7.799	156	2174777	50.07	ppm	99
48) Hexachlorocyclopentadiene	7.131	237	1419794	122.73	ppm	99
49) 2,4,6-Trichlorophenol	7.297	196	737178	51.40	ppm	100
50) 2,4,5-Trichlorophenol	7.350	196	831337	50.86	ppm	98
52) 2-Chloronaphthalene	7.585	162	2177633	49.60	ppm	97
53) Biphenyl	7.564	154	2940446	50.37	ppm	98
54) 2-Nitroaniline	7.746	65	629156	54.32	ppm	95
55) Dimethylphthalate	8.050	163	2581005	50.62	ppm	99
56) Acenaphthylene	8.221	152	3713913	52.22	ppm	98
57) 2,6-Dinitrotoluene	8.130	165	623660	57.13	ppm	97
58) 3-Nitroaniline	8.397	138	729631	58.07	ppm	96
59) Acenaphthene	8.509	153	2252010	50.16	ppm	97
60) 2,4-Dinitrophenol	8.568	184	733299	155.88	ppm	94
61) 4-Nitrophenol	8.712	109	321759	57.29	ppm	91
62) Dibenzofuran	8.798	168	3121277	49.64	ppm	99
63) 2,4-Dinitrotoluene	8.792	165	779279	55.54	ppm	82
64) 2,3,4,6-Tetrachlorophenol	9.022	232	691736	58.26	ppm	96
65) Diethylphthalate	9.262	149	2522503	51.26	ppm	100
66) Fluorene	9.391	166	2695030	50.66	ppm	97
67) 4-Chlorophenyl-phenyle...	9.417	204	1273670	48.93	ppm	94
68) 4-Nitroaniline	9.449	138	702714	56.30	ppm	93
70) 4,6-Dinitro-2-methylph...	9.508	198	523010	70.69	ppm	100
71) n-Nitrosodiphenylamine	9.636	169	1911253	52.25	ppm	96
72) 1,2-Diphenylhydrazine	9.700	77	2332604	53.67	ppm	97
74) 4-Bromophenyl-phenylether	10.304	248	811449	51.81	ppm	95
75) Hexachlorobenzene	10.395	284	873799	49.38	ppm	93
76) Pentachlorophenol	10.774	266	1084744	176.21	ppm	97
77) Phenanthrene	11.148	178	3810369	50.44	ppm	98

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125266.D
Acq On : 16 Jun 2016 2:51 pm
Operator : ashleyd
Sample : icc5307-50
Misc : op94571,em5307
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 09:46:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 16 15:59:09 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Anthracene	11.239	178	3928801	52.94	ppm	98
79)	Carbazole	11.581	167	3838365	52.66	ppm	100
80)	Di-n-butylphthalate	12.387	149	4468554	56.01	ppm	98
81)	Fluoranthene	13.445	202	4569901	52.56	ppm	98
82)	Octadecane	11.089	57	1369160	54.07	ppm	96
84)	Pyrene	13.877	202	4658341	50.65	ppm	97
86)	Butylbenzylphthalate	15.335	149	2065285	54.59	ppm	97
87)	Benzo[a]anthracene	16.265	228	4129807	49.21	ppm	98
88)	3,3'-Dichlorobenzidine	16.291	252	1560293	55.05	ppm	98
89)	Chrysene	16.339	228	4101135	49.29	ppm	97
90)	bis(2-Ethylhexyl)phtha...	16.553	149	2746489	56.21	ppm	98
92)	Di-n-octylphthalate	17.782	149	4843407	59.14	ppm	98
93)	Benzo[b]fluoranthene	18.268	252	4293958	46.69	ppm	98
94)	Benzo[k]fluoranthene	18.321	252	4227155	51.50	ppm	98
95)	Benzo[a]pyrene	18.812	252	4076055	49.66	ppm	98
96)	Indeno[1,2,3-cd]pyrene	20.692	276	4070167	50.86	ppm	98
97)	Dibenz(a,h)acridine	20.302	279	3736912	52.19	ppm	99
98)	Dibenz[a,h]anthracene	20.746	278	4297456	52.35	ppm	98
99)	7,12-Dimethylbenz(a)an...	18.284	256	1990791	53.89	ppm	98
100)	Benzo[g,h,i]perylene	21.189	276	4317287	49.82	ppm	99

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

7.6.84

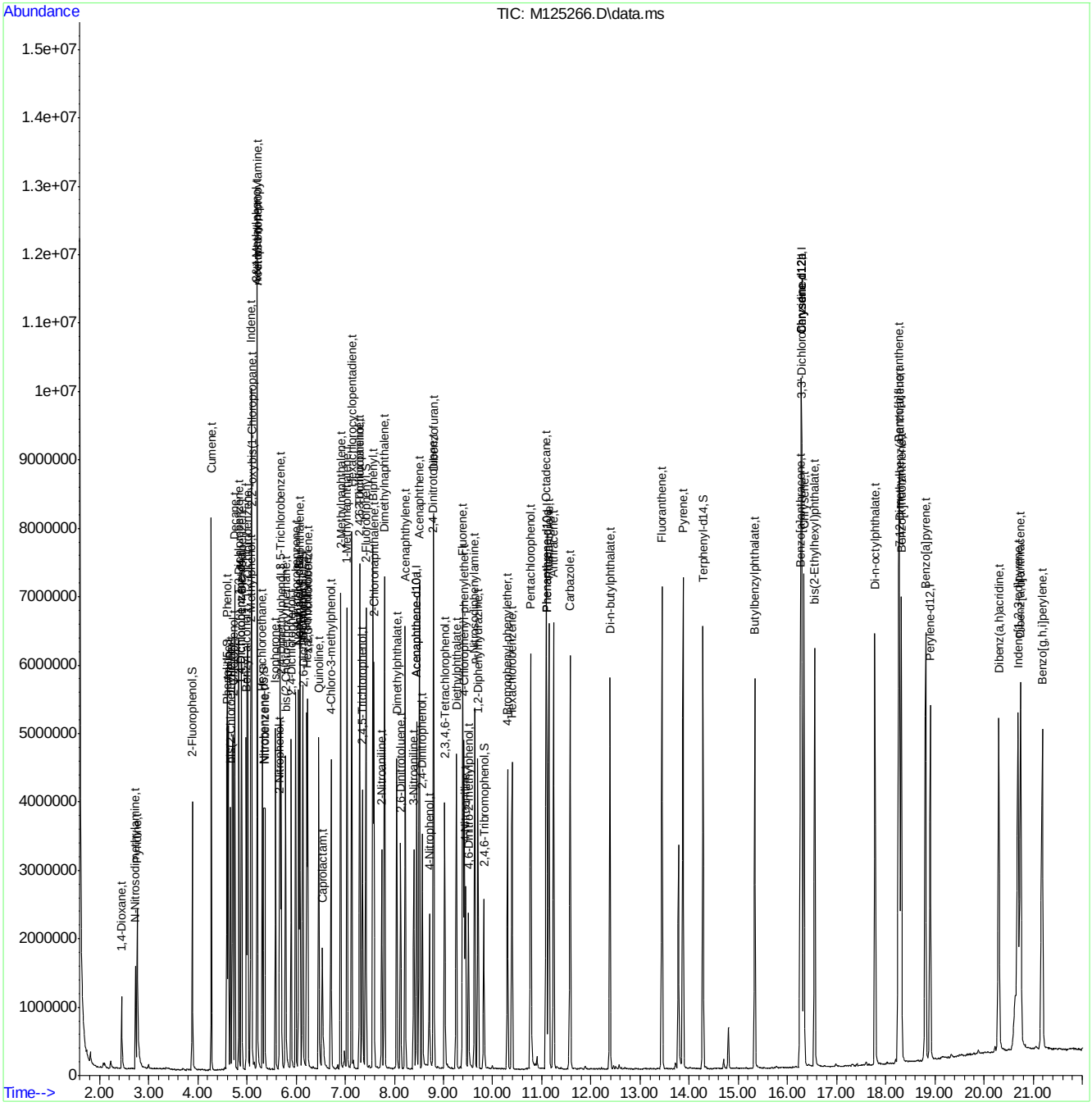
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125266.D
Acq On : 16 Jun 2016 2:51 pm
Operator : ashleyd
Sample : icc5307-50
Misc : op94571,em5307
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 20 09:46:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 16 15:59:09 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125267.D
Acq On : 16 Jun 2016 3:21 pm
Operator : ashleyd
Sample : ic5307-25
Misc : op94571,em5307
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 20 09:46:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 16 16:01:56 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.879	152	703070	40.00	ppm	0.00
24) Naphthalene-d8	6.054	136	2541377	40.00	ppm	0.00
47) Acenaphthene-d10	8.452	164	1595222	40.00	ppm	0.00
69) Phenanthrene-d10	11.101	188	2780327	40.00	ppm	0.00
83) Chrysene-d12	16.282	240	2826436	40.00	ppm	0.00
91) Perylene-d12	18.904	264	2908987	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.879	152	703070	40.00	ppm	0.00
103) Acenaphthene-d10a	8.452	164	1595222	40.00	ppm	0.00
106) Chrysene-d12a	16.282	240	2826436	40.00	ppm	0.00
109) Phenanthrene-d10a	11.101	188	2780327	40.00	ppm	0.00
111) Naphthalene-d8a	6.054	136	2541377	40.00	ppm	0.00
113) Chrysene-d12b	16.282	240	2826436	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.885	112	564127	25.68	ppm	0.00
Spiked Amount 50.000			Recovery	=	51.36%	
8) Phenol-d5	4.590	99	718572	26.14	ppm	0.00
Spiked Amount 50.000			Recovery	=	52.28%	
25) Nitrobenzene-d5	5.344	82	587907	25.93	ppm	0.00
Spiked Amount 50.000			Recovery	=	51.86%	
51) 2-Fluorobiphenyl	7.416	172	1396780	27.19	ppm	0.00
Spiked Amount 50.000			Recovery	=	54.38%	
73) 2,4,6-Tribromophenol	9.819	330	211455	25.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.78%	
85) Terphenyl-d14	14.279	244	1659457	25.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.78%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.449	88	255250	24.63	ppm	98
3) Pyridine	2.769	79	616654	26.53	ppm	97
4) N-Nitrosodimethylamine	2.732	42	289234	24.90	ppm	85
6) Indene	5.093	116	1007877	28.13	ppm	96
7) Cumene	4.275	105	1396316	28.10	ppm	99
9) Phenol	4.596	94	811327	27.32	ppm	96
10) Aniline	4.617	93	855976	29.39	ppm	98
11) bis(2-Chloroethyl)ether	4.665	93	542830	26.78	ppm	96
12) 2-Chlorophenol	4.713	128	631705	27.13	ppm	98
13) Decane	4.751	43	553236	27.70	ppm	98
14) 1,3-Dichlorobenzene	4.836	146	699396	26.76	ppm	98
15) 1,4-Dichlorobenzene	4.890	146	675530	26.75	ppm	96
16) Benzyl alcohol	4.986	108	388022	26.85	ppm	97
17) 1,2-Dichlorobenzene	5.018	146	640939	27.23	ppm	99
18) Acetophenone	5.210	105	758067	28.54	ppm	85
19) 2-Methylphenol	5.076	108	552697	27.46	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.098	121	189318	27.17	ppm	97

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125267.D
Acq On : 16 Jun 2016 3:21 pm
Operator : ashleyd
Sample : ic5307-25
Misc : op94571,em5307
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 20 09:46:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 16 16:01:56 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.199	108	583617	27.92	ppm	93
22) n-Nitroso-di-n-propyla...	5.205	70	400489	28.33	ppm	99
23) Hexachloroethane	5.311	201	254163	26.50	ppm	95
26) Nitrobenzene	5.360	77	598681	26.98	ppm	95
27) Quinoline	6.454	129	1291468	26.74	ppm	98
28) Isophorone	5.579	82	1104727	27.81	ppm	96
29) 2-Nitrophenol	5.659	139	354054	27.85	ppm	94
30) 2,4-Dimethylphenol	5.691	107	536739	26.72	ppm	97
32) bis(2-Chloroethoxy)met...	5.782	93	637622	27.02	ppm	98
33) 2,4-Dichlorophenol	5.899	162	547903	27.52	ppm	97
34) 2,6-Dichlorophenol	6.139	162	507264	26.91	ppm	95
35) 1,3,5-Trichlorobenzene	5.675	180	611380	27.54	ppm	99
36) 1,2,4-Trichlorobenzene	5.990	180	599962	27.02	ppm	99
37) 1,2,3-Trichlorobenzene	6.235	180	564073	26.57	ppm	98
38) Naphthalene	6.075	128	1727387	27.22	ppm	99
39) 4-Chloroaniline	6.129	127	754578	27.75	ppm	99
40) 2,3-Dichloroaniline	7.288	161	671059	27.66	ppm	99
41) Caprolactam	6.519	55	243370	26.15	ppm	97
42) Hexachlorobutadiene	6.219	225	318971	26.67	ppm	99
43) 4-Chloro-3-methylphenol	6.705	107	505830	26.50	ppm	99
44) 2-Methylnaphthalene	6.903	141	1068672	27.57	ppm	98
45) 1-Methylnaphthalene	7.037	142	1266880	27.15	ppm	99
46) Dimethylnaphthalene	7.795	156	1162189	27.52	ppm	100
48) Hexachlorocyclopentadiene	7.133	237	755834	59.70	ppm	97
49) 2,4,6-Trichlorophenol	7.293	196	385238	26.79	ppm	99
50) 2,4,5-Trichlorophenol	7.346	196	434972	26.35	ppm	100
52) 2-Chloronaphthalene	7.581	162	1170346	27.07	ppm	98
53) Biphenyl	7.560	154	1576010	27.26	ppm	99
54) 2-Nitroaniline	7.742	65	324193	26.83	ppm	96
55) Dimethylphthalate	8.046	163	1367045	26.78	ppm	99
56) Acenaphthylene	8.217	152	1975084	27.50	ppm	99
57) 2,6-Dinitrotoluene	8.121	165	316133	27.09	ppm	95
58) 3-Nitroaniline	8.393	138	370684	27.37	ppm	97
59) Acenaphthene	8.505	153	1210728	27.09	ppm	99
60) 2,4-Dinitrophenol	8.564	184	301545	48.23	ppm	93
61) 4-Nitrophenol	8.703	109	153288	24.98	ppm	92
62) Dibenzofuran	8.794	168	1690756	27.32	ppm	99
63) 2,4-Dinitrotoluene	8.789	165	415093	28.31	ppm	95
64) 2,3,4,6-Tetrachlorophenol	9.018	232	339538	26.35	ppm	98
65) Diethylphthalate	9.253	149	1326637	26.88	ppm	98
66) Fluorene	9.387	166	1448442	27.21	ppm	99
67) 4-Chlorophenyl-phenyle...	9.419	204	686712	26.84	ppm	95
68) 4-Nitroaniline	9.440	138	357559	26.83	ppm	97
70) 4,6-Dinitro-2-methylph...	9.504	198	229859	24.45	ppm	96
71) n-Nitrosodiphenylamine	9.632	169	1006879	26.50	ppm	99
72) 1,2-Diphenylhydrazine	9.697	77	1231201	26.91	ppm	99
74) 4-Bromophenyl-phenylether	10.300	248	415052	25.75	ppm	95
75) Hexachlorobenzene	10.391	284	465298	26.13	ppm	97
76) Pentachlorophenol	10.770	266	437503	49.80	ppm	96
77) Phenanthrene	11.144	178	2034361	26.54	ppm	99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125267.D
Acq On : 16 Jun 2016 3:21 pm
Operator : ashleyd
Sample : ic5307-25
Misc : op94571,em5307
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 20 09:46:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 16 16:01:56 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Anthracene	11.240	178	2093823	27.17	ppm	99
79)	Carbazole	11.577	167	2029610	26.96	ppm	100
80)	Di-n-butylphthalate	12.383	149	2320562	27.26	ppm	100
81)	Fluoranthene	13.441	202	2402078	26.73	ppm	99
82)	Octadecane	11.085	57	713312	26.77	ppm	97
84)	Pyrene	13.873	202	2481873	25.55	ppm	99
86)	Butylbenzylphthalate	15.331	149	1036528	24.89	ppm	99
87)	Benzo[a]anthracene	16.261	228	2169603	24.77	ppm	100
88)	3,3'-Dichlorobenzidine	16.282	252	809171	25.93	ppm	99
89)	Chrysene	16.330	228	2165229	24.90	ppm	100
90)	bis(2-Ethylhexyl)phtha...	16.554	149	1389999	25.48	ppm	97
92)	Di-n-octylphthalate	17.778	149	2442035	28.33	ppm	99
93)	Benzo[b]fluoranthene	18.258	252	2338076	27.10	ppm	99
94)	Benzo[k]fluoranthene	18.306	252	2209620	27.48	ppm	99
95)	Benzo[a]pyrene	18.803	252	2122759	26.86	ppm	99
96)	Indeno[1,2,3-cd]pyrene	20.683	276	2034364	25.85	ppm	98
97)	Dibenz(a,h)acridine	20.293	279	1918181	26.99	ppm	99
98)	Dibenz[a,h]anthracene	20.736	278	2207182	27.05	ppm	98
99)	7,12-Dimethylbenz(a)an...	18.269	256	1027963	28.08	ppm	98
100)	Benzo[g,h,i]perylene	21.169	276	2218205	26.26	ppm	97

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

7.6.85

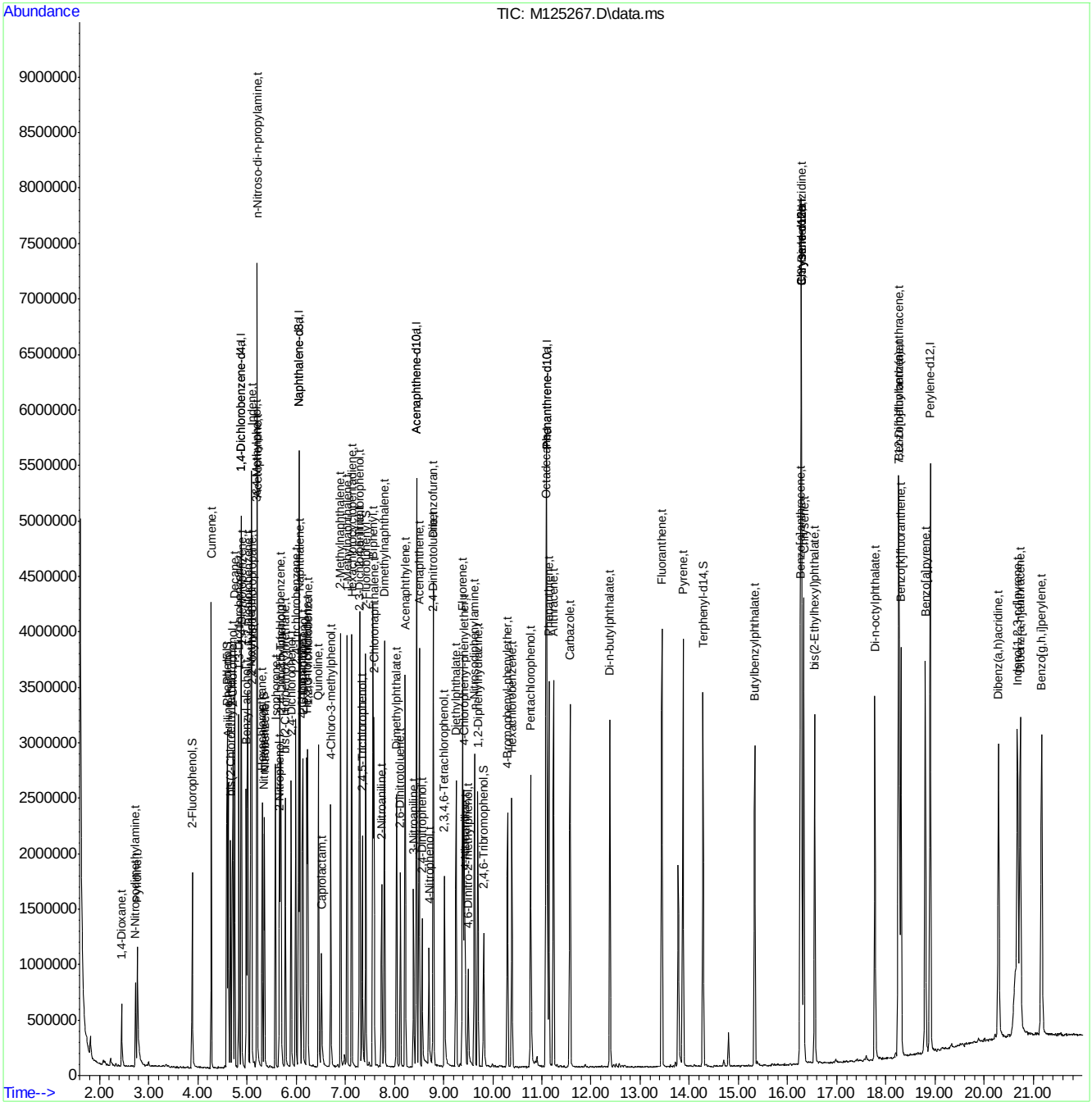
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125267.D
Acq On : 16 Jun 2016 3:21 pm
Operator : ashleyd
Sample : ic5307-25
Misc : op94571,em5307
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 20 09:46:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 16 16:01:56 2016
Response via : Initial Calibration



MM5307.M Mon Jun 20 09:46:34 2016 MSM

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125268.D
Acq On : 16 Jun 2016 3:49 pm
Operator : ashleyd
Sample : ic5307-10
Misc : op94571,em5307
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 20 09:47:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.878	152	820835	40.00	ppm	0.00
24) Naphthalene-d8	6.053	136	2936172	40.00	ppm	0.00
47) Acenaphthene-d10	8.451	164	1827652	40.00	ppm	0.00
69) Phenanthrene-d10	11.100	188	3234363	40.00	ppm	0.00
83) Chrysene-d12	16.281	240	3330432	40.00	ppm	0.00
91) Perylene-d12	18.904	264	3219904	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.878	152	820835	40.00	ppm	0.00
103) Acenaphthene-d10a	8.451	164	1827652	40.00	ppm	0.00
106) Chrysene-d12a	16.281	240	3330432	40.00	ppm	0.00
109) Phenanthrene-d10a	11.100	188	3234363	40.00	ppm	0.00
111) Naphthalene-d8a	6.053	136	2936172	40.00	ppm	0.00
113) Chrysene-d12b	16.281	240	3330432	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.885	112	252549	9.80	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.60%	
8) Phenol-d5	4.584	99	319501	9.61	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.22%	
25) Nitrobenzene-d5	5.343	82	260682	9.61	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.22%	
51) 2-Fluorobiphenyl	7.415	172	615715	9.67	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.34%	
73) 2,4,6-Tribromophenol	9.819	330	90559	9.66	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.32%	
85) Terphenyl-d14	14.278	244	737113	9.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.78%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.448	88	113619	9.27	ppm	98
3) Pyridine	2.774	79	265576	9.91	ppm	99
4) N-Nitrosodimethylamine	2.731	42	123200	9.18	ppm	95
6) Indene	5.092	116	455342	9.90	ppm	96
7) Cumene	4.275	105	612934	9.78	ppm	98
9) Phenol	4.595	94	350600	9.65	ppm	99
10) Aniline	4.622	93	360563	9.75	ppm	99
11) bis(2-Chloroethyl)ether	4.664	93	238629	9.49	ppm	96
12) 2-Chlorophenol	4.713	128	276103	9.60	ppm	98
13) Decane	4.750	43	246989	9.78	ppm	97
14) 1,3-Dichlorobenzene	4.835	146	319283	9.79	ppm	96
15) 1,4-Dichlorobenzene	4.894	146	300056	9.61	ppm	97
16) Benzyl alcohol	4.985	108	162218	9.41	ppm	95
17) 1,2-Dichlorobenzene	5.017	146	296910	9.94	ppm	99
18) Acetophenone	5.209	105	341632	10.05	ppm	83
19) 2-Methylphenol	5.076	108	239276	9.71	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.097	121	86177	9.89	ppm	90

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125268.D
Acq On : 16 Jun 2016 3:49 pm
Operator : ashleyd
Sample : ic5307-10
Misc : op94571,em5307
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 20 09:47:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.199	108	255089	9.75	ppm		92
22) n-Nitroso-di-n-propyla...	5.204	70	180988	10.14	ppm		96
23) Hexachloroethane	5.311	201	116165	9.89	ppm		94
26) Nitrobenzene	5.359	77	262043	9.74	ppm		98
27) Quinoline	6.454	129	544286	9.41	ppm		99
28) Isophorone	5.578	82	470697	9.73	ppm		94
29) 2-Nitrophenol	5.658	139	145175	9.74	ppm		96
30) 2,4-Dimethylphenol	5.690	107	207292	9.03	ppm		99
32) bis(2-Chloroethoxy)met...	5.781	93	282088	9.79	ppm		95
33) 2,4-Dichlorophenol	5.898	162	230281	9.65	ppm		99
34) 2,6-Dichlorophenol	6.139	162	215924	9.48	ppm		99
35) 1,3,5-Trichlorobenzene	5.674	180	280462	9.90	ppm		96
36) 1,2,4-Trichlorobenzene	5.989	180	280545	10.06	ppm		95
37) 1,2,3-Trichlorobenzene	6.235	180	256937	9.67	ppm		97
38) Naphthalene	6.074	128	776269	9.78	ppm		98
39) 4-Chloroaniline	6.128	127	325728	9.69	ppm		98
40) 2,3-Dichloroaniline	7.287	161	290008	9.57	ppm		97
41) Caprolactam	6.502	55	101211	9.72	ppm		96
42) Hexachlorobutadiene	6.219	225	142403	9.66	ppm		97
43) 4-Chloro-3-methylphenol	6.699	107	215482	9.53	ppm		92
44) 2-Methylnaphthalene	6.902	141	483537	9.97	ppm		98
45) 1-Methylnaphthalene	7.036	142	563419	9.70	ppm		99
46) Dimethylnaphthalene	7.794	156	514289	9.78	ppm		98
48) Hexachlorocyclopentadiene	7.132	237	302658	20.17	ppm		97
49) 2,4,6-Trichlorophenol	7.292	196	161731	9.42	ppm		94
50) 2,4,5-Trichlorophenol	7.346	196	179255	9.40	ppm		95
52) 2-Chloronaphthalene	7.581	162	530015	9.79	ppm		98
53) Biphenyl	7.559	154	685389	9.60	ppm		99
54) 2-Nitroaniline	7.736	65	130212	9.46	ppm		87
55) Dimethylphthalate	8.040	163	599443	9.59	ppm		98
56) Acenaphthylene	8.216	152	866336	9.80	ppm		98
57) 2,6-Dinitrotoluene	8.120	165	129032	9.67	ppm		91
58) 3-Nitroaniline	8.387	138	150820	9.80	ppm		98
59) Acenaphthene	8.505	153	538636	9.77	ppm		98
60) 2,4-Dinitrophenol	8.569	184	72843	16.00	ppm		91
61) 4-Nitrophenol	8.702	109	58365	8.76	ppm	#	85
62) Dibenzofuran	8.793	168	771340	9.95	ppm		98
63) 2,4-Dinitrotoluene	8.788	165	179738	10.30	ppm		91
64) 2,3,4,6-Tetrachlorophenol	9.023	232	131294	9.28	ppm		95
65) Diethylphthalate	9.252	149	566686	9.59	ppm		98
66) Fluorene	9.386	166	634896	9.68	ppm		96
67) 4-Chlorophenyl-phenyle...	9.418	204	301781	9.55	ppm		97
68) 4-Nitroaniline	9.434	138	148743	9.88	ppm		96
70) 4,6-Dinitro-2-methylph...	9.503	198	61174	8.16	ppm		98
71) n-Nitrosodiphenylamine	9.626	169	437789	9.50	ppm		99
72) 1,2-Diphenylhydrazine	9.696	77	514646	9.49	ppm		97
74) 4-Bromophenyl-phenylether	10.299	248	179774	9.30	ppm		96
75) Hexachlorobenzene	10.390	284	207911	9.53	ppm		97
76) Pentachlorophenol	10.775	266	116831	16.39	ppm		96
77) Phenanthrene	11.138	178	918044	9.75	ppm		99

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125268.D
Acq On : 16 Jun 2016 3:49 pm
Operator : ashleyd
Sample : ic5307-10
Misc : op94571,em5307
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 20 09:47:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Anthracene	11.234	178	929822	9.80	ppm	99
79)	Carbazole	11.576	167	882496	9.67	ppm	98
80)	Di-n-butylphthalate	12.382	149	981339	9.68	ppm	99
81)	Fluoranthene	13.440	202	1068921	9.79	ppm	97
82)	Octadecane	11.084	57	296501	9.38	ppm	97
84)	Pyrene	13.867	202	1113367	9.47	ppm	97
86)	Butylbenzylphthalate	15.331	149	430489	9.20	ppm	99
87)	Benzo[a]anthracene	16.260	228	956788	9.16	ppm	98
88)	3,3'-Dichlorobenzidine	16.281	252	330588	9.23	ppm	96
89)	Chrysene	16.324	228	966580	9.27	ppm	100
90)	bis(2-Ethylhexyl)phtha...	16.554	149	578763	9.30	ppm	98
92)	Di-n-octylphthalate	17.777	149	990745	10.05	ppm	99
93)	Benzo[b]fluoranthene	18.257	252	1019178	9.90	ppm	97
94)	Benzo[k]fluoranthene	18.300	252	995893	10.22	ppm	99
95)	Benzo[a]pyrene	18.797	252	920544	9.90	ppm	97
96)	Indeno[1,2,3-cd]pyrene	20.677	276	873893	9.74	ppm	98
97)	Dibenz(a,h)acridine	20.287	279	796769	9.76	ppm	81
98)	Dibenz[a,h]anthracene	20.730	278	922080	9.79	ppm	99
99)	7,12-Dimethylbenz(a)an...	18.263	256	354122	8.94	ppm	96
100)	Benzo[g,h,i]perylene	21.163	276	939582	9.62	ppm	98

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

7.6.86

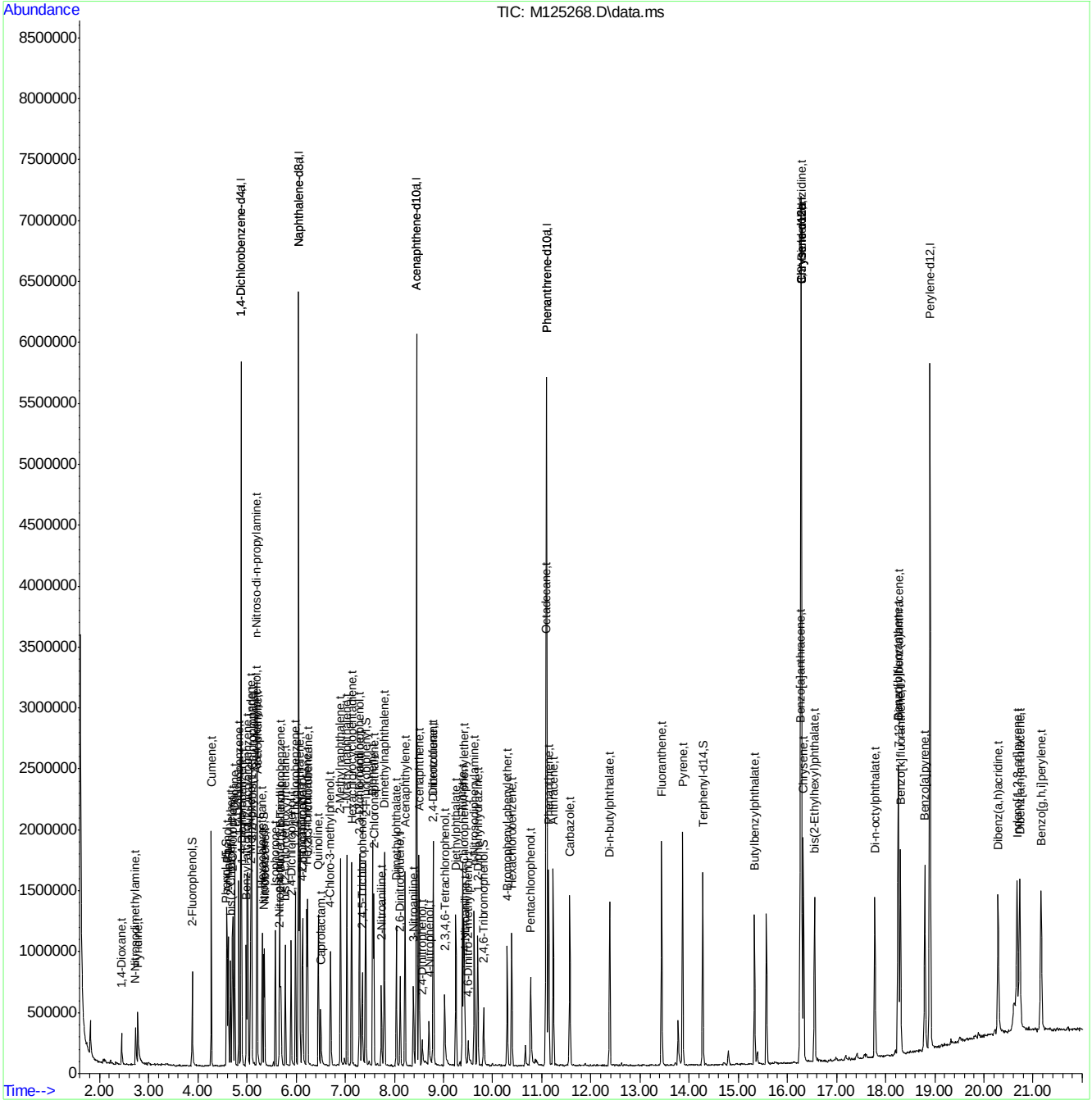
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125268.D
Acq On : 16 Jun 2016 3:49 pm
Operator : ashleyd
Sample : ic5307-10
Misc : op94571,em5307
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 20 09:47:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125269.D
Acq On : 16 Jun 2016 4:18 pm
Operator : ashleyd
Sample : ic5307-5
Misc : op94571,em5307
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 20 09:48:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.879	152	834389	40.00	ppm	0.00
24) Naphthalene-d8	6.054	136	2995817	40.00	ppm	0.00
47) Acenaphthene-d10	8.452	164	1844928	40.00	ppm	0.00
69) Phenanthrene-d10	11.101	188	3294652	40.00	ppm	0.00
83) Chrysene-d12	16.282	240	3375248	40.00	ppm	0.00
91) Perylene-d12	18.904	264	3224503	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.879	152	834389	40.00	ppm	0.00
103) Acenaphthene-d10a	8.452	164	1844928	40.00	ppm	0.00
106) Chrysene-d12a	16.282	240	3375248	40.00	ppm	0.00
109) Phenanthrene-d10a	11.101	188	3294652	40.00	ppm	0.00
111) Naphthalene-d8a	6.054	136	2995817	40.00	ppm	0.00
113) Chrysene-d12b	16.282	240	3375248	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.885	112	134841	5.15	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.30%	
8) Phenol-d5	4.585	99	188201	5.57	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.14%	
25) Nitrobenzene-d5	5.343	82	151224	5.46	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.92%	
51) 2-Fluorobiphenyl	7.416	172	362069	5.64	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.28%	
73) 2,4,6-Tribromophenol	9.819	330	46550	4.87	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.74%	
85) Terphenyl-d14	14.279	244	427656	5.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.76%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.448	88	68187	5.47	ppm	99
3) Pyridine	2.785	79	147036	5.40	ppm	98
4) N-Nitrosodimethylamine	2.737	42	68874	5.05	ppm	91
6) Indene	5.092	116	268465	5.74	ppm	95
7) Cumene	4.275	105	357284	5.61	ppm	98
9) Phenol	4.596	94	204017	5.53	ppm	100
10) Aniline	4.622	93	213276	5.68	ppm	89
11) bis(2-Chloroethyl)ether	4.665	93	141963	5.55	ppm	97
12) 2-Chlorophenol	4.713	128	162125	5.54	ppm	99
13) Decane	4.750	43	148448	5.78	ppm	100
14) 1,3-Dichlorobenzene	4.836	146	188868	5.70	ppm	98
15) 1,4-Dichlorobenzene	4.889	146	173662	5.47	ppm	99
16) Benzyl alcohol	4.985	108	93773	5.35	ppm	99
17) 1,2-Dichlorobenzene	5.017	146	173472	5.71	ppm	99
18) Acetophenone	5.210	105	199221	5.76	ppm	86
19) 2-Methylphenol	5.076	108	142188	5.68	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.098	121	50455	5.69	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125269.D
Acq On : 16 Jun 2016 4:18 pm
Operator : ashleyd
Sample : ic5307-5
Misc : op94571,em5307
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 20 09:48:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.199	108	147056	5.53	ppm		91
22) n-Nitroso-di-n-propyla...	5.204	70	104613	5.77	ppm		95
23) Hexachloroethane	5.311	201	63906	5.35	ppm		96
26) Nitrobenzene	5.359	77	153994	5.61	ppm		95
27) Quinoline	6.454	129	322318	5.46	ppm		97
28) Isophorone	5.578	82	272654	5.53	ppm		92
29) 2-Nitrophenol	5.658	139	78537	5.16	ppm		93
30) 2,4-Dimethylphenol	5.690	107	117977	5.04	ppm		100
32) bis(2-Chloroethoxy)met...	5.781	93	163088	5.55	ppm		97
33) 2,4-Dichlorophenol	5.899	162	131663	5.41	ppm		94
34) 2,6-Dichlorophenol	6.139	162	130012	5.60	ppm		94
35) 1,3,5-Trichlorobenzene	5.674	180	164814	5.70	ppm		96
36) 1,2,4-Trichlorobenzene	5.990	180	160604	5.65	ppm		95
37) 1,2,3-Trichlorobenzene	6.235	180	154064	5.68	ppm		98
38) Naphthalene	6.075	128	451842	5.58	ppm		99
39) 4-Chloroaniline	6.128	127	193505	5.64	ppm		99
40) 2,3-Dichloroaniline	7.287	161	173239	5.60	ppm		98
41) Caprolactam	6.497	55	56376	5.30	ppm		91
42) Hexachlorobutadiene	6.219	225	83747	5.57	ppm		94
43) 4-Chloro-3-methylphenol	6.700	107	121346	5.26	ppm		96
44) 2-Methylnaphthalene	6.903	141	276216	5.58	ppm		95
45) 1-Methylnaphthalene	7.036	142	330907	5.58	ppm		99
46) Dimethylnaphthalene	7.795	156	292015	5.44	ppm		96
48) Hexachlorocyclopentadiene	7.127	237	163160	10.77	ppm		94
49) 2,4,6-Trichlorophenol	7.298	196	90953	5.25	ppm		95
50) 2,4,5-Trichlorophenol	7.346	196	102589	5.33	ppm		98
52) 2-Chloronaphthalene	7.581	162	311608	5.70	ppm		99
53) Biphenyl	7.560	154	404367	5.61	ppm		97
54) 2-Nitroaniline	7.736	65	74930	5.39	ppm		92
55) Dimethylphthalate	8.040	163	347020	5.50	ppm		97
56) Acenaphthylene	8.217	152	506189	5.67	ppm		98
57) 2,6-Dinitrotoluene	8.121	165	71011	5.27	ppm		93
58) 3-Nitroaniline	8.388	138	80790	5.20	ppm		94
59) Acenaphthene	8.505	153	305347	5.48	ppm		93
60) 2,4-Dinitrophenol	8.575	184	23584	10.20	ppm		74
61) 4-Nitrophenol	8.703	109	28526	4.24	ppm	#	83
62) Dibenzofuran	8.794	168	451890	5.77	ppm		99
63) 2,4-Dinitrotoluene	8.788	165	100038	5.68	ppm		95
64) 2,3,4,6-Tetrachlorophenol	9.023	232	69593	4.87	ppm		92
65) Diethylphthalate	9.253	149	329585	5.52	ppm		99
66) Fluorene	9.386	166	370698	5.60	ppm		95
67) 4-Chlorophenyl-phenyle...	9.413	204	180468	5.66	ppm		99
68) 4-Nitroaniline	9.429	138	81636	5.37	ppm		97
70) 4,6-Dinitro-2-methylph...	9.509	198	19405	4.77	ppm		89
71) n-Nitrosodiphenylamine	9.627	169	256819	5.47	ppm		99
72) 1,2-Diphenylhydrazine	9.696	77	301278	5.45	ppm		97
74) 4-Bromophenyl-phenylether	10.300	248	105908	5.38	ppm		96
75) Hexachlorobenzene	10.391	284	118003	5.31	ppm		95
76) Pentachlorophenol	10.780	266	36442	10.68	ppm		92
77) Phenanthrene	11.138	178	521259	5.44	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125269.D
Acq On : 16 Jun 2016 4:18 pm
Operator : ashleyd
Sample : ic5307-5
Misc : op94571,em5307
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 20 09:48:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
78)	Anthracene	11.234	178	540514	5.59	ppm	98
79)	Carbazole	11.571	167	499932	5.38	ppm	99
80)	Di-n-butylphthalate	12.383	149	550686	5.33	ppm	99
81)	Fluoranthene	13.440	202	615205	5.53	ppm	97
82)	Octadecane	11.085	57	170510	5.29	ppm	95
84)	Pyrene	13.868	202	651005	5.46	ppm	97
86)	Butylbenzylphthalate	15.331	149	232419	4.90	ppm	96
87)	Benzo[a]anthracene	16.260	228	559773	5.29	ppm	96
88)	3,3'-Dichlorobenzidine	16.282	252	180599	4.97	ppm	97
89)	Chrysene	16.324	228	559642	5.30	ppm	98
90)	bis(2-Ethylhexyl)phtha...	16.554	149	316755	5.02	ppm	99
92)	Di-n-octylphthalate	17.777	149	520752	5.27	ppm	99
93)	Benzo[b]fluoranthene	18.253	252	596146	5.78	ppm	99
94)	Benzo[k]fluoranthene	18.301	252	563642	5.77	ppm	99
95)	Benzo[a]pyrene	18.797	252	526341	5.65	ppm	95
96)	Indeno[1,2,3-cd]pyrene	20.672	276	488917	5.44	ppm	98
97)	Dibenz(a,h)acridine	20.288	279	446782	5.47	ppm	80
98)	Dibenz[a,h]anthracene	20.726	278	514164	5.45	ppm	98
99)	7,12-Dimethylbenz(a)an...	18.263	256	185009	4.66	ppm	98
100)	Benzo[g,h,i]perylene	21.158	276	552270	5.65	ppm	97

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

7.6.87

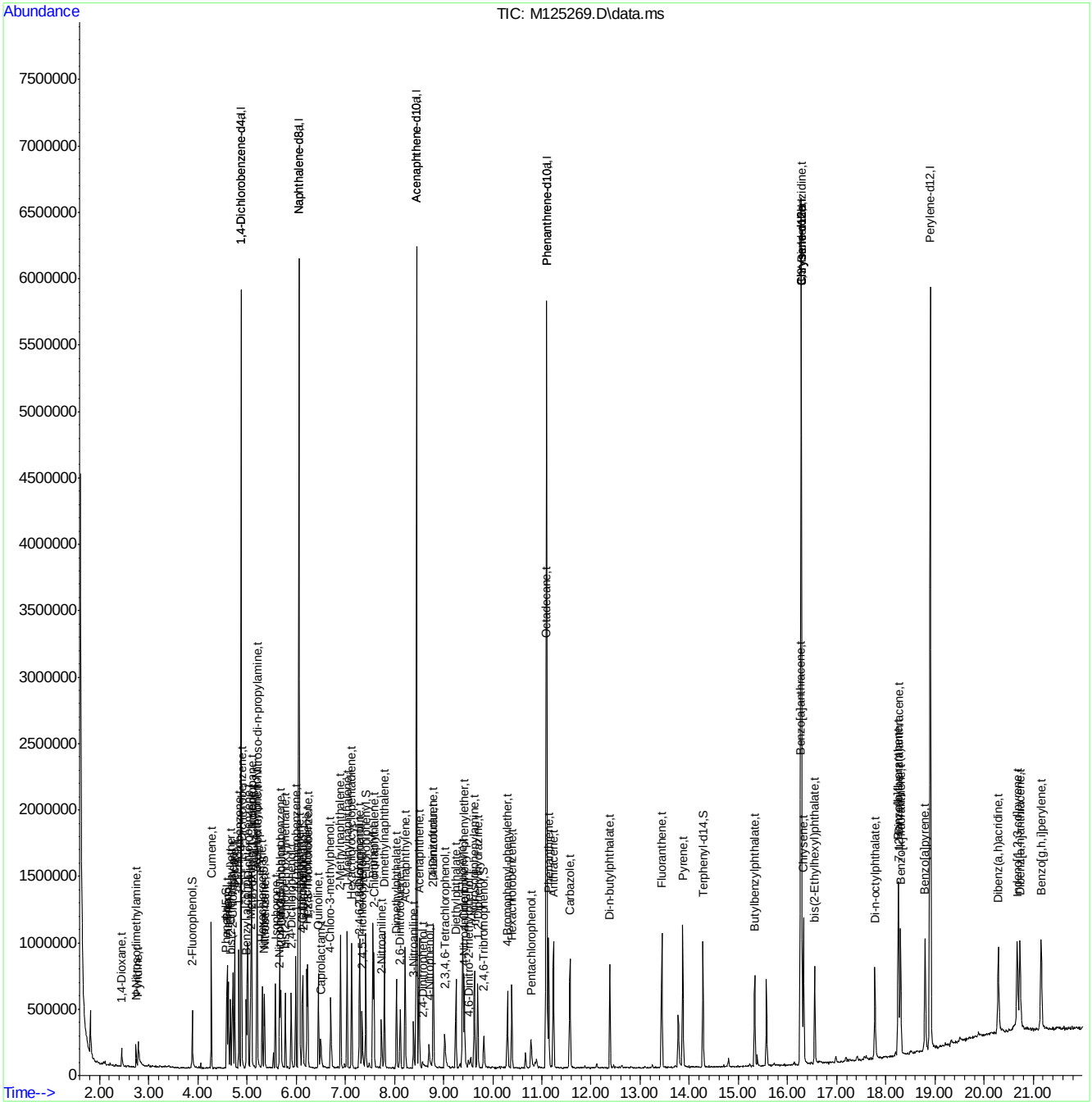
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5307\
Data File : M125269.D
Acq On : 16 Jun 2016 4:18 pm
Operator : ashleyd
Sample : ic5307-5
Misc : op94571,em5307
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 20 09:48:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Jun 20 09:44:47 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125271.D
Acq On : 16 Jun 2016 5:34 pm
Operator : juliusj
Sample : ic5308-100
Misc : op94571,em5308
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 17 17:25:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.879	152	771889	40.00	ppm	0.00
24) Naphthalene-d8	6.054	136	2850468	40.00	ppm	0.00
47) Acenaphthene-d10	8.452	164	1743618	40.00	ppm	0.00
69) Phenanthrene-d10	11.101	188	3099452	40.00	ppm	0.00
83) Chrysene-d12	16.276	240	2994308	40.00	ppm	0.00
91) Perylene-d12	18.904	264	3001412	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.879	152	771889	40.00	ppm	0.00
103) Acenaphthene-d10a	8.452	164	1743618	40.00	ppm	0.00
106) Chrysene-d12a	16.276	240	2994308	40.00	ppm	0.00
109) Phenanthrene-d10a	11.101	188	3099452	40.00	ppm	0.00
111) Naphthalene-d8a	6.054	136	2850468	40.00	ppm	0.00
113) Chrysene-d12b	16.276	240	2994308	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	13.435	57	1624263	95.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	190.34%	
110) o-terphenyl	11.913	230	3559721	87.99	ppm	0.00
Spiked Amount 50.000			Recovery	=	175.98%	
Target Compounds						Qvalue
102) Benzaldehyde	4.537	105	1290220	75.90	ppm	95
104) 1,2,4,5-Tetrachloroben...	7.138	216	2101949	92.21	ppm	94
105) Atrazine	10.684	215	774081	93.10	ppm	95
107) Benzidine	13.782	184	2950795	70.00	ppm	100
112) Hydroquinone	6.518	110	2314183	95.35	ppm	81

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

7.6.88

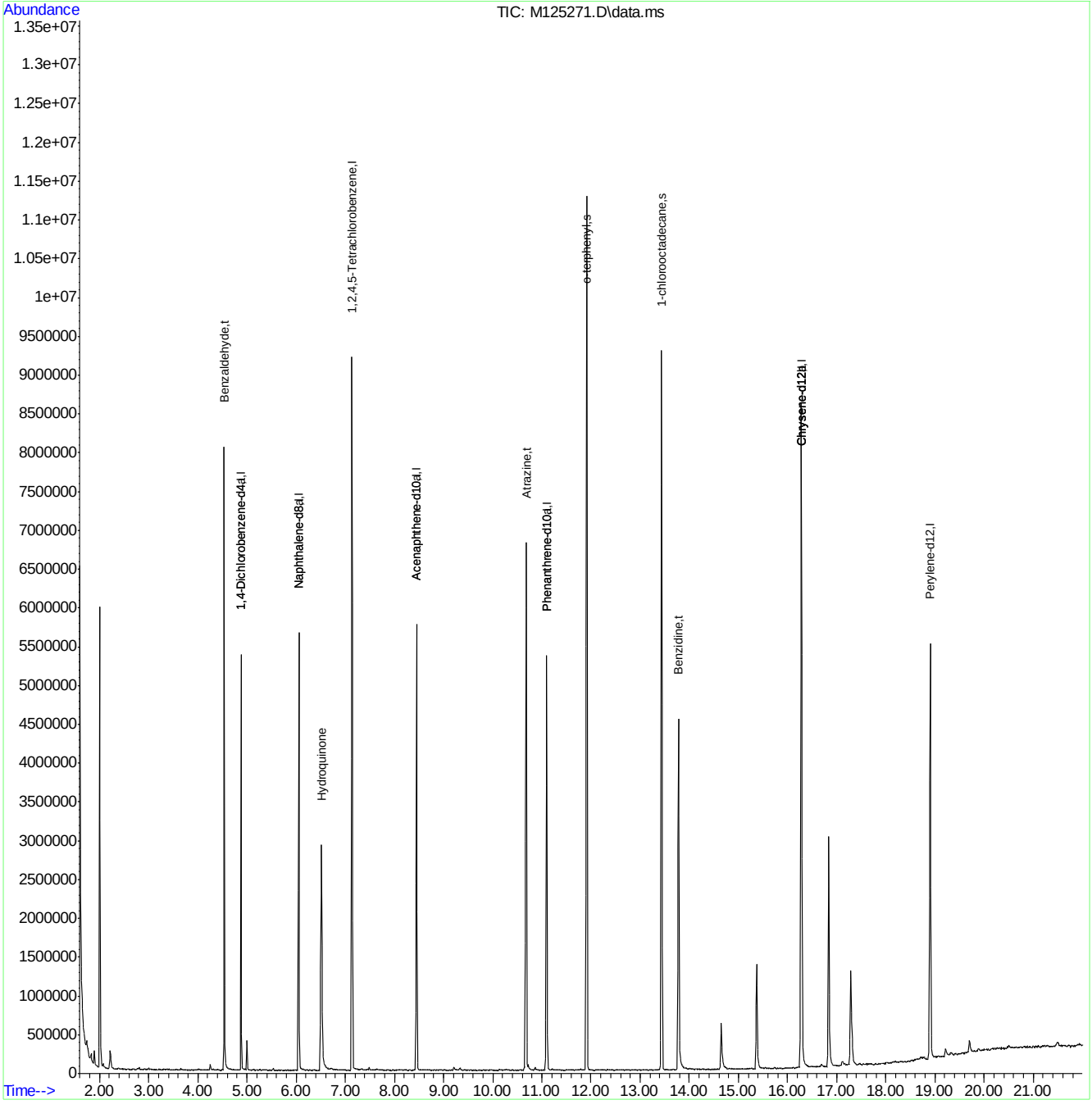
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125271.D
Acq On : 16 Jun 2016 5:34 pm
Operator : juliusj
Sample : ic5308-100
Misc : op94571,em5308
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 17 17:25:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration



MM5307.M Fri Jun 17 17:25:46 2016 MSM

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125272.D
Acq On : 16 Jun 2016 6:03 pm
Operator : juliusj
Sample : ic5308-80
Misc : op94571,em5308
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 17 17:26:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.876	152	828576	40.00	ppm	0.00
24) Naphthalene-d8	6.051	136	2973805	40.00	ppm	0.00
47) Acenaphthene-d10	8.449	164	1816329	40.00	ppm	0.00
69) Phenanthrene-d10	11.098	188	3263230	40.00	ppm	0.00
83) Chrysene-d12	16.279	240	3216309	40.00	ppm	0.00
91) Perylene-d12	18.907	264	3219337	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.876	152	828576	40.00	ppm	0.00
103) Acenaphthene-d10a	8.449	164	1816329	40.00	ppm	0.00
106) Chrysene-d12a	16.279	240	3216309	40.00	ppm	0.00
109) Phenanthrene-d10a	11.098	188	3263230	40.00	ppm	0.00
111) Naphthalene-d8a	6.051	136	2973805	40.00	ppm	0.00
113) Chrysene-d12b	16.279	240	3216309	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	13.437	57	1388181	75.72	ppm	0.00
Spiked Amount 50.000			Recovery	=	151.44%	
110) o-terphenyl	11.915	230	3099249	72.76	ppm	0.00
Spiked Amount 50.000			Recovery	=	145.52%	
Target Compounds						Qvalue
102) Benzaldehyde	4.539	105	1217790	66.74	ppm	94
104) 1,2,4,5-Tetrachloroben...	7.135	216	1787291	75.27	ppm	95
105) Atrazine	10.681	215	662074	76.44	ppm	95
107) Benzidine	13.779	184	2937685	64.87	ppm	100
112) Hydroquinone	6.515	110	1924813	76.02	ppm	84

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

7.6.89

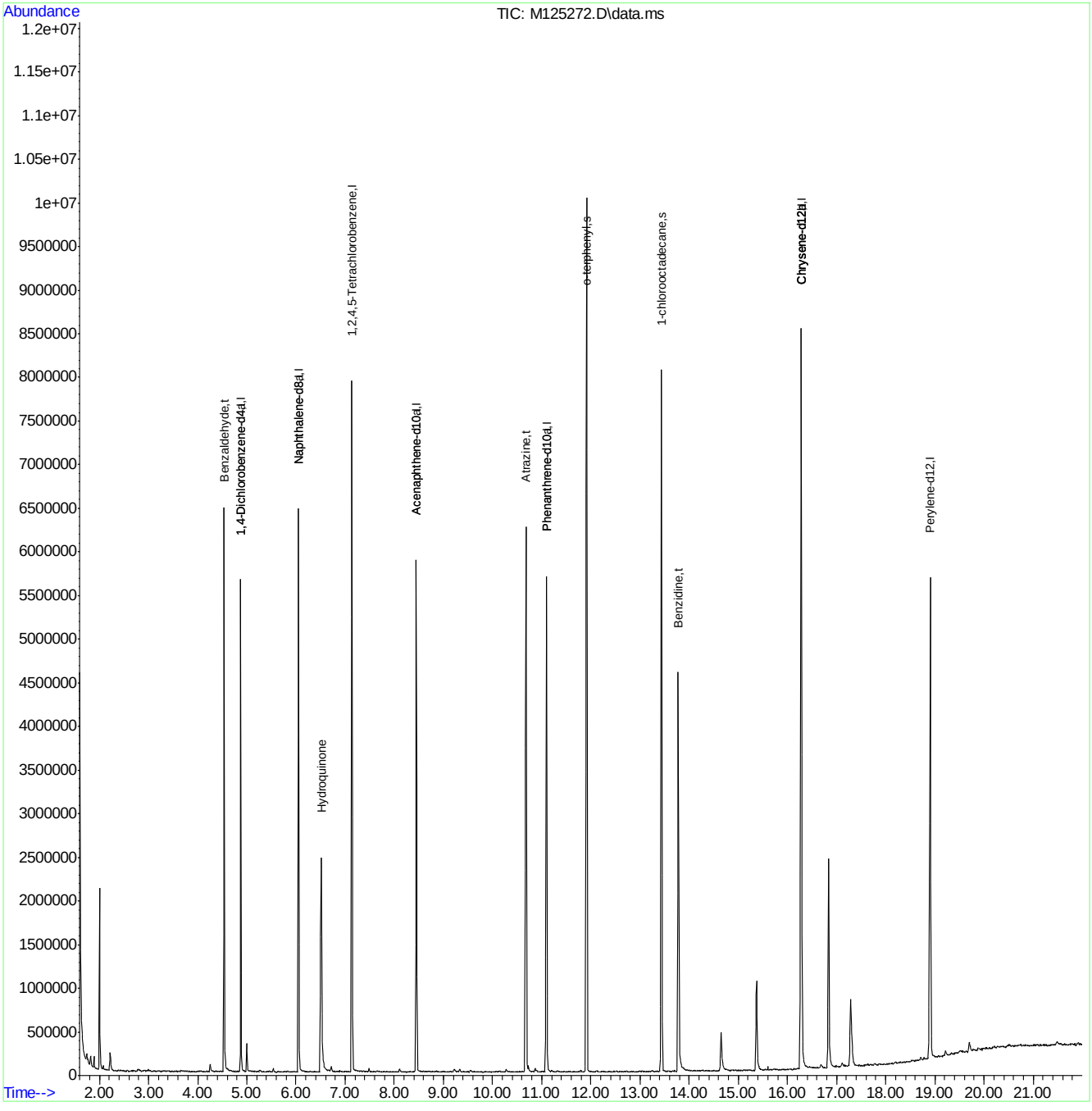
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125272.D
Acq On : 16 Jun 2016 6:03 pm
Operator : juliusj
Sample : ic5308-80
Misc : op94571,em5308
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 17 17:26:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration



MM5307.M Fri Jun 17 17:26:30 2016 MSM

Page: 2

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125273.D
Acq On : 16 Jun 2016 6:31 pm
Operator : juliusj
Sample : icc5308-50
Misc : op94571,em5308
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 17 17:24:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.876	152	779288	40.00	ppm	0.00
24) Naphthalene-d8	6.051	136	2833217	40.00	ppm	0.00
47) Acenaphthene-d10	8.449	164	1779945	40.00	ppm	0.00
69) Phenanthrene-d10	11.098	188	3187438	40.00	ppm	0.00
83) Chrysene-d12	16.279	240	3197086	40.00	ppm	0.00
91) Perylene-d12	18.907	264	3169807	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.876	152	779288	40.00	ppm	0.00
103) Acenaphthene-d10a	8.449	164	1779945	40.00	ppm	0.00
106) Chrysene-d12a	16.279	240	3197086	40.00	ppm	0.00
109) Phenanthrene-d10a	11.098	188	3187438	40.00	ppm	0.00
111) Naphthalene-d8a	6.051	136	2833217	40.00	ppm	0.00
113) Chrysene-d12b	16.279	240	3197086	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	13.432	57	911166	50.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	100.00%	
110) o-terphenyl	11.910	230	2080204	50.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	100.00%	
Target Compounds						Qvalue
102) Benzaldehyde	4.539	105	850581	49.56	ppm	95
104) 1,2,4,5-Tetrachloroben...	7.135	216	1163463	50.00	ppm	95
105) Atrazine	10.676	215	422091	49.73	ppm	92
107) Benzidine	13.779	184	2250599	50.00	ppm	100
112) Hydroquinone	6.505	110	1187043	49.21	ppm	82

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

7.6.90

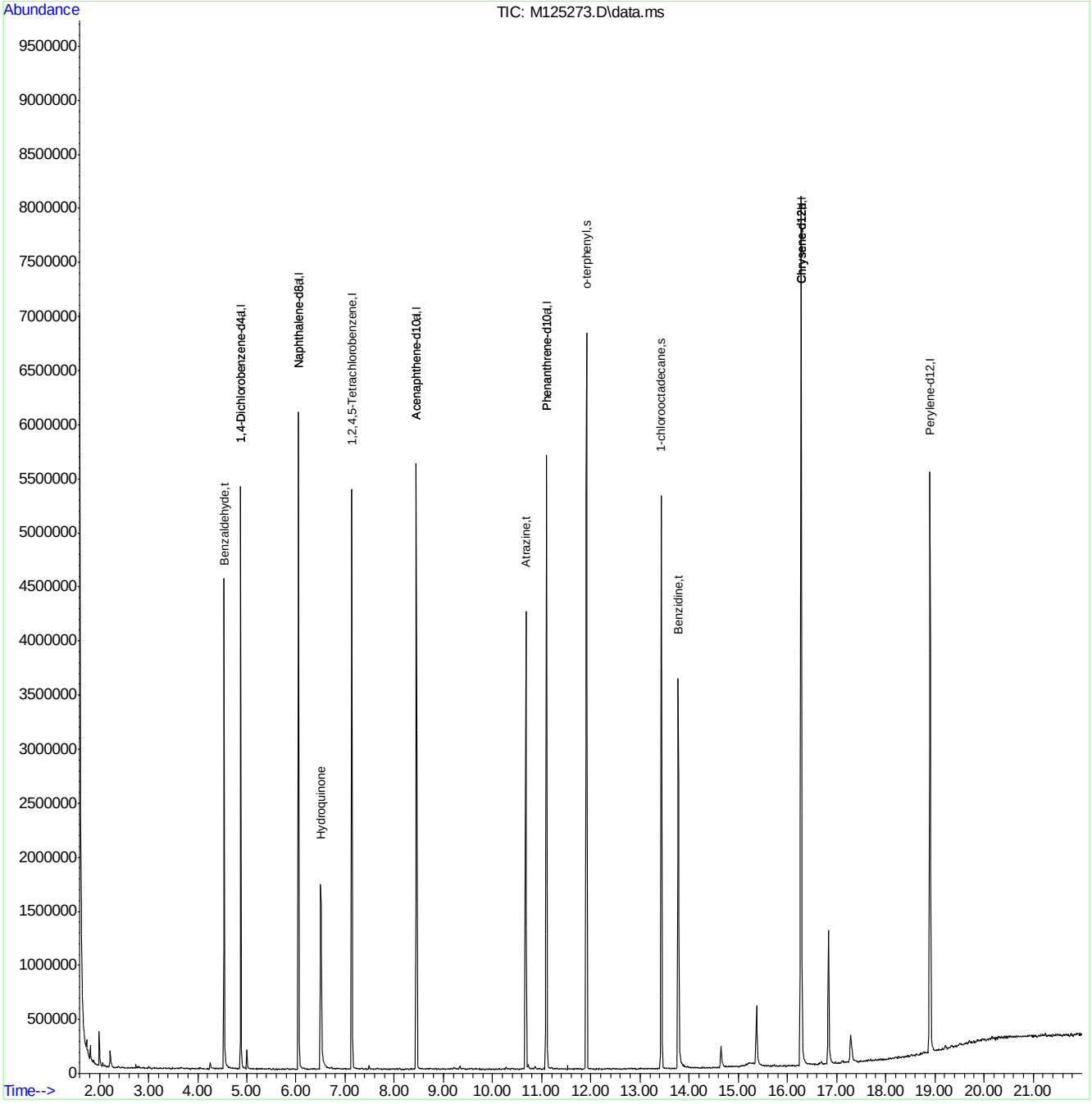
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125273.D
Acq On : 16 Jun 2016 6:31 pm
Operator : juliusj
Sample : icc5308-50
Misc : op94571,em5308
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Jun 17 17:24:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration



MM5307.M Fri Jun 17 17:24:55 2016 MSM

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SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125274.D
Acq On : 16 Jun 2016 7:00 pm
Operator : juliusj
Sample : ic5308-25
Misc : op94571,em5308
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 17 17:27:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.878	152	816032	40.00	ppm	0.00
24) Naphthalene-d8	6.053	136	2998533	40.00	ppm	0.00
47) Acenaphthene-d10	8.451	164	1901331	40.00	ppm	0.00
69) Phenanthrene-d10	11.095	188	3431230	40.00	ppm	0.00
83) Chrysene-d12	16.276	240	3460530	40.00	ppm	0.00
91) Perylene-d12	18.904	264	3365222	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.878	152	816032	40.00	ppm	0.00
103) Acenaphthene-d10a	8.451	164	1901331	40.00	ppm	0.00
106) Chrysene-d12a	16.276	240	3460530	40.00	ppm	0.00
109) Phenanthrene-d10a	11.095	188	3431230	40.00	ppm	0.00
111) Naphthalene-d8a	6.053	136	2998533	40.00	ppm	0.00
113) Chrysene-d12b	16.276	240	3460530	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	13.429	57	499033	25.30	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.60%	
110) o-terphenyl	11.907	230	1137892	25.41	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.82%	
Target Compounds						Qvalue
102) Benzaldehyde	4.536	105	472211	26.28	ppm	96
104) 1,2,4,5-Tetrachloroben...	7.138	216	646565	26.01	ppm	94
105) Atrazine	10.673	215	229724	25.34	ppm	95
107) Benzidine	13.777	184	1364892	28.01	ppm	100
112) Hydroquinone	6.502	110	605152	23.70	ppm	83

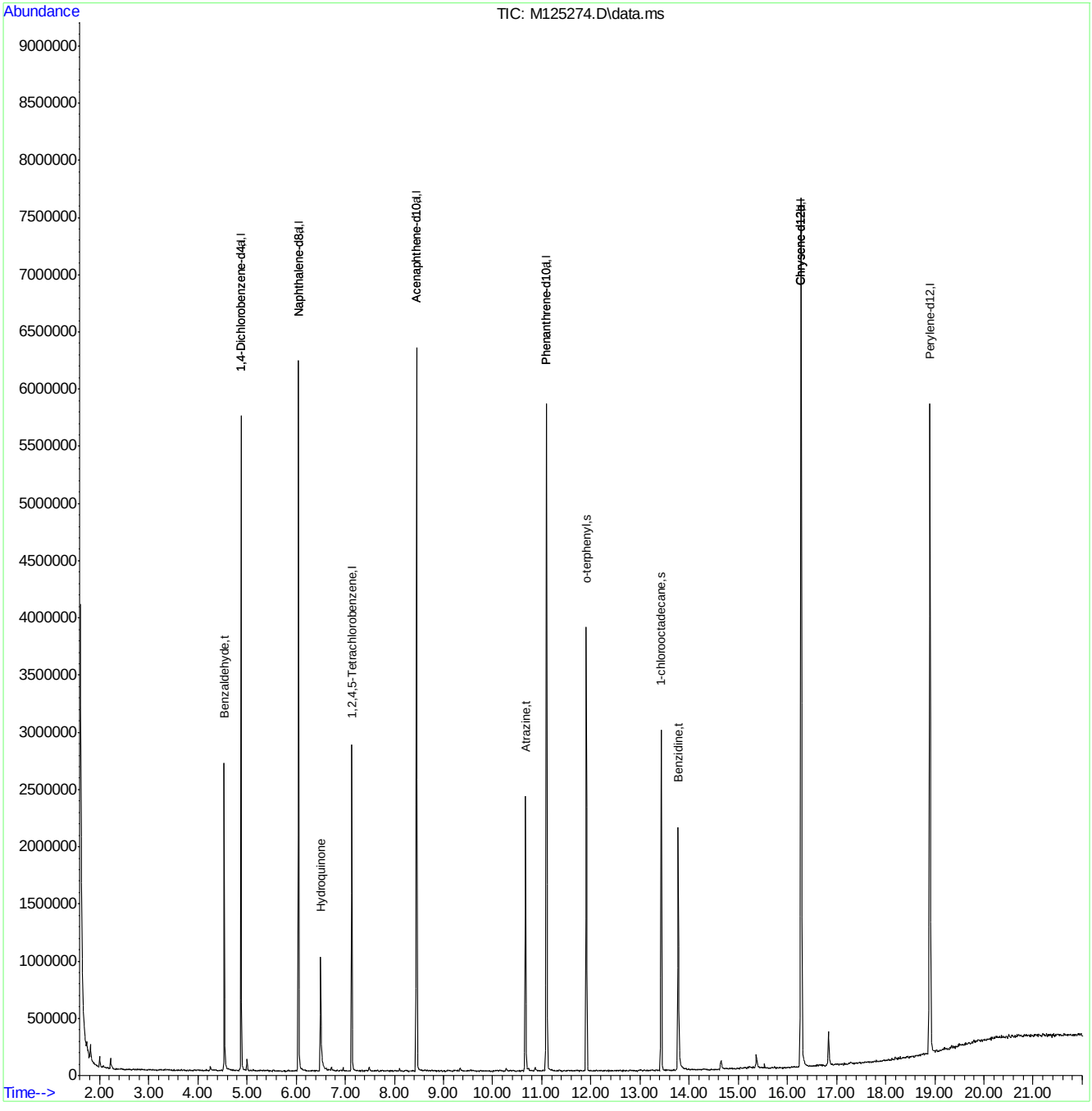
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125274.D
Acq On : 16 Jun 2016 7:00 pm
Operator : juliusj
Sample : ic5308-25
Misc : op94571,em5308
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Jun 17 17:27:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration



MM5307.M Fri Jun 17 17:27:16 2016 MSM

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125275.D
Acq On : 16 Jun 2016 7:29 pm
Operator : juliusj
Sample : ic5308-10
Misc : op94571,em5308
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 17 17:27:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.878	152	867193	40.00	ppm	0.00
24) Naphthalene-d8	6.053	136	3174744	40.00	ppm	0.00
47) Acenaphthene-d10	8.451	164	1991646	40.00	ppm	0.00
69) Phenanthrene-d10	11.100	188	3560117	40.00	ppm	0.00
83) Chrysene-d12	16.276	240	3621900	40.00	ppm	0.00
91) Perylene-d12	18.904	264	3444747	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.878	152	867193	40.00	ppm	0.00
103) Acenaphthene-d10a	8.451	164	1991646	40.00	ppm	0.00
106) Chrysene-d12a	16.276	240	3621900	40.00	ppm	0.00
109) Phenanthrene-d10a	11.100	188	3560117	40.00	ppm	0.00
111) Naphthalene-d8a	6.053	136	3174744	40.00	ppm	0.00
113) Chrysene-d12b	16.276	240	3621900	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	13.429	57	215786	10.45	ppm	0.00
Spiked Amount 50.000			Recovery = 20.90%			
110) o-terphenyl	11.907	230	530490	11.42	ppm	0.00
Spiked Amount 50.000			Recovery = 22.84%			
Target Compounds						Qvalue
102) Benzaldehyde	4.541	105	216851	11.36	ppm	95
104) 1,2,4,5-Tetrachloroben...	7.137	216	295070	11.33	ppm	95
105) Atrazine	10.668	215	95629	10.07	ppm	90
107) Benzidine	13.776	184	570741	11.19	ppm	100
112) Hydroquinone	6.496	110	232444	8.60	ppm	82

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

7.6.92

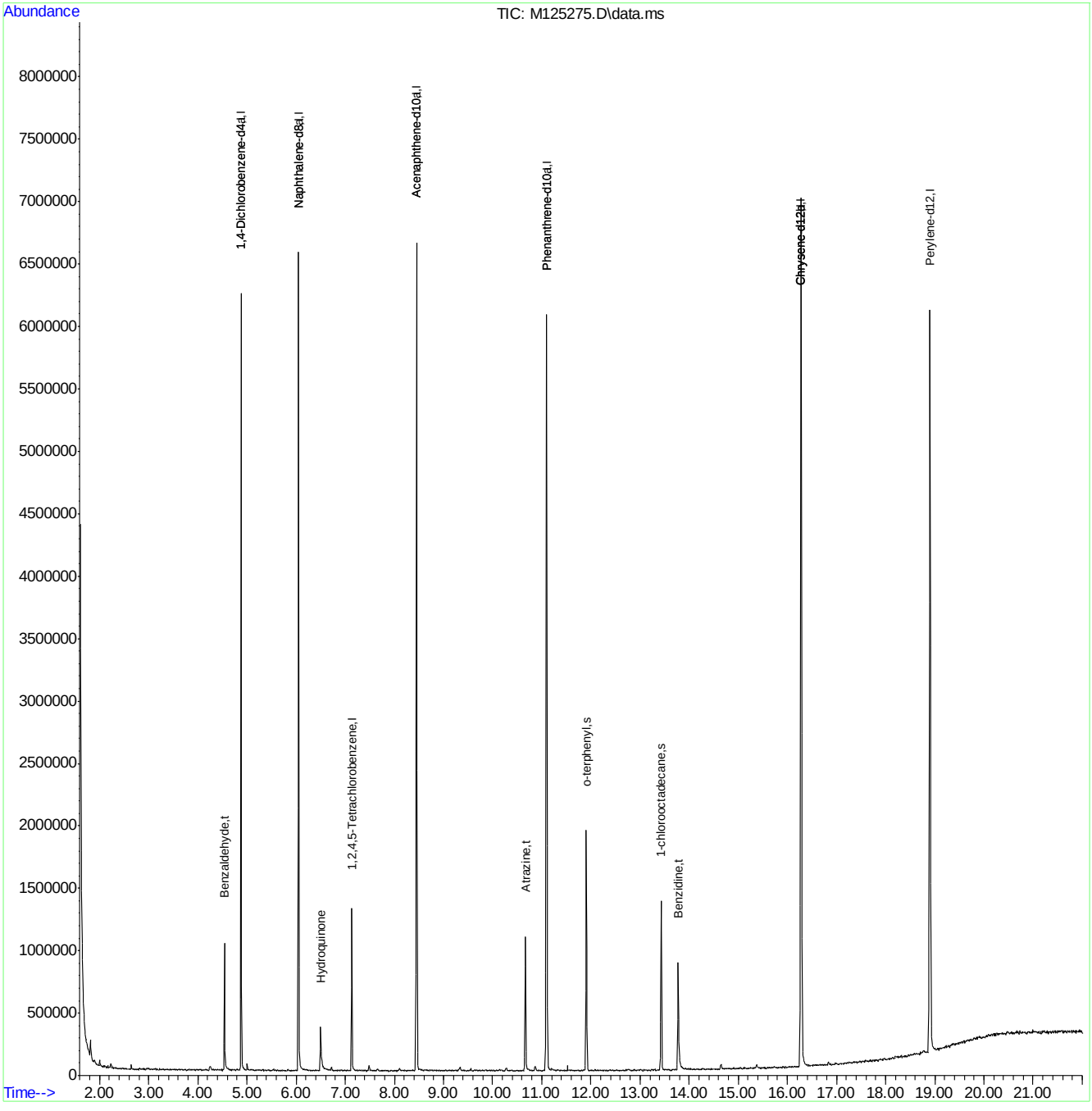
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125275.D
Acq On : 16 Jun 2016 7:29 pm
Operator : juliusj
Sample : ic5308-10
Misc : op94571,em5308
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jun 17 17:27:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration



MM5307.M Fri Jun 17 17:27:58 2016 MSM

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Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125276.D
Acq On : 16 Jun 2016 7:58 pm
Operator : juliusj
Sample : ic5308-5
Misc : op94571,em5308
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 17 17:29:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.879	152	810184	40.00	ppm	0.00
24) Naphthalene-d8	6.049	136	2899093	40.00	ppm	0.00
47) Acenaphthene-d10	8.452	164	1828707	40.00	ppm	0.00
69) Phenanthrene-d10	11.096	188	3270123	40.00	ppm	0.00
83) Chrysene-d12	16.277	240	3361715	40.00	ppm	0.00
91) Perylene-d12	18.905	264	3219678	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.879	152	810184	40.00	ppm	0.00
103) Acenaphthene-d10a	8.452	164	1828707	40.00	ppm	0.00
106) Chrysene-d12a	16.277	240	3361715	40.00	ppm	0.00
109) Phenanthrene-d10a	11.096	188	3270123	40.00	ppm	0.00
111) Naphthalene-d8a	6.049	136	2899093	40.00	ppm	0.00
113) Chrysene-d12b	16.277	240	3361715	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	13.430	57	85357	4.45	ppm	0.00
Spiked Amount 50.000			Recovery	=	8.90%	
110) o-terphenyl	11.908	230	217425	5.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.18%	
Target Compounds						Qvalue
102) Benzaldehyde	4.542	105	86357	4.84	ppm	93
104) 1,2,4,5-Tetrachloroben...	7.133	216	130344	5.45	ppm	95
105) Atrazine	10.669	215	37010	4.24	ppm	94
107) Benzidine	13.777	184	197410	4.17	ppm	100
112) Hydroquinone	6.503	110	77600	3.14	ppm	90

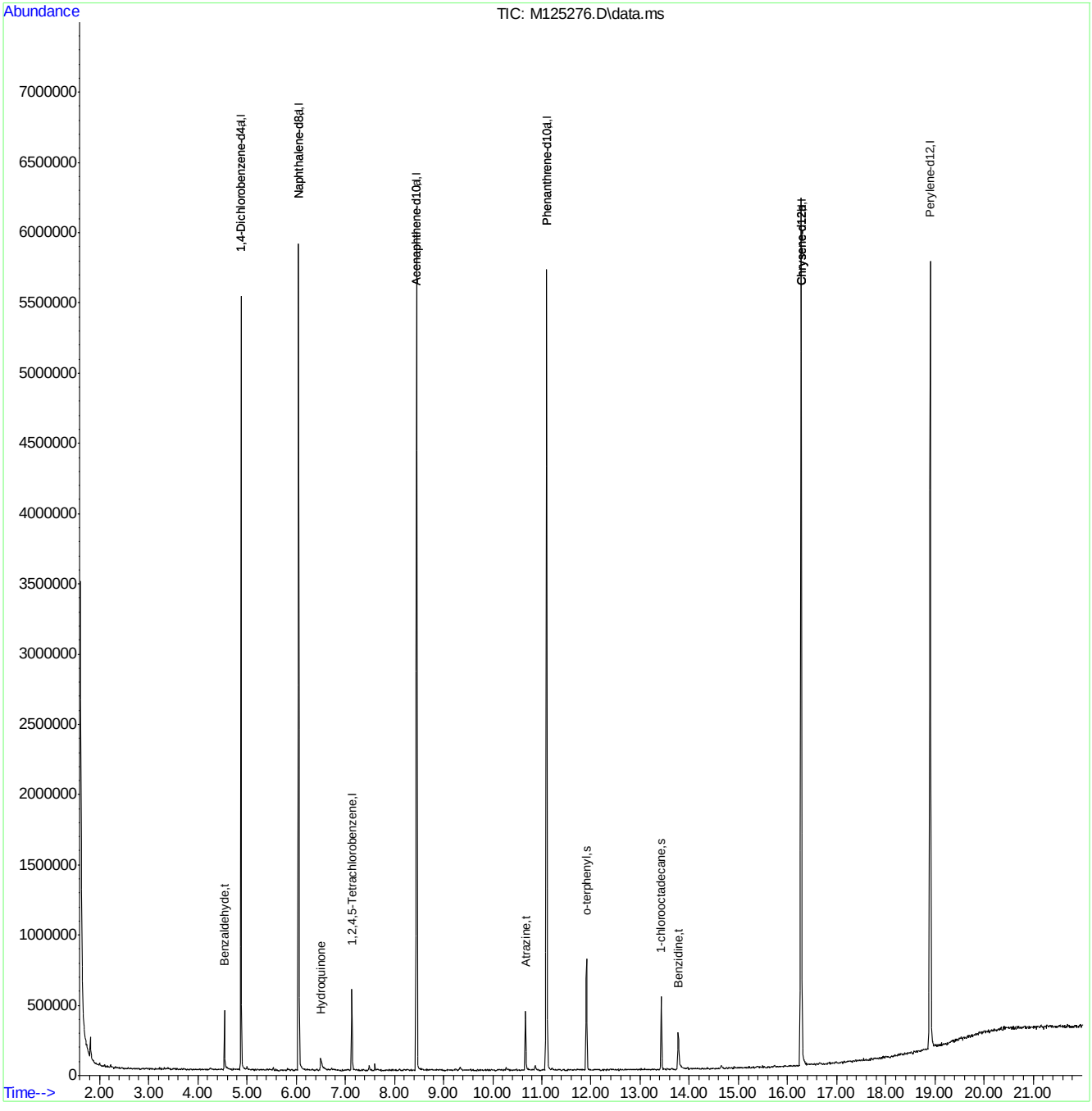
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125276.D
Acq On : 16 Jun 2016 7:58 pm
Operator : juliusj
Sample : ic5308-5
Misc : op94571,em5308
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jun 17 17:29:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration



MM5307.M Fri Jun 17 17:29:15 2016 MSM

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125277.D
Acq On : 16 Jun 2016 8:27 pm
Operator : juliusj
Sample : ic5308-2
Misc : op94571,em5308
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 17 17:29:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.880	152	825066	40.00	ppm	0.00
24) Naphthalene-d8	6.050	136	3025165	40.00	ppm	0.00
47) Acenaphthene-d10	8.453	164	1903754	40.00	ppm	0.00
69) Phenanthrene-d10	11.097	188	3474178	40.00	ppm	0.00
83) Chrysene-d12	16.278	240	3594619	40.00	ppm	0.00
91) Perylene-d12	18.905	264	3331776	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.880	152	825066	40.00	ppm	0.00
103) Acenaphthene-d10a	8.453	164	1903754	40.00	ppm	0.00
106) Chrysene-d12a	16.278	240	3594619	40.00	ppm	0.00
109) Phenanthrene-d10a	11.097	188	3474178	40.00	ppm	0.00
111) Naphthalene-d8a	6.050	136	3025165	40.00	ppm	0.00
113) Chrysene-d12b	16.278	240	3594619	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	13.431	57	30502	1.49	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.98%	
110) o-terphenyl	11.909	230	90980	2.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.02%	
Target Compounds						Qvalue
102) Benzaldehyde	4.543	105	35065	1.93	ppm	91
104) 1,2,4,5-Tetrachloroben...	7.134	216	53976	2.17	ppm	97
105) Atrazine	10.670	215	16139	1.78	ppm	86
107) Benzidine	13.778	184	54076	1.07	ppm	100
112) Hydroquinone	6.514	110	25418	0.99	ppm	87

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

7.6.94

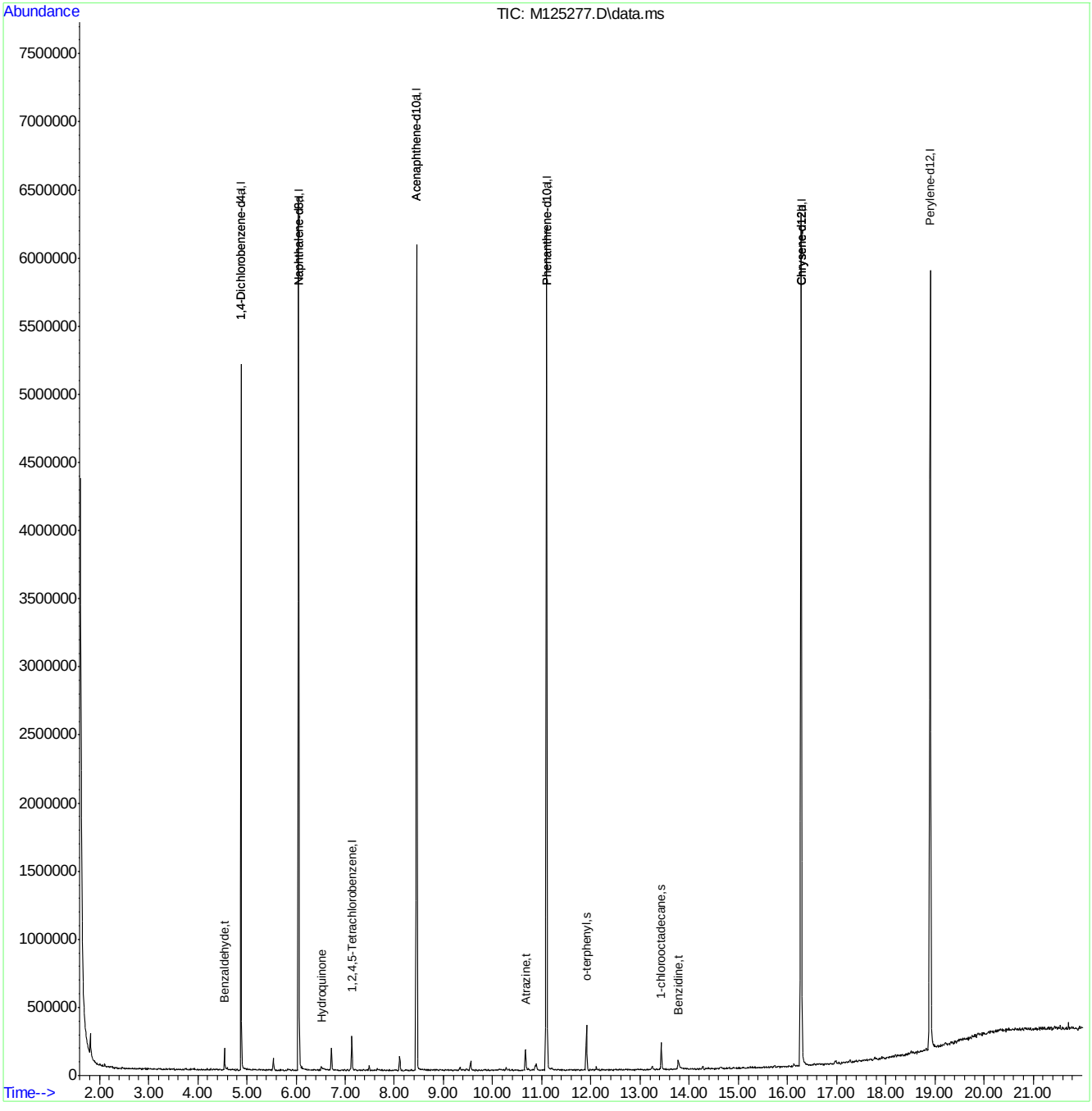
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125277.D
Acq On : 16 Jun 2016 8:27 pm
Operator : juliusj
Sample : ic5308-2
Misc : op94571,em5308
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Jun 17 17:29:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration



MM5307.M Fri Jun 17 17:29:52 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125278.D
Acq On : 16 Jun 2016 8:56 pm
Operator : juliusj
Sample : ic5308-1
Misc : op94571,em5308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 17 17:30:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration

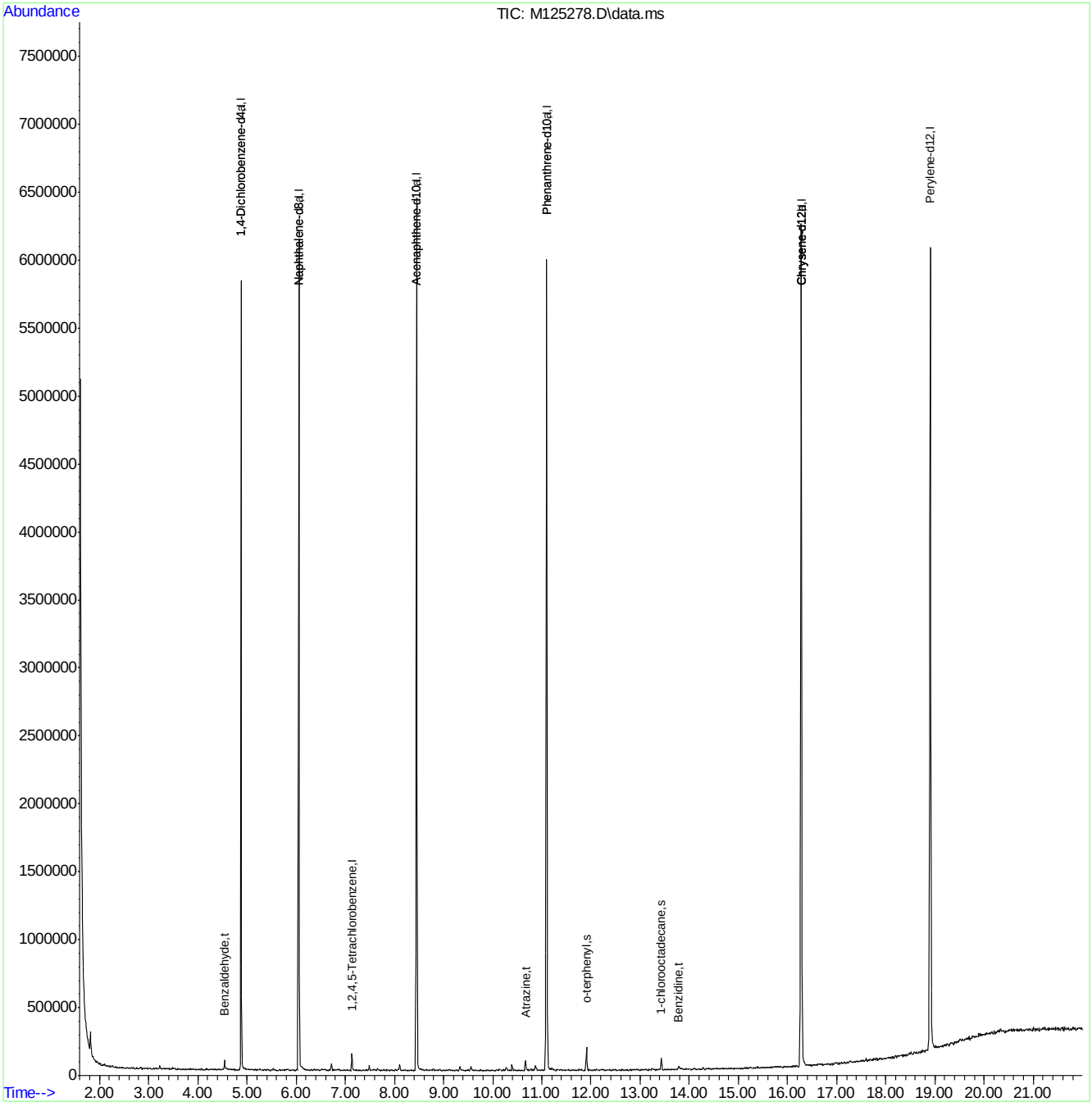
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.878	152	823878	40.00	ppm	0.00
24) Naphthalene-d8	6.053	136	3066960	40.00	ppm	0.00
47) Acenaphthene-d10	8.452	164	1934104	40.00	ppm	0.00
69) Phenanthrene-d10	11.095	188	3467844	40.00	ppm	0.00
83) Chrysene-d12	16.282	240	3573722	40.00	ppm	0.00
91) Perylene-d12	18.904	264	3351664	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.878	152	823878	40.00	ppm	0.00
103) Acenaphthene-d10a	8.452	164	1934104	40.00	ppm	0.00
106) Chrysene-d12a	16.282	240	3573722	40.00	ppm	0.00
109) Phenanthrene-d10a	11.095	188	3467844	40.00	ppm	0.00
111) Naphthalene-d8a	6.053	136	3066960	40.00	ppm	0.00
113) Chrysene-d12b	16.282	240	3573722	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	13.430	57	13787	0.68	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.36%	
110) o-terphenyl	11.907	230	45057	1.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.00%	
Target Compounds						Qvalue
102) Benzaldehyde	4.542	105	17446	0.96	ppm	98
104) 1,2,4,5-Tetrachloroben...	7.138	216	26473	1.05	ppm	84
105) Atrazine	10.674	215	6145	0.67	ppm	92
107) Benzidine	13.777	184	18578	0.37	ppm	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125278.D
Acq On : 16 Jun 2016 8:56 pm
Operator : juliusj
Sample : ic5308-1
Misc : op94571,em5308
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Jun 17 17:30:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:23:57 2016
Response via : Initial Calibration



MM5307.M Fri Jun 17 17:30:48 2016 MSM

Page: 2

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125280.D
Acq On : 16 Jun 2016 9:54 pm
Operator : juliusj
Sample : icv5307-50
Misc : op94571,em5308
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 17 17:43:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.881	152	825805	40.00	ppm	0.00
24) Naphthalene-d8	6.050	136	3233669	40.00	ppm	0.00
47) Acenaphthene-d10	8.454	164	1970690	40.00	ppm	0.00
69) Phenanthrene-d10	11.098	188	3753564	40.00	ppm	0.00
83) Chrysene-d12	16.278	240	3744917	40.00	ppm	0.00
91) Perylene-d12	18.906	264	3453933	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.881	152	825805	40.00	ppm	0.00
103) Acenaphthene-d10a	8.454	164	1970690	40.00	ppm	0.00
106) Chrysene-d12a	16.278	240	3744917	40.00	ppm	0.00
109) Phenanthrene-d10a	11.098	188	3753564	40.00	ppm	0.00
111) Naphthalene-d8a	6.050	136	3233669	40.00	ppm	0.00
113) Chrysene-d12b	16.278	240	3744917	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
3) Pyridine	2.835	79	1401355	51.98	ppm	98
10) Aniline	4.624	93	2205001	59.30	ppm	66
16) Benzyl alcohol	4.987	108	942293	54.34	ppm	92
39) 4-Chloroaniline	6.130	127	1788183	48.28	ppm	99
44) 2-Methylnaphthalene	6.905	141	2323211	43.49	ppm	100
54) 2-Nitroaniline	7.738	65	744420	50.15	ppm	94
58) 3-Nitroaniline	8.395	138	855171	51.56	ppm	98
62) Dibenzofuran	8.796	168	4042531	48.34	ppm	100
68) 4-Nitroaniline	9.442	138	849097	52.30	ppm	97
79) Carbazole	11.578	167	4748600	44.84	ppm	99

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

7.6.96

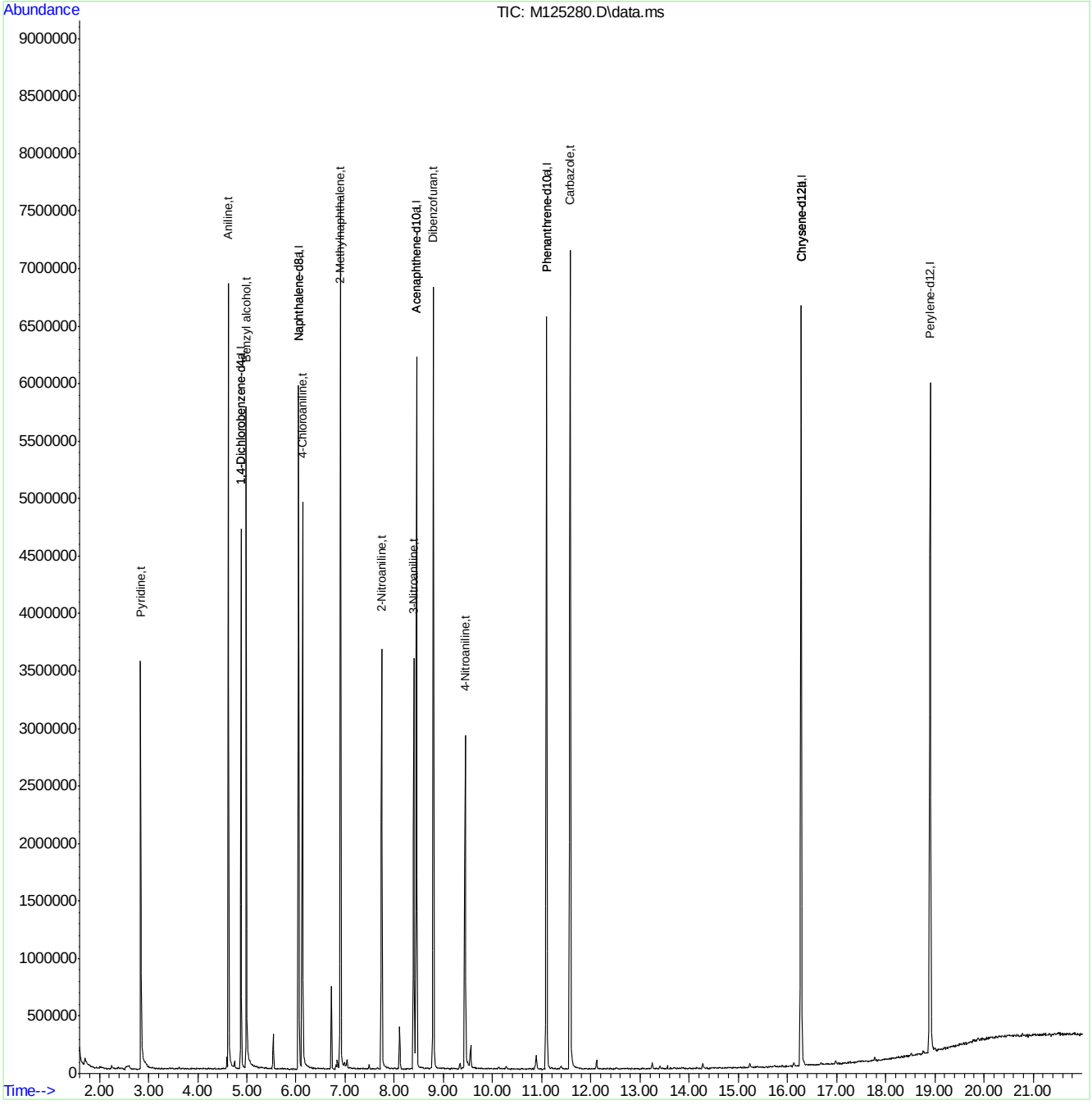
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125280.D
Acq On : 16 Jun 2016 9:54 pm
Operator : juliusj
Sample : icv5307-50
Misc : op94571,em5308
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Jun 17 17:43:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125281a.D
Acq On : 16 Jun 2016 10:23 pm
Operator : juliusj
Sample : icv5308-50
Misc : op94571,em5308
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 20 09:05:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.879	152	848771	40.00	ppm	0.00
24) Naphthalene-d8	6.054	136	3035646	40.00	ppm	0.00
47) Acenaphthene-d10	8.452	164	1917205	40.00	ppm	0.00
69) Phenanthrene-d10	11.101	188	3363557	40.00	ppm	0.00
83) Chrysene-d12	16.287	240	2817317	40.00	ppm	0.00
91) Perylene-d12	18.904	264	2977607	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.879	152	848771	40.00	ppm	0.00
103) Acenaphthene-d10a	8.452	164	1917205	40.00	ppm	0.00
106) Chrysene-d12a	16.287	240	2817317	40.00	ppm	0.00
109) Phenanthrene-d10a	11.101	188	3363557	40.00	ppm	0.00
111) Naphthalene-d8a	6.054	136	3035646	40.00	ppm	0.00
113) Chrysene-d12b	16.287	240	2817317	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
104) 1,2,4,5-Tetrachloroben...	7.138	216	1339896	51.79	ppm	95
107) Benzidine	13.782	184	3797569	102.86	ppm	100

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

7.6.97

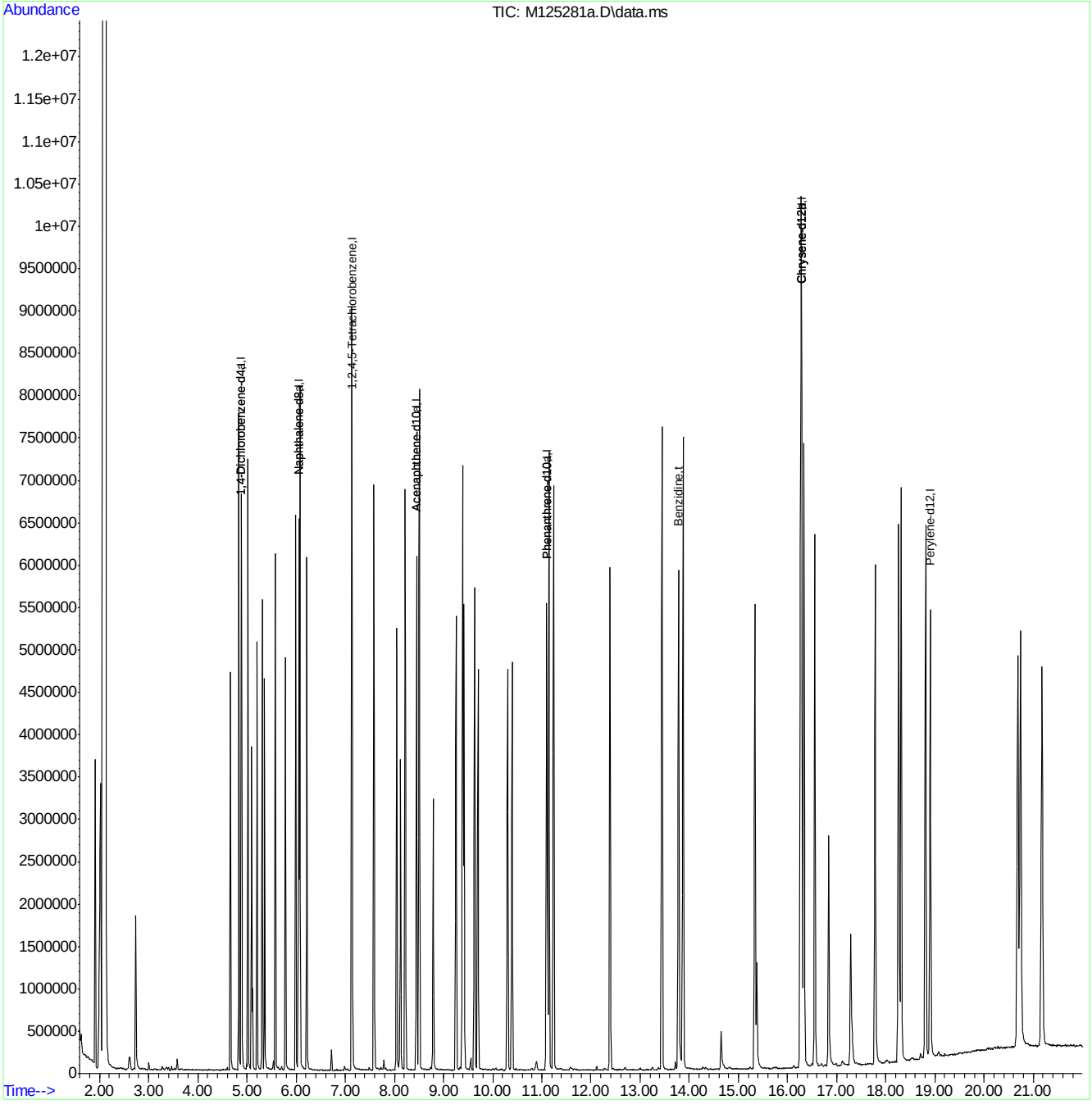
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125281a.D
Acq On : 16 Jun 2016 10:23 pm
Operator : juliusj
Sample : icv5308-50
Misc : op94571,em5308
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 20 09:05:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration



MM5307.M Mon Jun 20 09:18:30 2016 MSM

Page: 2

SGS ACCUTEST JC22613

Manual Integrations
APPROVED
(compounds with "m" flag)
Nina Pandya
06/20/16 12:39

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125281.D
Acq On : 16 Jun 2016 10:23 pm
Operator : juliusj
Sample : icv5307-50
Misc : op94571,em5308
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 20 09:04:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.879	152	848771	40.00	ppm	0.00
24) Naphthalene-d8	6.054	136	3035646	40.00	ppm	0.00
47) Acenaphthene-d10	8.452	164	1917205	40.00	ppm	0.00
69) Phenanthrene-d10	11.101	188	3363557	40.00	ppm	0.00
83) Chrysene-d12	16.287	240	2817317	40.00	ppm	0.00
91) Perylene-d12	18.904	264	2977607	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.879	152	848771	40.00	ppm	0.00
103) Acenaphthene-d10a	8.452	164	1917205	40.00	ppm	0.00
106) Chrysene-d12a	16.287	240	2817317	40.00	ppm	0.00
109) Phenanthrene-d10a	11.101	188	3363557	40.00	ppm	0.00
111) Naphthalene-d8a	6.054	136	3035646	40.00	ppm	0.00
113) Chrysene-d12b	16.287	240	2817317	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.737	42	628661	45.29	ppm	83
11) bis(2-Chloroethyl)ether	4.665	93	1342363	51.62	ppm	96
14) 1,3-Dichlorobenzene	4.836	146	1609068	47.72	ppm	97
15) 1,4-Dichlorobenzene	4.895	146	1530351	47.40	ppm	99
17) 1,2-Dichlorobenzene	5.017	146	1543172	49.94	ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.098	121	435399	48.31	ppm	94
22) n-Nitroso-di-n-propyla...	5.204	70	898366	48.69	ppm	96
23) Hexachloroethane	5.311	201	592717	48.81	ppm	94
26) Nitrobenzene	5.359	77	1283703	46.16	ppm	97
28) Isophorone	5.573	82	2429048	48.59	ppm	97
32) bis(2-Chloroethoxy)met...	5.781	93	1502472	50.45	ppm	98
36) 1,2,4-Trichlorobenzene	5.989	180	1371062	47.57	ppm	98
38) Naphthalene	6.075	128	3768868	45.92	ppm	99
42) Hexachlorobutadiene	6.219	225	747081	49.02	ppm	98
48) Hexachlorocyclopentadiene	7.132	237	701950	44.60	ppm	99
52) 2-Chloronaphthalene	7.581	162	2741166	48.25	ppm	98
55) Dimethylphthalate	8.046	163	2937774	44.80	ppm	99

7.6.98
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125281.D
Acq On : 16 Jun 2016 10:23 pm
Operator : juliusj
Sample : icv5307-50
Misc : op94571,em5308
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 20 09:04:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
56)	Acenaphthylene	8.217	152	4066388	43.85	ppm	99
57)	2,6-Dinitrotoluene	8.126	165	654498	46.75	ppm	98
59)	Acenaphthene	8.505	153	2561677	44.28	ppm	96
63)	2,4-Dinitrotoluene	8.794	165	865522	47.27	ppm	73
65)	Diethylphthalate	9.253	149	2748251	44.33	ppm	99
66)	Fluorene	9.386	166	3013848	43.83	ppm	96
67)	4-Chlorophenyl-phenyle...	9.418	204	1498451	45.19	ppm	96
71)	n-Nitrosodiphenylamine	9.632	169	2069817	43.20	ppm	99
72)	1,2-Diphenylhydrazine	9.696	77	2442604	43.30	ppm	99
74)	4-Bromophenyl-phenylether	10.305	248	926571	46.07	ppm	97
75)	Hexachlorobenzene	10.396	284	980972	43.24	ppm	98
77)	Phenanthrene	11.144	178	4148830	42.38	ppm	100
78)	Anthracene	11.240	178	4171210	42.26	ppm	100
80)	Di-n-butylphthalate	12.388	149	4711948	44.68	ppm	100
81)	Fluoranthene	13.446	202	4848841	42.71	ppm	98
84)	Pyrene	13.873	202	4924244	49.50	ppm	100
86)	Butylbenzylphthalate	15.336	149	2049906	51.78	ppm	99
87)	Benzo[a]anthracene	16.266	228	4229872	47.87	ppm	99
89)	Chrysene	16.335	228	4097982	46.46	ppm	99
90)	bis(2-Ethylhexyl)phtha...	16.554	149	2705533	51.41	ppm	99
92)	Di-n-octylphthalate	17.783	149	4702528	51.56	ppm	99
93)	Benzo[b]fluoranthene	18.263	252	4192562	44.03	ppm	98
94)	Benzo[k]fluoranthene	18.311	252	4277711	47.45	ppm	99
95)	Benzo[a]pyrene	18.808	252	4002288	46.54	ppm	100
96)	Indeno[1,2,3-cd]pyrene	20.688	276	3825805m	46.13	ppm	
98)	Dibenz[a,h]anthracene	20.742	278	4002852	45.97	ppm	99
100)	Benzo[g,h,i]perylene	21.180	276	3978472	44.06	ppm	98

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

7.6.98

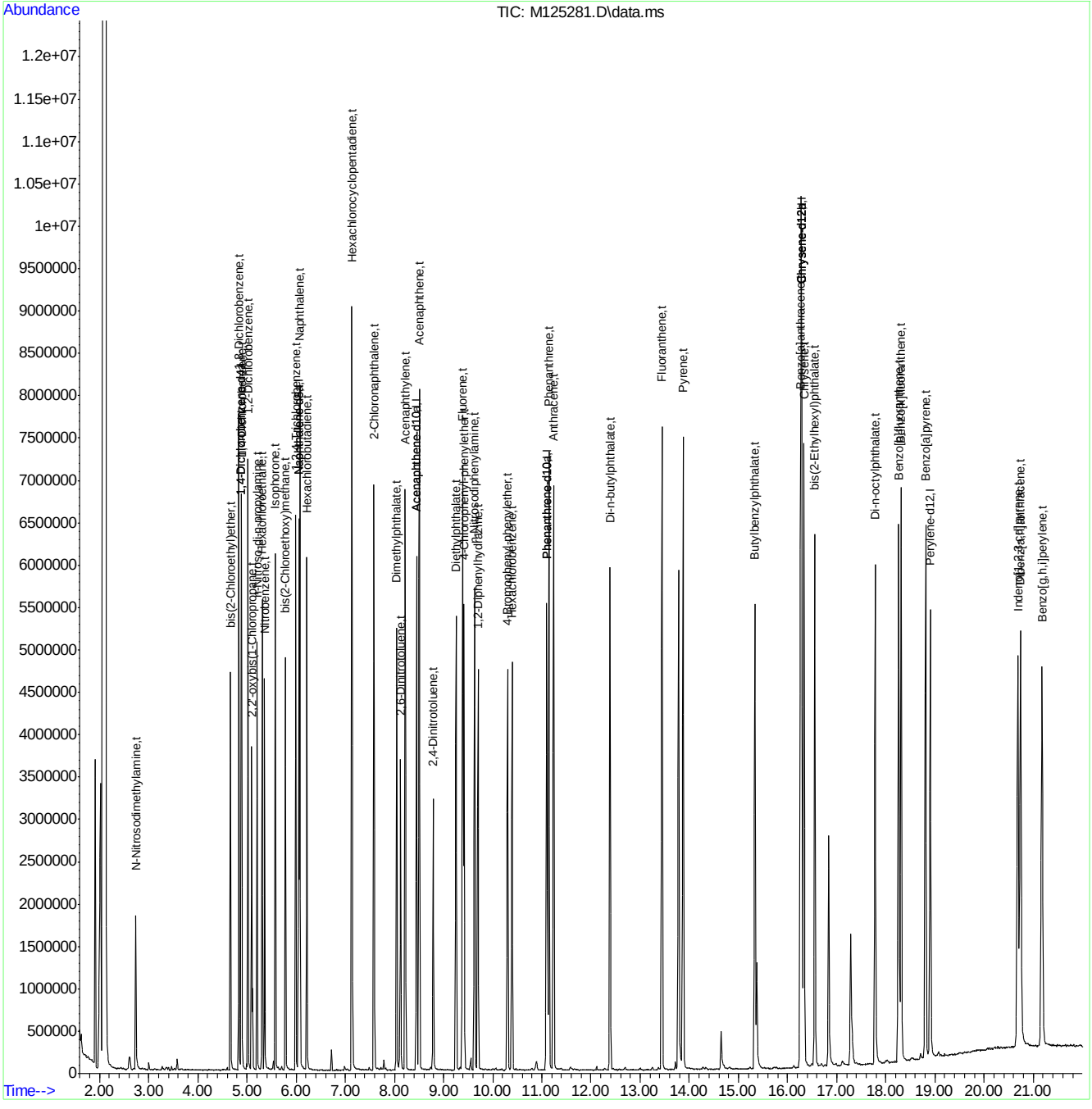
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125281.D
Acq On : 16 Jun 2016 10:23 pm
Operator : juliusj
Sample : icv5307-50
Misc : op94571,em5308
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 20 09:04:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration



Manual Integration Approval Summary

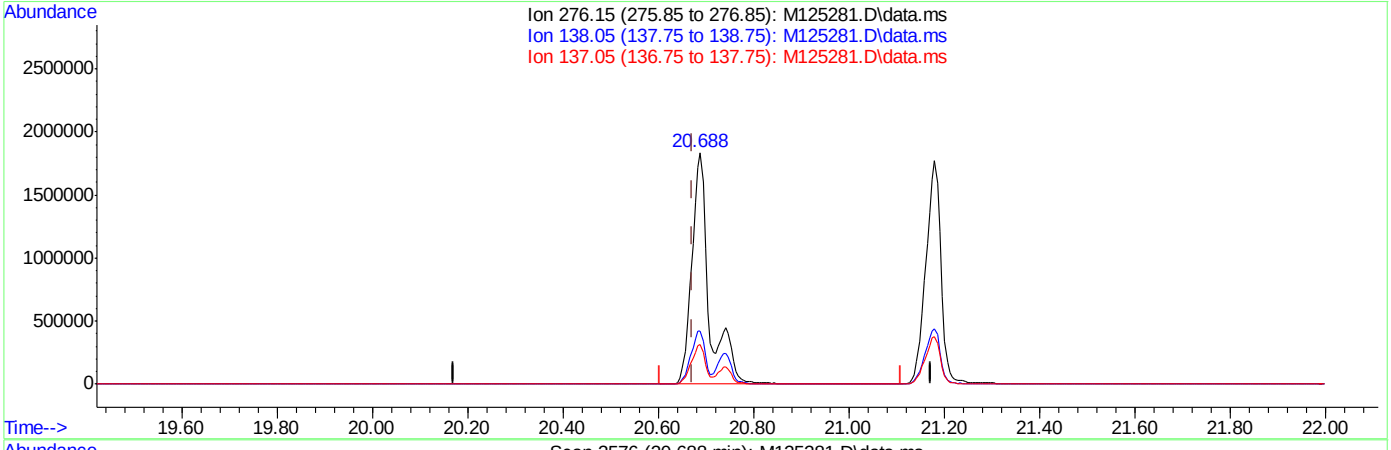
Sample Number:	EM5308-ICV5307	**Method:**	SW846 8270D
Lab FileID:	M125281.D	**Analyst approved:**	06/20/16 09:34 Ashley Dye
Injection Time:	06/16/16 22:23	**Supervisor approved:**	06/20/16 12:39 Nina Pandya

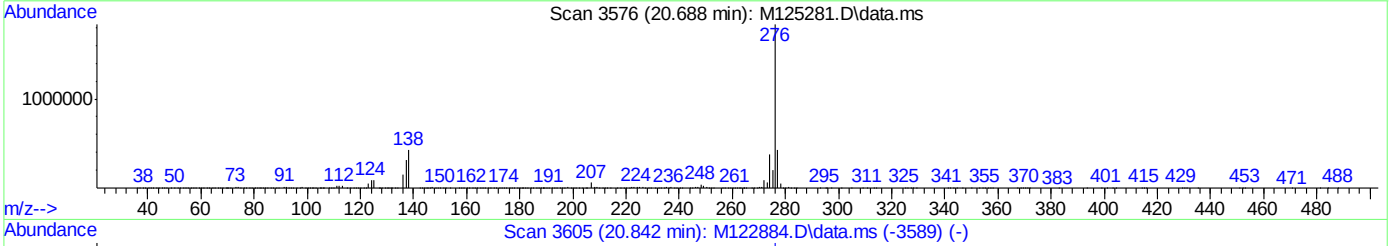
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.69	Overlapping peak

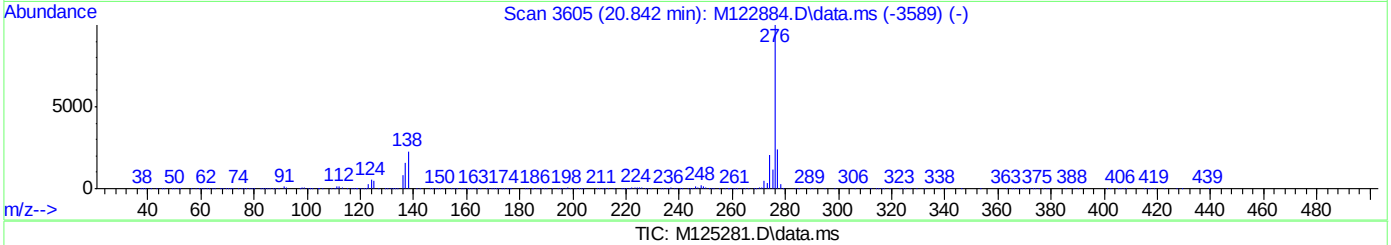
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125281.D
Acq On : 16 Jun 2016 10:23 pm
Operator : juliusj
Sample : icv5308-50
Misc : op94571,em5308
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 17 17:44:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration







TIC: M125281.D\data.ms

(96) Indeno[1,2,3-cd]pyrene (t)

20.688min (+0.016) 57.53ppm

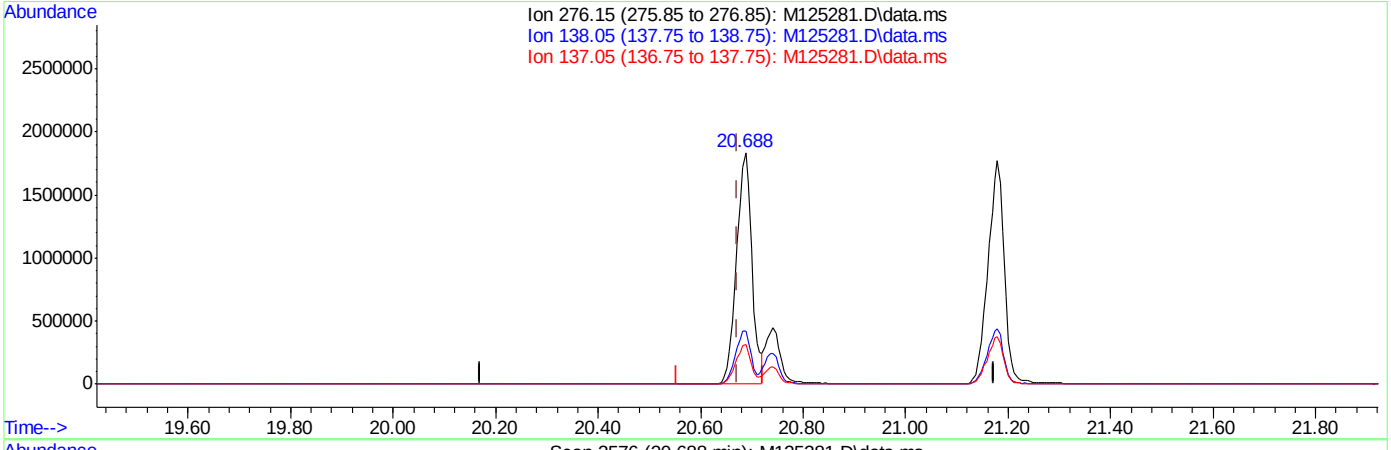
response 4771282

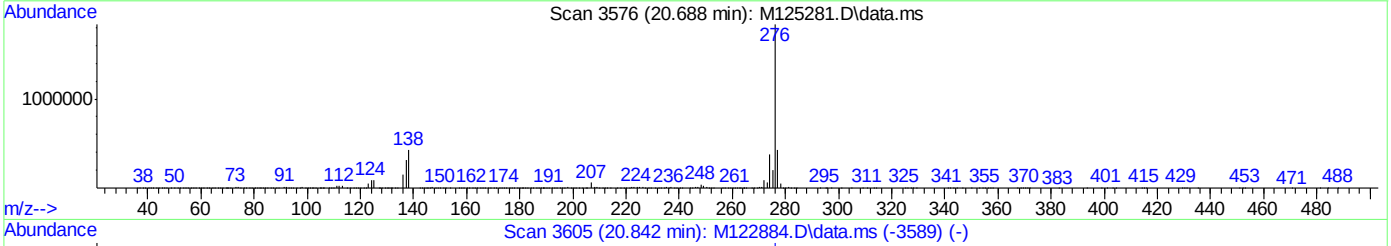
Ion	Exp%	Act%
276.15	100	100
138.05	22.30	23.03
137.05	16.40	17.00
0.00	0.00	0.00

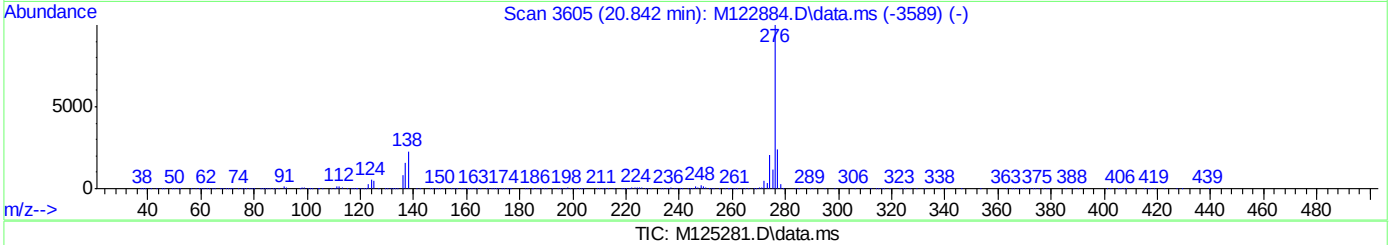
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125281.D
Acq On : 16 Jun 2016 10:23 pm
Operator : juliusj
Sample : icv5307-50
Misc : op94571,em5308
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Jun 20 09:04:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration







TIC: M125281.D\data.ms

(96) Indeno[1,2,3-cd]pyrene (t)

20.688min (+0.016) 46.13ppm m

response 3825805

Ion	Exp%	Act%
276.15	100	100
138.05	22.30	23.03
137.05	16.40	17.02
0.00	0.00	0.00

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125282a.D
Acq On : 16 Jun 2016 10:51 pm
Operator : juliusj
Sample : icv5308-50
Misc : op94571,em5308
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 20 09:06:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.878	152	957827	40.00	ppm	0.00
24) Naphthalene-d8	6.053	136	3496127	40.00	ppm	0.00
47) Acenaphthene-d10	8.451	164	2100448	40.00	ppm	0.00
69) Phenanthrene-d10	11.100	188	3348307	40.00	ppm	0.00
83) Chrysene-d12	16.281	240	3626837	40.00	ppm	0.00
91) Perylene-d12	18.903	264	3210567	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.878	152	957827	40.00	ppm	0.00
103) Acenaphthene-d10a	8.451	164	2100448	40.00	ppm	0.00
106) Chrysene-d12a	16.281	240	3626837	40.00	ppm	0.00
109) Phenanthrene-d10a	11.100	188	3348307	40.00	ppm	0.00
111) Naphthalene-d8a	6.053	136	3496127	40.00	ppm	0.00
113) Chrysene-d12b	16.281	240	3626837	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
102) Benzaldehyde	4.536	105	1198860	57.36	ppm	95
105) Atrazine	10.678	215	518365	56.67	ppm	94

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

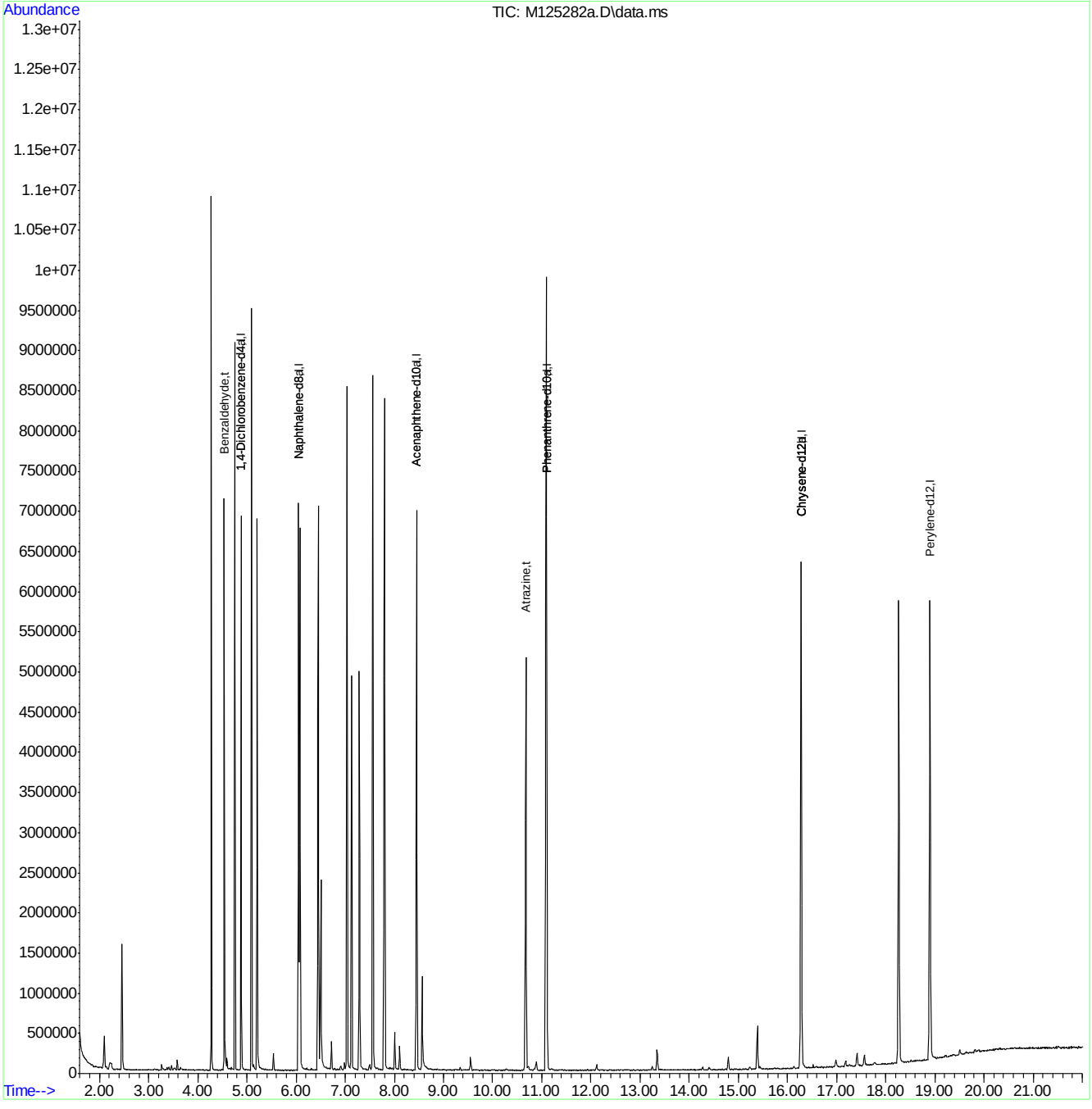
7.6.99

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125282a.D
Acq On : 16 Jun 2016 10:51 pm
Operator : juliusj
Sample : icv5308-50
Misc : op94571,em5308
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 20 09:06:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration



MM5307.M Mon Jun 20 09:18:26 2016 MSM

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125282.D
Acq On : 16 Jun 2016 10:51 pm
Operator : juliusj
Sample : icv5307-50
Misc : op94571,em5308
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 20 09:05:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.878	152	957827	40.00	ppm	0.00
24) Naphthalene-d8	6.053	136	3496127	40.00	ppm	0.00
47) Acenaphthene-d10	8.451	164	2100448	40.00	ppm	0.00
69) Phenanthrene-d10	11.100	188	3348307	40.00	ppm	0.00
83) Chrysene-d12	16.281	240	3626837	40.00	ppm	0.00
91) Perylene-d12	18.903	264	3210567	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.878	152	957827	40.00	ppm	0.00
103) Acenaphthene-d10a	8.451	164	2100448	40.00	ppm	0.00
106) Chrysene-d12a	16.281	240	3626837	40.00	ppm	0.00
109) Phenanthrene-d10a	11.100	188	3348307	40.00	ppm	0.00
111) Naphthalene-d8a	6.053	136	3496127	40.00	ppm	0.00
113) Chrysene-d12b	16.281	240	3626837	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.458	88	600513	41.97	ppm	100
6) Indene	5.091	116	2624238	48.90	ppm	99
7) Cumene	4.274	105	3194220	43.68	ppm	99
13) Decane	4.749	43	1272514	43.16	ppm	98
18) Acetophenone	5.203	105	1863100	46.95	ppm	85
27) Quinoline	6.448	129	2934852	42.61	ppm	99
40) 2,3-Dichloroaniline	7.292	161	1473404	40.84	ppm	98
41) Caprolactam	6.507	55	551106	44.43	ppm	98
45) 1-Methylnaphthalene	7.035	142	2927564	42.32	ppm	100
46) Dimethylnaphthalene	7.799	156	2688634	42.96	ppm	98
48) Hexachlorocyclopentadiene	7.132	237	921789	53.45	ppm	98
53) Biphenyl	7.559	154	3641037	44.38	ppm	100
82) Octadecane	11.084	57	1605286	49.04	ppm	97
99) 7,12-Dimethylbenz(a)an...	18.268	256	1832205	46.39	ppm	98

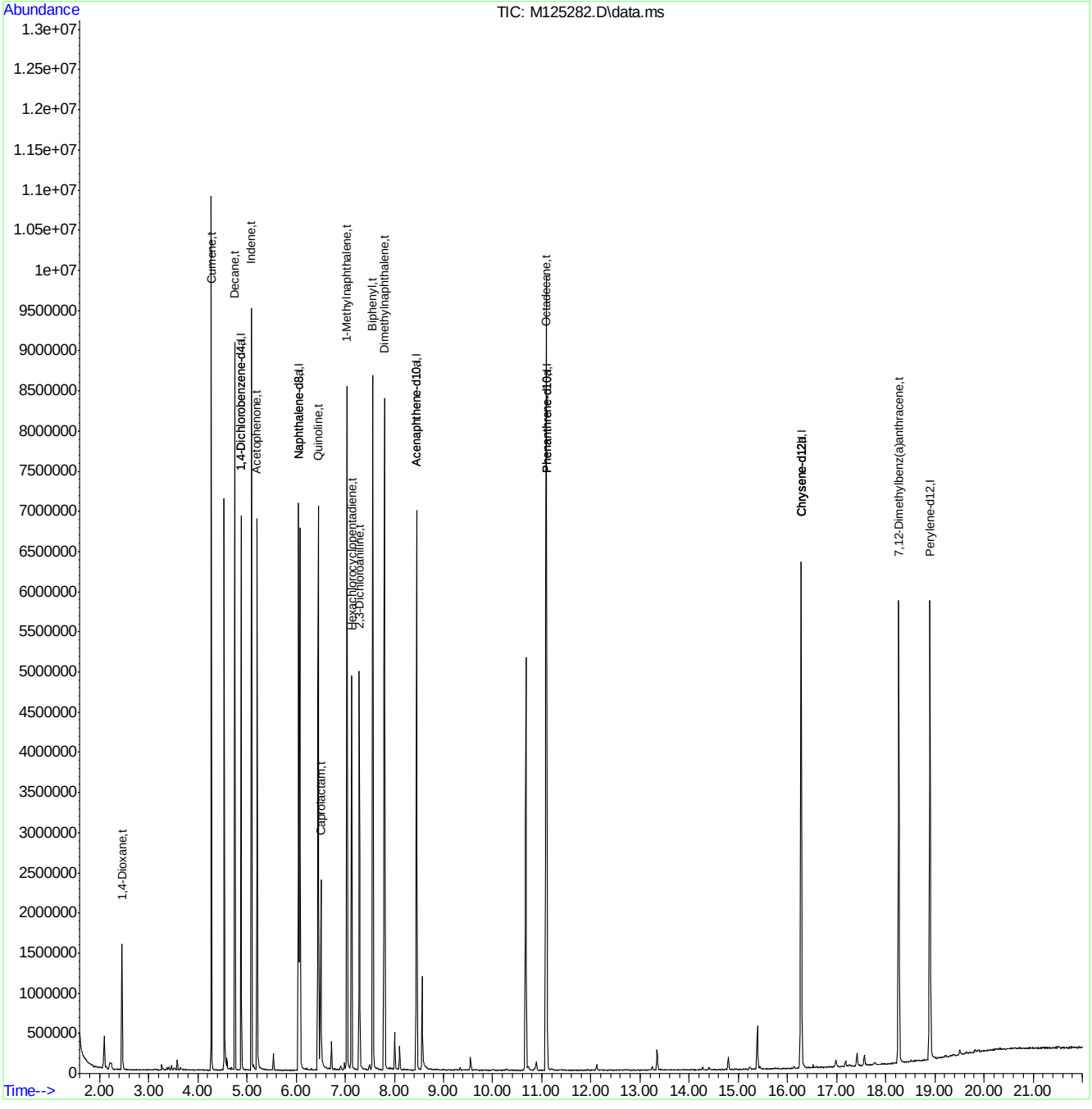
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125282.D
Acq On : 16 Jun 2016 10:51 pm
Operator : juliusj
Sample : icv5307-50
Misc : op94571,em5308
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Jun 20 09:05:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration



MM5307.M Mon Jun 20 09:05:43 2016 MSM

Page: 2

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125283.D
Acq On : 16 Jun 2016 11:20 pm
Operator : juliusj
Sample : icv5307-50
Misc : op94571,em5308
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 17 17:49:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.878	152	1033084	40.00	ppm	0.00
24) Naphthalene-d8	6.053	136	3639354	40.00	ppm	0.00
47) Acenaphthene-d10	8.451	164	2221550	40.00	ppm	0.00
69) Phenanthrene-d10	11.100	188	3912259	40.00	ppm	0.00
83) Chrysene-d12	16.281	240	3809671	40.00	ppm	0.00
91) Perylene-d12	18.903	264	3513822	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.878	152	1033084	40.00	ppm	0.00
103) Acenaphthene-d10a	8.451	164	2221550	40.00	ppm	0.00
106) Chrysene-d12a	16.281	240	3809671	40.00	ppm	0.00
109) Phenanthrene-d10a	11.100	188	3912259	40.00	ppm	0.00
111) Naphthalene-d8a	6.053	136	3639354	40.00	ppm	0.00
113) Chrysene-d12b	16.281	240	3809671	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.884	112	1461517	45.07	ppm	0.00
Spiked Amount 50.000			Recovery = 90.14%			
8) Phenol-d5	4.589	99	1796128	42.95	ppm	0.00
Spiked Amount 50.000			Recovery = 85.90%			
25) Nitrobenzene-d5	5.342	82	1487446	44.24	ppm	0.00
Spiked Amount 50.000			Recovery = 88.48%			
51) 2-Fluorobiphenyl	7.415	172	3466366	44.81	ppm	0.00
Spiked Amount 50.000			Recovery = 89.62%			
73) 2,4,6-Tribromophenol	9.813	330	462517	40.79	ppm	0.00
Spiked Amount 50.000			Recovery = 81.58%			
85) Terphenyl-d14	14.283	244	3630836	40.44	ppm	0.00
Spiked Amount 50.000			Recovery = 80.88%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds Qvalue

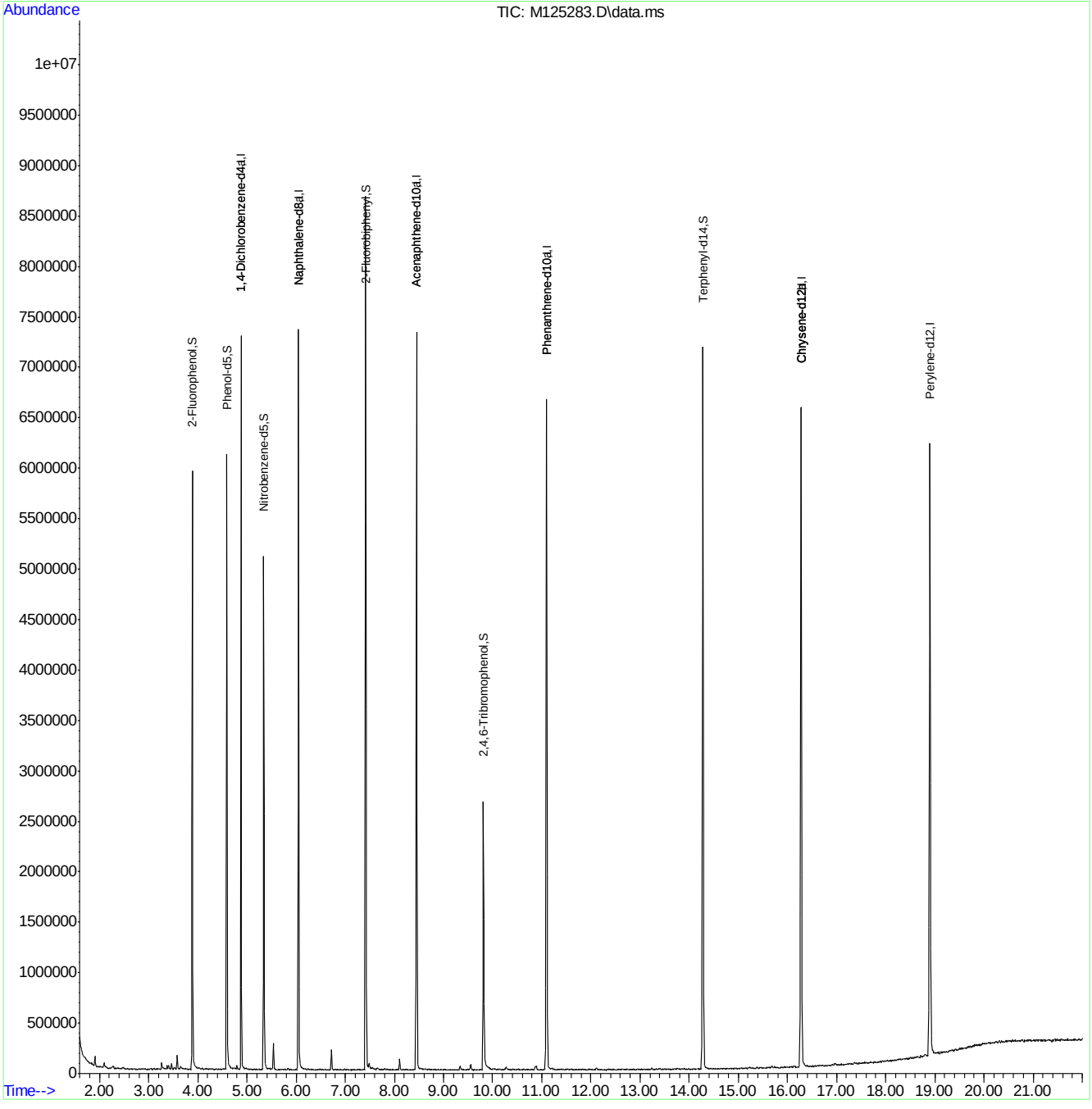
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125283.D
Acq On : 16 Jun 2016 11:20 pm
Operator : juliusj
Sample : icv5307-50
Misc : op94571,em5308
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Jun 17 17:49:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration



MM5307.M Mon Jun 20 09:06:26 2016 MSM

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125284.D
Acq On : 16 Jun 2016 11:49 pm
Operator : juliusj
Sample : icv5307-50
Misc : op94571,em5308
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 17 17:50:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.878	152	886541	40.00	ppm	0.00
24) Naphthalene-d8	6.053	136	3178774	40.00	ppm	0.00
47) Acenaphthene-d10	8.451	164	1982125	40.00	ppm	0.00
69) Phenanthrene-d10	11.095	188	3533558	40.00	ppm	0.00
83) Chrysene-d12	16.276	240	3441708	40.00	ppm	0.00
91) Perylene-d12	18.903	264	3421872	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.878	152	886541	40.00	ppm	0.00
103) Acenaphthene-d10a	8.451	164	1982125	40.00	ppm	0.00
106) Chrysene-d12a	16.276	240	3441708	40.00	ppm	0.00
109) Phenanthrene-d10a	11.095	188	3533558	40.00	ppm	0.00
111) Naphthalene-d8a	6.053	136	3178774	40.00	ppm	0.00
113) Chrysene-d12b	16.276	240	3441708	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
88) 3,3'-Dichlorobenzidine	16.286	252	1657824	44.78	ppm	99

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

7.6.102

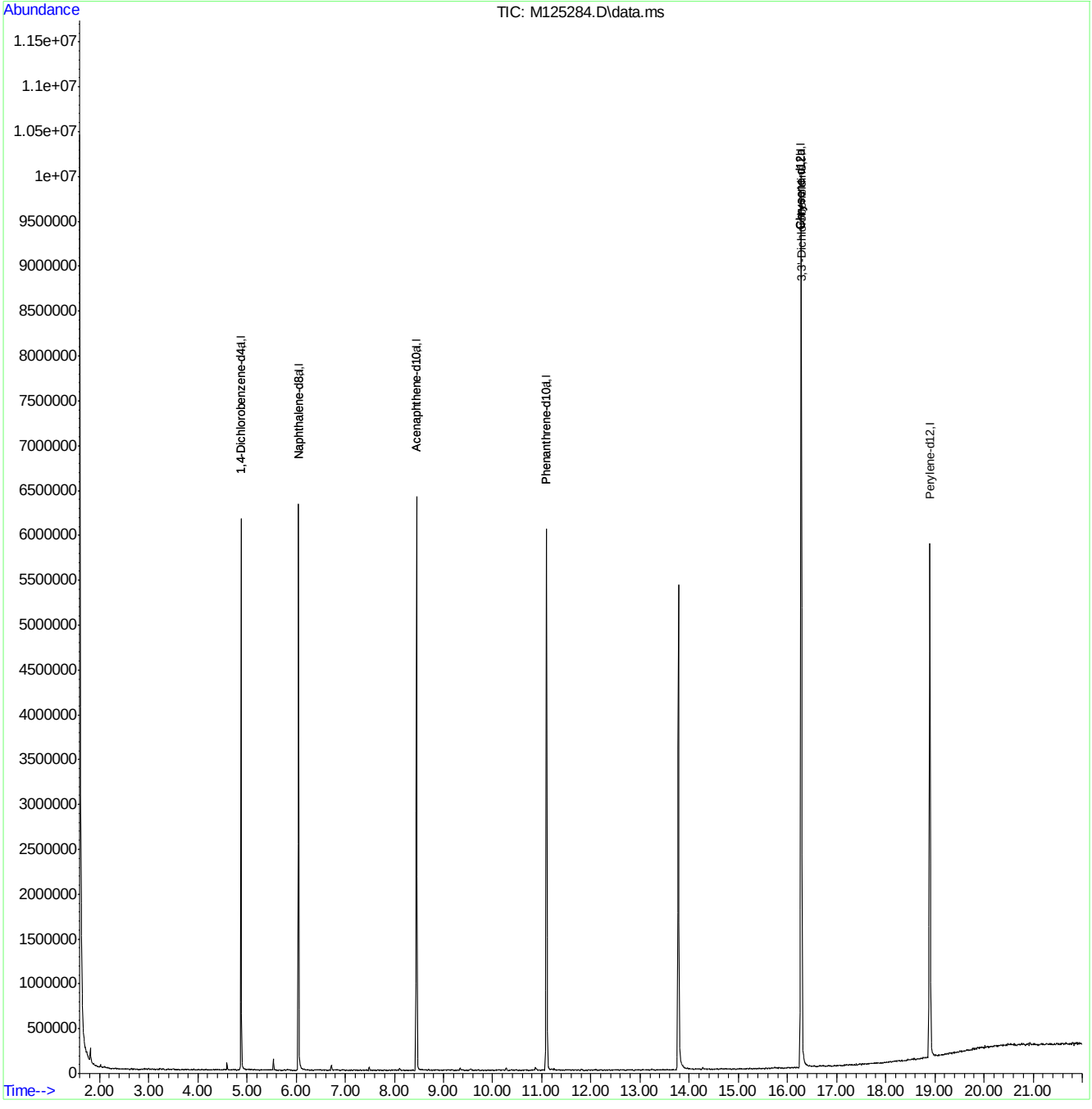
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125284.D
Acq On : 16 Jun 2016 11:49 pm
Operator : juliusj
Sample : icv5307-50
Misc : op94571,em5308
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Jun 17 17:50:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration



MM5307.M Mon Jun 20 09:56:10 2016 MSM

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125285.D
Acq On : 17 Jun 2016 12:18 am
Operator : juliusj
Sample : icv5308-50
Misc : op94571,em5308
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 17 17:51:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.879	152	888444	40.00	ppm	0.00
24) Naphthalene-d8	6.048	136	3191981	40.00	ppm	0.00
47) Acenaphthene-d10	8.452	164	1996625	40.00	ppm	0.00
69) Phenanthrene-d10	11.096	188	3594196	40.00	ppm	0.00
83) Chrysene-d12	16.276	240	3723179	40.00	ppm	0.00
91) Perylene-d12	18.904	264	3479845	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.879	152	888444	40.00	ppm	0.00
103) Acenaphthene-d10a	8.452	164	1996625	40.00	ppm	0.00
106) Chrysene-d12a	16.276	240	3723179	40.00	ppm	0.00
109) Phenanthrene-d10a	11.096	188	3594196	40.00	ppm	0.00
111) Naphthalene-d8a	6.048	136	3191981	40.00	ppm	0.00
113) Chrysene-d12b	16.276	240	3723179	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
112) Hydroquinone	6.502	110	1372190	56.89	ppm	81

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

7.6.103

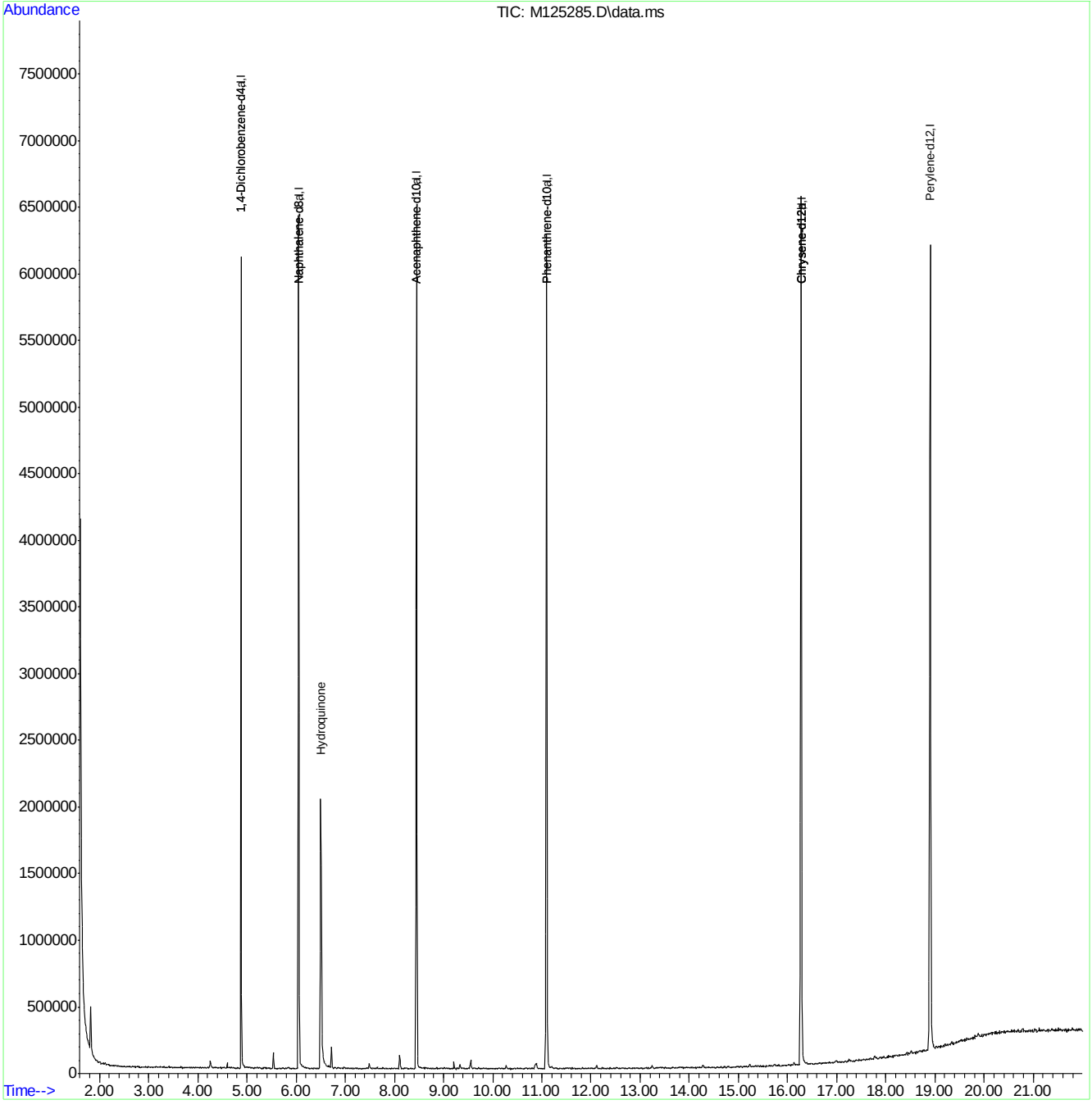
7

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5308\
Data File : M125285.D
Acq On : 17 Jun 2016 12:18 am
Operator : juliusj
Sample : icv5308-50
Misc : op94571,em5308
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Jun 17 17:51:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration



MM5307.M Mon Jun 20 09:06:51 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5310\
Data File : M125314.D
Acq On : 19 Jun 2016 8:09 am
Operator : kristis
Sample : icv5307-50
Misc : op94571,em5310,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 19 08:36:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.872	152	956056	40.00	ppm	0.00
24) Naphthalene-d8	6.042	136	3257019	40.00	ppm	-0.01
47) Acenaphthene-d10	8.445	164	1987547	40.00	ppm	0.00
69) Phenanthrene-d10	11.089	188	3315098	40.00	ppm	-0.01
83) Chrysene-d12	16.264	240	3159544	40.00	ppm	-0.02
91) Perylene-d12	18.892	264	2831292	40.00	ppm	-0.01
101) 1,4-Dichlorobenzene-d4a	4.872	152	956056	40.00	ppm	0.00
103) Acenaphthene-d10a	8.445	164	1987547	40.00	ppm	0.00
106) Chrysene-d12a	16.264	240	3159544	40.00	ppm	-0.02
109) Phenanthrene-d10a	11.089	188	3315098	40.00	ppm	0.00
111) Naphthalene-d8a	6.042	136	3257019	40.00	ppm	-0.01
113) Chrysene-d12b	16.264	240	3159544	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
9) Phenol	4.600	94	1885810	44.58	ppm	96
12) 2-Chlorophenol	4.712	128	1573892	46.98	ppm	99
19) 2-Methylphenol	5.075	108	1374922	47.90	ppm	98
21) 3&4-Methylphenol	5.198	108	1441323	47.31	ppm #	77
29) 2-Nitrophenol	5.652	139	891155	53.89	ppm	95
30) 2,4-Dimethylphenol	5.689	107	1335677	52.45	ppm	98
33) 2,4-Dichlorophenol	5.897	162	1326439	50.10	ppm	98
34) 2,6-Dichlorophenol	6.132	162	1251531	49.55	ppm	96
43) 4-Chloro-3-methylphenol	6.699	107	1180676	47.08	ppm	97
49) 2,4,6-Trichlorophenol	7.286	196	976390	52.28	ppm	99
50) 2,4,5-Trichlorophenol	7.350	196	951837	45.90	ppm	98
60) 2,4-Dinitrophenol	8.563	184	320151	41.34	ppm	86
61) 4-Nitrophenol	8.718	109	339843	48.84	ppm	95
64) 2,3,4,6-Tetrachlorophenol	9.017	232	795403	51.67	ppm	98
70) 4,6-Dinitro-2-methylph...	9.492	198	574368	45.68	ppm	99
76) Pentachlorophenol	10.769	266	501491	42.91	ppm	97

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5310\
Data File : M125314.D
Acq On : 19 Jun 2016 8:09 am
Operator : kristis
Sample : icv5307-50
Misc : op94571,em5310,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 19 08:36:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration

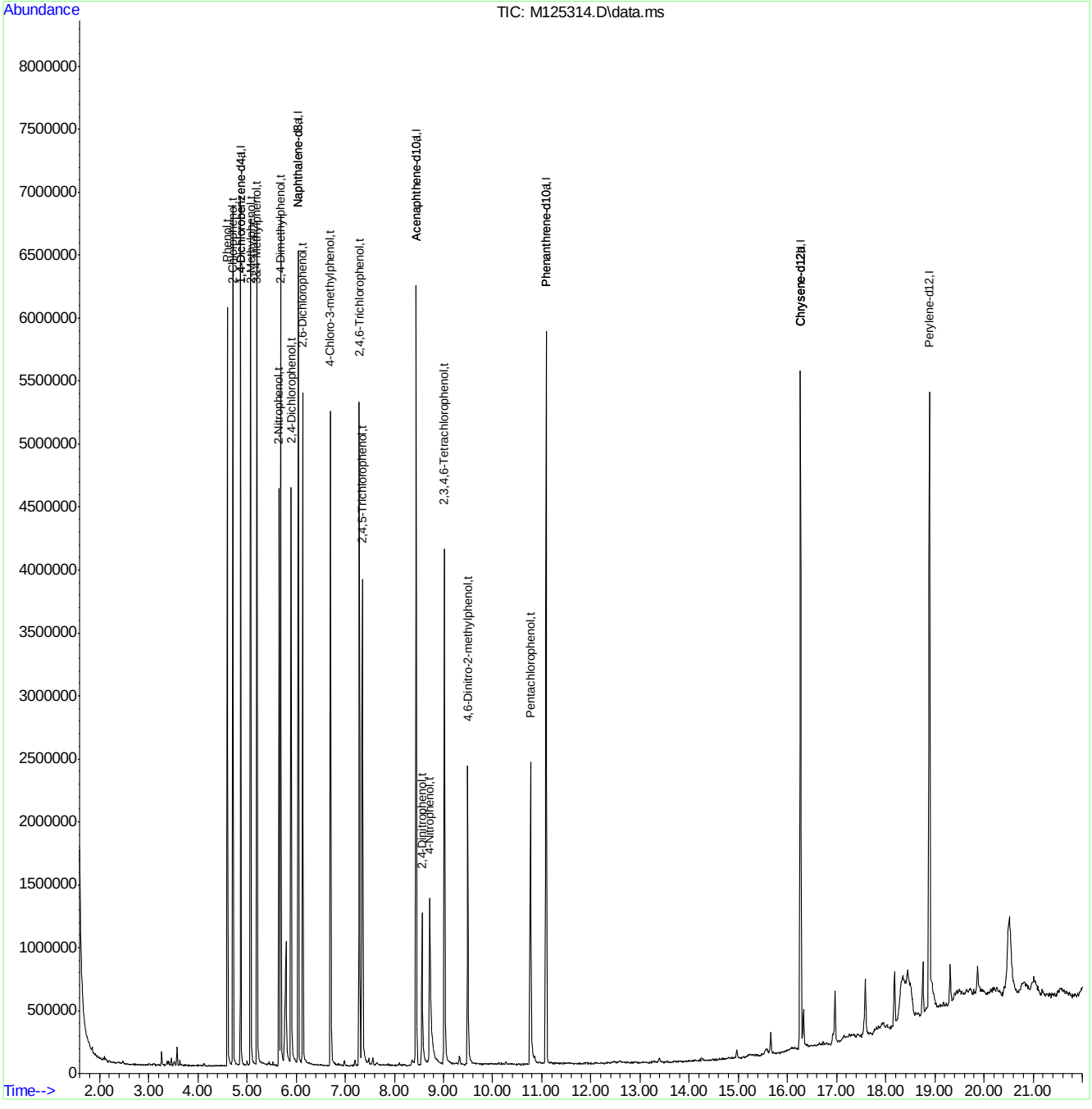
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5310\
Data File : M125314.D
Acq On : 19 Jun 2016 8:09 am
Operator : kristis
Sample : icv5307-50
Misc : op94571,em5310,1000,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 19 08:36:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri Jun 17 17:40:20 2016
Response via : Initial Calibration



MM5307.M Mon Jun 20 09:28:53 2016 MSM

Page: 3

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125529.D
Acq On : 23 Jun 2016 9:46 pm
Operator : seanb1
Sample : cc5307-50
Misc : op94571,em5319
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 11:45:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.808	152	407003	40.00	ppm	0.00
24) Naphthalene-d8	5.972	136	1459269	40.00	ppm	0.00
47) Acenaphthene-d10	8.355	164	942853	40.00	ppm	0.00
69) Phenanthrene-d10	10.998	188	1710772	40.00	ppm	0.00
83) Chrysene-d12	16.185	240	1732447	40.00	ppm	0.00
91) Perylene-d12	18.812	264	1685112	40.00	ppm	0.01
101) 1,4-Dichlorobenzene-d4a	4.808	152	407003	40.00	ppm	0.00
103) Acenaphthene-d10a	8.355	164	942853	40.00	ppm	0.00
106) Chrysene-d12a	16.185	240	1732447	40.00	ppm	0.00
108) Naphthalene-d8a	5.972	136	1459269	40.00	ppm	0.00
110) Chrysene-d12b	16.185	240	1732447	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.831	112	582628	45.22	ppm	0.00
Spiked Amount 50.000			Recovery	=	90.44%	
8) Phenol-d5	4.546	99	758481	46.02	ppm	0.02
Spiked Amount 50.000			Recovery	=	92.04%	
25) Nitrobenzene-d5	5.273	82	634247	47.04	ppm	0.00
Spiked Amount 50.000			Recovery	=	94.08%	
51) 2-Fluorobiphenyl	7.324	172	1522544	46.36	ppm	0.00
Spiked Amount 50.000			Recovery	=	92.72%	
73) 2,4,6-Tribromophenol	9.722	330	269029	54.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	108.00%	
85) Terphenyl-d14	14.176	244	1972530	48.32	ppm	0.02
Spiked Amount 50.000			Recovery	=	96.64%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.367	88	231791	37.53	ppm	97
3) Pyridine	2.693	79	605856	45.32	ppm	94
4) N-Nitrosodimethylamine	2.656	42	321101	47.56	ppm	94
6) Indene	5.016	116	1068284	46.81	ppm	99
7) Cumene	4.205	105	1423249	45.81	ppm	100
9) Phenol	4.557	94	803724	44.63	ppm #	49
10) Aniline	4.557	93	817842	44.63	ppm	83
11) bis(2-Chloroethyl)ether	4.600	93	539224	42.83	ppm	97
12) 2-Chlorophenol	4.653	128	669044	46.82	ppm	97
13) Decane	4.680	43	562243	44.84	ppm	99
14) 1,3-Dichlorobenzene	4.765	146	765570	47.36	ppm	100
15) 1,4-Dichlorobenzene	4.819	146	749405	48.40	ppm	97
16) Benzyl alcohol	4.926	108	300699	35.15	ppm	92
17) 1,2-Dichlorobenzene	4.947	146	704299	47.49	ppm	97
18) Acetophenone	5.134	105	821388	48.69	ppm	86
19) 2-Methylphenol	5.022	108	611666	49.98	ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.022	121	194307	44.96	ppm	96
21) 3&4-Methylphenol	5.150	108	603148	46.41	ppm	94
22) n-Nitroso-di-n-propyla...	5.139	70	435198	48.89	ppm	97
23) Hexachloroethane	5.230	201	308776	53.03	ppm	96
26) Nitrobenzene	5.289	77	642203	47.61	ppm	97
27) Quinoline	6.373	129	1376319	47.72	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125529.D
Acq On : 23 Jun 2016 9:46 pm
Operator : seanb1
Sample : cc5307-50
Misc : op94571,em5319
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 11:45:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
28)	Isophorone	5.502	82	1155094	47.46	ppm		96
29)	2-Nitrophenol	5.583	139	397680	53.60	ppm		95
30)	2,4-Dimethylphenol	5.631	107	585050	50.83	ppm		88
32)	bis(2-Chloroethoxy)met...	5.705	93	655587	45.79	ppm		99
33)	2,4-Dichlorophenol	5.834	162	627108	52.60	ppm		98
34)	2,6-Dichlorophenol	6.063	162	582116	51.26	ppm		98
35)	1,3,5-Trichlorobenzene	5.593	180	706294	50.21	ppm		100
36)	1,2,4-Trichlorobenzene	5.908	180	680616	49.14	ppm		99
37)	1,2,3-Trichlorobenzene	6.154	180	664733	50.34	ppm		99
38)	Naphthalene	5.994	128	1822640	46.24	ppm		98
39)	4-Chloroaniline	6.053	127	782659	46.70	ppm		97
40)	2,3-Dichloroaniline	7.201	161	763694	50.76	ppm		98
41)	Caprolactam	6.464	55	269300	50.59	ppm	#	78
42)	Hexachlorobutadiene	6.133	225	387946	53.00	ppm		98
43)	4-Chloro-3-methylphenol	6.651	107	555261	49.28	ppm		99
44)	2-Methylnaphthalene	6.816	141	1143108	47.38	ppm		99
45)	1-Methylnaphthalene	6.945	142	1368264	47.37	ppm		99
46)	Dimethylnaphthalene	7.703	156	1279577	49.02	ppm		99
48)	Hexachlorocyclopentadiene	7.035	237	913226	118.03	ppm		99
49)	2,4,6-Trichlorophenol	7.217	196	482888	54.53	ppm		99
50)	2,4,5-Trichlorophenol	7.276	196	545845	55.49	ppm		100
52)	2-Chloronaphthalene	7.489	162	1308406	46.82	ppm		99
53)	Biphenyl	7.468	154	1725059	46.87	ppm		99
54)	2-Nitroaniline	7.655	65	366686	51.65	ppm		90
55)	Dimethylphthalate	7.949	163	1568443	48.53	ppm		98
56)	Acenaphthylene	8.125	152	2163644	47.44	ppm		98
57)	2,6-Dinitrotoluene	8.034	165	385011	55.95	ppm		98
58)	3-Nitroaniline	8.306	138	392038	49.36	ppm		99
59)	Acenaphthene	8.408	153	1286663	45.25	ppm		95
60)	2,4-Dinitrophenol	8.488	184	483714	110.19	ppm		90
61)	4-Nitrophenol	8.664	109	191132	55.62	ppm		96
62)	Dibenzofuran	8.696	168	1892231	47.31	ppm		99
63)	2,4-Dinitrotoluene	8.707	165	488344	54.08	ppm		76
64)	2,3,4,6-Tetrachlorophenol	8.931	232	453437	62.12	ppm		98
65)	Diethylphthalate	9.156	149	1524372	49.98	ppm		97
66)	Fluorene	9.289	166	1605991	47.51	ppm		98
67)	4-Chlorophenyl-phenyle...	9.316	204	805882	49.45	ppm		93
68)	4-Nitroaniline	9.359	138	386925	49.29	ppm		99
70)	4,6-Dinitro-2-methylph...	9.423	198	356273	53.61	ppm		94
71)	n-Nitrosodiphenylamine	9.535	169	1132578	46.27	ppm		97
72)	1,2-Diphenylhydrazine	9.599	77	1313819	45.79	ppm		94
74)	4-Bromophenyl-phenylether	10.197	248	508348	49.70	ppm		98
75)	Hexachlorobenzene	10.293	284	565104	48.97	ppm		95
76)	Pentachlorophenol	10.689	266	694528	103.46	ppm		98
77)	Phenanthrene	11.041	178	2271514	45.59	ppm		99
78)	Anthracene	11.137	178	2367514	47.05	ppm		98
79)	Carbazole	11.484	167	2286869	47.38	ppm		99
80)	Di-n-butylphthalate	12.280	149	2707279	50.47	ppm		99
81)	Fluoranthene	13.343	202	2774255	48.04	ppm		98
82)	Octadecane	10.977	57	807367	47.96	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125529.D
Acq On : 23 Jun 2016 9:46 pm
Operator : seanb1
Sample : cc5307-50
Misc : op94571,em5319
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 11:45:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

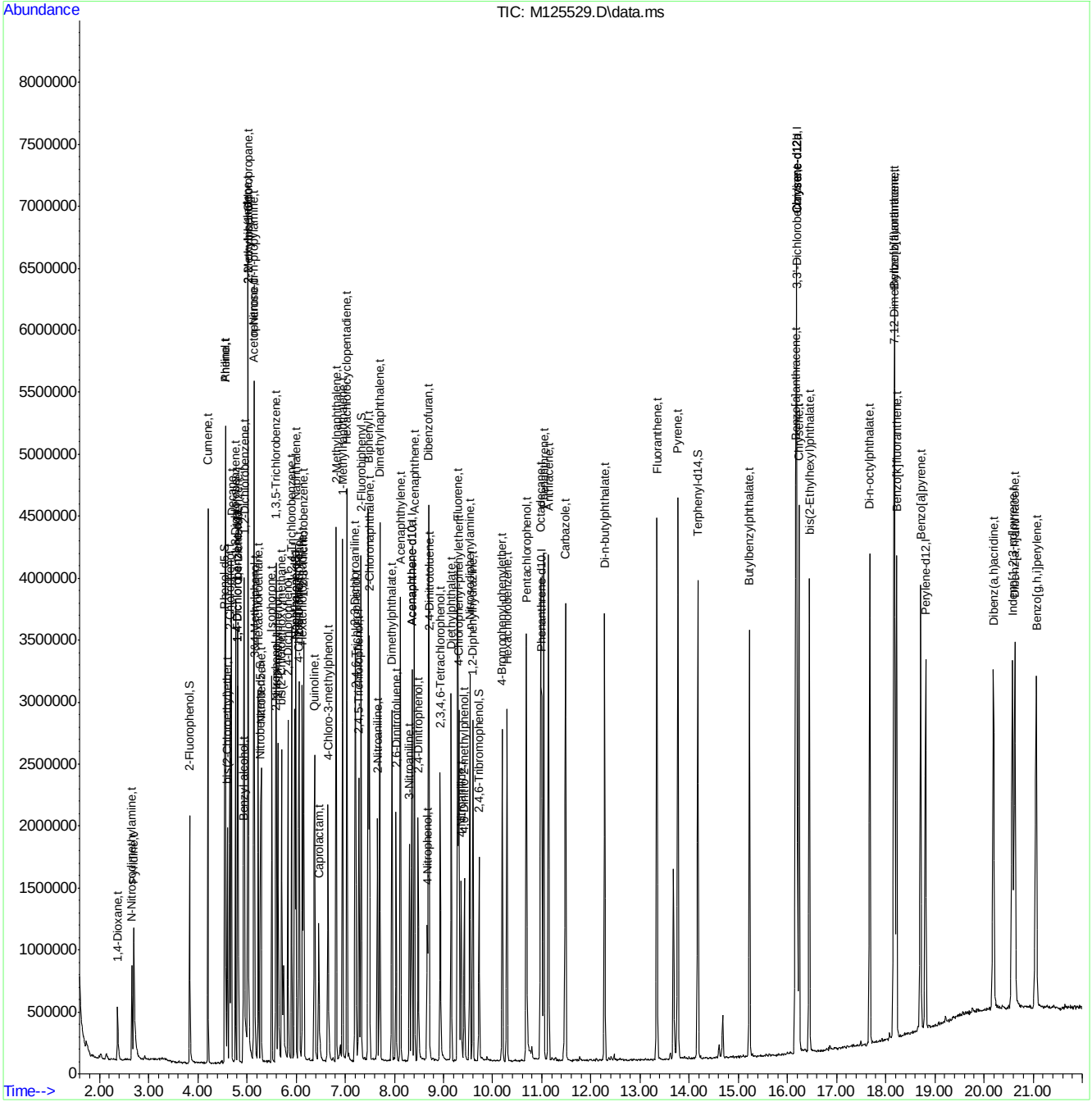
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
84)	Pyrene	13.770	202	2856019	46.67	ppm	100
86)	Butylbenzylphthalate	15.229	149	1224890	50.33	ppm	98
87)	Benzo[a]anthracene	16.169	228	2597159	47.82	ppm	100
88)	3,3'-Dichlorobenzidine	16.190	252	1011310	54.23	ppm	98
89)	Chrysene	16.238	228	2510755	46.21	ppm	99
90)	bis(2-Ethylhexyl)phtha...	16.446	149	1679947	51.79	ppm	99
92)	Di-n-octylphthalate	17.675	149	2859477	55.40	ppm	100
93)	Benzo[b]fluoranthene	18.171	252	2596162	48.22	ppm	97
94)	Benzo[k]fluoranthene	18.225	252	2377466	46.39	ppm	98
95)	Benzo[a]pyrene	18.716	252	2343346	48.15	ppm	96
96)	Indeno[1,2,3-cd]pyrene	20.580	276	2301865	48.92	ppm	92
97)	Dibenz(a,h)acridine	20.196	279	2113998	49.43	ppm	96
98)	Dibenz[a,h]anthracene	20.628	278	2423729	49.29	ppm	97
99)	7,12-Dimethylbenz(a)an...	18.182	256	1184691	57.19	ppm	98
100)	Benzo[g,h,i]perylene	21.066	276	2406973	47.02	ppm	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125529.D
Acq On : 23 Jun 2016 9:46 pm
Operator : seanb1
Sample : cc5307-50
Misc : op94571,em5319
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Jun 24 11:45:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125530.D
Acq On : 23 Jun 2016 10:15 pm
Operator : seanb1
Sample : cc5308-50
Misc : op94571,em5319
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 24 11:46:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration

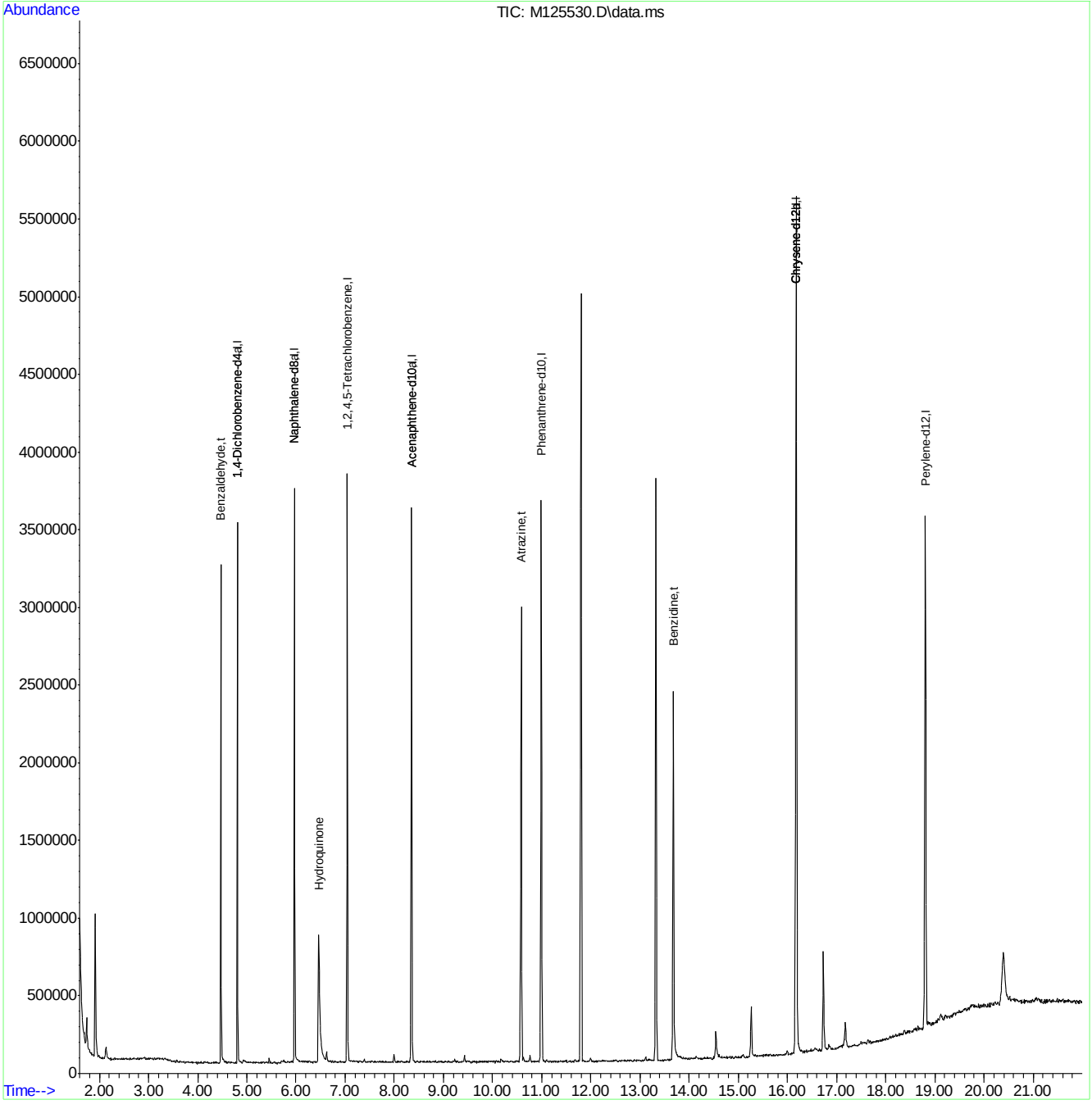
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.806	152	477051	40.00	ppm	0.00
24) Naphthalene-d8	5.965	136	1742421	40.00	ppm	0.00
47) Acenaphthene-d10	8.352	164	1120254	40.00	ppm	0.00
69) Phenanthrene-d10	10.991	188	2083602	40.00	ppm	0.00
83) Chrysene-d12	16.177	240	2137081	40.00	ppm	0.00
91) Perylene-d12	18.810	264	1972810	40.00	ppm	0.00
101) 1,4-Dichlorobenzene-d4a	4.806	152	477051	40.00	ppm	0.00
103) Acenaphthene-d10a	8.352	164	1120254	40.00	ppm	0.00
106) Chrysene-d12a	16.177	240	2137081	40.00	ppm	0.00
108) Naphthalene-d8a	5.965	136	1742421	40.00	ppm	0.00
110) Chrysene-d12b	16.177	240	2137081	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
102) Benzaldehyde	4.470	105	481841	46.29	ppm	95
104) 1,2,4,5-Tetrachloroben...	7.044	216	823748	54.49	ppm	97
105) Atrazine	10.585	215	302187	61.95	ppm	98
107) Benzidine	13.678	184	1494021	53.35	ppm	100
109) Hydroquinone	6.462	110	786975	59.77	ppm	79

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5319\
Data File : M125530.D
Acq On : 23 Jun 2016 10:15 pm
Operator : seanb1
Sample : cc5308-50
Misc : op94571,em5319
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Jun 24 11:46:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5307.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Jun 23 17:14:12 2016
Response via : Initial Calibration



SGS ACCUTEST JC22613

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E2M3720

Print Analyst Name: Ashley N.

Analyst Signature: AN

Date: 6-7-2016

Columns: ZB5ms 30mx25mmx25μm

Method 8270D/625

Initial Cal. Method M2M3713 20 ANVS

Injection Volume: 1μl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151827-91	dftpp	50ppm
CM5732	Internal Std	4000ppm
162800	dcm (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to compl with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMB

Date: 6/8/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	2M84431	dftpp			W	1					Not Scan	raised baseline reinstall
	84432	dftpp				1					OK	9:17AM
	84433	ic 3770-2		BMA		2					OK	SV161935-63H
	84434	ic3770-1				3					OK	-63I
	84435	ic3770-100				4					OK	-63A
	84436	ic3770-80				5					OK	-63B
	84437	ic 3770-50				6					OK	-63C
	84438	ic 3770-25				7					OK	-63D
	84439	ic3770-10				8					OK	-63E
	84440	ic3770-5				9					OK	-63G
	84441	icv 3770-50		Acids		10					OK	SV161935-21
	84442	icv 3770-50		Anilines		11					OK	-20
	84443	icv3770-50		ABN SVOC		12					OK	OP167121-136
	84444	icv 3770-50		BN1		13					OK	NO 3:30CB SV161935-17
	84445	icv3770-50		BN2		14					RR	run diff. 101 # -69
	84446	icv 3770-50		BN2D 3rd		15					OK	use for 3:30CB -14B
	84447	icv3770-50		BN2		16					RR	SV151829-116 3:42

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E2M3721

Print Analyst Name: Ashley N.

Analyst Signature: AM

Date: 6-7-16

Columns: 70m @ 30m x 3mm x .25µM

Method 8270D 1625

Initial Cal. Method M2M3720.D

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV161027-91	dftpp	50ppm
CM5732	Internal Std	4000ppm
162800	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: 6/8/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	2M84448	dftpp			W	1					NG	PCP↑ reinject
	84449	dftpp				1					OK	6:05pm
	84450	ICV3720-50		BN2		2					OK	SV161935-116

AM

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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7.7.2

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E2M3754

Print Analyst Name: Ashley N.

Analyst Signature: AN

Date: 6-28-16

Columns: ZB5ms (P) 30m x 25mm x 25

Method 8270D/625

Initial Cal. Method M2M3770

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 1187791	dftpp	50ppm
161935-938	BNA	20ppm
-324	TCL42	↓
OM5732	Internal STD	4000ppm
163039	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: 6/30/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	2M85103	dftpp			W	1					NG	PCP↑ 68↑ reinject
	85104	dftpp			W	1					↓	PCP↑ retune
	85105	dftpp			W	1					NG	68↑ PCP↑ reinstall
	85106	DFTPP			W	1					not sing	68↑ retune.
	85107	DFTPP			W	1					OK	952AM.
	85108	CC3770-25		BNA	W	2					OK	81↓ 48↓ 54↓ 60, 61↓ 68, 70
	85109	OP94957-MB2	94952-2	SPLP AB8270	W	3					OK	
	85110	-LB13				4					OK	
	85111	-LB17				5					OK	
	85112	-BS2		↓		6					OK	
	85113	JC22153-5R		SPLP XH		7					OK	RR1:5
	85114	-6R				8					OK	
	85115	JC22470-5R		SPLP NAPT		9					OK	
	85116	-6R		↓ 2MMP		10					OK	RR1:5
R	85117	-6R				11	5				OK	
R	85118	JC22153-5R		SPLP4H		12	5				OK	
	~~85119~~ 85119	OP94823A MB	94823A	AB8270	W	13					OK	Ran @ end of sequence! 6:30PM

AN 6/28/16 (4)

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
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SGS ACCUTEST JC22613

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E2M3754

Print Analyst Name: Ashley N

Analyst Signature: AN

Date: 6-26-16

Columns: ~~Rtx-5Sm 30m x .25mm x .25µm~~

Method 8270D/625

Initial Cal. Method M2M3770

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see page 33	

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: 6/30/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	2M85120	JC22163-13	~~94623A~~ 94645 ~~AN 6/28/16~~	SIM14DIOX	W	14			✓	✓	OK	no 14DIOX. RR(M)
	85121	OP94854-MB1	94659A-1	PB8270	W	15			✓	✓	OK	
	85122	JC22270-1		SIM14DIOX		16			✓	✓	OK	
	85123	-4				17			✓	✓	OK	
	85124	OP95018-MB1	95018A	PB8270	W	18			✓	✓	OK	
	85125	JC22457-4		SIM14DIOX		19			✓	✓	OK	
R	85126	JC22117-4 1x		PB8270		20	2				did not run	not in sequence.

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

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3E3699

Print Analyst Name: Ashley N.

Date: 6-22-16

Analyst Signature: AN

Columns: Rxi 5Silms 30m x 25mm x 25µm

Method 8270 D / 625

Initial Cal. Method M3E3699

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 1587791	DFTPP	50ppm
CMS732	Internal std	4000ppm
163039	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: Anne.

Date: 6/23/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	BE 84381	DFTPP			W	1					NG	68↑ 275↑ reinject
	84382	DFTPP			W	1					↓	68↑ 275↑ retune
	84383	DFTPP			W	1					NG	275 442↑ retune.
	84384	DFTPP				1					↓	275 ↓ 127↑ Reinject. ~~refund~~
	84385	DFTPP			W	1					OK ~~AG~~	9:48 AM
	84386	ic 3699-2		BNA		2			AN 6/22/16		RR	solvent delay. adjust method add 1 min to start
	84387	ic 3699-2			AN 6/22/16	32					OK	SV161935-63H
	84388	-1				3					OK	-63I
	84389	-100				4					OK	-63A
	843890	-80				5					OK	-63B
	84391	-25				6					OK	-63D
	84392	-10				7					OK	-63E
	84393	-5				8					OK	-63G
	84394	icc 3699-50				9					OK	-63C
	84395	icv 3699-50		Acids		10					OK	SV161935-70
	84396	icv 3699-50		Anilines		11					OK	-78
	84397	icv 3699-50		ABNSUR		12					OK	DP161712128

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 JC22613

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3E3699

Print Analyst Name: Ashley N.

Date: 6-22-16

Analyst Signature: AN

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page 73	

Columns: Rxi 5Sil MS 30m x 0.25mm x 0.25µm

Method 8270D / 625

Initial Cal. Method M3E3699

Injection Volume: 1µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMW

Date: 6/23/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3E84398	ICV3699-50		BN1		13					OK	SV161935-75 AD#89
	84399	ICV3699-50		BN2		14					RR	# 40,41,45 ↓ NO 0.00 ~~nnnnn~~ SV161935-10 #.
	84400	ICV3699-50		Benzidines 250		15					OK	use for 33DCB SV161935-14B 4:33

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
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SGS ACCUTEST JC22613

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E3E3700

Print Analyst Name: Ashley N

Analyst Signature: [illegible]

Date: 6-22-16

Columns: Rxi-5ssilms 30mx0.25mmx0.25µm

Method: 8270D 1625

Initial Cal. Method: M3E3699

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV5187791	DFTPP	50ppm
QM5732	Internal Std	40000ppm
63039	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: 6/23/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	3E 84401	DFTPP			W	1					NG	51 ↓ 275↑ reinject
	84402	DFTPP				1					↓	275↑ reinject
	84403	DFTPP				1					NG	275↑ reinject
	84404	DFTPP				1					↓	275↑, re-inject
	84405	DFTPP				1						[illegible]
	84406	DFTPP				1					↓	275↑, re-inject
	84407	DFTPP				1					OK	6.13pm
	84408A	ICV3700-100		TZL47		2					OK	SV16435-31A method error, run as "A" file
	84409	-50				3					OK	-31B
	84410	ICV3700-50				4					OK	-31M
	84411	ICV3700-25				5					OK	-32H
	84412	-10				6					OK	-31E
	84413	-5				7					OK	-31G
	84414	-2				8					OK	-31H
	84415	-1				9					OK	-31I
	84416	ICV3699-50		BN1		10					OK	SV16435-75
	84417	-50		BN2		11					OK	-74 40,41,21 (100.00) 100

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

cant report 27 or 40 ↑ in 2nd

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 E3E3700

Print Analyst Name: Sam Black

Analyst Signature: Sam Black

Date: 6/22/16

Columns: Rxi-5sims 30m x .25mm x 2

Method 8270 D/625

Initial Cal. Method M3E3699

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page 77	

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: 6/23/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	E84418	ICV3700-50		Benzid. 3rd		12					Not used	SV161955-148 ND+ Nuclear Benzidine in BN
	84419	-50		Ha		13					OK	SV157827-950 11:55PM

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Rev. Date: 1/19/16

SGS ACCUTEST JC22613

SGS ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID E3E3716

Date: 7/1/16

Print Analyst Name: Sean Black

Analyst Signature: [signature]

Columns: Rtx-5Silms 30m x .25mm

Method 8270D 625 .25mm

Initial Cal. Method M3E3699

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 157827-91	DFTPP	50ppm
SV 161935-92H	BNA	25ppm
SV 161935-37B	TCL42	25ppm
CM-5732	Internal Std	4000ppm
162039	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to compl with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature]

Date: 7-5-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3E84756	DFTPP				1						
	84757	DFTPP				1					ngsmg	442L; re-run
	84758	DFTPP				1					↓	442L; re-tune
	84759	DFTPP				1						68T; re-tune
	84760	CC3699-25		BNA		2					d	8.09 ppm
	84761	CC3700-25		TCL42		3					d	4.4
	84762	ms 1ppm ver				4					d	
	84763	OP95059-mb1	95059	ABS270	W	5					d	SV161935-60H
	84764	-bs1				6					d	
	84765	-ms				7					d	
	84766	-msd				8					d	
	84767	JC22613-2		ABSL MNA		9					d	
	84768	-3				10					d	
	84769	-4				11					d	
	84770	-5				12					d	
	84771	-6				13					d	
	84772	-7				14					d	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC22613

SGS ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID E3E3716

Date: 7/1/16

Print Analyst Name: Sean Black

Analyst Signature: [signature]

Columns: Rtx-5sil ms 30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method M3E3699

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page 133	

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: 7-5-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	3684773	JC22613-8	95059	ABX + MNap + 2MNap	W	15			/	/	ok	
	84774	JC22684-9	↓	ABXh	↓	16			/	\	OK	
	84775	JC23038-2A	95170	ABTCL2Ol	S	17	100		/	X	OK	
	84776	-3A				18	100		/	X	OK	
	84777	-3A				19	10		/	\	OK	
	84778	-2A				20	10	SIM ↓		\	OK	
	84779	-1A				21	10		/	\	OK	
	84780	-3A				22	5	+ SIM ↓		\	OK	diluted due to matrix
	84781	-2A				23	5	+ SIM ↓	INBE ↓		OK	
	84782	-1A	↓	↓	↓	24	2	+ SIM ↓		\	OK	6:24am CF1

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 E3M2942

Print Analyst Name: Ashley Mayo

Analyst Signature: AMO

Date: 6/20/2016

Columns: RVI(G)1030m0.25mm0.25µ

Method 8270D/625

Initial Cal. Method 113M2942Sim

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.
		AMO 6/20/16

Standard Data

Lot #	Description	Conc.
SV518279	DFTPP	50ng
SV161935	8M TSTD	40ng
16248	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: 6-21-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	3M62370	DFTPP				1					OK	623PM
	62371	ICV2942-.2		BNAsim	W	2					OK	SV161935-60C
	62372	-.1				3					OK	-60D
	62373	-1.0				4					OK	-84A
	62374	-.5				5					OK	-84B
	62375	-.05				6					RR	SV161935-60E Peaking etion
	62376	-.02				7					OK	SV161935-60F
	62377	-.01				8					OK	-60G
	62378	-.5				9					OK	-60A
	62379	-2.5				10					OK	-60B
	62380	-.05				11					OK	-60E
	62381	ICV2942-1.0		BSim2nd	W	12					RR	OP16072012
	62382	-1.0		Acid2nd	W	13					OK	SV161935-66 12:50AM
												AMO

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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7.2.7

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3M2943

Print Analyst Name: LMSELK

Date: 6/21/16

Analyst Signature: [illegible]

Columns: Rxi-5sil MS 30m x .25mm x .25um

Method 8270D/1625

Initial Cal. Method M3M2942SIM

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SI1502491	DFTPP	50ppm
SI1602580	SIM IS/TD	40ppm
162039	DCM EFCHON	—

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: 6-21-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3M022383	DFTPP			W	1					OK	9:00AM
	1022384	IC12942-1.0		BSIM208	W	2					OK	9:20AM

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Rev. Date: 1/19/16

7.7.8

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E3M2951

Print Analyst Name: Arlie Cooper

Analyst Signature: [signature]

Date: 6/26/16

Columns: Rtx-5sil MS 30m x .25mm

Method: 8270D 1625

Initial Cal. Method: M3M2942SIM

Injection Volume: µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
6193589	DFTPP	50ppm
6193584	5-m std	100ppm
-80	SMI STD	40ppm
62636	PCM (F.S.)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 6/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3M62530	DFTPP			W	1					OK	35ppm
	62531	CC2942-1.0			W	2					OK	20,21,32 1 33 (Benzo(k))
	62532	0995018M31	95031	1,4SSIM	W	3			/	/	OK	
	62533	0512				4			/	/	OK	
	62534	JC22457-3		1,4DIOX		5			/	/	OK	
	62535	4				6			/	/	OK	run by 8270.
	62536	JC22505-3		1,4DIOX		7			/	/	OK	
	62537	4				8			/	/	OK	
	62538	5				9			/	/	OK	
	62539	1				10			/	/	OK	
	62540	2				11			/	/	OK	
	62541	JC22515-1		Alcohol + Phenol Tree		12			/	/	OK	
	62542	2				13			/	/	OK	
	62543	3				14			/	/	OK	
	62544	JC22613-1		1,4DIOX + NNP		15			/	/	OK	11:34pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Rev. Date: 1/19/16

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3M2967

Print Analyst Name: Linsey K

Analyst Signature: LK

Date: 7/7/16

Columns: Rtx-5Sil MS 30m x .25mm x .25um

Method 8270D/625

Initial Cal. Method M3M1942sim

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SMCP135-59	DFTPP	50ppm
-100	SMSTD	100ppm
-94	SMISTD	400ppm
1663239	DCM-Fisher	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMC

Date: 7/8/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3m62826	DFTPP			W	1					ok	3:41pm
	62827	CC2042-1.0		BNsim	W	2					ok	
	62828	OP95259MB1	95259-1	BS270	W	3			/	/	ok	
	62829	-bs2				4			/	/	ok	
	62830	-MS				5			/	/	ok	
	62831	-MSd				6			/	/	ok	
	62832	JC22613-2		NAP+14dioxane		7			/	/	ok	
	62833	-3				8			/	/	ok	
	62834	-4				9			/	/	ok	
	62835	-5				10			/	/	ok	
	62836	-6				11			/	/	ok	
	62837	-7				12			/	/	ok	
	62838	-8				13			/	/	ok	
	62839	JC22702-2	95160-1	1,4dioxane		14			/	/	ok	
	62840	-3				15			/	/	ok	
	62841	-4				16			/	/	ok	
	62842	-5				17			/	/	ok	nn 7/8/20

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3m29167

Print Analyst Name: Linsey/K

Analyst Signature: JK

Date: 7/7/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	SL pg 129	

Columns: Rtx-5sil MS 30m x .25mm x .25um

Method 8270D/625

Initial Cal. Method M3m29428im

Injection Volume: 1ul

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO

Date: 7/8/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3m102843	JC22702-6	951001	1,4dioxane	W	18			/	/	ok	
	102844	-7				19			/	/	ok	
	102845	-8				20			/	/	ok	
	102846	-9				21			/	/	ok	mnb/8270
	102847	-10				22			/	/	ok	2:59.4m

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 E4M2974

Print Analyst Name: Ashley Mdyp

Date: 6/20/2016

Analyst Signature: AMO

Columns: ZB5ms 30m x 5mm x 0.5µ

Method 8270D/625

Initial Cal. Method M4M2973 4 5ml

Injection Volume: 1µL AMO 6/20/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV15827-91	DFTPP	50ppm
SV16935-80	Sim std. JSTD 6/20/16	400ppm
K0324	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: 6-21-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4M6179	DFTPP				1					OK	1006PU
	66180	ICV2974-1		BLASIM	W	2					na	using fix windows Rerun
	66181	~~-.2~~	.1			~~3~~ 2					OK	SV16935-60D
	66182	~~-.5~~	.2			~~4~~ 3					OK	-60C JK 6/21/16
	66183	~~-1.0~~	.5			~~5~~ 4					OK	~~-60~~ -84B
	66184	~~-.05~~	1.0			~~6~~ 5					OK	-84A
	66185	~~-.02~~	.05			~~7~~ 6					OK	-60E
	66186	~~-.01~~	.02			~~8~~ 7					OK	-60F
	66187	~~-.5~~	.01			~~9~~ 8					OK	-60G
	66188	AMO ~~-2.5~~	5			~~10~~ 9	AMO 6/20/16				OK	-60A
	66189	6/20/16 ~~-2.5~~				10					OK	-60B
	66190	ICV2974-1.0		BSim2nd	W	11					OK	OP16177U6
	66191	1.0		Acid2nd	W	12					OK	SV16935764.00AM

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC22613

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4M2995

Print Analyst Name: Linsey K

Analyst Signature: [signature]

Date: 7/5/16

Columns: 28Em5 @ 30m x .25mm x .25um

Method 8270D 1625

Initial Cal. Method M4M2944SIM

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SHC0935-89	DFTPP	50ppm
-90	SIMSTD.	0.5ppm
-94	SIMISTD	40ppm
163039	DEM-CFSTD	—

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: 7-6-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4M160573	DFTPP			W	1					ok	8:34AM
	160574	CC2944-05		BNAsim	W	2					↓	bad↓ reinstall
	160575	DFTPP			W	1					ok	lost reinject
	160576	DFTPP			W	1					ok	9:56AM
	160577	CC2944-05		BNAsim	W	2					ok	HEBT
	160578	QC50169-MB	QC50169-1	ABS270		3			✓	3↓	ok	
	160579	MB12				4			✓	✓	ok	
	160580	JC22558-14		ABSimms +1,4dioxane		5			✓	✓	ok	
	160581	QC50169-MS		ABS270		6			✓	✓	ok	
	160582	MSD				7			✓	✓	ok	
	160583	QC50165-MS1	QC50165-1	ABS270		8			✓	✓	ok	
	160584	MSD2				9			✓	✓	ok	
	160585	MS				10			✓	✓	ok	
	160586	-MSD				11			✓	✓	ok	
	160587	JC22558-8		ABSimms +1,4dioxane		12			✓	✓	ok	
	160588	-9				13			✓	✓	ok	
	160589	-10				14			✓	✓	ok	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4M2995

Print Analyst Name: Linsey K

Date: 7/5/16

Analyst Signature: [illegible]

Columns: 28.5m @ 30m x 25mm x .25um

Method 8270D/625

Initial Cal. Method M4M2974SIM

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Surg 35	

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: 7-6-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4M060590	JC22500-11	950181	ABSIMNF Hydrazine	W	15			✓	✓	ok	
	060591	JC22500-16	950181	ABSIMNF Hydrazine	W	16			/	/	OK	rerun after 060588
	060592	QC951301BS1	951301	A8270		17			✓	✓	ok	
	060593	JC22945		ABSIMNF Hydrazine		18			/	/	OK	
	060594	-6				19			/	/	OK	
	060595	-7				20			/	/	OK	
	060596	JC22838-1				21			/	/	OK	
	060597	-2				22			/	/	OK	
	060598	JC22830-10		ABSIMNF Hydrazine		23			/	/	OK	9:29pm

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
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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4P887

Print Analyst Name: Linsey K

Analyst Signature: [signature]

Date: 6/6/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV160791	DFTPP	50ppm
SV160935	55 SIMSK ISTD	40ppm
	[illegible]	
1603836	DCM (Fisher)	—

Columns: Rtx-5Silms 30mx.25mmx.25um

Method 8270D/1625 [illegible]

Initial Cal. Method M4P887Bsim

Injection Volume: 1ul

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 6-6-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4P16065	DFTPP			W	1					ok	front pk ragged
	16066	DFTPP			W	1					not	8:49AM
	16067	CC887-0.5		BAsim	W	2					↓	low response
	16068	DFTPP [illegible]			W	1					ok	9:57AM
	16069	CC887-0.5		BAsim	W	2					ok	SV160935-57B
	16070	ICC887-1.0				3					ok	-57A
	16071	ICC887-0.2				4					ok	-60C
	16072	-0.1				5					ok	-60D
	16073	-0.05				6					ok	-60E
	16074	-0.02				7					ok	-60F
	16075	-0.01				8					ok	-60G
	16076	-50				9					ok	-60A
	16077	-2.5				10					ok	-60B
	16078	ICV887-1.0		Acids 2nd		11					ok	SV160935-66
	16079	ICV887-1.0		BAsim 2nd		12					ok	CB160712-28 3:19pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC22613

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4P933

Print Analyst Name: Linsey K

Analyst Signature: LK

Date: 7/5/16

Columns: Rxi-5silms30mx.25mmx.25um

Method 8270D 1625

Initial Cal. Method MHP8875im

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SMd93588	DFTPP	50ppm
-90	Sim Std.	0.5ppm
-94	Sim JSTD	40ppm
162089	Dem Cat Shen	—

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: 7-6-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4P17513	DFTPP			W	1					NG	1:17pm
	17514	CC887-0.5		Bnasim	W	2					NG	bad run
	17515	DFTPP			W	1					NG	very baseline run
	17516	DFTPP			W	1					OK	3:33pm
	17517	CC887-0.5		Bnasim	W	2					OK	
	17518	OP95054MB	95054	B8270		3			✓	4	OK	rerun under 1/4 DW cc.
	17519	-1512				4			✓	4	OK	
	17520	JC22515-5		fluorene +phen		5			✓	✓	OK	
	17521	-6				6			✓	✓	OK	
	17522	-7				7			✓	✓	OK	
	17523	-8				8			✓	✓	OK	
	17524	-9				9			✓	✓	OK	
	17525	-10				10			✓	✓	OK	
	17526	-11				11			✓	✓	OK	rerun by 8270!
	17527	-12				12			✓	✓	OK	
	17528	-13				13			✓	4	OK	
	17529	-14				14			✓	✓	OK	950PM

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

AMO

Form: OR015-07
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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5307

Print Analyst Name: Ashley Mdyk

Date: 6/16/2016

Analyst Signature: AMO

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 1518279	DFTPP	50ng/µL
1624918	DCM (Fisher)	—
Lot 5732	IS/SU	40ng/µL

Columns: RTX 5Sil MS 30m x 0.25mm x 0.25µm

Method 8270D/625

Initial Cal. Method EM5307

Injection Volume: 1µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 6-20-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M125257	DFTPP				1					not using	
	125258	IC5307-2		BNA	W	2					↓	no60 LpEMT
	125259	DFTPP				1					not using	
	125260	IC5307-2		BNA	W	2					↓	reinstall. NO60
	125261	DFTPP				1					ok	1228PM
	125262	IC5307-2		BNA	W	2					ok	
	125263	-1				3					ok	
	125264	-100				4					ok	
	125265	-80				5					ok	
	125266	IC5307-50				6					ok	
	125267	IC530725				7					ok	
	125268	-10				8					ok	
	125269	-5				9					ok	418PM

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

@ JMJ 6/16/16

Batch ID EM5307/8

Print Analyst Name: Julius M. Johnson

Analyst Signature: JMJ

Date: 6/16/16

Columns: RTX5Silms30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method MM5307

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151827191	DFTPP	50ppm
CLU5732	Internal Std.	400ppm
162418	DCM (Fisher)	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO

Date: 6/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M125270	DFTPP				1					OK	5:01
	125271	ic5308-100		TCL42		2					OK	SV161935-3A
	125272	ic5308-80				3					OK	-3B
	125273	ic5308-50				4					OK	-3C
	125274	ic5308-25				5					OK	-3D
	125275	ic5308-10				6					OK	-3E
	125276	ic5308-5				7					OK	-3G
	125277	ic5308-2				8					OK	-3H
	125278	ic5308-1				9					OK	-3I
	125279	icv5308-50		Acid		10					RR	SV161935-70 PCP-1
	125280	icv5308-50 AMC 6/20/16		Aniline		11					OK	-15
	125281	icv5308-50		BN1		12					OK	-75
	125282	icv5308-50		BN2		13					OK	-10
	125283	icv5308-50 AMC 6/20/16		ABSLIN		14					OK	16171292
	125284	icv5308-50		3rd		15					OK	SV161935-38F
	125285	icv5308-50		HQ		16					OK	SV151827-98A

AMO 1218AMC

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

7.7.16

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EM5310

Print Analyst Name: Kristi Schlenbey

Analyst Signature:

Date: 6-5-16

Columns: RTX-5Sil MS 30m x .25mm x .25u

Method: EPA 8270D / 625

Initial Cal. Method: M5307

Injection Volume: 1 ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SU5152951	DFTPP	50ppm
~~SU6-1515-10~~	Acid 2nd Source	50ppm
SU6-1515-10		
CM5732	Internal Std.	4000ppm
162418	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO

Date: 6/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M125313	DFTPP			W	1					ok	7:53am
	125314	ICV5302-50	Acid 2nd Source		W	2					OK	8:09AM

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

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SGS ACCUTEST JC22613

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5319

Print Analyst Name: Sean Block

Analyst Signature: [signature]

Date: 6/23/16

Columns: 28-5ms + 30m × .25mm = .25µm

Method 8270D / 625

Initial Cal. Method MM5307

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SU 151827-91	DFTPP	50 ppm
SU 161935-64M	BNA	50 ppm
SU 151827-1876	TCL42	50 ppm
CM-5732	Internal Std	4000 ppm
163039	DCM (Blank)	–

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMC

Date: 6/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M125528	DFTPP				1					ok	9:32pm
	125529	cc5307-50		BNA		2					ok	2,16
	125530	cc5308-50		TCL42		3					ok	
	125531	bns ppm ave				4					ok	SU 161935-64E ✓
	125532	094990-mb1	94990	AB8270	S	5			✓	✓	ok	
	125533	-bs1	↓	↓	S 6/28/16	6			✓	✓	ok	
	125534	095018-mb1	95018	AB8270+	W	7			✓	✓	ok	
	125535	-bs1				8			✓	✓	ok	
	125536	-ms				9			✓	✓	ok	
	125537	-msd		↓	↓	10			✓	✓	ok	
	125538	J022404-1		ABNJTCL20+	W	11		+	✓	✓	ok	
	125539	-2				12		+	✓	✓	ok	
	125540	J022406-1		↓		13		+	✓	✓	ok	
	125541	J022506-8		ABNJTCL20+		14		+	✓	✓	ok	
	125542	-9				15		+	✓	✓	ok	
	125543	-10				16		+	✓	✓	ok	
	125544	-11	↓	↓	↓	17		+	✓	✓	ok	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Rev. Date: 1/19/16

7.7.18

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5319

Print Analyst Name: Sean Black

Analyst Signature: [signature]

Date: 6/23/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see page 1A	

Columns: ZB-5ms 30m x 25mm x .25µm

Method 8270D/625

Initial Cal. Method MM5207

Injection Volume: 1µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO

Date: 6/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M125545	JC22613-1	95018	ABSL + ZMNGP MNGP	W	18		+	/	J	OK	
	125546	JC22591-32	94990	ABSL	O	19			J	J	OK	RR 1:2 / 1:100
	125547	OP94990-ms	↓	ABS270	↓	20			J	J	OK	
	125548	msd	↓	↓	↓	21			J	J	OK	
	125549	JC22501-6	94964	SB 6/27/16 BNBCL20+	S	22		+	/	J	OK	moved to end of sequence 850AM
	125550	JC22386-16	↓	ABTCL	S	23	10		/	/	OK	dil BP 6/24/16
	125551	JC22450-2	94994	BNJTCL20+	W	24		+	/	J	OK	
	125552	-3	↓	↓	↓	25		+	/	J	OK	8:21am

AMO

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07

Rev. Date: 1/19/16

LOGBOOK ID: 6-1747

ABN Aqueous Extraction Logbook

Date Started: 6/23/16 Time Started: 8:00 AM
Date Finished: 6/23/16 Time Finished: 1430

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM
Continuous Liquid Liquid: SW846 3520C/CLP/other

BATCH # MS 95018	RACK# A-3
Extracted by:	BOJ, VP
Concentrated by:	VP m.P.
Vialed by:	m.P. NL
Relinquished by:	
Accepted by:	
Supervisor Review:	6/23/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

	Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) <2 H2SO4	pH Adjust(mL) >11 NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
	MB1	ABN		DIH2O	1000	1	4	Clear	1		
	BS1			DIH2O	1000	1	4	yellow	1		
	JC22506-9 MS		2	Yellow	455	1	4	Yellow	1		
	MSD		2	Yellow	455	1	4	Yellow	1		
CW 6/27/16	JC22506-8 BS	125IM		DIH2O	1000	1	4	L-Yellow	1		
	JC22506-8 MS		1	Yellow	500	1	4	Yellow	1		
	MSD		1	Yellow	500	1	4	Yellow	1		
1	JC22404-1 RA	ABN	1	Clear	1000	1	4	Clear	1		
2	-2		1	LT Yellow	1000	1	4	Yellow	1		
3	JC22406-1		1	Clear	1000	1	4	Clear	1		
4	JC22506-8		2	Yellow	1000	1	4	Yellow	1		
5	-9		1	Yellow	1000	1	4	Yellow	1		
6	-10		1	Yellow	470	1	4	Yellow	1		
7	-11		1	Yellow	1000	1	4	H-yellow	1		
8	JC22515-1		2	Yellow	960	1	4	L-Yellow	1		
9	-2		2	LT Yellow	930	1	4	Clear	1		
10	-3		1	LT Yellow	990	1	4	L-Yellow	1		
11	JC22613-1		1	Gold	900	1	4	Yellow	1		
12	JC22457-3		1	Clear	940	1	4	Clear	1		
13	-4		2	Clear	1000	1	4	Clear	1		
14	JC22505-1		1	Clear	990	1	4	L-Yellow	1		
15	-2		2	Yellow	900	1	4	L-Yellow	1		
16	-3		2	Clear	990	1	4	Clear	1		
17	-4		2	Clear	990	1	4	Clear	1		
18	-5		2	Clear	910	1	4	Clear	1		
19											
20											

Rx due 6/24

HT up 6/23

HT up 6/24

Comments: okay to split MS/MSD & SIM MS/MSD, not enough bottles

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other: HT 6/23, 6/24

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	6.7	76, 76.4	-0.5, -0.1	76, 76	NA
Waterbath Chiller (GPM)	F2	3	—	—	2
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	1617705	50	1

WITNESS SIGN: ENC SPIKE SIGN: BOJ

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid			Acid: 1
Acid (for SIM)	1518279Z	50	A(SIM): .1
Base #1	16193575	50	1
Base #2	16193574	50	1
Anilines	16193573	50	1
BSIM	1617706	1	1

WITNESS SIGN: ENC SPIKE SIGN: BOJ

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	163534	Pesticide	6/62

REAGENT	LOT #	BRAND
NaOH	157991	Pesticide
H2SO4	9603594	Acros
Sodium Sulfate	158459	Pesticide
Glass Wool	020122	J&K
Filter Paper		
pH strips		

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

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LOGBOOK ID: 6-1747

ABN Aqueous Extraction Logbook

Date Started: 6/23/16 Time Started: 8:00 AM
Date Finished: 6/23/16 Time Finished: 1430

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM
Continuous Liquid Liquid: SW846 3520C/CLP/other

BATCH # MS 95018	RACK# A-3
Extracted by:	BOJ, VP
Concentrated by:	VP m.P.
Vialed by:	m.P. NM
Relinquished by:	
Accepted by:	
Supervisor Review:	6/23/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) <2 H2SO4	pH Adjust(mL) >11 NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
MB1	ABN		DIH2O	1000	1	4	clear	1		
BS1			DIH2O	1000	1	4	yellow	1		
JC22506-9 MS		2	Yellow	455	1	4	Yellow	1		
MSD		2	Yellow	455	1	4	Yellow	1		
JC22506-8 BS	125IM		DIH2O	1000	1	4	L-Yellow	1		
JC22506-8 MS		1	Yellow	500	1	4	Yellow	1		
MSD		1	Yellow	500	1	4	Yellow	1		
JC22404-1 RA	ABN	1	Clear	1000	1	4	Clear	1		
-2		1	LT Yellow	1000	1	4	Yellow	1		
JC22406-1		1	Clear	1000	1	4	Clear	1		
JC22506-8		2	Yellow	1000	1	4	Yellow	1		
-9		1	Yellow	1000	1	4	Yellow	1		
-10		1	Yellow	470	1	4	Yellow	1		
-11		1	Yellow	1000	1	4	H-yellow	1		
JC22515-1		2	Yellow	960	1	4	L-Yellow	1		
-2		2	LT Yellow	930	1	4	Clear	1		
-3		1	LT Yellow	990	1	4	L-Yellow	1		
JC22613-1		1	Gold	900	1	4	Yellow	1		
JC22457-3		1	Clear	940	1	4	Clear	1		
-4		2	Clear	1000	1	4	Clear	1		
JC22505-1		1	Clear	990	1	4	L-Yellow	1		
-2		2	Yellow	900	1	4	L-Yellow	1		
-3		2	Clear	990	1	4	Clear	1		
-4		2	Clear	990	1	4	Clear	1		
-5		2	Clear	910	1	4	Clear	1		

Rx due 6/24
HT up 6/23
HT up 6/24

Comments: okay to split MS/MSD & SIM MS/MSD, not enough bottles

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other: HT 6/23, 6/24

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	6.7	76, 76.4	-0.5, -0.1	76, 76	NA
Waterbath Chiller (GPM)	F2	3	—	—	2
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	1617705	50	1

WITNESS SIGN: ENC SPIKE SIGN: BOJ

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid			Acid: 1
Acid (for SIM)	15182792	50	A(SIM): .1
Base #1	16193575	50	1
Base #2	16193574	50	1
Anilines	16193573	50	1
BSIM	1617706	1	1

WITNESS SIGN: ENC SPIKE SIGN: BOJ

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	163534	Fisher	6/62

REAGENT	LOT #	BRAND
NaOH	157991	Fisher
H2SO4	9603594	Acros
Sodium Sulfate	158459	Fisher
Glass Wool	020122	J&K
Filter Paper		
pH strips		

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

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ABN Aqueous Extraction Logbook

LOGBOOK ID: 6-1746

Date Started: 06.24.16 Time Started: 7:30 AM
Date Finished: 06.24.16 Time Finished: 1500

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other √ 3510C SIM √
Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH # MS 95059 RACK# B-15

Extracted by:	EMC BJ NL UP
Concentrated by:	~~AH~~ KP
Vialed by:	~~AH~~ EMC
Relinquished by:	
Accepted by:	
Supervisor Review:	6/24/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:

Manager/Supervisor/Team Lead Approval:

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other: HT UP 6/24

	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	Yellow	1		
	JC22613-2 MS		1	YELLOW	500	1	4	Yellow	1		
	⊥ MSD		1	YELLOW	500	1	4	Yellow	1		
	BS	12SIM		DI H2O	1000	1	4	Clear	1		
	JC22515-5 MS		1	ORANGE	500	1	4	Clear	1		
	⊥ MSD		1	ORANGE	500	1	4	Clear	1		
1	JC22515-5	ABN	2	ORANGE	970	1	4	Yellow	1		
2	-6		2	ORANGE	1000	1	4	Yellow	1		
3	-7		1	YELLOW	800	1	4	Yellow	1		
4	-8		1	LT PINK	950	1	4	Yellow	1		
5	-9		1	YELLOW	1000	1	4	Yellow	1		
6	-10		2	LT YELLOW	950	1	4	Yellow	1		
7	-11		1	YELLOW	900	1	4	Yellow	1		
8	-12		2	YELLOW	980	1	4	Yellow	1		
9	-13		1	YELLOW	960	1	4	Clear	1		
10	-14		2	LT YELLOW	950	1	4	Clear	1		
11	JC22613-2		2	YELLOW	900	1	4	Yellow	1		
12	-3		2	LT YELLOW	910	1	4	Clear	1		
13	-4		2	YELLOW	1000	1	4	Yellow	1		
14	~~-5~~		~~2~~	~~LT YELLOW~~	~~1000~~	~~1~~	~~4~~	~~Yellow~~	~~1~~		*
15	-6		2	LT YELLOW	1000	1	4	Clear	1		
16	JC22684-9xh		2	LT YELLOW	910	1	4	Yellow	1		
17	JC22613-7		3	CLEAR	940	1	4	Clear	1		
18	-8	⊥	1	CLEAR	910	1	4	Clear	1		
19	JC22613-5		1	Yellow	990	1	4	Clear	1		
20											

HT UP 6/24

Comments: OK to split MS/MSD & SIM MS/MSD
*Sample put back to hold due to lab error 6/24/16 Reschedule 6/29/19

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	75.76	0.8,0.1	74.76	NA
Waterbath Chiller (GPM)	F2	4	–	–	2
NEVAP (32-38°C; LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	16177013	50	1

WITNESS SIGN: EMC SPIKE SIGN: NL

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	16182792	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1	161935-81	50	1
Base #2	161935-74	50	1
Anilines	161935-78	50	1
BSIM	16177016	1	1

WITNESS SIGN: EMC SPIKE SIGN: NL

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	163534	Fisher	4/100

REAGENT	LOT #	BRAND
NaOH	157791	Fisher
H2SO4	4603899	Ricca
Sodium Sulfate	158459	Fisher
Glass Wool	09012-2	LAB
Filter Paper		
pH strips		

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

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ABN Aqueous Extraction Logbook

LOGBOOK ID: 6-1746

Date Started: 06.24.16 Time Started: 7:30 AM
Date Finished: 06.24.16 Time Finished: 1500

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other √ 3510C SIM √
Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH # MS 95059 RACK# B-15

Extracted by: EMC BJ NL UP
Concentrated by: ~~AH~~ KP
Vialed by: ~~AH~~ EMC
Relinquished by:
Accepted by:
Supervisor Review: 6/24/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:

Manager/Supervisor/Team Lead Approval:

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other: HT UP 6/24

	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	Yellow	1		
	JC22613-2 MS		1	YELLOW	500	1	4	Yellow	1		
	⊥ MSD		1	YELLOW	500	1	4	Yellow	1		
	BS	12SIM		DI H2O	1000	1	4	Clear	1		
	JC22515-5 MS		1	ORANGE	500	1	4	Clear	1		
	⊥ MSD		1	ORANGE	500	1	4	Clear	1		
1	JC22515-5	ABN	2	ORANGE	970	1	4	Yellow	1		
2	-6		2	ORANGE	1000	1	4	Yellow	1		
3	-7		1	YELLOW	800	1	4	Yellow	1		
4	-8		1	LT PINK	950	1	4	Yellow	1		
5	-9		1	YELLOW	1000	1	4	Yellow	1		
6	-10		2	LT YELLOW	950	1	4	Yellow	1		
7	-11		1	YELLOW	900	1	4	Yellow	1		
8	-12		2	YELLOW	980	1	4	Yellow	1		
9	-13		1	YELLOW	960	1	4	Clear	1		
10	-14		2	LT YELLOW	950	1	4	Clear	1		
11	JC22613-2		2	YELLOW	900	1	4	Yellow	1		
12	-3		2	LT YELLOW	910	1	4	Clear	1		
13	-4		2	YELLOW	1000	1	4	Yellow	1		
14	-5		2	LT YELLOW	1000	1	4	Yellow	1		*
15	-6		2	LT YELLOW	1000	1	4	Clear	1		
16	JC22684-9xh		2	LT YELLOW	910	1	4	Yellow	1		
17	JC22613-7		3	CLEAR	940	1	4	Clear	1		
18	-8	⊥	1	CLEAR	910	1	4	Clear	1		
19	JC22613-5		1	Yellow	990	1	4	Clear	1		
20											

HT UP 6/24

Comments: OK to split MS/MSD & SIM MS/MSD
*Sample put back to hold due to lab error 6/24/16 Reschedule 6/29/19

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	75.76	0.8, 0.1	74.76	NA
Waterbath Chiller (GPM)	F2	4	–	–	2
NEVAP (32-38°C; LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	16177013	50	1

WITNESS SIGN: EMC SPIKE SIGN: NL

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	16182792	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1	161935-81	50	1
Base #2	161935-74	50	1
Anilines	161935-78	50	1
BSIM	16177016	1	1

WITNESS SIGN: EMC SPIKE SIGN: NL

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	163534	Fisher	4/100

REAGENT	LOT #	BRAND
NaOH	157791	Fisher
H2SO4	4603899	Ricca
Sodium Sulfate	158459	Fisher
Glass Wool	09012-2	LAB
Filter Paper		
pH strips		

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

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GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Method Blank Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5333-MB1	GH105630.D	1	06/23/16	XPL	n/a	n/a	GGH5333

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC22613-1, JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6

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	118%	56-145%

Method Blank Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5333-MB2	GH105641.D	1	06/23/16	XPL	n/a	n/a	GGH5333

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC22613-7, JC22613-8

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	113%	56-145%

Blank Spike Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5333-BS	GH105631.D	1	06/23/16	XPL	n/a	n/a	GGH5333

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC22613-1, JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
64-17-5	Ethanol	5000	5590	112	74-123
78-83-1	Isobutyl Alcohol	5000	5870	117	70-124
67-63-0	Isopropyl Alcohol	5000	5710	114	76-121
71-23-8	n-Propyl Alcohol	5000	5520	110	73-122
71-36-3	n-Butyl Alcohol	5000	5690	114	67-116
78-92-2	sec-Butyl Alcohol	5000	5680	114	74-118
67-56-1	Methanol	5000	4430	89	67-121

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	121%	56-145%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC22613-1MS	GH105633.D	1	06/23/16	XPL	n/a	n/a	GGH5333
JC22613-1MSD	GH105634.D	1	06/23/16	XPL	n/a	n/a	GGH5333
JC22613-1	GH105632.D	1	06/23/16	XPL	n/a	n/a	GGH5333

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC22613-1, JC22613-2, JC22613-3, JC22613-4, JC22613-5, JC22613-6, JC22613-7, JC22613-8

CAS No.	Compound	JC22613-1 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	5780	116	5000	5900	118	2	58-145/27
78-83-1	Isobutyl Alcohol	ND		5000	6200	124	5000	6690	134* [a]	8	69-131/25
67-63-0	Isopropyl Alcohol	ND		5000	5610	112	5000	5870	117	5	70-133/28
71-23-8	n-Propyl Alcohol	ND		5000	6130	123	5000	6390	128	4	66-137/29
71-36-3	n-Butyl Alcohol	ND		5000	5970	119	5000	6270	125	5	63-131/25
78-92-2	sec-Butyl Alcohol	ND		5000	5960	119	5000	6360	127	6	64-136/25
67-56-1	Methanol	ND		5000	5310	106	5000	5170	103	3	48-148/34

CAS No.	Surrogate Recoveries	MS	MSD	JC22613-1	Limits
111-27-3	Hexanol	98%	115%	78%	56-145%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: JC22613
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]
JC22613-1	GH105632.D	78
JC22613-2	GH105635.D	102
JC22613-3	GH105636.D	107
JC22613-4	GH105637.D	107
JC22613-5	GH105638.D	110
JC22613-6	GH105639.D	101
JC22613-7	GH105642.D	102
JC22613-8	GH105643.D	99
GGH5333-BS	GH105631.D	121
GGH5333-MB1	GH105630.D	118
GGH5333-MB2	GH105641.D	113
JC22613-1MS	GH105633.D	98
JC22613-1MSD	GH105634.D	115

Surrogate Compounds	Recovery Limits
S1 = Hexanol	56-145%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5333-CC5288	**Injection Date:**	06/23/16
Lab File ID:	GH105629.D	**Injection Time:**	14:19
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] **RT**
Check Std	5.57

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GGH5333-MB1	GH105630.D	06/23/16	14:35	5.57
GGH5333-BS	GH105631.D	06/23/16	14:50	5.57
JC22613-1	GH105632.D	06/23/16	15:06	5.57
JC22613-1MS	GH105633.D	06/23/16	15:22	5.57
JC22613-1MSD	GH105634.D	06/23/16	15:38	5.57
JC22613-2	GH105635.D	06/23/16	15:53	5.57
JC22613-3	GH105636.D	06/23/16	16:09	5.57
JC22613-4	GH105637.D	06/23/16	16:25	5.57
JC22613-5	GH105638.D	06/23/16	16:41	5.57
JC22613-6	GH105639.D	06/23/16	16:56	5.57

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5333-CC5288	**Injection Date:**	06/23/16
Lab File ID:	GH105640.D	**Injection Time:**	17:12
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] **RT**
Check Std	5.57

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GGH5333-MB2	GH105641.D	06/23/16	17:28	5.56
JC22613-7	GH105642.D	06/23/16	17:44	5.57
JC22613-8	GH105643.D	06/23/16	17:59	5.57

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: JC22613
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

Initial Calibration Verification

Job Number: JC22613 **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: JC22613 **Sample:** GGH5333-CC5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105629.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105629.D                    Vial: 92
Acq On    : 23 Jun 2016   2:19 pm                       Operator: XULIU
Sample    : CC5288-5000                                Inst     : GCGH
Misc      : GC48660,GGH5333,5,,,,1                      Multiplr: 1.00
IntFile   : AUTOINT1.E

Method       : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	15.459	16.367	-5.9	106	0.00	1.09- 1.15
2	Ethanol	18.950	21.876	-15.4	110	0.00	1.41- 1.50
3	Tert-Butyl Alcohol	28.335	30.986	-9.4	108	0.00	1.96- 2.08
4	1-Propanol	24.326	29.172	-19.9	114	0.00	2.45- 2.57
5	2-Propanol	19.931	22.524	-13.0	107	0.00	1.71- 1.80
6	Isobutanol	28.771	33.001	-14.7	112	0.00	3.26- 3.36
7	1-Butanol	28.561	31.167	-9.1	109	0.00	3.72- 3.78
8	2-Butanol	25.634	28.482	-11.1	110	0.00	2.88- 3.00
9 S	Hexanol	67.597	57.819	14.5	84	0.00	5.54- 5.60

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH105020.D MGH5288A.M Mon Jun 27 14:43:38 2016 GCGH

8.6.3

8

Continuing Calibration Summary

Job Number: JC22613 **Sample:** GGH5333-CC5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105640.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105640.D                    Vial: 95
Acq On    : 23 Jun 2016   5:12 pm                       Operator: XULIU
Sample    : CC5288-10000                               Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                      Multiplr: 1.00
IntFile   : AUTOINT1.E

Method       : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	15.459	14.443	6.6	92	0.00	1.09- 1.15
2	Ethanol	18.950	18.851	0.5	93	0.00	1.41- 1.50
3	Tert-Butyl Alcohol	28.335	28.288	0.2	96	0.02	1.96- 2.08
4	1-Propanol	24.326	25.267	-3.9	98	0.01	2.45- 2.57
5	2-Propanol	19.931	19.620	1.6	92	0.01	1.71- 1.80
6	Isobutanol	28.771	29.127	-1.2	97	0.01	3.27- 3.36
7	1-Butanol	28.561	27.558	3.5	95	0.00	3.72- 3.78
8	2-Butanol	25.634	25.629	0.0	98	0.01	2.88- 3.00
9 S	Hexanol	67.597	76.464	-13.1	108	0.00	5.54- 5.60

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH105021.D MGH5288A.M Mon Jun 27 14:44:28 2016 GCGH

8.6.4

8

Continuing Calibration Summary

Job Number: JC22613 **Sample:** GGH5333-CC5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105644.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105644.D                    Vial: 90
Acq On    : 23 Jun 2016   6:15 pm                     Operator: XULIU
Sample    : CC5288-5000                              Inst     : GCGH
Misc      : GC48660,GGH5333,5,,,,1                    Multiplr: 1.00
IntFile   : AUTOINT1.E

Method       : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	15.459	17.308	-12.0	112	0.00	1.09- 1.15
2	Ethanol	18.950	21.822	-15.2	110	0.00	1.41- 1.50
3	Tert-Butyl Alcohol	28.335	31.615	-11.6	111	0.00	1.95- 2.07
4	1-Propanol	24.326	28.059	-15.3	109	0.00	2.45- 2.57
5	2-Propanol	19.931	22.922	-15.0	109	0.00	1.71- 1.80
6	Isobutanol	28.771	31.326	-8.9	106	0.00	3.26- 3.35
7	1-Butanol	28.561	30.868	-8.1	108	0.00	3.72- 3.78
8	2-Butanol	25.634	28.232	-10.1	109	0.00	2.88- 3.00
9 S	Hexanol	67.597	64.326	4.8	93	0.00	5.54- 5.60

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH105020.D MGH5288A.M Mon Jun 27 14:42:47 2016 GCGH

8.6.5

8

GC Volatiles

Raw Data

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105632.D                    Vial: 1
Acq On    : 23 Jun 2016   3:06 pm                       Operator: XULIU
Sample    : JC22613-1                                   Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                      Multiplr: 1.00
IntFile   : AUTOINT1.E
Quant Time: Jun 24 15:23 2016  Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj.  : 2ul
Signal Phase : ZB-624
Signal Info  : 30mx0.53mmx3um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 9) S   Hexanol                  5.57         264452 3912.199 PPB
Spiked Amount   5000.000                 Recovery      =   78.24%

Target Compounds
```

9.1.1

9

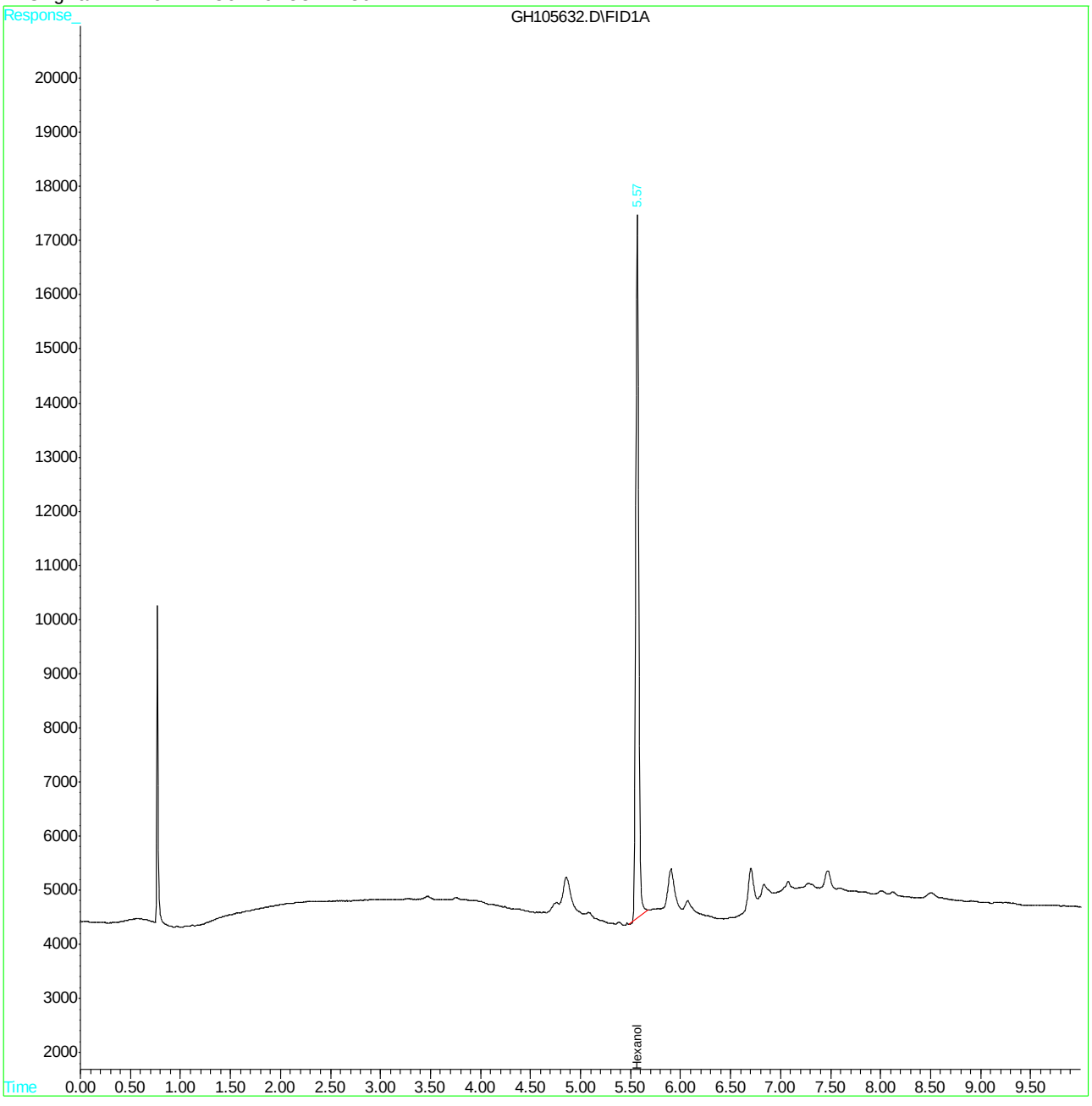
```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window                              (m)=manual int.
GH105632.D  MGH5288A.M      Mon Jun 27 14:38:00 2016      GCGH
```

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105632.D Vial: 1
Acq On : 23 Jun 2016 3:06 pm Operator: XULIU
Sample : JC22613-1 Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 24 15:23 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105635.D                    Vial: 4
Acq On    : 23 Jun 2016   3:53 pm                       Operator: XULIU
Sample    : JC22613-2                                   Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                      Multiplr: 1.00
IntFile   : AUTOINT1.E
Quant Time: Jun 27 14:38 2016  Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj.  : 2ul
Signal Phase : ZB-624
Signal Info  : 30mx0.53mmx3um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 9) S   Hexanol                  5.57         344230 5092.411 PPB
Spiked Amount   5000.000                Recovery      =  101.85%

Target Compounds
```

9.1.2

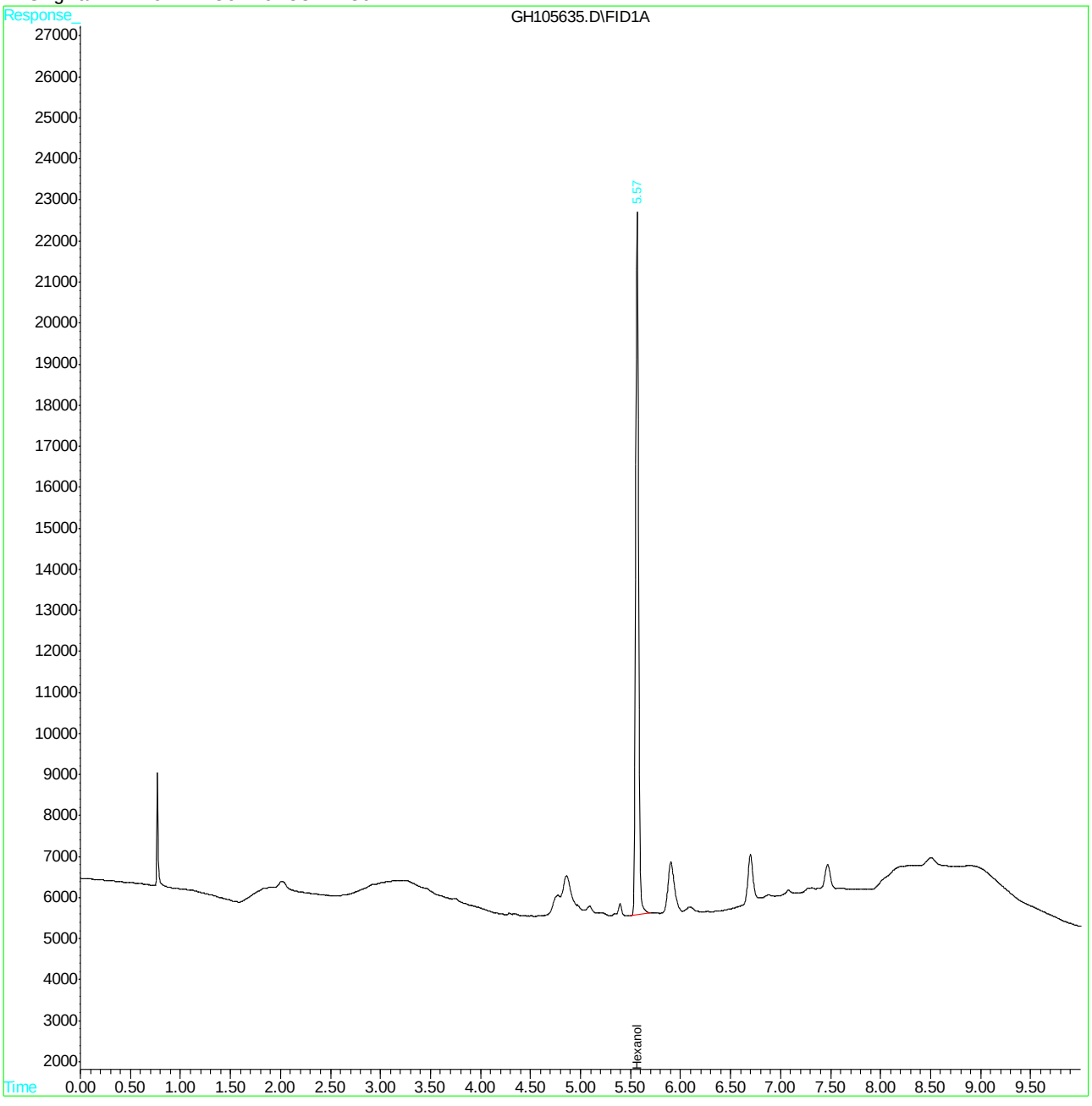
9

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105635.D Vial: 4
Acq On : 23 Jun 2016 3:53 pm Operator: XULIU
Sample : JC22613-2 Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 27 14:38 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105636.D                    Vial: 5
Acq On    : 23 Jun 2016   4:09 pm                       Operator: XULIU
Sample    : JC22613-3                                   Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                      Multiplr: 1.00
IntFile   : AUTOINT1.E
Quant Time: Jun 24 15:24 2016  Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj.  : 2ul
Signal Phase : ZB-624
Signal Info  : 30mx0.53mmx3um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 9) S   Hexanol                  5.57         360777 5337.196 PPB
Spiked Amount   5000.000                Recovery      =  106.74%

Target Compounds
```

9.1.3

9

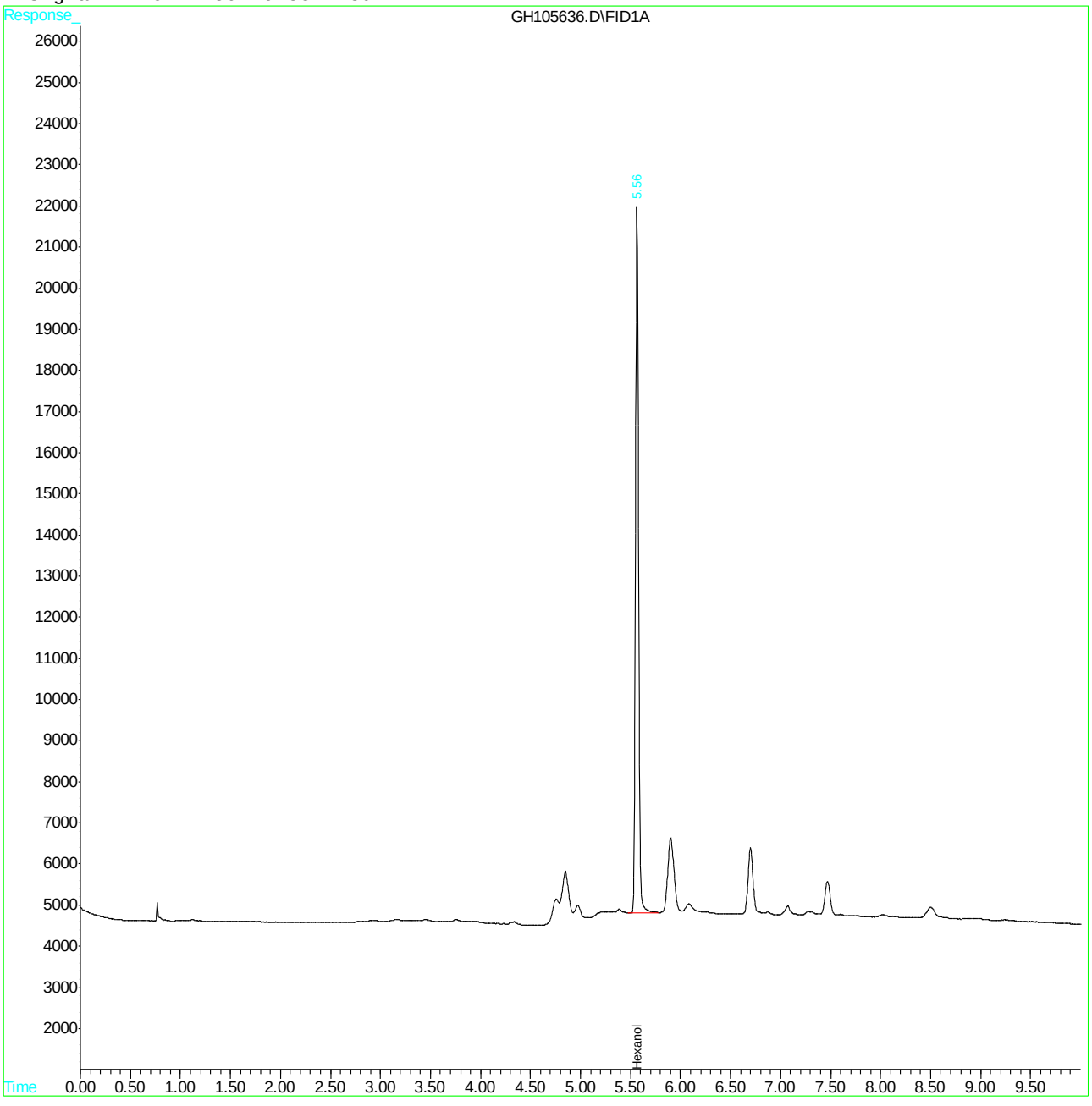
SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105636.D Vial: 5
Acq On : 23 Jun 2016 4:09 pm Operator: XULIU
Sample : JC22613-3 Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 24 15:24 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105637.D                    Vial: 6
Acq On    : 23 Jun 2016   4:25 pm                       Operator: XULIU
Sample    : JC22613-4                                   Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                      Multiplr: 1.00
IntFile   : AUTOINT1.E
Quant Time: Jun 23 16:35 2016  Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj.  : 2ul
Signal Phase : ZB-624
Signal Info  : 30mx0.53mmx3um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 9) S   Hexanol                  5.57         360373 5331.217 PPB
Spiked Amount   5000.000                 Recovery      =  106.62%

Target Compounds
```

9.1.4

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window                              (m)=manual int.
GH105637.D  MGH5288A.M      Mon Jun 27 14:39:08 2016      GCGH
```

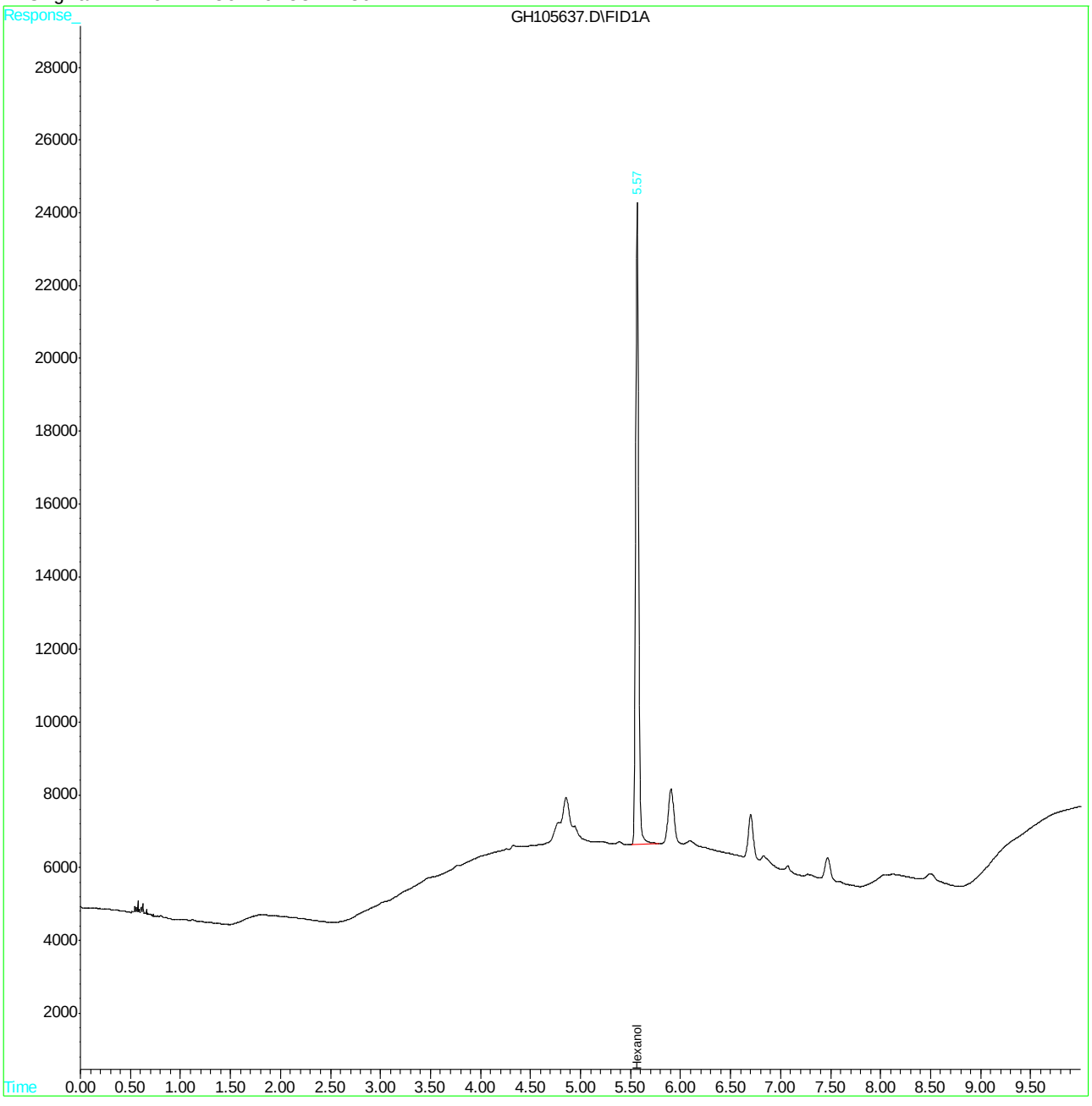

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105637.D Vial: 6
Acq On : 23 Jun 2016 4:25 pm Operator: XULIU
Sample : JC22613-4 Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 23 16:35 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105638.D                    Vial: 7
Acq On    : 23 Jun 2016   4:41 pm                       Operator: XULIU
Sample    : JC22613-5                                   Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                      Multiplr: 1.00
IntFile   : AUTOINT1.E
Quant Time: Jun 24 15:24 2016  Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj.  : 2ul
Signal Phase : ZB-624
Signal Info  : 30mx0.53mmx3um
```

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
9) S Hexanol	5.57	371146	5490.598	PPB
Spiked Amount 5000.000		Recovery	= 109.81%	
Target Compounds				

(f)=RT Delta > 1/2 Window (m)=manual int.

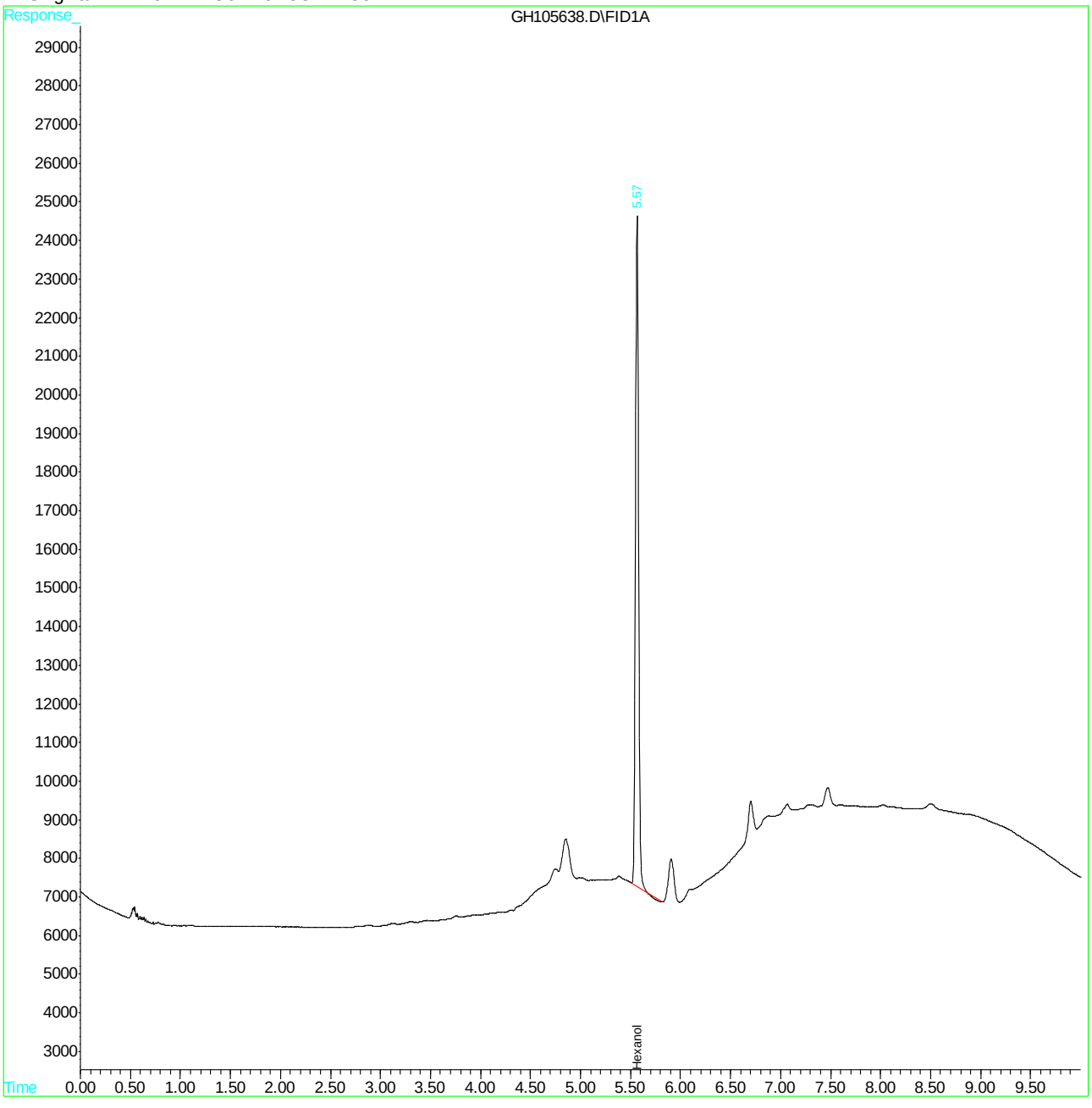
SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105638.D Vial: 7
Acq On : 23 Jun 2016 4:41 pm Operator: XULIU
Sample : JC22613-5 Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 24 15:24 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105639.D                    Vial: 8
Acq On    : 23 Jun 2016   4:56 pm                       Operator: XULIU
Sample    : JC22613-6                                   Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                      Multiplr: 1.00
IntFile   : AUTOINT1.E
Quant Time: Jun 23 17:06 2016  Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj.  : 2ul
Signal Phase : ZB-624
Signal Info  : 30mx0.53mmx3um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 9) S   Hexanol                  5.57         341916 5058.169 PPB
Spiked Amount   5000.000                 Recovery      =  101.16%

Target Compounds
```

9.1.6

6

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window                              (m)=manual int.
GH105639.D  MGH5288A.M      Mon Jun 27 14:39:34 2016      GCGH
```

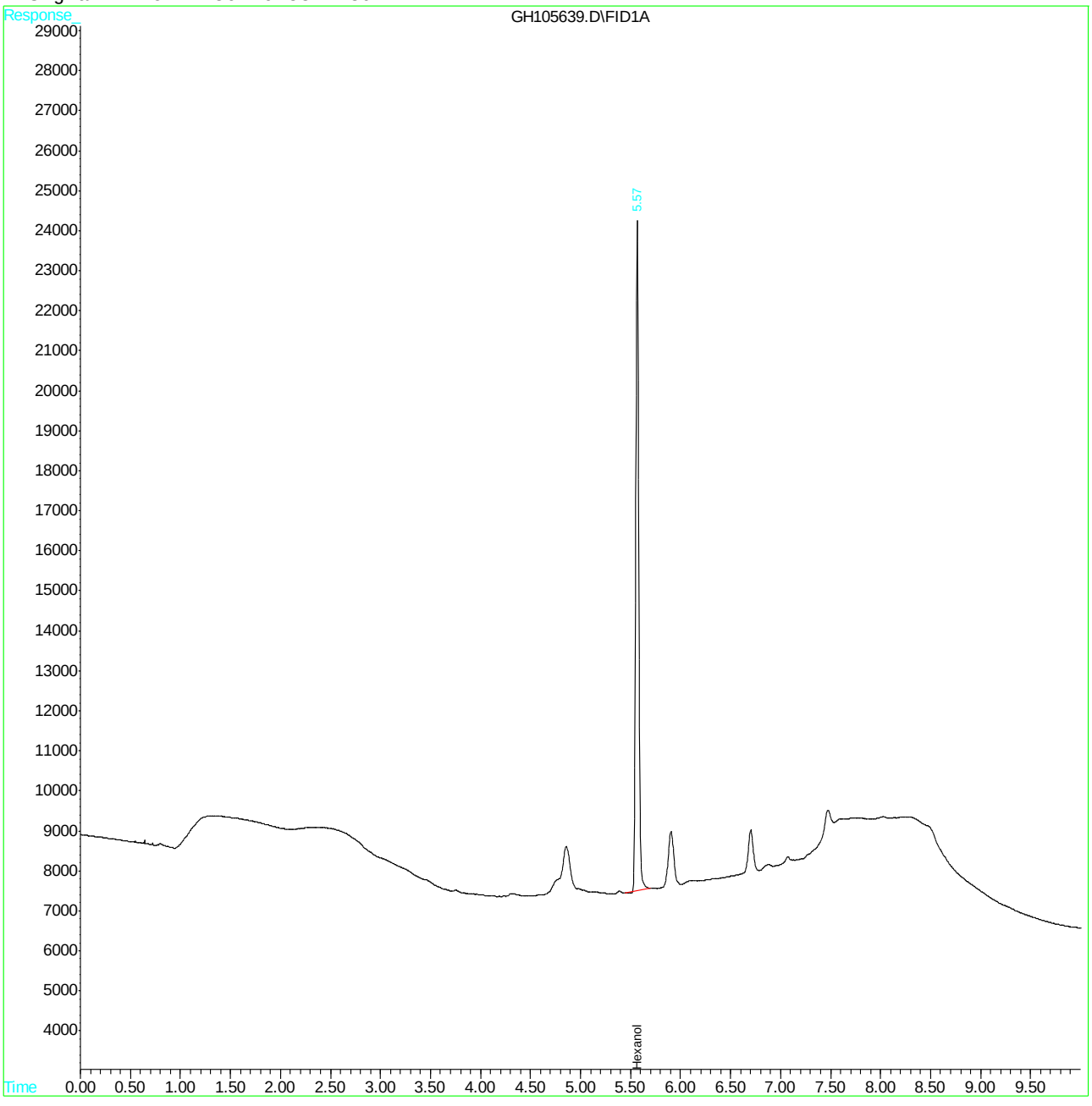

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105639.D Vial: 8
Acq On : 23 Jun 2016 4:56 pm Operator: XULIU
Sample : JC22613-6 Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 23 17:06 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105642.D                    Vial: 10
Acq On    : 23 Jun 2016   5:44 pm                       Operator: XULIU
Sample    : JC22613-7                                   Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                      Multiplr: 1.00
IntFile   : AUTOINT1.E
Quant Time: Jun 24 15:25 2016  Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj.  : 2ul
Signal Phase : ZB-624
Signal Info  : 30mx0.53mmx3um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 9) S   Hexanol                  5.57         345544 5111.851 PPB
Spiked Amount   5000.000                Recovery      =  102.24%

Target Compounds
```

9.1.7

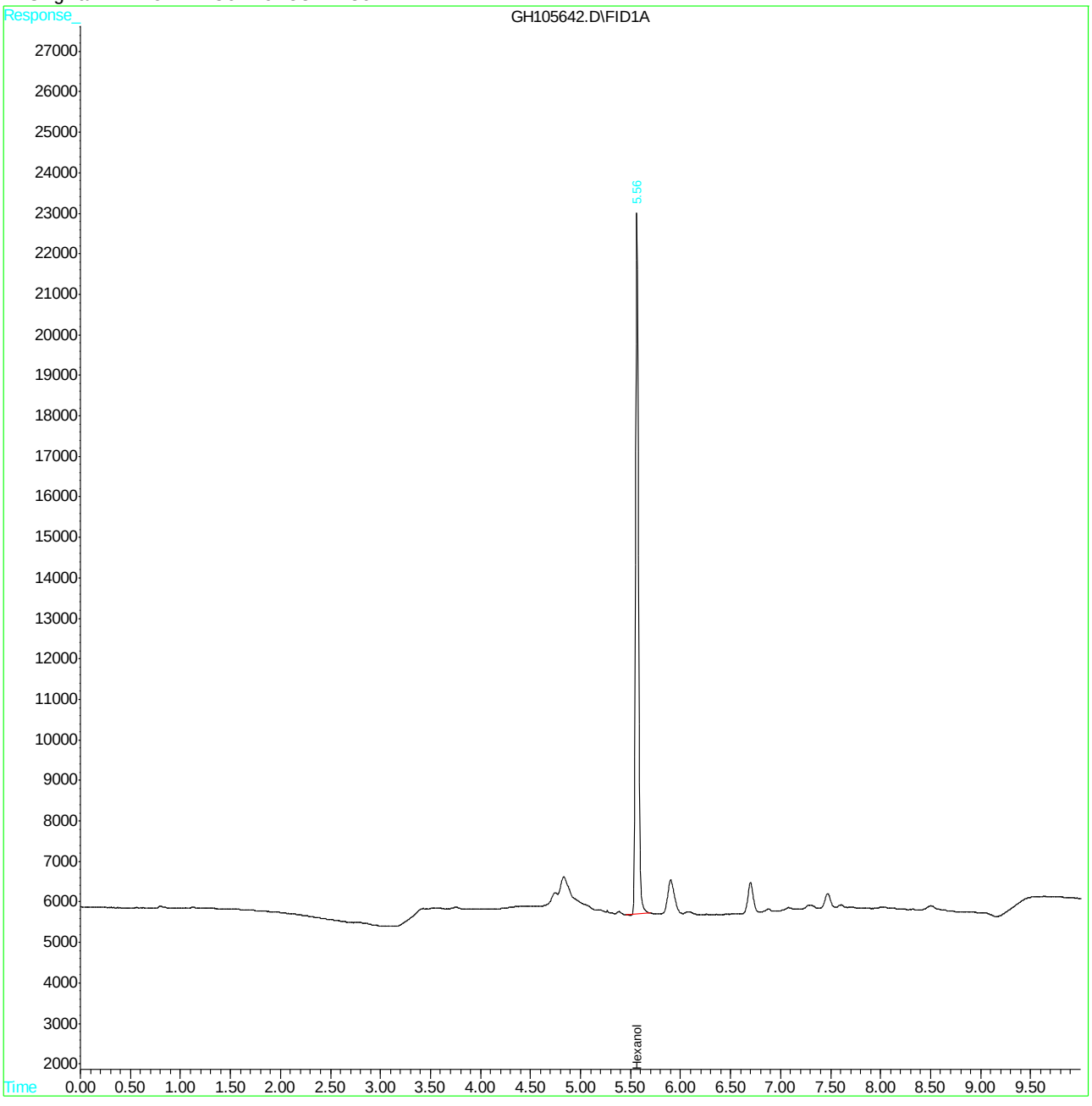
9

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105642.D Vial: 10
Acq On : 23 Jun 2016 5:44 pm Operator: XULIU
Sample : JC22613-7 Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 24 15:25 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105643.D                    Vial: 11
Acq On    : 23 Jun 2016   5:59 pm                       Operator: XULIU
Sample    : JC22613-8                                   Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                      Multiplr: 1.00
IntFile   : AUTOINT1.E
Quant Time: Jun 24 15:25 2016  Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj.  : 2ul
Signal Phase : ZB-624
Signal Info  : 30mx0.53mmx3um
```

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
9) S Hexanol	5.57	333655	4935.969	PPB
Spiked Amount 5000.000		Recovery	= 98.72%	
Target Compounds				

9.1.8

9

(f)=RT Delta > 1/2 Window (m)=manual int.

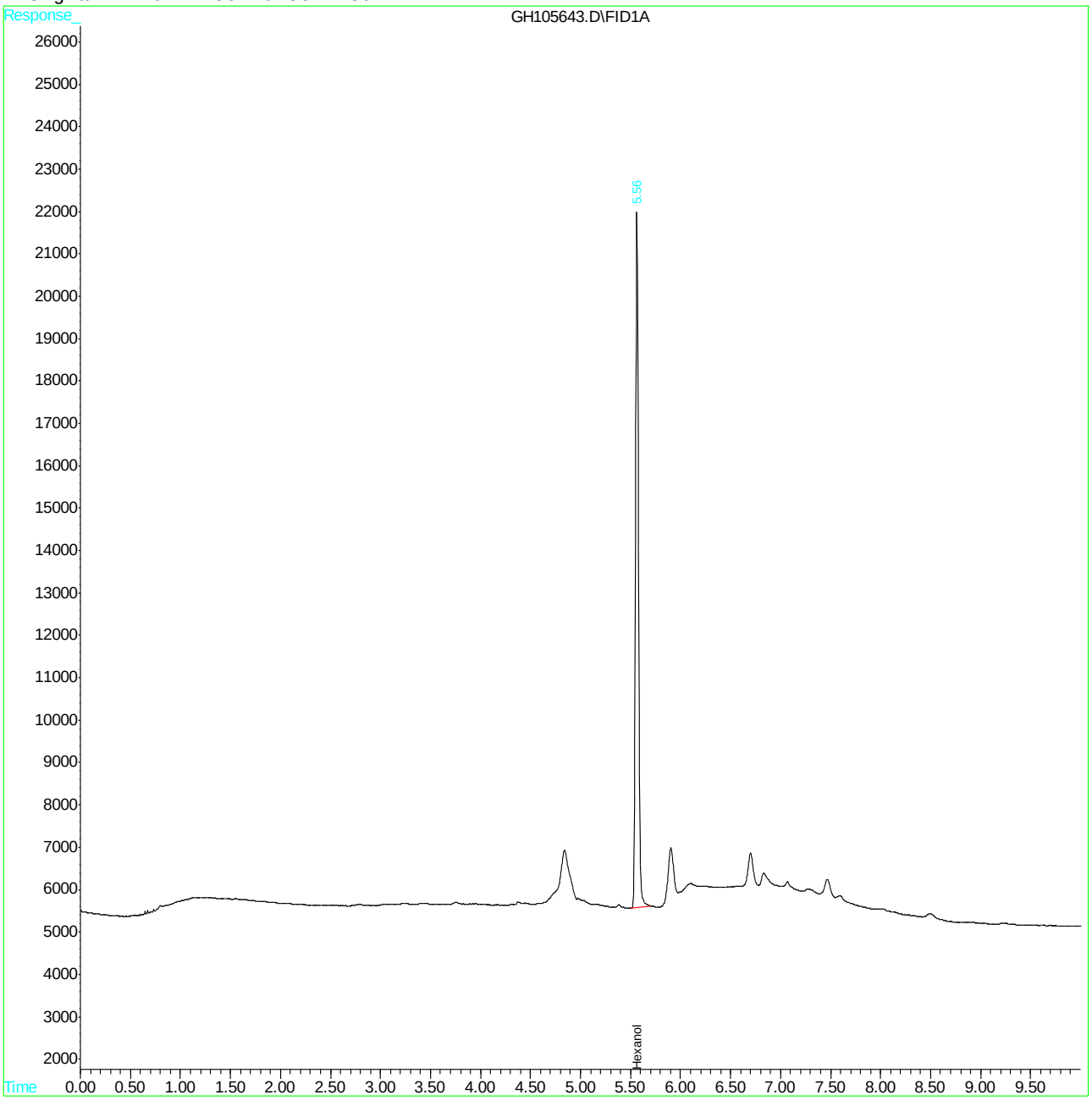
SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105643.D Vial: 11
Acq On : 23 Jun 2016 5:59 pm Operator: XULIU
Sample : JC22613-8 Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 24 15:25 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105630.D                    Vial: 93
Acq On    : 23 Jun 2016   2:35 pm                       Operator: XULIU
Sample    : MB1                                         Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                      Multiplr: 1.00
IntFile   : AUTOINT1.E
Quant Time: Jun 24 15:22 2016  Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj.  : 2ul
Signal Phase : ZB-624
Signal Info  : 30mx0.53mmx3um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 9) S   Hexanol                  5.57         398412 5893.960 PPB
Spiked Amount   5000.000                Recovery      =  117.88%

Target Compounds
```

9.2.1

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window                              (m)=manual int.
GH105630.D  MGH5288A.M      Mon Jun 27 14:37:28 2016      GCGH
```

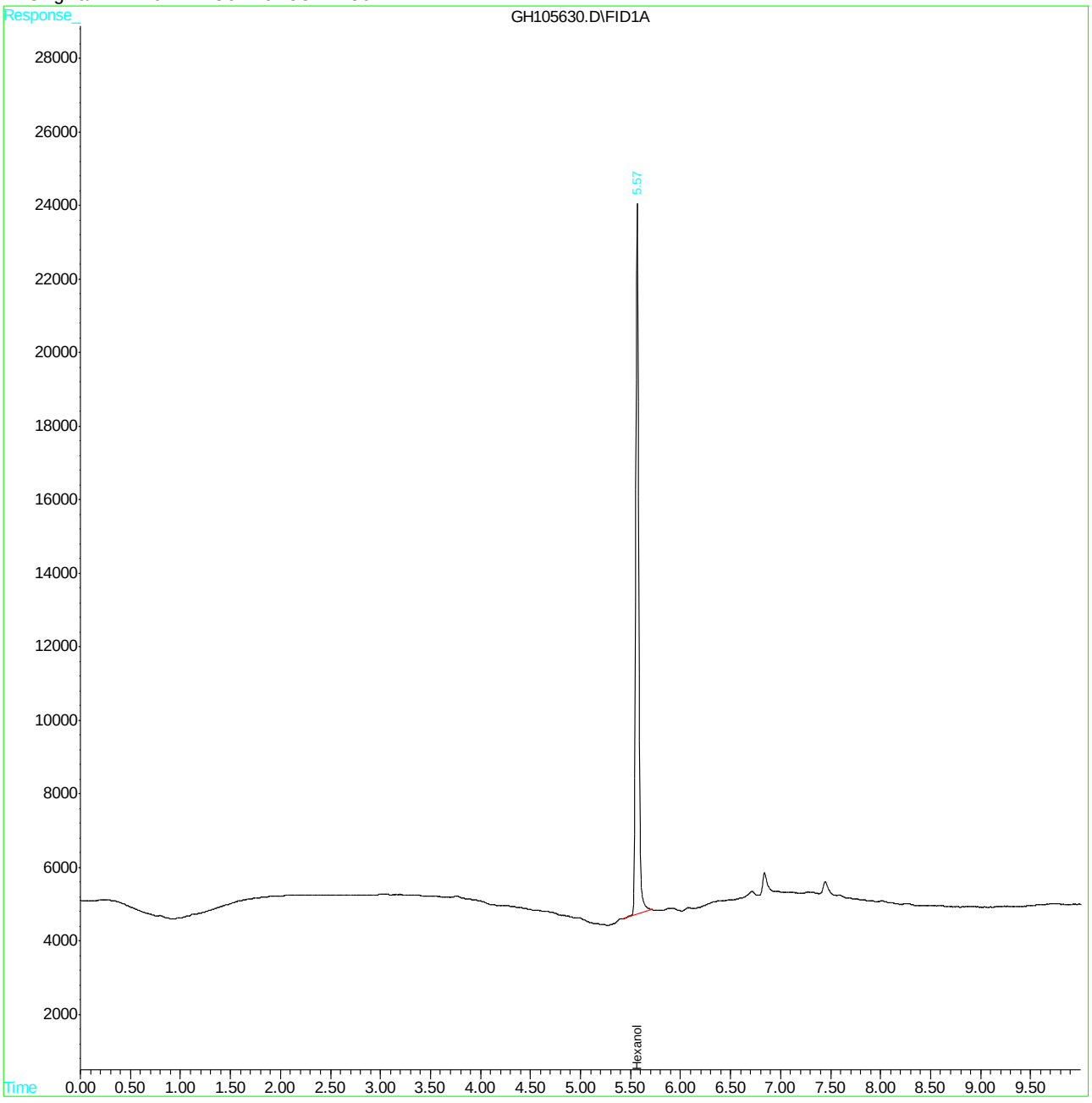

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105630.D Vial: 93
Acq On : 23 Jun 2016 2:35 pm Operator: XULIU
Sample : MB1 Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 24 15:22 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105641.D                    Vial: 91
Acq On    : 23 Jun 2016   5:28 pm                       Operator: XULIU
Sample    : MB2                                         Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                      Multiplr: 1.00
IntFile   : AUTOINT1.E
Quant Time: Jun 24 15:22 2016  Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj.  : 2ul
Signal Phase : ZB-624
Signal Info  : 30mx0.53mmx3um

     Compound                    R.T.       Response    Conc Units
---------------------------------------------------------------------------

System Monitoring Compounds
 9) S   Hexanol                  5.56         380992 5636.248 PPB
Spiked Amount   5000.000                Recovery      =  112.72%

Target Compounds
```

9.2.2

9

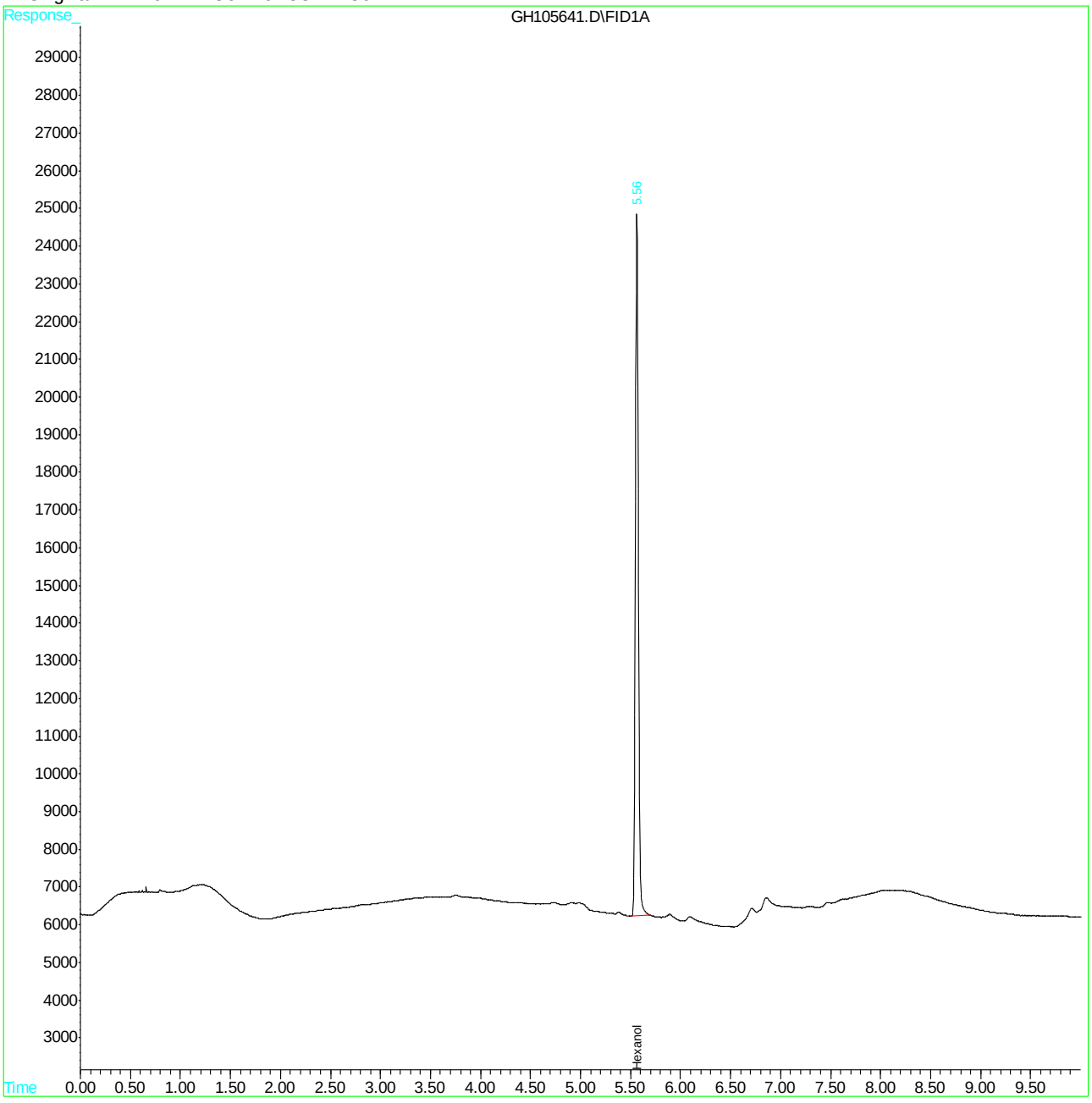
SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105641.D Vial: 91
Acq On : 23 Jun 2016 5:28 pm Operator: XULIU
Sample : MB2 Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 24 15:22 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105631.D Vial: 94
Acq On : 23 Jun 2016 2:50 pm Operator: XULIU
Sample : BS Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 24 15:29 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S Hexanol	5.57	410213	6068.543 PPB
Spiked Amount 5000.000		Recovery =	121.37%
Target Compounds			
1) Methanol	1.12	68413	4425.518 PPB
2) Ethanol	1.45	106020	5594.639 PPB
3) Tert-Butyl Alcohol	2.02	158316	5587.331 PPB
4) 1-Propanol	2.51	134163	5515.175 PPB
5) 2-Propanol	1.75	113811	5710.217 PPB
6) Isobutanol	3.31	168816	5867.573 PPB
7) 1-Butanol	3.76	162421	5686.874 PPB
8) 2-Butanol	2.94	145510	5676.368 PPB

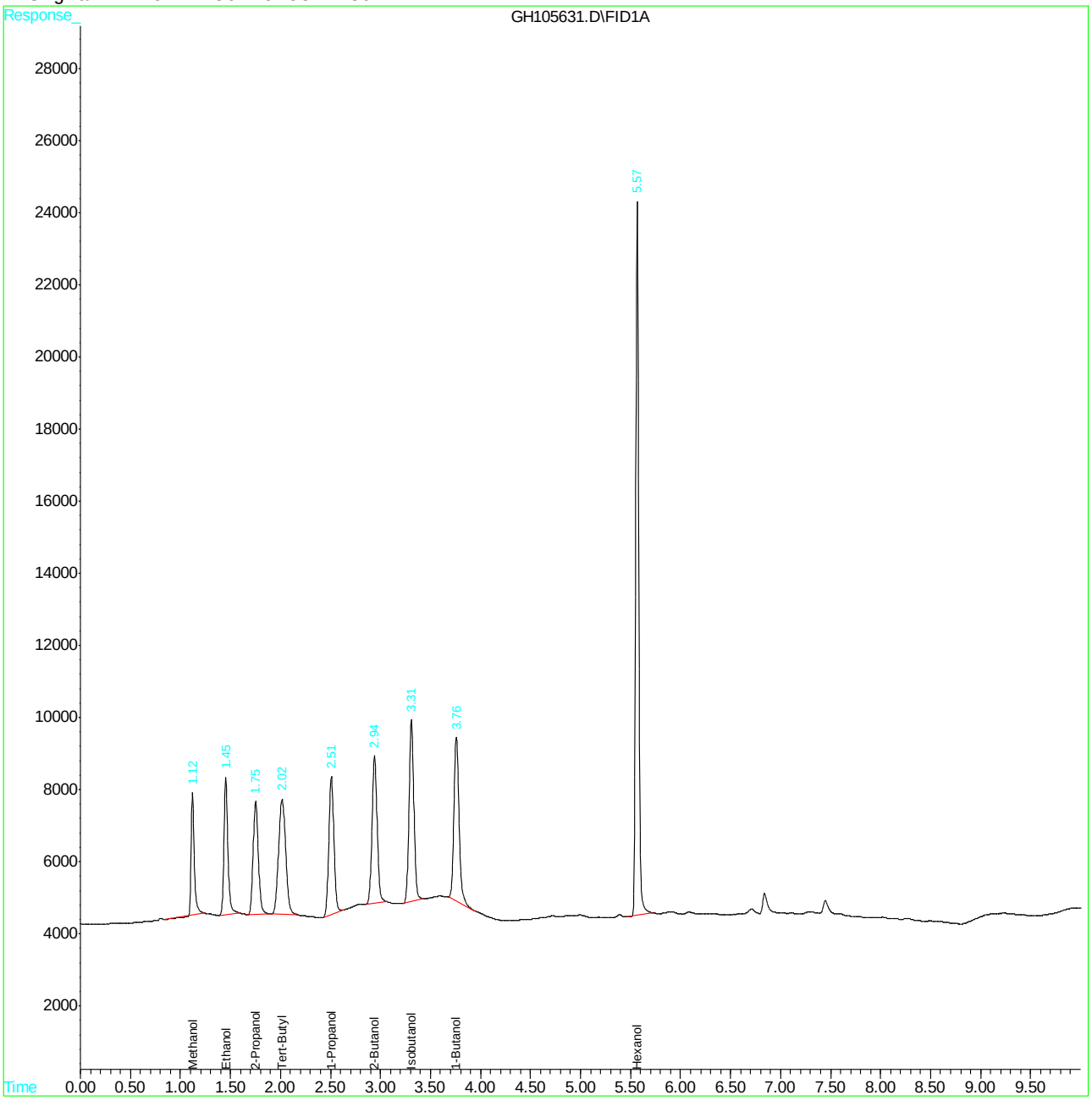
(f)=RT Delta > 1/2 Window (m)=manual int.
GH105631.D MGH5288A.M Mon Jun 27 14:37:41 2016 GCGH Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105631.D Vial: 94
Acq On : 23 Jun 2016 2:50 pm Operator: XULIU
Sample : BS Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 24 15:29 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105633.D                    Vial: 2
Acq On    : 23 Jun 2016   3:22 pm                      Operator: XULIU
Sample    : JC22613-1MS                                Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                     Multiplr: 1.00
IntFile   : AUTOINT1.E
Quant Time: Jun 24 15:29 2016  Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj.  : 2ul
Signal Phase : ZB-624
Signal Info  : 30mx0.53mmx3um
```

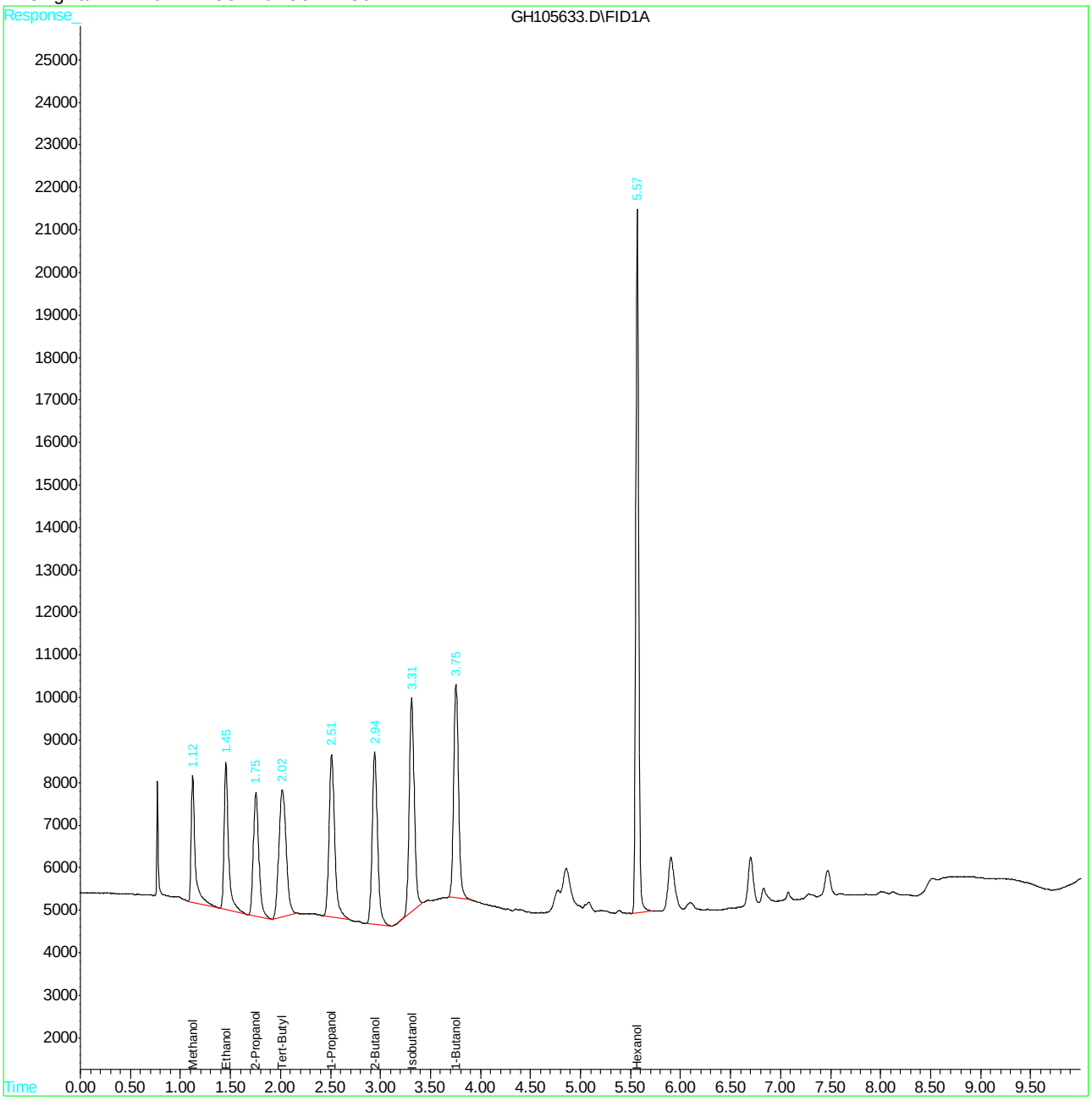
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
9) S Hexanol	5.57	329645	4876.651	PPB
Spiked Amount 5000.000		Recovery =	97.53%	
Target Compounds				
1) Methanol	1.12	82092	5310.415	PPB
2) Ethanol	1.46	109449	5775.594	PPB
3) Tert-Butyl Alcohol	2.02	151609	5350.641	PPB
4) 1-Propanol	2.51	149216	6133.982	PPB
5) 2-Propanol	1.76	111869	5612.794	PPB
6) Isobutanol	3.31	178433	6201.834	PPB
7) 1-Butanol	3.76	170593	5973.003	PPB
8) 2-Butanol	2.94	152731	5958.046	PPB

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105633.D Vial: 2
Acq On : 23 Jun 2016 3:22 pm Operator: XULIU
Sample : JC22613-1MS Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 24 15:29 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105634.D                    Vial: 3
Acq On    : 23 Jun 2016   3:38 pm                      Operator: XULIU
Sample    : JC22613-1MSD                               Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                     Multiplr: 1.00
IntFile   : AUTOINT1.E
Quant Time: Jun 24 15:30 2016  Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj.  : 2ul
Signal Phase : ZB-624
Signal Info  : 30mx0.53mmx3um
```

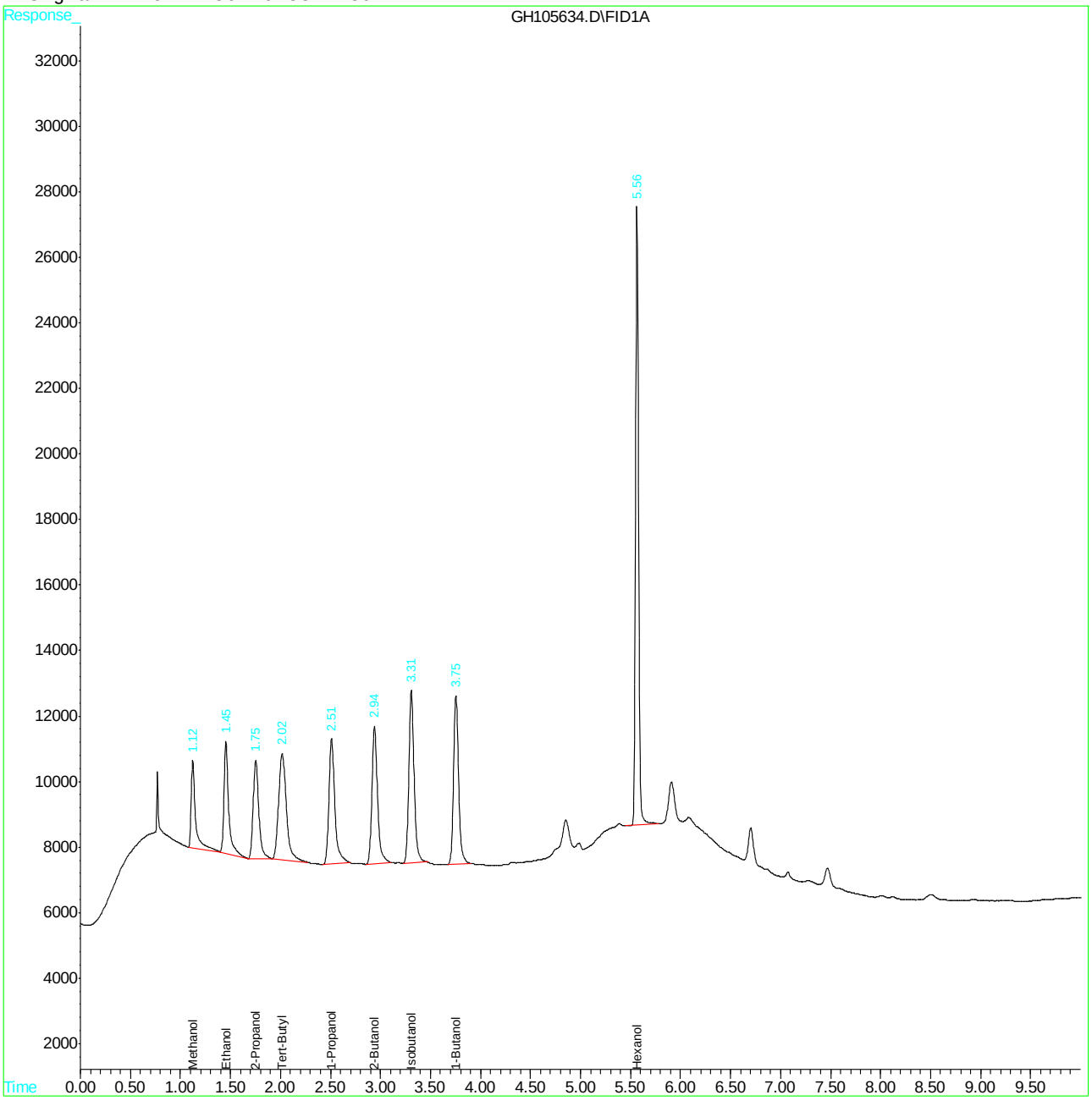
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S Hexanol	5.57	389756	5765.909 PPB
Spiked Amount 5000.000		Recovery =	115.32%
Target Compounds			
1) Methanol	1.12	79846	5165.102 PPB
2) Ethanol	1.46	111893	5904.604 PPB
3) Tert-Butyl Alcohol	2.02	174626	6162.950 PPB
4) 1-Propanol	2.51	155533	6393.635 PPB
5) 2-Propanol	1.75	117036	5872.064 PPB
6) Isobutanol	3.31	192524	6691.614 PPB
7) 1-Butanol	3.76	179004	6267.505 PPB
8) 2-Butanol	2.94	163080	6361.745 PPB

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105634.D Vial: 3
Acq On : 23 Jun 2016 3:38 pm Operator: XULIU
Sample : JC22613-1MSD Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 24 15:30 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



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.

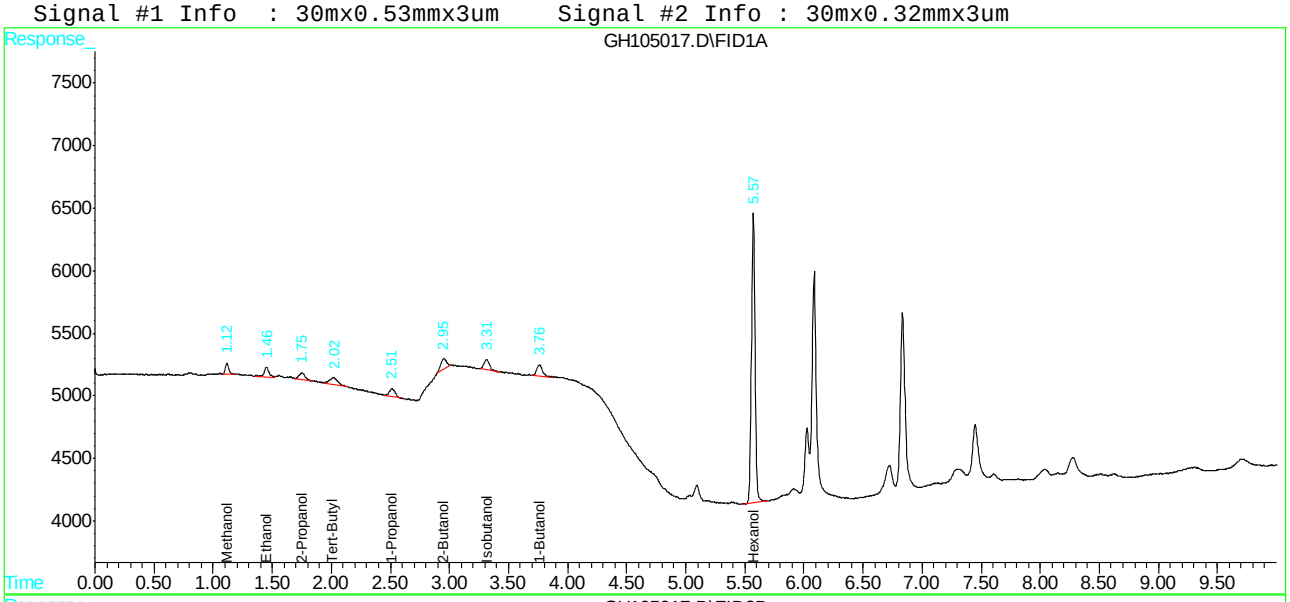
Quantitation Report (QT Reviewed)

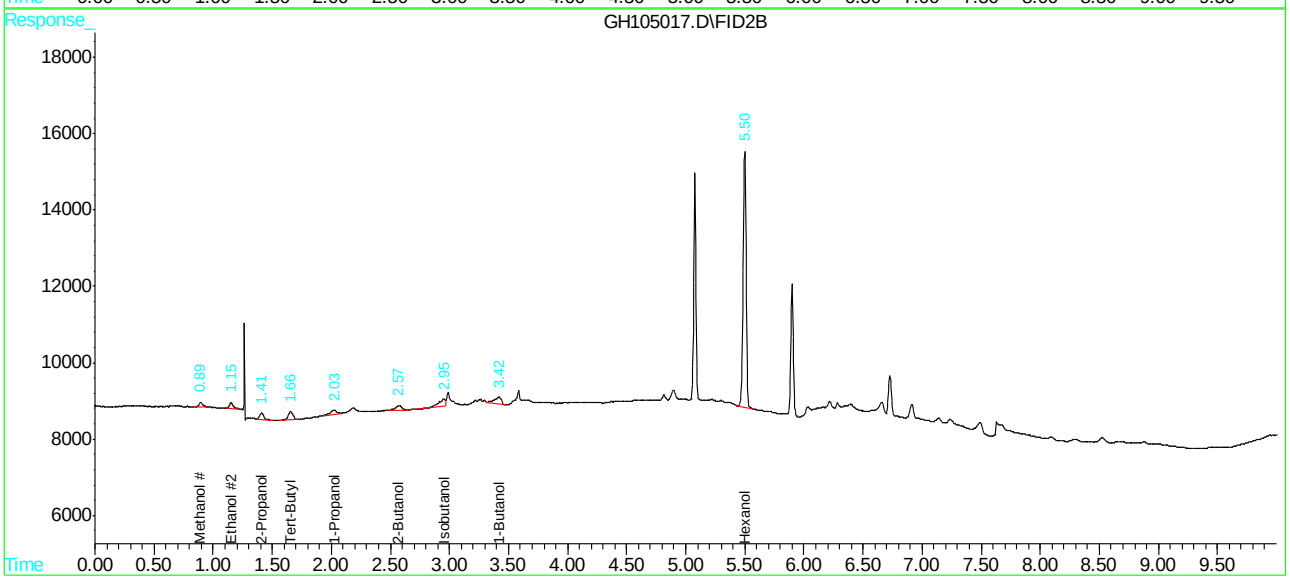
```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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
```





SGS ACCUTEST JC22613

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

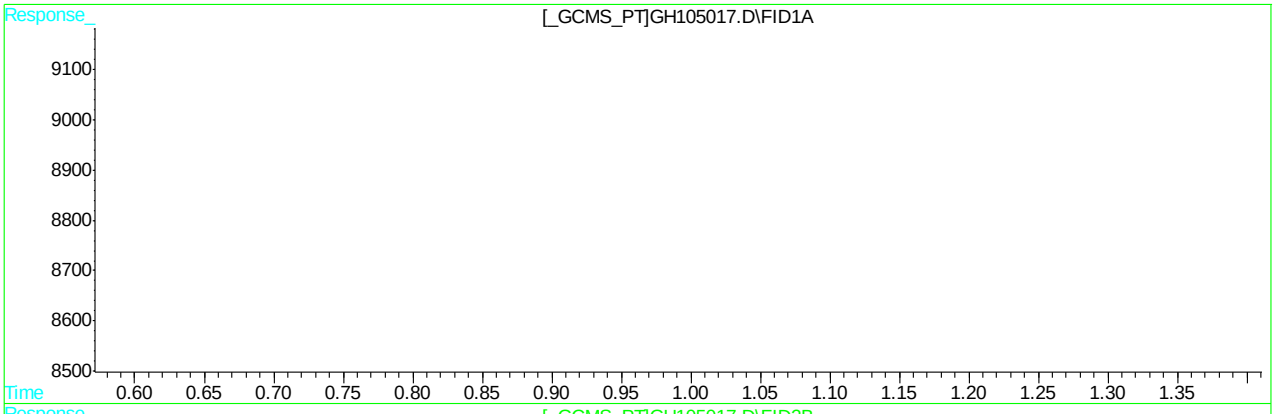
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methanol	67-56-1	2	0.89	Poor instrument integration
Ethanol	64-17-5	2	1.15	Poor instrument integration
n-Propyl Alcohol	71-23-8	2	2.03	Poor instrument integration
sec-Butyl Alcohol	78-92-2	2	2.57	Poor instrument integration
sec-Butyl Alcohol	78-92-2	1	2.95	Poor instrument integration
n-Butyl Alcohol	71-36-3	2	3.42	Poor instrument integration

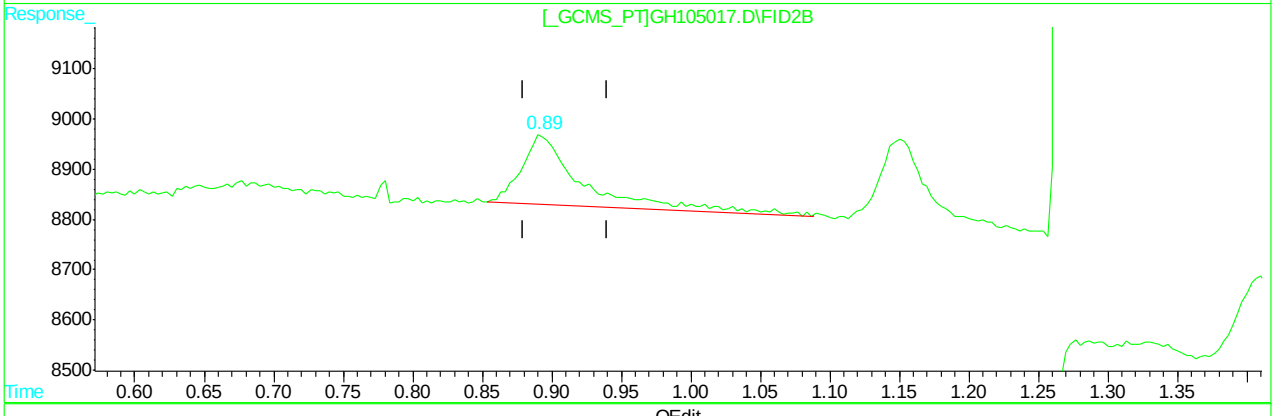
Quantitation Report (Qedit)

```
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

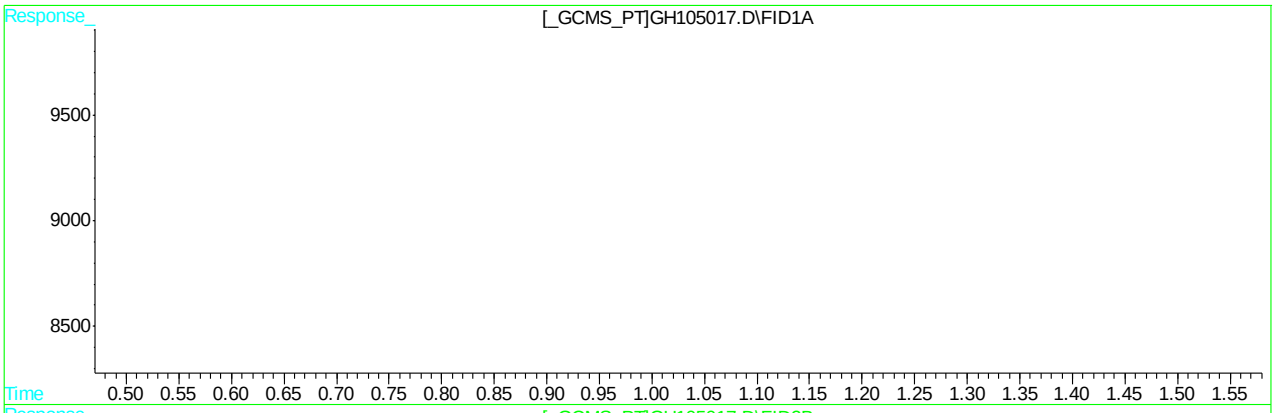
GH105017.D MGH5288.M Wed May 18 08:43:56 2016 GCGH

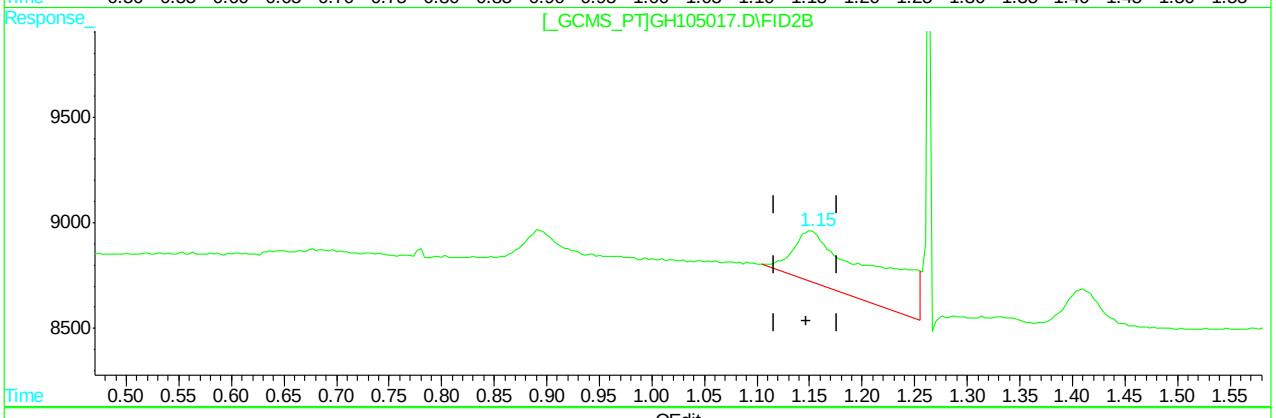
Quantitation Report (Qedit)

```
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

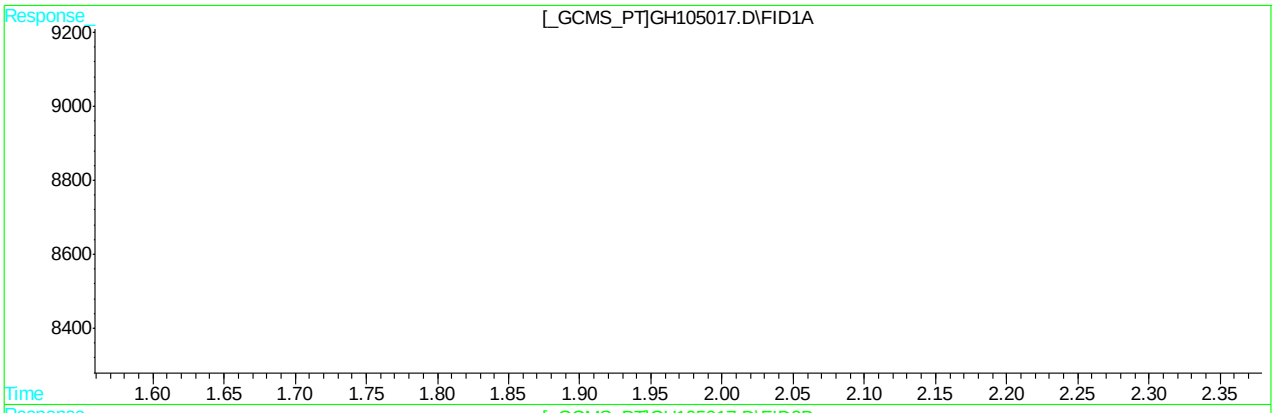
GH105017.D MGH5288.M Wed May 18 08:44:26 2016 GCGH

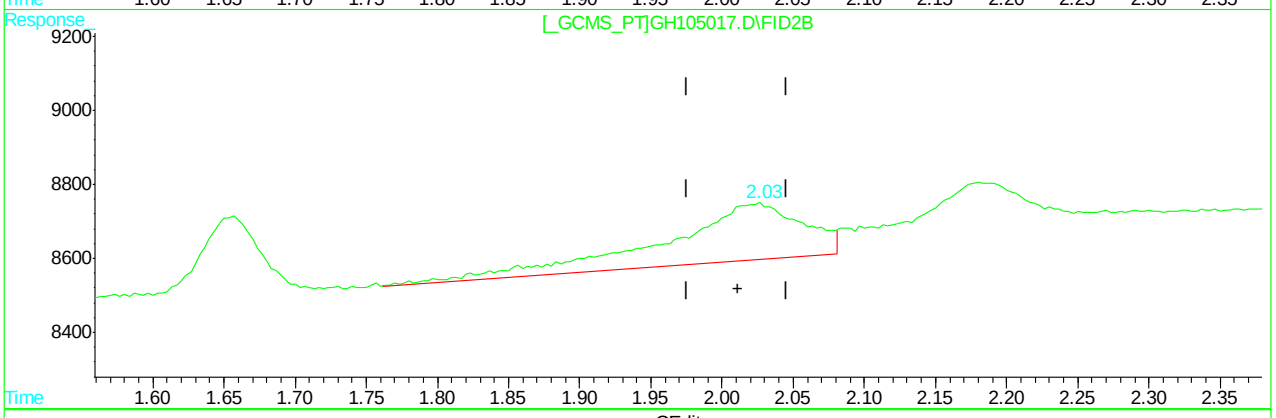
Quantitation Report (Qedit)

```
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

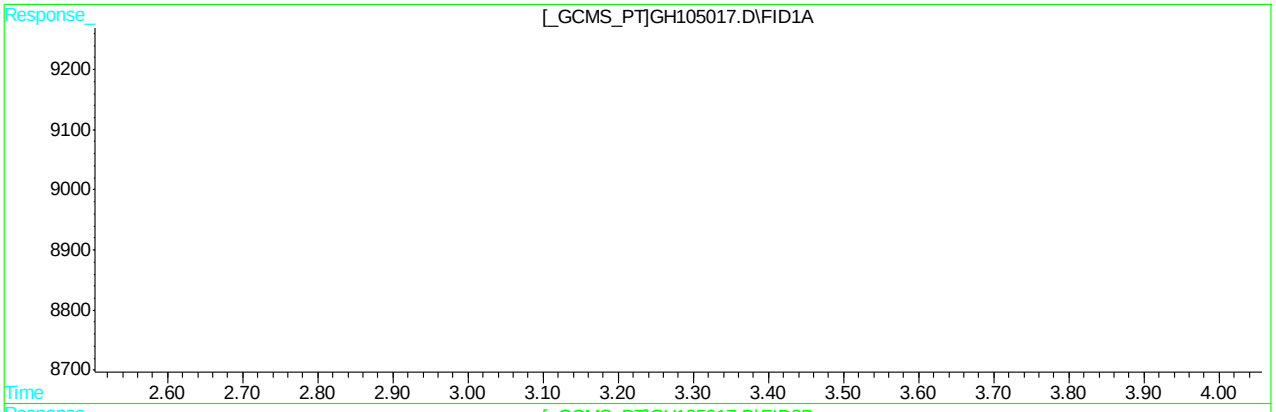
GH105017.D MGH5288.M Wed May 18 08:44:42 2016 GCGH

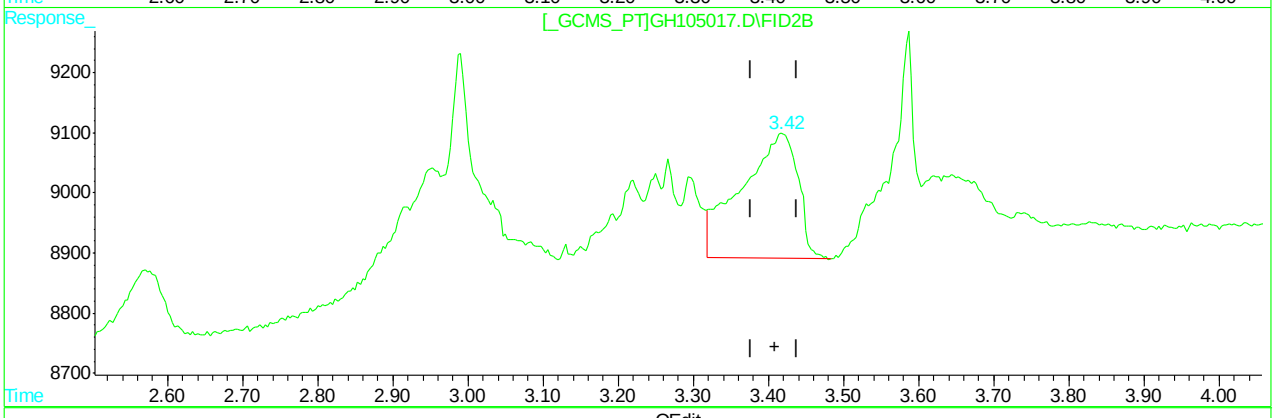
Quantitation Report (Qedit)

```
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

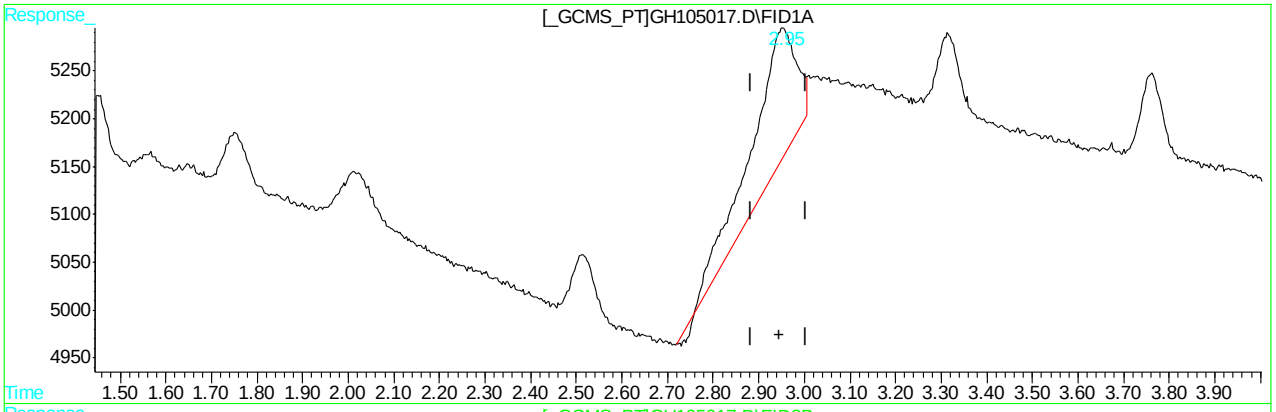
GH105017.D MGH5288.M Wed May 18 08:45:02 2016 GCGH

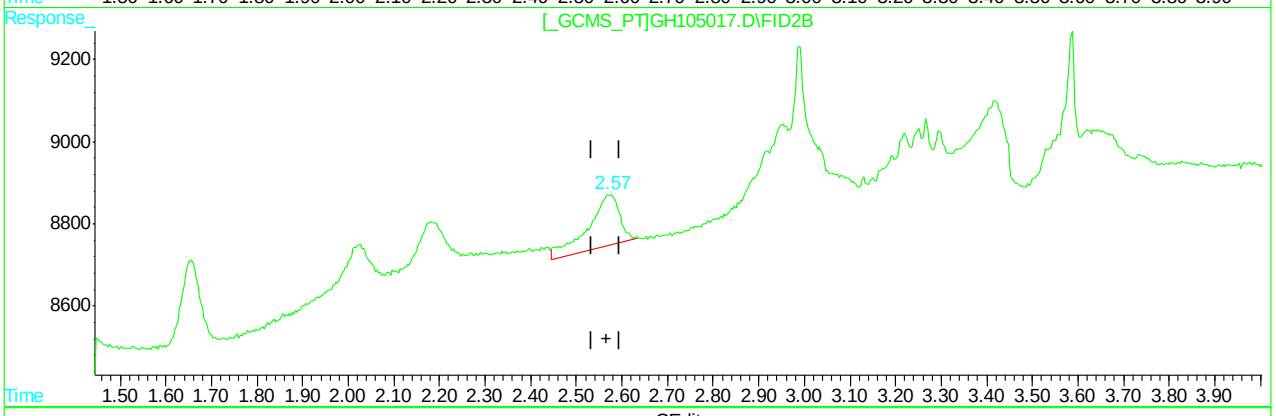
Quantitation Report (Qedit)

```
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

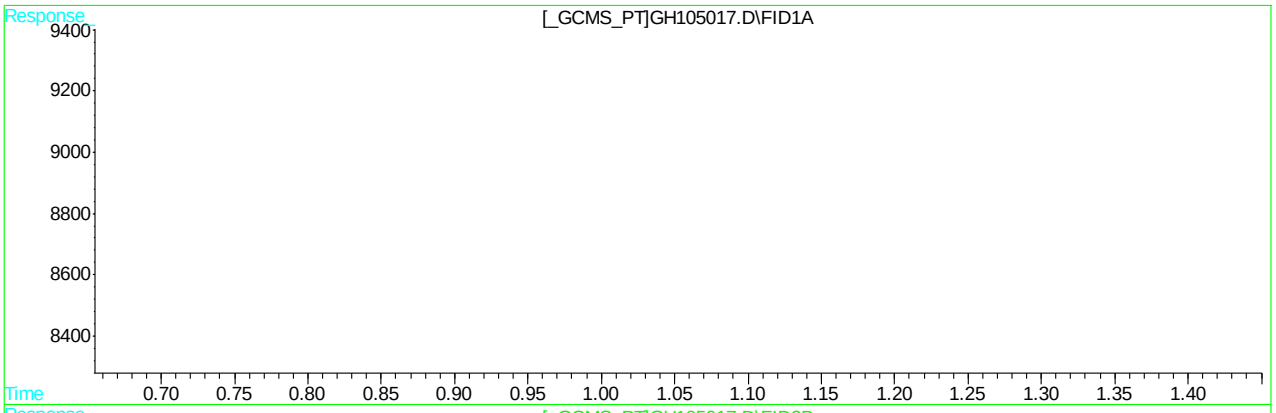
SGS ACCUTEST JC22613

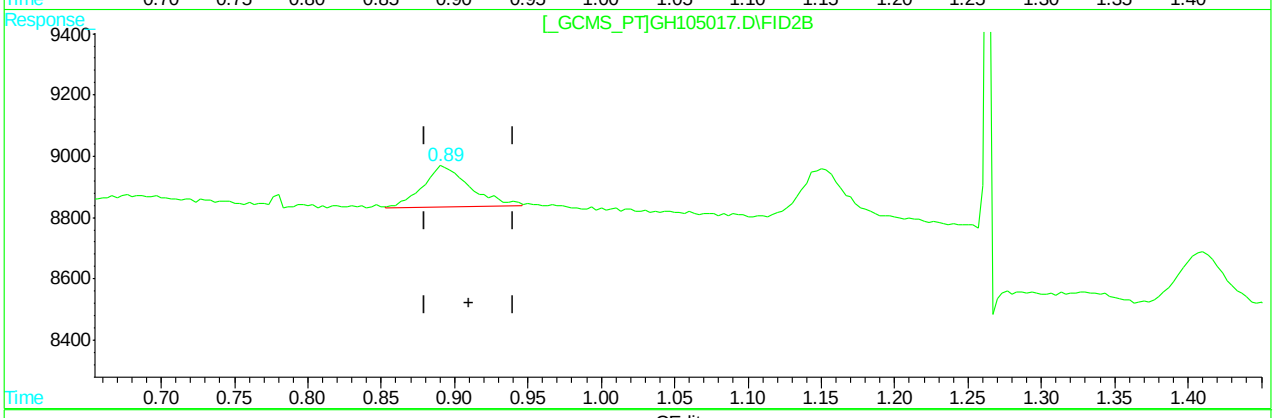
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(1) Methanol

1.12min 115.427PPB

response 1784

(1) Methanol #2

0.89min 93.713PPB m

response 2982

(+) = Expected Retention Time

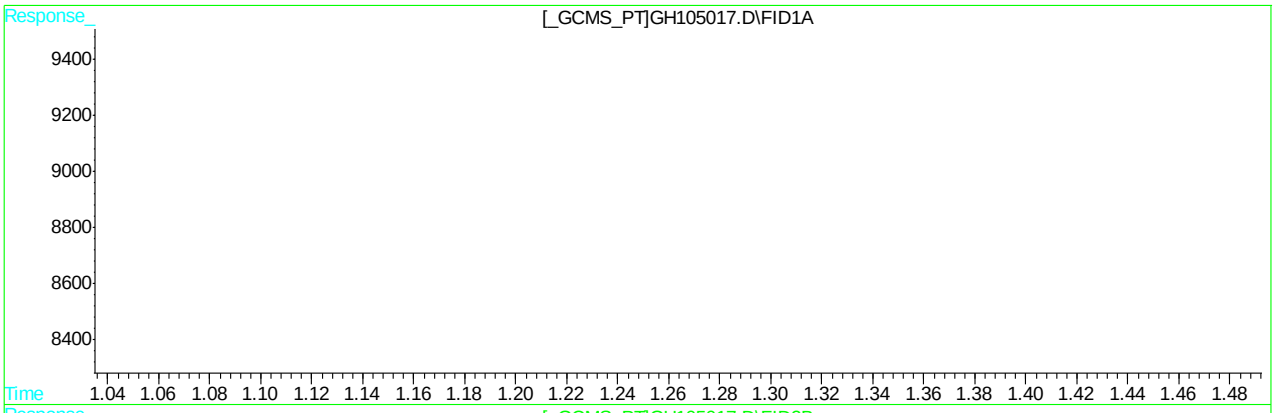
GH105017.D MGH5288.M Wed May 18 08:46:19 2016 GCGH

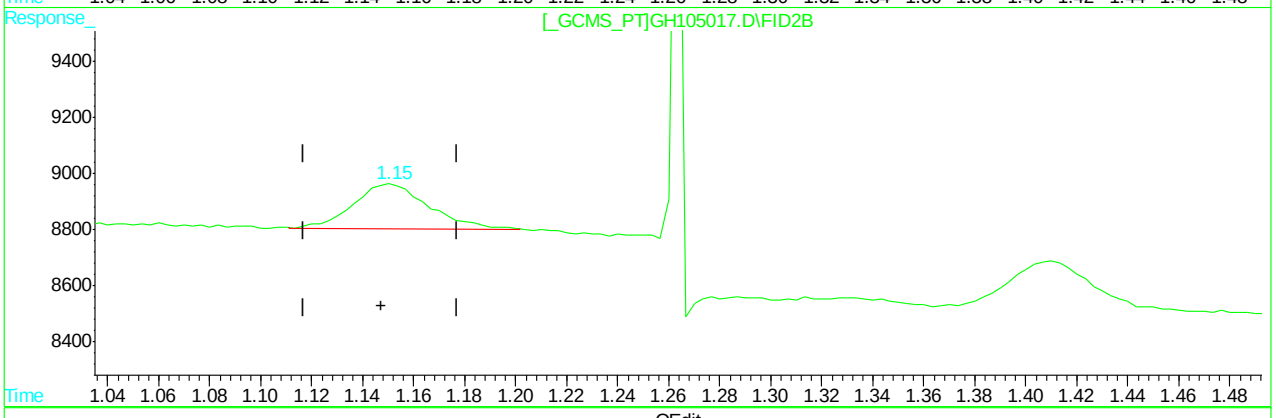
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Ethanol

1.45min 110.763PPB

response 2099

(2) Ethanol #2

1.15min 84.901PPB m

response 3361

(+) = Expected Retention Time

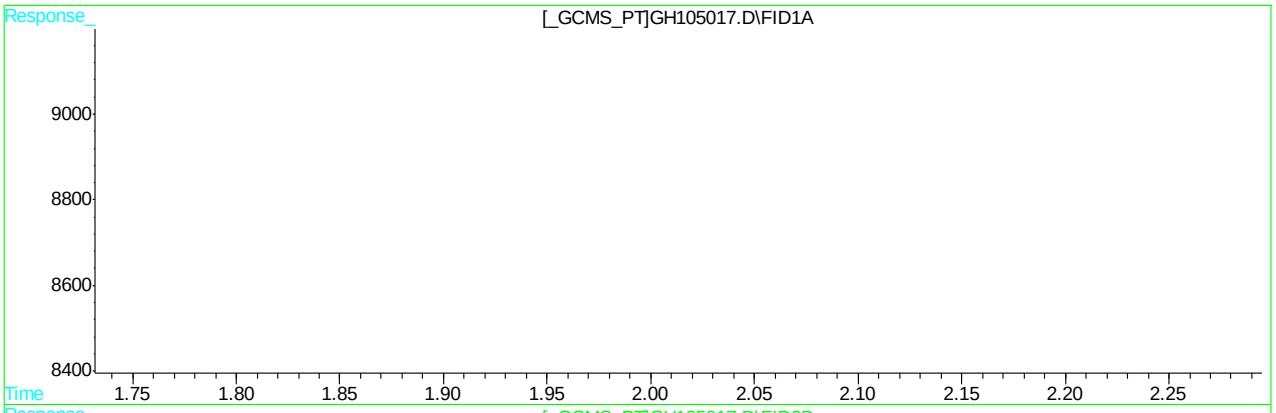
GH105017.D MGH5288.M Wed May 18 08:46:55 2016 GCGH

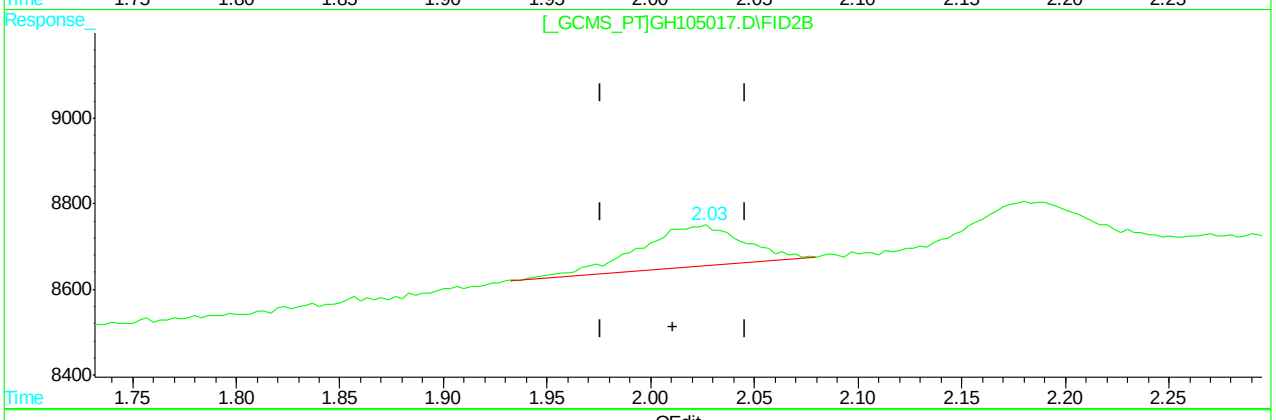
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

2.52min 89.885PPB

response 2187

(4) 1-Propanol #2

2.03min 69.117PPB m

response 3458

(+) = Expected Retention Time

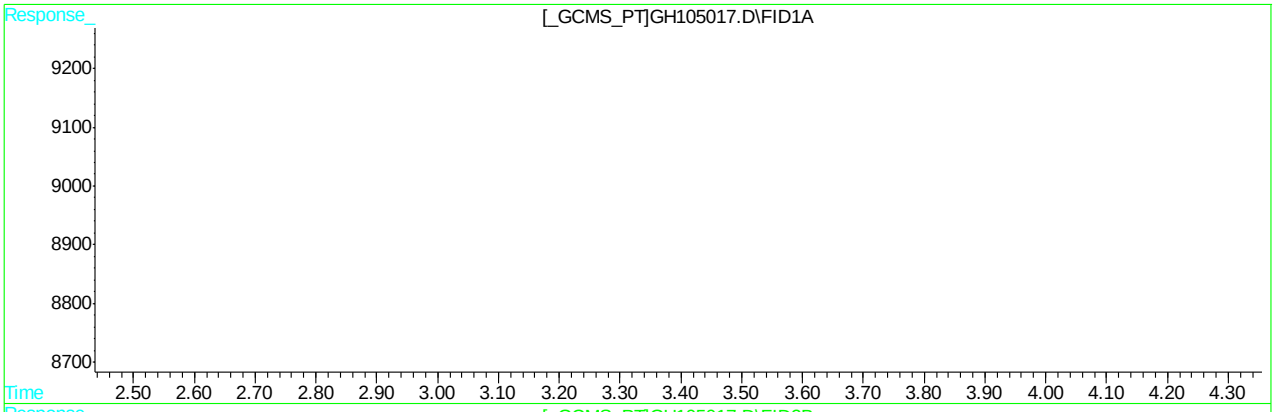
GH105017.D MGH5288.M Wed May 18 08:48:45 2016 GCGH

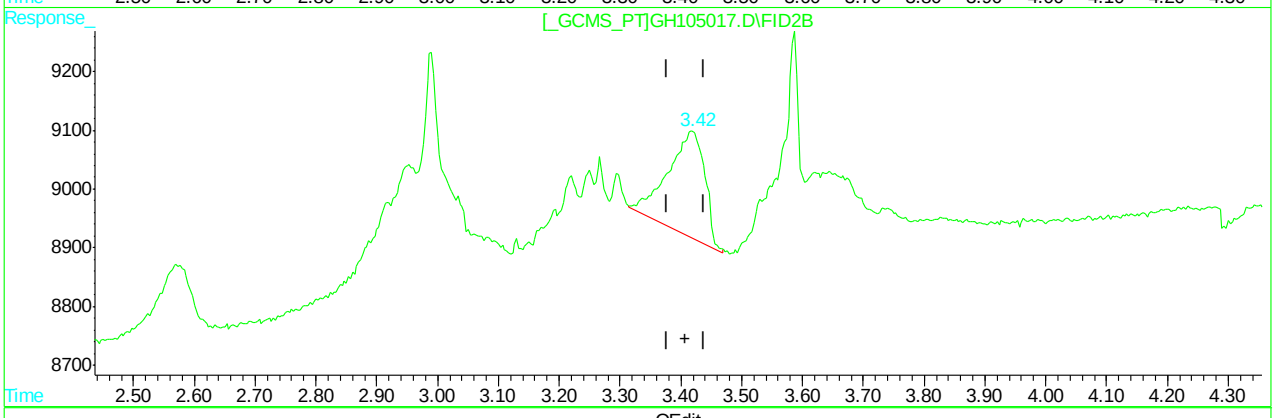
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(7) 1-Butanol

3.76min 105.546PPB

response 3014

(7) 1-Butanol #2

3.42min 113.606PPB m

response 7445

(+) = Expected Retention Time

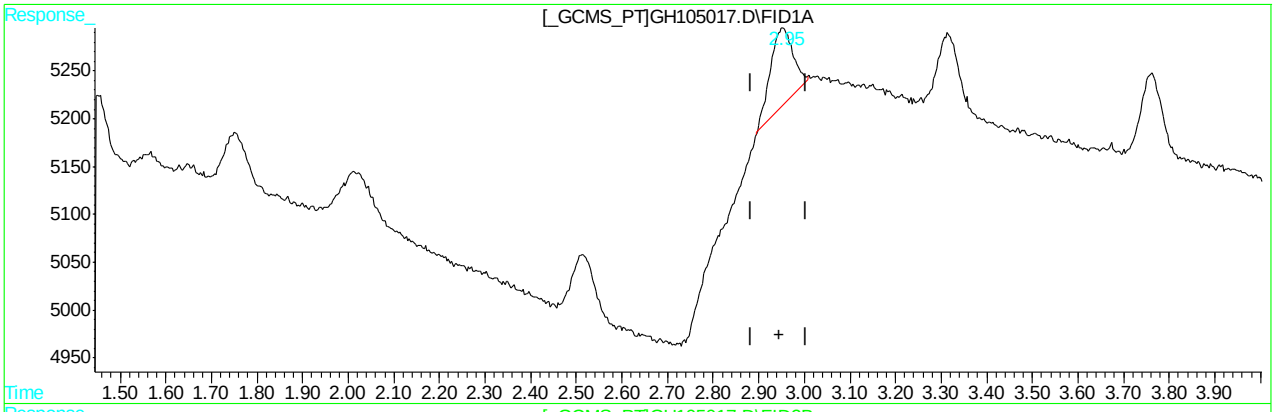
GH105017.D MGH5288.M Wed May 18 08:49:10 2016 GCGH

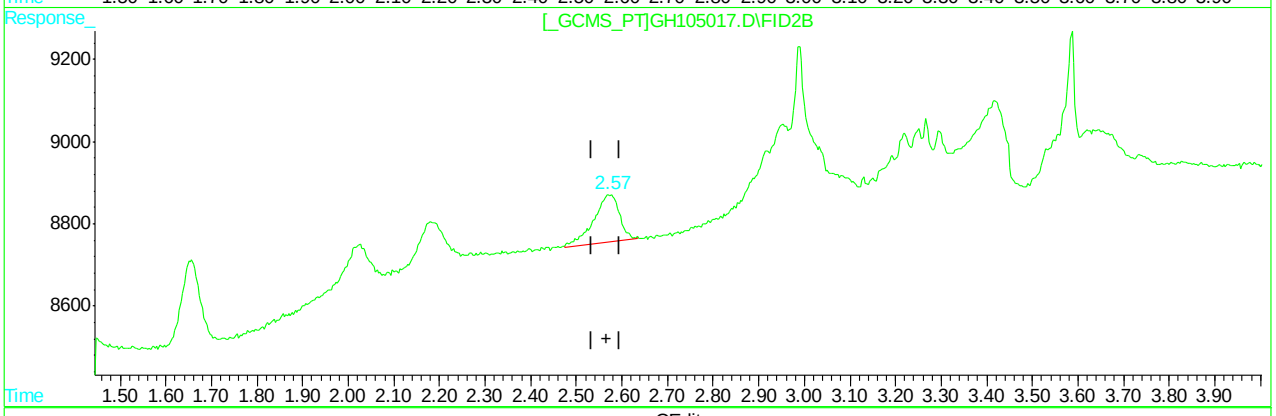
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105017.D\FID2B.CH          Vial: 2
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:37 2016  Quant Results File: MGH5288.RES


Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:34:35 2016
Response via : Multiple Level Calibration
```





QEdit

(8) 2-Butanol

2.95min 121.739PPB m

response 2840

(8) 2-Butanol #2

2.57min 83.638PPB m

response 4510

(+) = Expected Retention Time

GH105017.D MGH5288.M Wed May 18 08:50:46 2016 GCGH

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105018.D\FID1A.CH          Vial: 3
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-500                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105018.D\FID2B.CH          Vial: 3
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-500                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:23 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:22:56 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	133226	309222	2149.239	2179.587
	Spiked Amount 5000.000			Recovery	=	42.98%	43.59%
	Target Compounds						
1)	Methanol	1.12	0.90	7371	16974	487.375	523.867
2)	Ethanol	1.45	1.15	7403	20315	382.175	495.986
3)	Tert-Butyl Alcoh	2.02	1.65	13219	32642	459.462	504.499
4)	1-Propanol	2.52	2.01	11323	26078	450.160	484.442
5)	2-Propanol	1.75	1.41	8826	24643	428.510	541.309
6)	Isobutanol	3.32	2.95f	14018	31821	481.673	522.579
7)	1-Butanol	3.76	3.41	14489	37291	514.513	593.512
8)	2-Butanol	2.95	2.57	11839	27554	464.803	492.431

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC22613

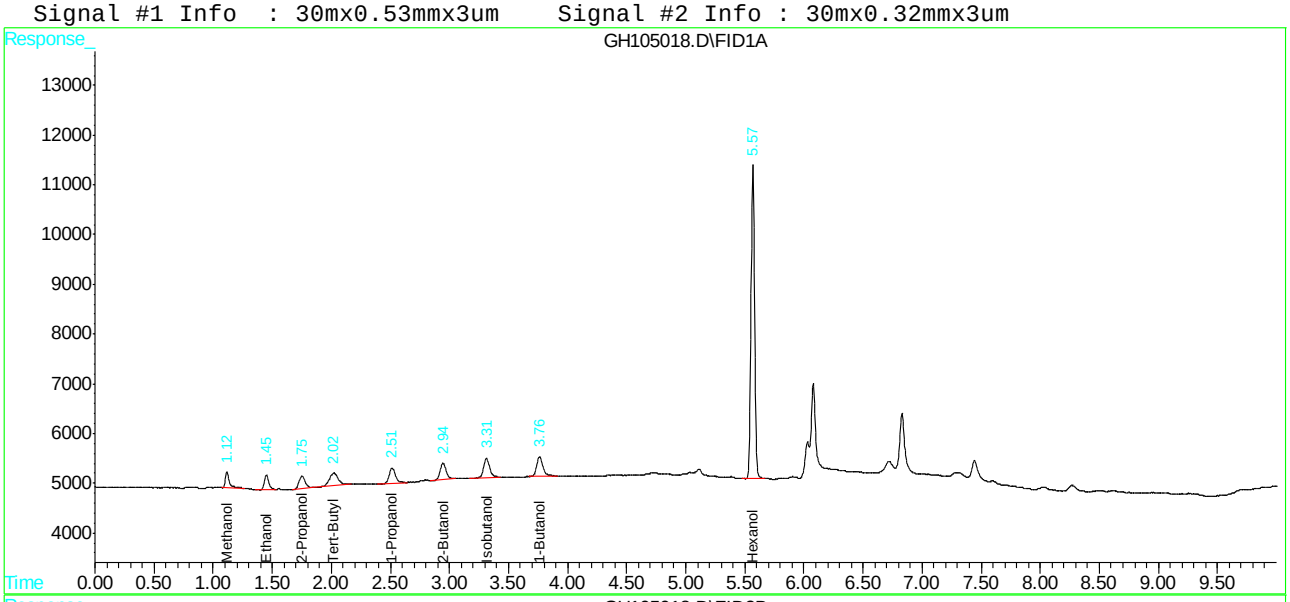
Quantitation Report (QT Reviewed)

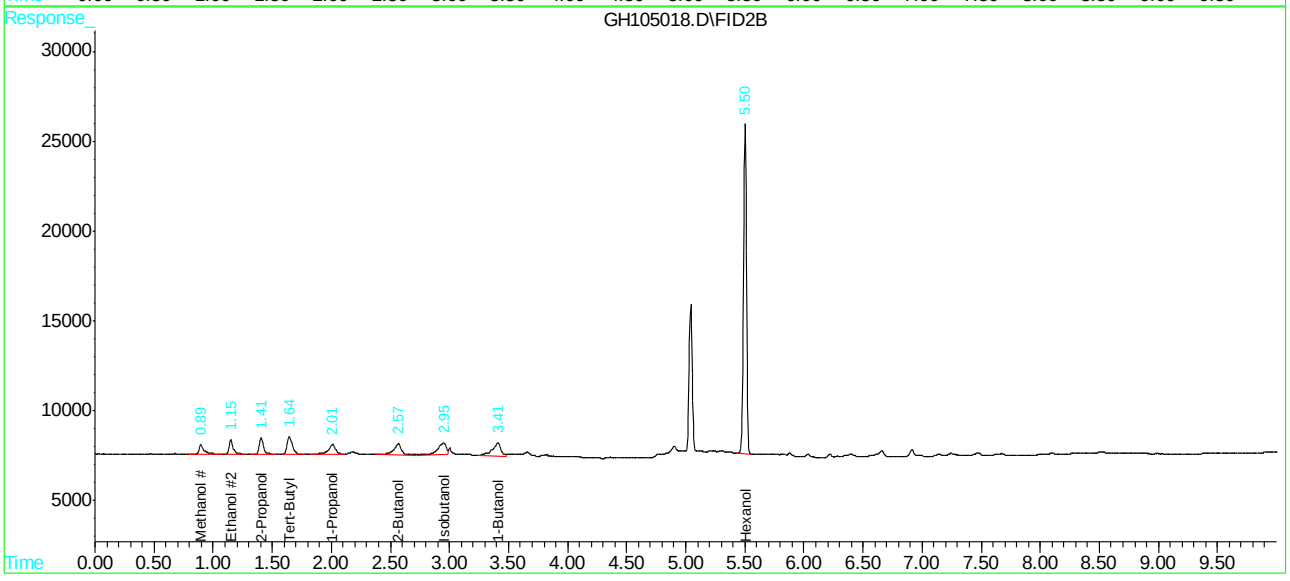
```
Data File : C:\HPCHEM\1\DATA\GH105018.D\FID1A.CH          Vial: 3
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-500                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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
```





SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105019.D\FID1A.CH          Vial: 4
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105019.D\FID2B.CH          Vial: 4
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:22 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:22:21 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.51	274171	622051	4543.104	4492.586
Spiked Amount	5000.000			Recovery	=	90.86%	89.85%
	Target Compounds						
1)	Methanol	1.12	0.92	16166	29685	1087.516	897.349
2)	Ethanol	1.45	1.17f	18855	36354	966.928	863.337
3)	Tert-Butyl Alcoh	2.01	1.66	28949	63750	1007.774	981.673
4)	1-Propanol	2.51	2.02	25248	52807	1004.669	976.309
5)	2-Propanol	1.75	1.42	20497	43421	993.892	942.889
6)	Isobutanol	3.31	2.94	29498	59602	1017.007	973.641
7)	1-Butanol	3.76	3.42	29408	73648	1055.991	1224.889
8)	2-Butanol	2.94	2.57	25576	58599	1005.126	1059.749

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

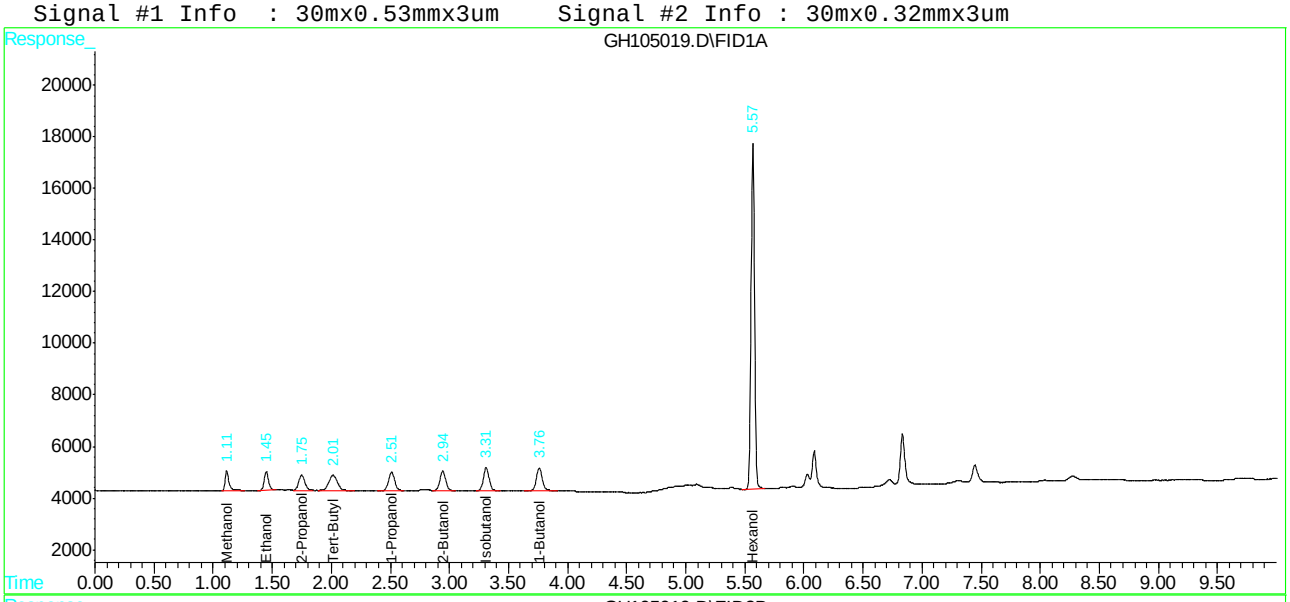
Quantitation Report (QT Reviewed)

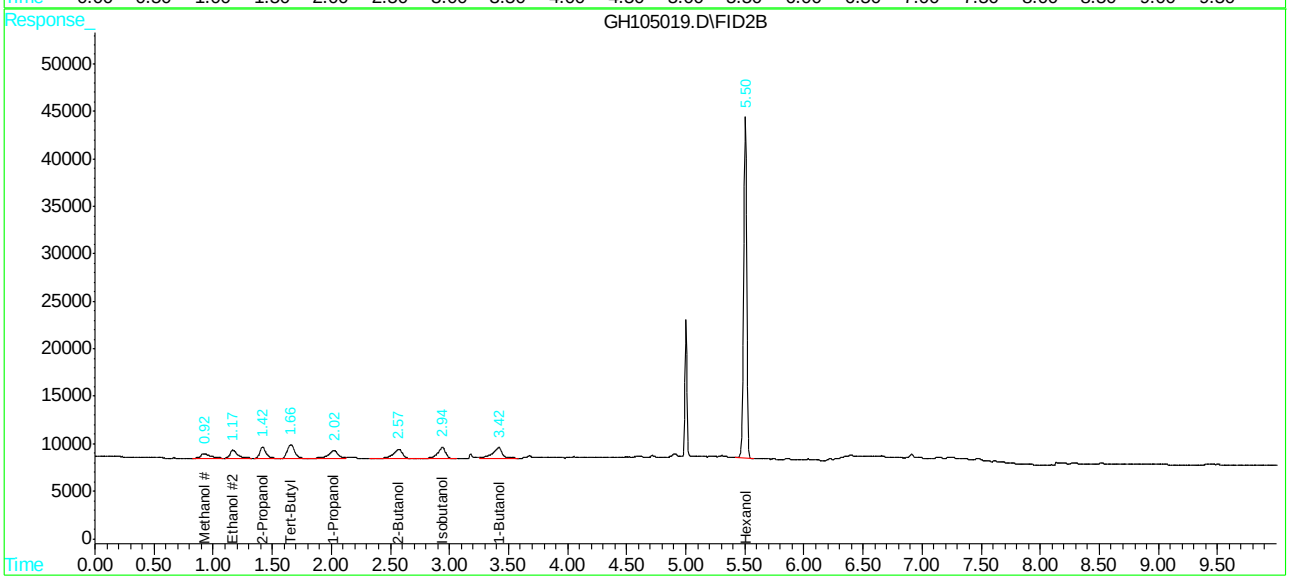
```
Data File : C:\HPCHEM\1\DATA\GH105019.D\FID1A.CH          Vial: 4
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105019.D\FID2B.CH          Vial: 4
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:22 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:22:21 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105020.D\FID1A.CH          Vial: 5
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105020.D\FID2B.CH          Vial: 5
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	345209	794669	4511.712	4828.644
Spiked Amount	5000.000			Recovery	=	90.23%	96.57%
	Target Compounds						
1)	Methanol	1.12	0.89	77443	173699	5243.603	8544.414 #
2)	Ethanol	1.45	1.15	99445	217347	5314.412	6840.346
3)	Tert-Butyl Alcoh	2.01	1.65	142996	332018	5237.321	5085.028
4)	1-Propanol	2.51	2.01	128385	274702	5760.408	5575.380
5)	2-Propanol	1.75	1.41	105046	236654	5062.425	5660.735
6)	Isobutanol	3.31	2.94	147383	311633	5362.003	5023.429
7)	1-Butanol	3.76	3.42	143097	319465	5843.923	6171.241
8)	2-Butanol	2.94	2.57	129413	280976	5135.753	5686.138

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC22613

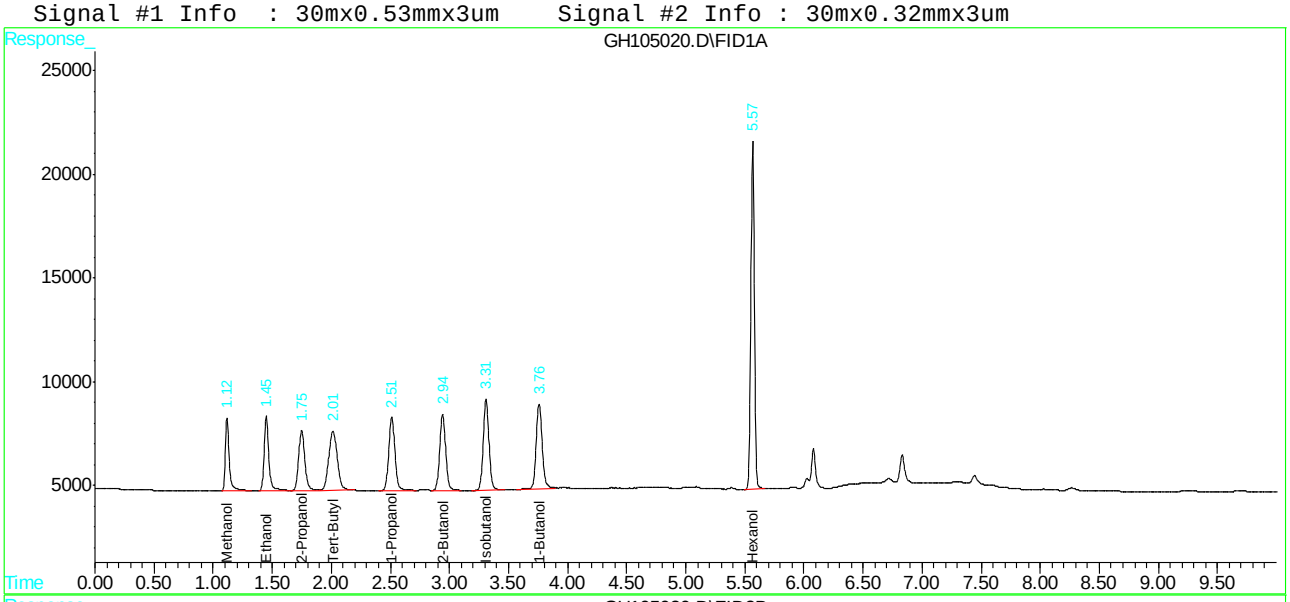
Quantitation Report (QT Reviewed)

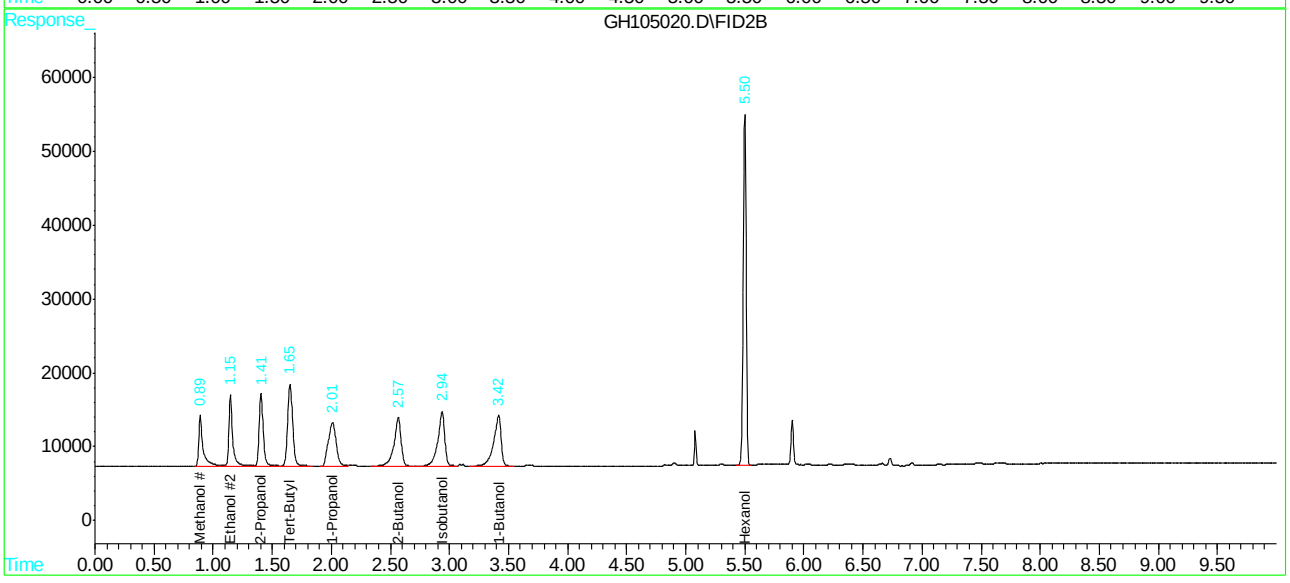
```
Data File : C:\HPCHEM\1\DATA\GH105020.D\FID1A.CH          Vial: 5
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC22613

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105021.D\FID1A.CH          Vial: 6
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105021.D\FID2B.CH          Vial: 6
Acq On    : 17 May 2016   5:33 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	355196	814101	4642.238	4946.724
Spiked Amount	5000.000			Recovery	=	92.84%	98.93%
	Target Compounds						
1)	Methanol	1.12	0.89	157448	346407	10660.697	17040.107 #
2)	Ethanol	1.45	1.15	202728	432745	10833.939	13619.358
3)	Tert-Butyl Alcoh	2.02	1.65	294805	663970	10797.389	10169.042
4)	1-Propanol	2.51	2.02	257894	549862	11571.266	11160.064
5)	2-Propanol	1.75	1.41	213932	472748	10309.866	11308.075
6)	Isobutanol	3.31	2.95	298782	632695	10870.134	10198.859
7)	1-Butanol	3.76	3.41	289038	604299	11803.967	11673.499
8)	2-Butanol	2.94	2.57	262599	566046	10421.277	11455.123

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC22613

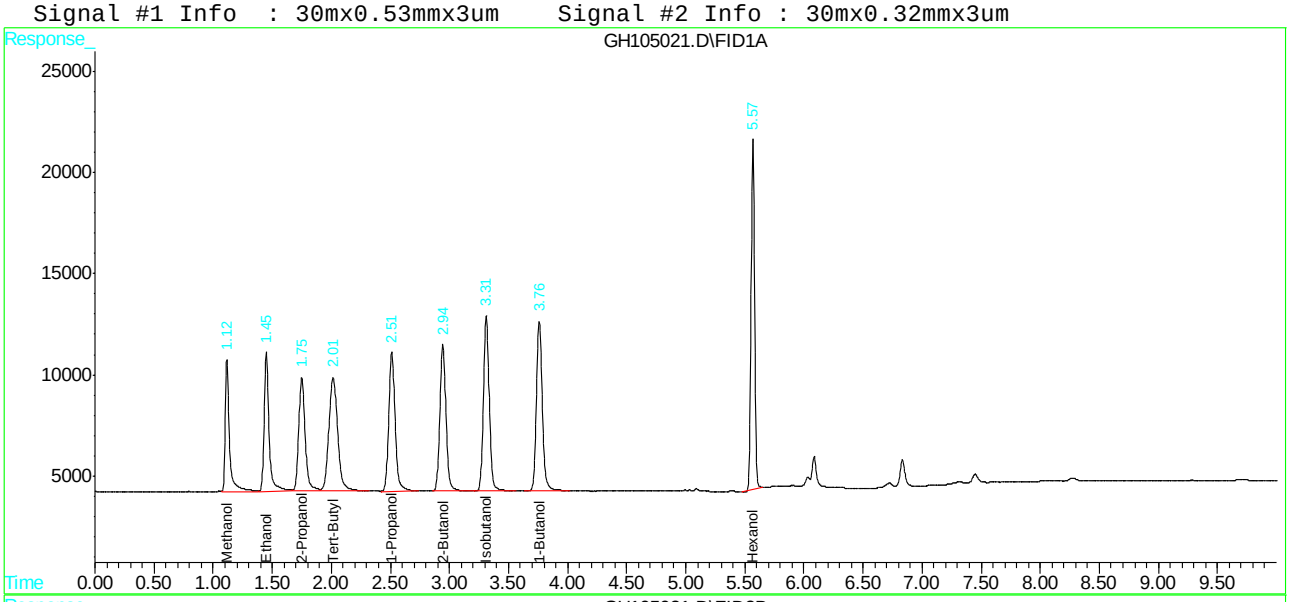
Quantitation Report (QT Reviewed)

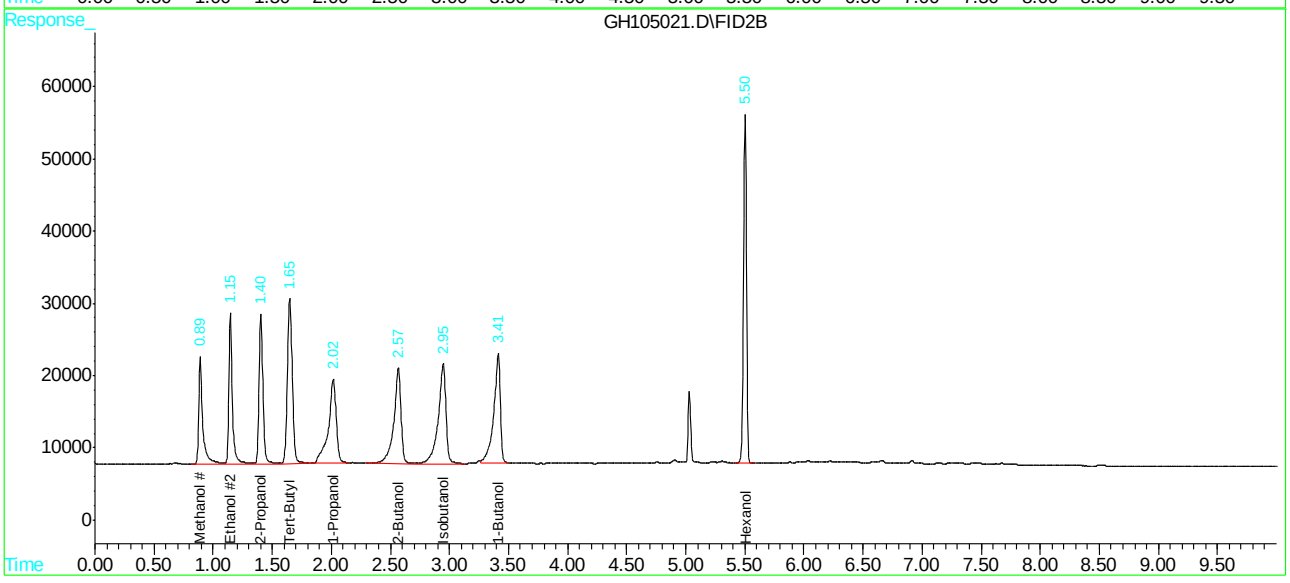
```
Data File : C:\HPCHEM\1\DATA\GH105021.D\FID1A.CH          Vial: 6
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC22613

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

SGS ACCUTEST JC22613

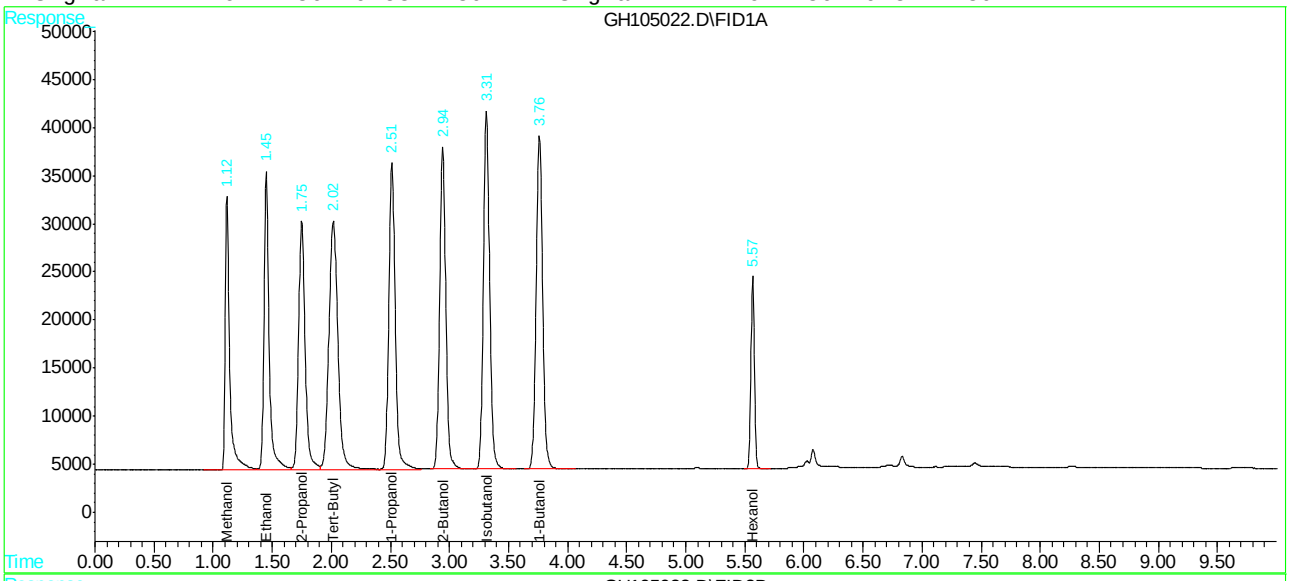
Quantitation Report (QT Reviewed)

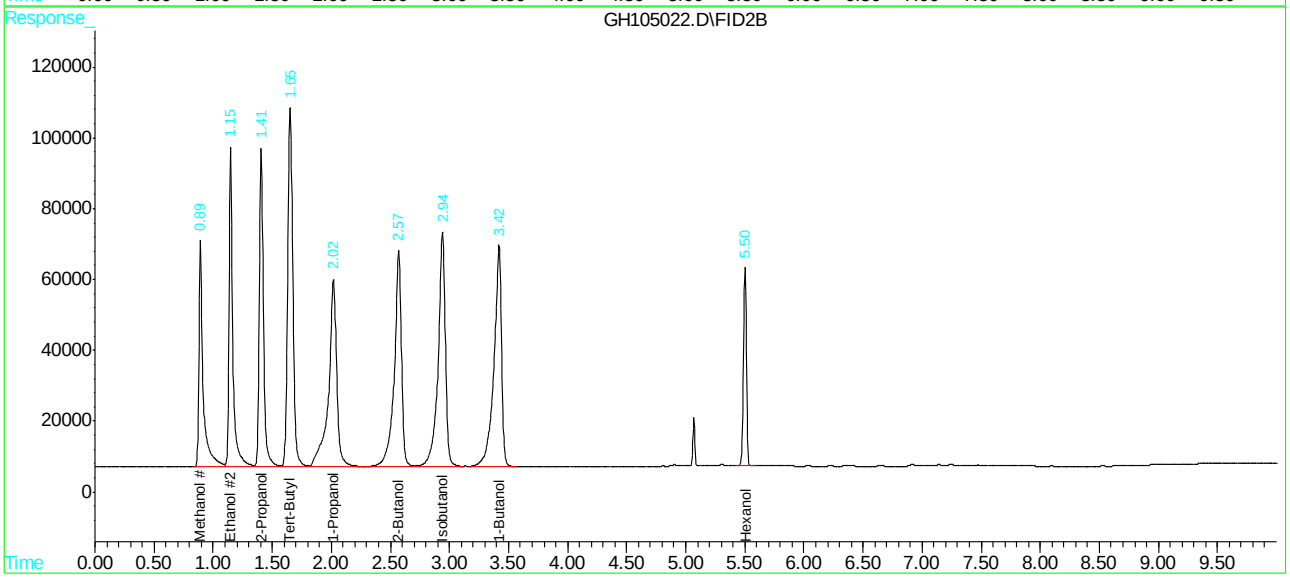
```
Data File : C:\HPCHEM\1\DATA\GH105022.D\FID1A.CH          Vial: 7
Acq On    : 17 May 2016   5:33 pm                     Operator: XULIU
Sample    : IC5288-50000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105023.D\FID1A.CH          Vial: 8
Acq On    : 17 May 2016   5:48 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105023.D\FID2B.CH          Vial: 8
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:10 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	259897	594005	3396.729	3609.352
	Spiked Amount 5000.000			Recovery	=	67.93%	72.19%
	Target Compounds						
1)	Methanol	1.12	0.89	1381464	3140971	93538.113	154507.580 #
2)	Ethanol	1.45	1.15	1913963	4176473	102283.537	131441.900
3)	Tert-Butyl Alcoh	2.02	1.66	2957875	6562015	108333.721	100500.651
4)	1-Propanol	2.51	2.03	2510870	5487726	112658.677	111379.470
5)	2-Propanol	1.76	1.41	2027830	4596795	97725.857	109954.692
6)	Isobutanol	3.32	2.96f	2927116	6160124	106492.774	99299.394
7)	1-Butanol	3.76	3.42	2754661	5940276	112496.937	114750.761
8)	2-Butanol	2.95	2.57	2539551	5573181	100782.352	112784.937

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

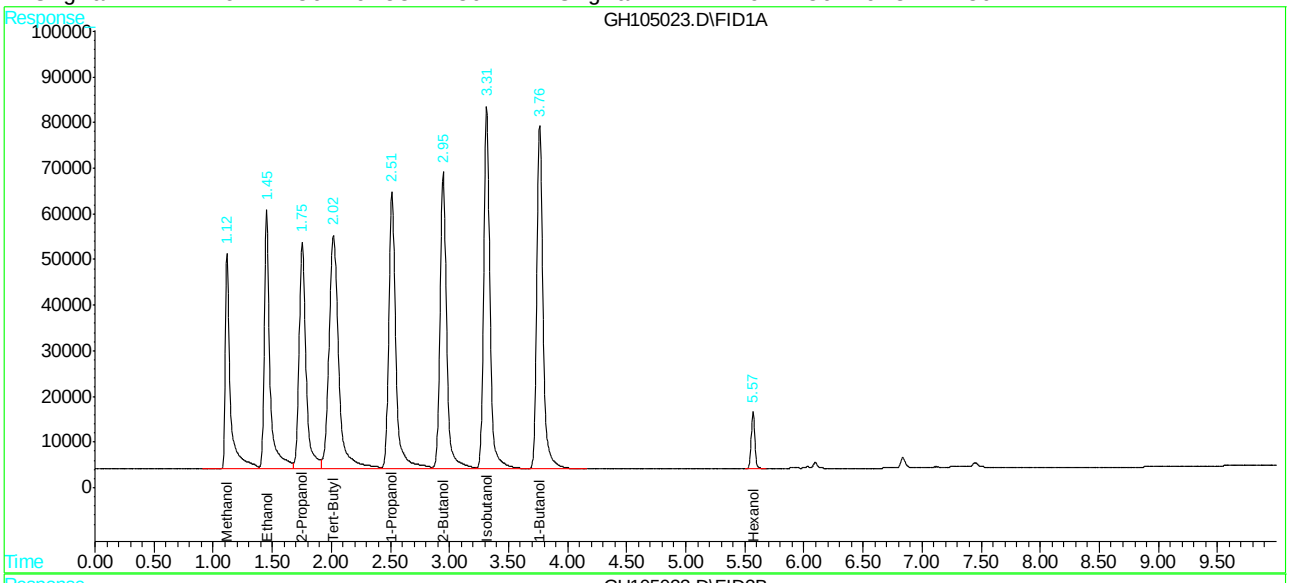
Quantitation Report (QT Reviewed)

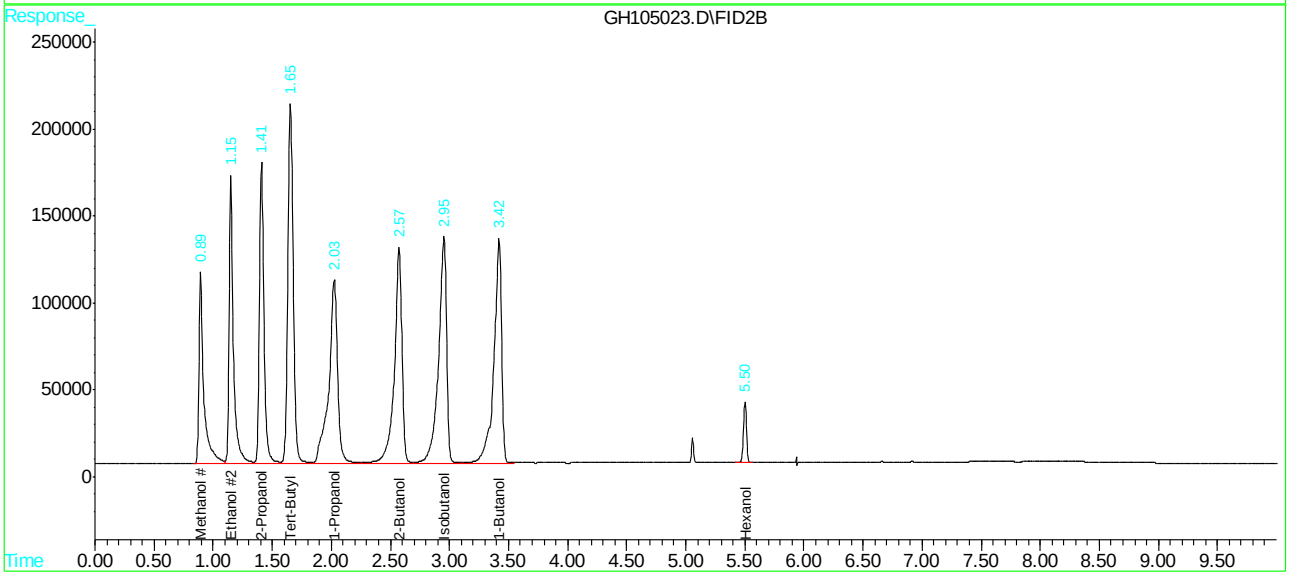
```
Data File : C:\HPCHEM\1\DATA\GH105023.D\FID1A.CH          Vial: 8
Acq On    : 17 May 2016   5:48 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105023.D\FID2B.CH          Vial: 8
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:10 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





SGS ACCUTEST JC22613

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

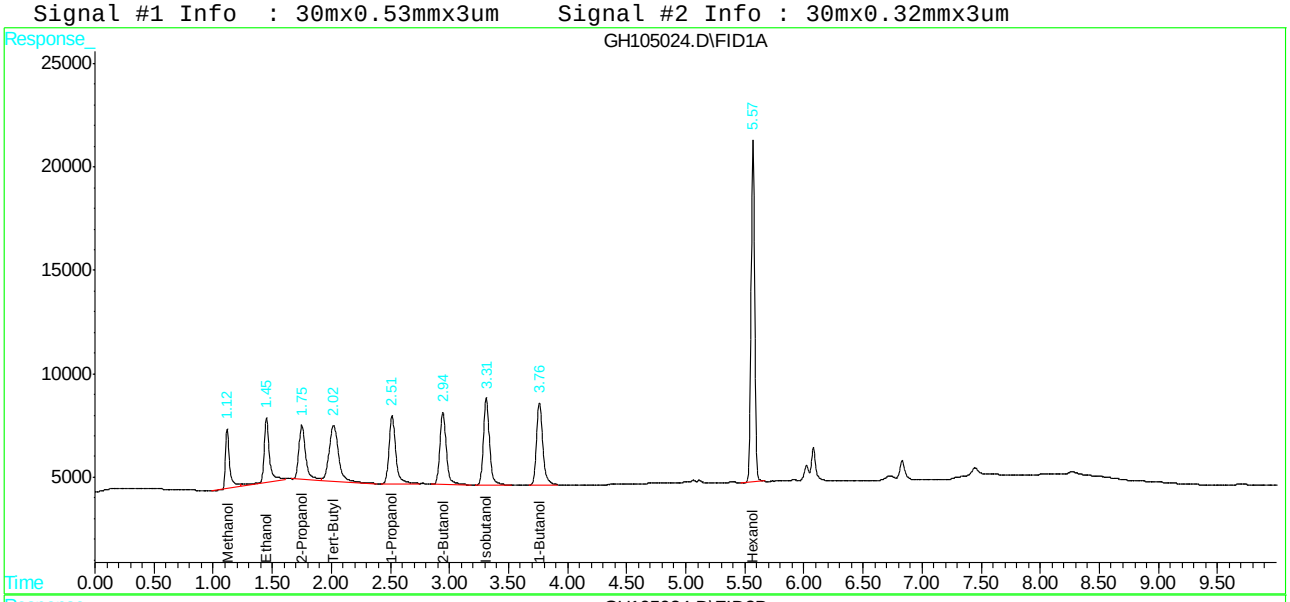
Quantitation Report (QT Reviewed)

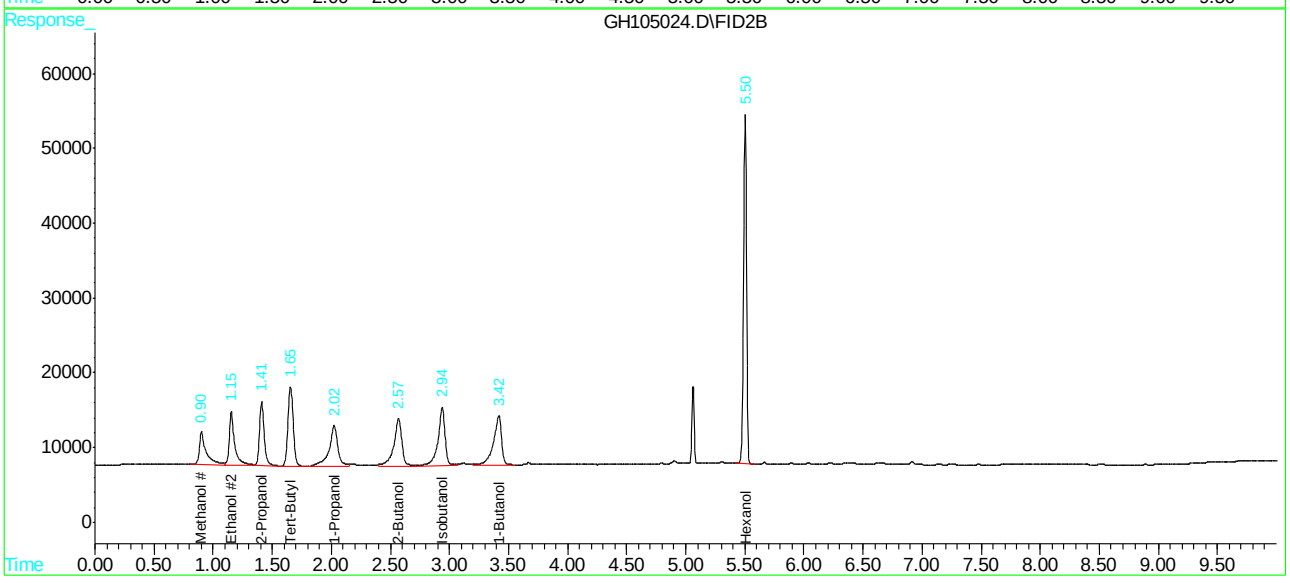
```
Data File : C:\HPCHEM\1\DATA\GH105024.D\FID1A.CH          Vial: 9
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : ICV5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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\GH105629.D Vial: 92
Acq On : 23 Jun 2016 2:19 pm Operator: XULIU
Sample : CC5288A-5000 Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 24 15:28 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S Hexanol	5.57	289096	4276.780 PPB
Spiked Amount 5000.000		Recovery =	85.54%
Target Compounds			
1) Methanol	1.12	81833	5293.661 PPB
2) Ethanol	1.45	109381	5772.036 PPB
3) Tert-Butyl Alcohol	2.02	154931	5467.878 PPB
4) 1-Propanol	2.51	145859	5995.994 PPB
5) 2-Propanol	1.75	112619	5650.453 PPB
6) Isobutanol	3.31	165003	5735.039 PPB
7) 1-Butanol	3.75	155833	5456.202 PPB
8) 2-Butanol	2.94	142410	5555.431 PPB

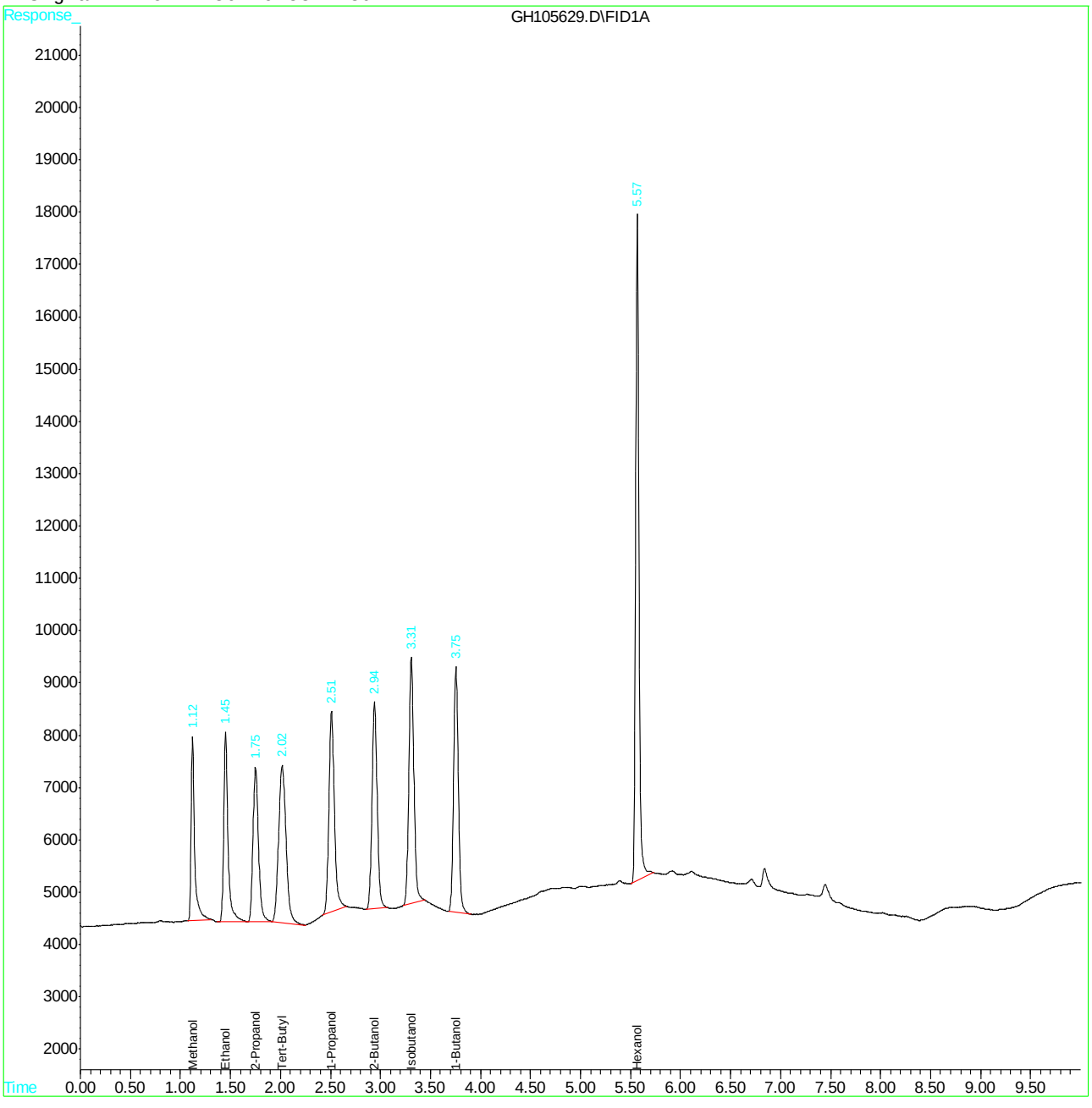
(f)=RT Delta > 1/2 Window (m)=manual int.
GH105629.D MGH5288A.M Mon Jun 27 14:37:15 2016 GCGH Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105629.D Vial: 92
Acq On : 23 Jun 2016 2:19 pm Operator: XULIU
Sample : CC5288A-5000 Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 24 15:28 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105640.D                    Vial: 95
Acq On    : 23 Jun 2016   5:12 pm                       Operator: XULIU
Sample    : CC5288A-10000                               Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                      Multiplr: 1.00
IntFile   : AUTOINT1.E
Quant Time: Jun 23 17:22 2016  Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj.  : 2ul
Signal Phase : ZB-624
Signal Info  : 30mx0.53mmx3um
```

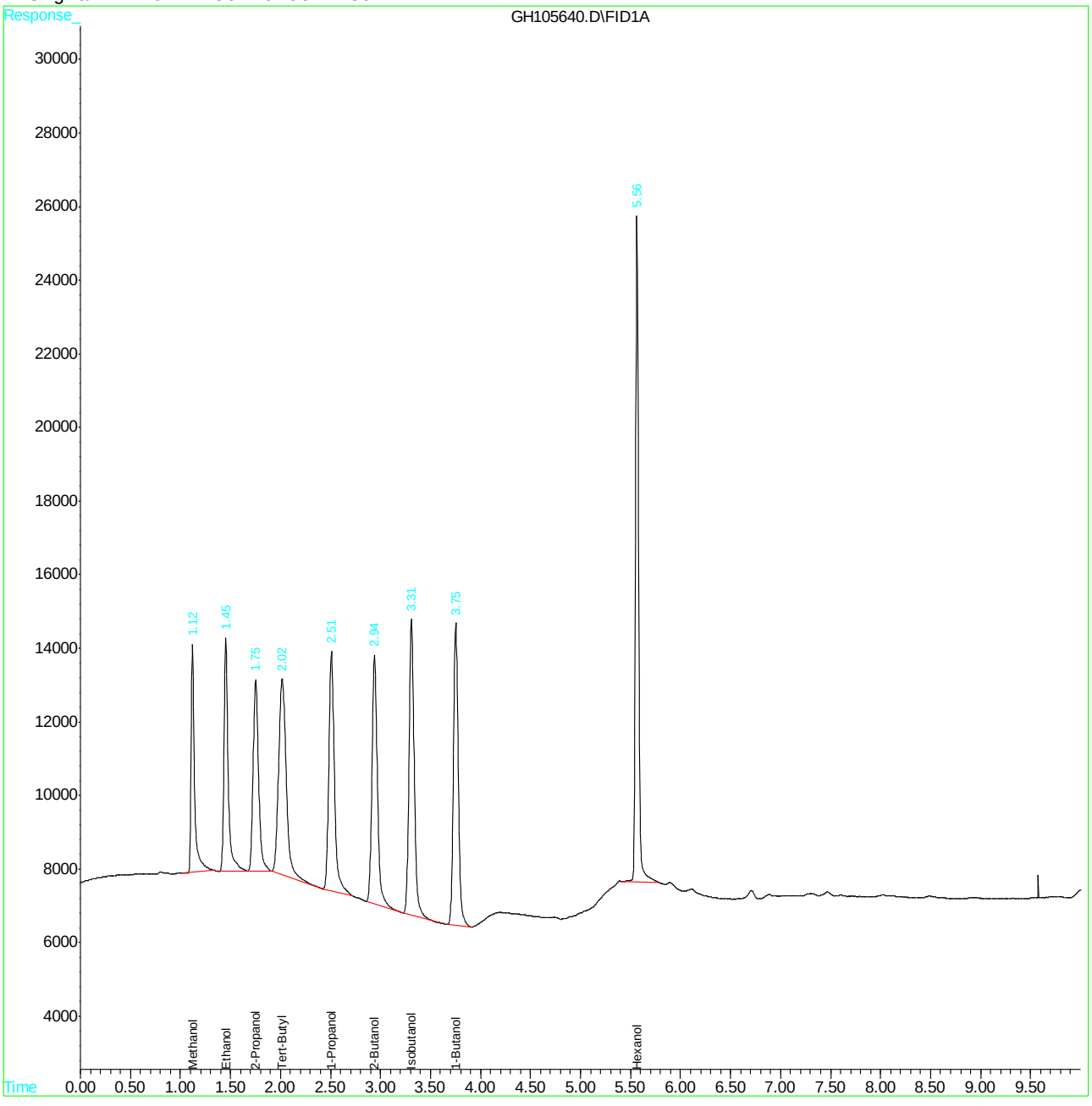
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S Hexanol	5.57	382319	5655.884 PPB
Spiked Amount 5000.000		Recovery	= 113.12%
Target Compounds			
1) Methanol	1.12	144425	9342.640 PPB
2) Ethanol	1.45	188507	9947.498 PPB
3) Tert-Butyl Alcohol	2.02	282884	9983.612 PPB
4) 1-Propanol	2.51	252672	10386.854 PPB
5) 2-Propanol	1.75	196198	9843.832 PPB
6) Isobutanol	3.31	291273	10123.851 PPB
7) 1-Butanol	3.75	275580	9648.947 PPB
8) 2-Butanol	2.94	256293	9998.009 PPB

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105640.D Vial: 95
Acq On : 23 Jun 2016 5:12 pm Operator: XULIU
Sample : CC5288A-10000 Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 23 17:22 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105644.D                    Vial: 90
Acq On    : 23 Jun 2016   6:15 pm                       Operator: XULIU
Sample    : CC5288A-5000                                Inst    : GCGH
Misc      : GC48660,GGH5333,5,,,,1                      Multiplr: 1.00
IntFile   : AUTOINT1.E
Quant Time: Jun 24 15:26 2016  Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Mon May 23 10:02:11 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288A.M

Volume Inj.  : 2ul
Signal Phase : ZB-624
Signal Info  : 30mx0.53mmx3um
```

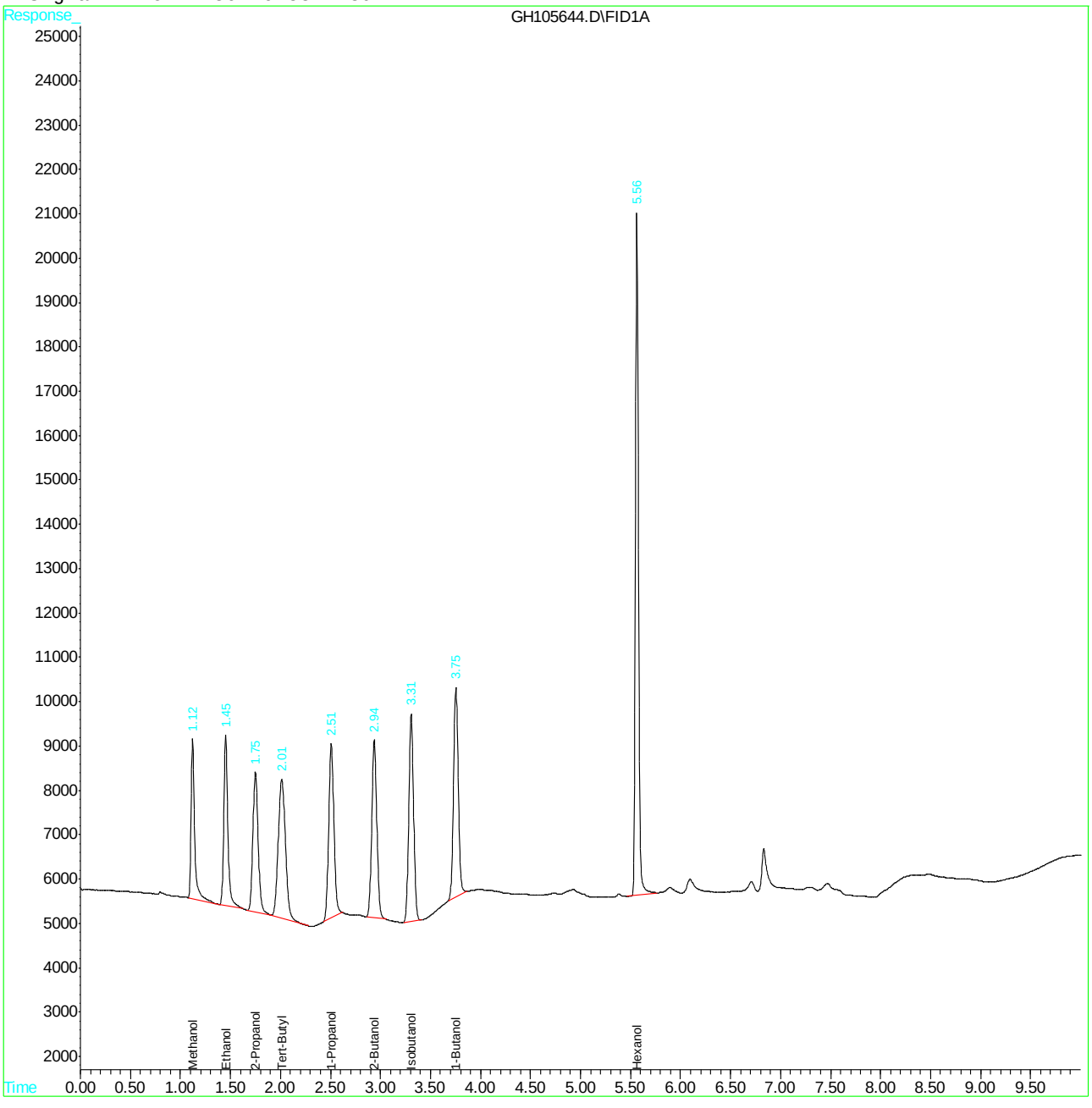
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
9) S Hexanol	5.57	321629	4758.065 PPB
Spiked Amount 5000.000		Recovery =	95.16%
Target Compounds			
1) Methanol	1.12	86541	5598.206 PPB
2) Ethanol	1.45	109110	5757.709 PPB
3) Tert-Butyl Alcohol	2.01	158077	5578.910 PPB
4) 1-Propanol	2.51	140293	5767.165 PPB
5) 2-Propanol	1.75	114609	5750.297 PPB
6) Isobutanol	3.31	156631	5444.061 PPB
7) 1-Butanol	3.75	154338	5403.869 PPB
8) 2-Butanol	2.94	141162	5506.726 PPB

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\1\DATA\GH105644.D Vial: 90
Acq On : 23 Jun 2016 6:15 pm Operator: XULIU
Sample : CC5288A-5000 Inst : GCGH
Misc : GC48660,GGH5333,5,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E
Quant Time: Jun 24 15:26 2016 Quant Results File: MGH5288A.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288A.M (Chemstation Integrator)
Title : METHOD SW846-8015C (DAI)
Last Update : Mon May 23 10:02:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288A.M

Volume Inj. : 2ul
Signal Phase : ZB-624
Signal Info : 30mx0.53mmx3um



SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH 5288

Print Analyst Name: Xu Gu

Analyst Signature:

Date: 5/17/16

Columns: ZB624 / RTX-1 (30m x0.53mm x3μm) (30m x0.32mm x3μm)

Method 8015C All

Initial Cal. Method m Cal 5288

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015M4128	All Sur (5/15)	2000 ppm
015M4517	All STD (5/15)	100 ppm
015M4130	All Spike (5/15)	100 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: _____ **Date:** 5/19/16

R	Data File	Sample ID	Test	MTX	Vial #	ALS #	Samp. Amt (ml or g)	MOH amt. (ul)	Secondary dilution	L+	IS	SU	Status (Data)	Comments	pH* < 2
	Cal 105015	ZB					1					✓	not well		
	105016	ZB					1					✓	ok		
	105017	ZC5288-100					1					✓	ok	10μl STD, 4μl SU / 10ml	
	105018	ZC5288-500					1					✓	ok	5μl STD, 1μl SU / 10ml	
	105019	ZC5288-1000					1					✓	ok	10μl STD, 2.5μl SU / 10ml	
	105020	ZC5288-5000					1					✓	ok	50μl STD, 2.5μl SU / 10ml	
	105021	ZC5288-10,000					1					✓	ok	100μl STD, 2.5μl SU / 10ml	
	105022	ZC5288-50,000					1					✓	ok	500μl STD, 3μl SU / 10ml	
	105023	ZC5288-100,000					1					✓	ok	1000μl STD, 4μl SU / 10ml	
	105024	ZC5288-5000					1					✓	ok	50μl STD (1:10) 2.5μl SU / 10ml	

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 JC22613

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH 5333

Print Analyst Name: Xulin

Analyst Signature:

Date: 6/23/16

Columns: ZB624 / RTX-1 (30m x 0.53mm x 3µm) (30m x 0.32mm x 3µm)

Method SW846

Initial Cal. Method MGH 5288A

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
0151214B13	ALL SWF (6/25)	2000 ppm
0151214B88	ALL STD (6/25)	100 ppm
0151214B89	ALL STD(2) (6/25)	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: Vayn **Date:** 6/27/16

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
	GH105628	ZB					1					✓	ok		
	105629	CC5288A-5000					1					✓	ok	100µl STD/ml H2O	
	105630	MB1					1					✓	ok		
	105631	BS					1					✓	ok		
	105632	JC22613-1	48660 LMA	G W	3		1					✓	ok		✓
	105633	JC22613-1MS	✓	G W	3		1					✓	ok	50µl STD(2)/ml sample	✓
	105634	JC22613-1MSD	✓	G W	3		1					✓	ok	50µl STD(2)/ml sample	✓
	105635	JC22613-2	✓	G W	3		1					✓	ok		✓
	105636	JC22613-3	✓	G W	3		1					✓	ok		✓
	105637	JC22613-4	✓	G W	3		1					✓	ok		✓
	105638	JC22613-5	✓	G W	3		1					✓	ok		✓
	105639	JC22613-6	✓	G W	3		1					✓	ok		✓
	105640	CC5288A-10000	✓				1					✓	ok	100µl STD/ml H2O	
	105641	MB2					1					✓	ok		
	105642	JC22613-7	✓	G W	5		1					✓	ok		✓
	105643	JC22613-8	✓	G W	5		1					✓	ok		✓
	105644	CC5288A-5000	✓				1					✓	ok	50µl STD/ml H2O	

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

9.6.2 9

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: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95079-MB1	6G36635.D	1	06/27/16	DS	06/27/16	OP95079	G6G1047

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC22613-7, JC22613-8

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	83%	26-132%
877-09-8	Tetrachloro-m-xylene	82%	26-132%
2051-24-3	Decachlorobiphenyl	55%	10-118%
2051-24-3	Decachlorobiphenyl	58%	10-118%

Blank Spike Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95079-BS1	6G36636.D	1	06/27/16	DS	06/27/16	OP95079	G6G1047

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC22613-7, JC22613-8

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
309-00-2	Aldrin	0.25	0.17	68	38-138
319-84-6	alpha-BHC	0.25	0.20	80	51-144
319-85-7	beta-BHC	0.25	0.19	76	55-137
319-86-8	delta-BHC	0.25	0.20	80	33-148
58-89-9	gamma-BHC (Lindane)	0.25	0.20	80	53-142
5103-71-9	alpha-Chlordane	0.25	0.19	76	52-137
5103-74-2	gamma-Chlordane	0.25	0.21	84 [a]	52-140
60-57-1	Dieldrin	0.25	0.20	80	54-144
72-54-8	4,4'-DDD	0.25	0.20	80	46-151
72-55-9	4,4'-DDE	0.25	0.19	76	51-142
50-29-3	4,4'-DDT	0.25	0.19	76	53-158
72-20-8	Endrin	0.25	0.22	88	53-149
1031-07-8	Endosulfan sulfate	0.25	0.20	80	49-148
7421-93-4	Endrin aldehyde	0.25	0.20	80	45-137
53494-70-5	Endrin ketone	0.25	0.21	84	48-142
959-98-8	Endosulfan-I	0.25	0.19	76	54-139
33213-65-9	Endosulfan-II	0.25	0.20	80	54-142
76-44-8	Heptachlor	0.25	0.18	72	45-137
1024-57-3	Heptachlor epoxide	0.25	0.20	80	54-140
72-43-5	Methoxychlor	0.25	0.20	80	51-157

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	76%	26-132%
877-09-8	Tetrachloro-m-xylene	75%	26-132%
2051-24-3	Decachlorobiphenyl	45%	10-118%
2051-24-3	Decachlorobiphenyl	48%	10-118%

(a) Reported from 2nd signal. %D of check calibration on 1st signal exceed method criteria (20%) so using for confirmation only.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP95079-MS	6G36641.D	1	06/27/16	DS	06/27/16	OP95079	G6G1047
OP95079-MSD	6G36642.D	1	06/28/16	DS	06/27/16	OP95079	G6G1047
JC22613-7	6G36640.D	1	06/27/16	DS	06/27/16	OP95079	G6G1047

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC22613-7, JC22613-8

CAS No.	Compound	JC22613-7 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND		0.5	0.48	96	0.5	0.35	70	31	37-159/40
319-84-6	alpha-BHC	ND		0.5	0.51	102	0.5	0.37	74	32	37-164/37
319-85-7	beta-BHC	ND		0.5	0.50	100	0.5	0.39	78	25	46-151/36
319-86-8	delta-BHC	ND		0.5	0.49	98	0.5	0.39	78	23	32-168/36
58-89-9	gamma-BHC (Lindane)	ND		0.5	0.51	102	0.5	0.39	78	27	44-160/37
5103-71-9	alpha-Chlordane	ND		0.5	0.50	100	0.5	0.38	76	27	38-160/35
5103-74-2	gamma-Chlordane	ND		0.5	0.49	98	0.5	0.38	76	25	39-157/37
60-57-1	Dieldrin	ND		0.5	0.52	104	0.5	0.39	78	29	42-161/36
72-54-8	4,4'-DDD	ND		0.5	0.50	100	0.5	0.39	78	25	40-161/36
72-55-9	4,4'-DDE	ND		0.5	0.40	80	0.5	0.32	64	22	34-158/36
50-29-3	4,4'-DDT	ND		0.5	0.44	88	0.5	0.35	70	23	41-173/33
72-20-8	Endrin	ND		0.5	0.52	104	0.5	0.41	82	24	44-166/35
1031-07-8	Endosulfan sulfate	ND		0.5	0.52	104	0.5	0.41	82	24	46-161/36
7421-93-4	Endrin aldehyde	ND		0.5	0.54	108	0.5	0.41	82	27	34-149/36
53494-70-5	Endrin ketone	ND		0.5	0.57	114	0.5	0.45	90	24	44-157/36
959-98-8	Endosulfan-I	ND		0.5	0.57	114	0.5	0.42	84	30	43-154/35
33213-65-9	Endosulfan-II	ND		0.5	0.52	104	0.5	0.41	82	24	40-162/35
76-44-8	Heptachlor	ND		0.5	0.47	94	0.5	0.35	70	29	33-153/37
1024-57-3	Heptachlor epoxide	ND		0.5	0.51	102	0.5	0.39	78	27	45-154/37
72-43-5	Methoxychlor	ND		0.5	0.45	90	0.5	0.36	72	22	48-169/32
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JC22613-7	Limits
877-09-8	Tetrachloro-m-xylene	98%	73%	76%	26-132%
877-09-8	Tetrachloro-m-xylene	98%	72%	77%	26-132%
2051-24-3	Decachlorobiphenyl	85%	68%	83%	10-118%
2051-24-3	Decachlorobiphenyl	94%	74%	91%	10-118%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1047-CC1034	**Injection Date:**	06/27/16
Lab File ID:	6G36617.D	**Injection Time:**	17:14
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	51614446	1.34	118985537	1.00
Upper Limit [a]	103228892	1.84	237971074	1.50
Lower Limit [b]	25807223	0.84	59492769	0.50

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP94861-MB1	56244029	1.34	127699564	1.00
OP94861-BS1	53314577	1.34	126473544	1.00
OP95079-MB1	56258774	1.34	130024068	1.00
OP95079-BS1	58508530	1.34	135775844	1.00
ZZZZZZ	54922345	1.34	120936746	1.00
ZZZZZZ	54553716	1.34	118797637	1.00
ZZZZZZ	56976497	1.34	131795342	1.00
ZZZZZZ	52000886	1.34	116907509	1.00
ZZZZZZ	95159892	1.34	688788769*	0.99
JC22206-9	58330236	1.34	133615471	1.00
OP94861-MS	55103348	1.34	127438813	1.00
OP94861-MSD	55864277	1.34	127983926	1.00
ZZZZZZ	53979034	1.34	122280284	1.00
ZZZZZZ	54917350	1.34	130431773	1.01
OP94857-MS	49539864	1.35	115347455	1.01
OP94857-MSD	52743294	1.35	122189713	1.01
ZZZZZZ	56073092	1.35	131393234	1.01
ZZZZZZ	54375702	1.35	126246013	1.01
ZZZZZZ	56403281	1.34	133879344	1.00

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

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

Semivolatile Internal Standard Area Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1047-CC1034	**Injection Date:**	06/27/16
Lab File ID:	6G36638.D	**Injection Time:**	22:59
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	52305569	1.35	124067401	1.01
Upper Limit [a]	104611138	1.85	248134802	1.51
Lower Limit [b]	26152785	0.85	62033701	0.51

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
JC22613-7	62331914	1.34	148227174	1.00
OP95079-MS	50496578	1.34	121213546	1.01
OP95079-MSD	54566150	1.34	129669768	1.00
JC22613-8	59838325	1.34	140372544	1.00
ZZZZZZ	46392254	1.34	99999876	1.00
ZZZZZZ	54527304	1.34	99761854	1.00
ZZZZZZ	46737897	1.34	99018438	1.01
ZZZZZZ	51501720	1.34	103423320	1.00

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: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G6G1034-DDT
Lab File ID: 6G36058.D
Instrument ID: GC6G
Injection Date: 06/10/16
Injection Time: 16:21

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	2612432	1434360
4,4'-DDE	1219518	542492
4,4'-DDT	216094680	102690829
DDT Breakdown [a]	1.7 %	1.9 %
Endrin aldehyde	1352257	618541
Endrin ketone	5068920	2227285
Endrin	116946783	52876025
Endrin Breakdown [b]	5.2 %	5.1 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G6G1034-IC1034	6G36060.D	06/10/16	16:54	00:33	Initial cal 1
G6G1034-IC1034	6G36061.D	06/10/16	17:10	00:49	Initial cal 2
G6G1034-IC1034	6G36062.D	06/10/16	17:27	01:06	Initial cal 5
G6G1034-IC1034	6G36063.D	06/10/16	17:43	01:22	Initial cal 10
G6G1034-ICC1034	6G36064.D	06/10/16	17:59	01:38	Initial cal 25
G6G1034-IC1034	6G36065.D	06/10/16	18:16	01:55	Initial cal 50
G6G1034-IC1034	6G36066.D	06/10/16	18:32	02:11	Initial cal 75
G6G1034-IC1034	6G36067.D	06/10/16	18:49	02:28	Initial cal 100
G6G1034-IC1034	6G36068.D	06/10/16	19:05	02:44	Initial cal 500
G6G1034-IC1034	6G36069.D	06/10/16	19:22	03:01	Initial cal 500
G6G1034-ICV1034	6G36070.D	06/10/16	19:38	03:17	Initial cal verification 25
G6G1034-ICV1034	6G36071.D	06/10/16	19:54	03:33	Initial cal verification 25
G6G1034-ICV1034	6G36072.D	06/10/16	20:11	03:50	Initial cal verification 500
G6G1034-ICV1034	6G36073.D	06/10/16	20:27	04:06	Initial cal verification 500
G6G1035-CC1034	6G36074.D	06/10/16	20:44	04:23	Continuing cal 25
OP94480-MB1	6G36076.D	06/10/16	21:17	04:56	Method Blank
OP94480-BS1	6G36077.D	06/10/16	21:33	05:12	Blank Spike
ZZZZZZ	6G36079.D	06/10/16	22:06	05:45	(unrelated sample)
ZZZZZZ	6G36080.D	06/10/16	22:22	06:01	(unrelated sample)
JC21339-4A	6G36081.D	06/10/16	22:39	06:18	(used for QC only; not part of job JC22613)
OP94480-MS	6G36082.D	06/10/16	22:55	06:34	Matrix Spike
OP94480-MSD	6G36083.D	06/10/16	23:12	06:51	Matrix Spike Duplicate
ZZZZZZ	6G36084.D	06/10/16	23:28	07:07	(unrelated sample)
ZZZZZZ	6G36085.D	06/10/16	23:44	07:23	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	G6G1034-DDT	**Injection Date:**	06/10/16
Lab File ID:	6G36058.D	**Injection Time:**	16:21
Instrument ID:	GC6G		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	6G36086.D	06/11/16	00:01	07:40	(unrelated sample)
ZZZZZZ	6G36087.D	06/11/16	00:17	07:56	(unrelated sample)
ZZZZZZ	6G36088.D	06/11/16	00:34	08:13	(unrelated sample)
ZZZZZZ	6G36089.D	06/11/16	00:50	08:29	(unrelated sample)
ZZZZZZ	6G36090.D	06/11/16	01:07	08:46	(unrelated sample)
ZZZZZZ	6G36091.D	06/11/16	01:23	09:02	(unrelated sample)
ZZZZZZ	6G36092.D	06/11/16	01:40	09:19	(unrelated sample)
ZZZZZZ	6G36093.D	06/11/16	01:56	09:35	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G6G1047-DDT
Lab File ID: 6G36616.D
Instrument ID: GC6G
Injection Date: 06/27/16
Injection Time: 16:58

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	998417	843569
4,4'-DDE	1132115	639961
4,4'-DDT	174304440	93062768
DDT Breakdown [a]	1.2 %	1.6 %
Endrin aldehyde	988789	754878
Endrin ketone	3628851	1824626
Endrin	100322797	49641022
Endrin Breakdown [b]	4.4 %	4.9 %

(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
G6G1047-CC1034	6G36617.D	06/27/16	17:14	00:16	Continuing cal 25
OP94861-MB1	6G36619.D	06/27/16	17:47	00:49	Method Blank
OP94861-BS1	6G36620.D	06/27/16	18:03	01:05	Blank Spike
OP95079-MB1	6G36635.D	06/27/16	18:20	01:22	Method Blank
OP95079-BS1	6G36636.D	06/27/16	18:36	01:38	Blank Spike
ZZZZZZ	6G36621.D	06/27/16	18:53	01:55	(unrelated sample)
ZZZZZZ	6G36622.D	06/27/16	19:09	02:11	(unrelated sample)
ZZZZZZ	6G36623.D	06/27/16	19:25	02:27	(unrelated sample)
ZZZZZZ	6G36624.D	06/27/16	19:42	02:44	(unrelated sample)
ZZZZZZ	6G36625.D	06/27/16	19:58	03:00	(unrelated sample)
JC22206-9	6G36626.D	06/27/16	20:15	03:17	(used for QC only; not part of job JC22613)
OP94861-MS	6G36627.D	06/27/16	20:31	03:33	Matrix Spike
OP94861-MSD	6G36628.D	06/27/16	20:48	03:50	Matrix Spike Duplicate
ZZZZZZ	6G36629.D	06/27/16	21:04	04:06	(unrelated sample)
ZZZZZZ	6G36630.D	06/27/16	21:21	04:23	(unrelated sample)
OP94857-MS	6G36631.D	06/27/16	21:37	04:39	Matrix Spike
OP94857-MSD	6G36632.D	06/27/16	21:54	04:56	Matrix Spike Duplicate
ZZZZZZ	6G36633.D	06/27/16	22:10	05:12	(unrelated sample)
ZZZZZZ	6G36634.D	06/27/16	22:26	05:28	(unrelated sample)
ZZZZZZ	6G36637.D	06/27/16	22:43	05:45	(unrelated sample)
G6G1047-CC1034	6G36638.D	06/27/16	22:59	06:01	Continuing cal 50
JC22613-7	6G36640.D	06/27/16	23:32	06:34	MW-23S
OP95079-MS	6G36641.D	06/27/16	23:49	06:51	Matrix Spike
OP95079-MSD	6G36642.D	06/28/16	00:05	07:07	Matrix Spike Duplicate

DDT/Endrin Breakdown Check

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	G6G1047-DDT	**Injection Date:**	06/27/16
Lab File ID:	6G36616.D	**Injection Time:**	16:58
Instrument ID:	GC6G		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JC22613-8	6G36643.D	06/28/16	00:21	07:23	MW-21S
ZZZZZZ	6G36646.D	06/28/16	01:11	08:13	(unrelated sample)
ZZZZZZ	6G36647.D	06/28/16	01:27	08:29	(unrelated sample)
ZZZZZZ	6G36648.D	06/28/16	01:44	08:46	(unrelated sample)
ZZZZZZ	6G36649.D	06/28/16	02:00	09:02	(unrelated sample)

GC Identification Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1047-CC1034	**Injection Date:**	06/27/16
Lab File ID:	6G36617.D	**Injection Time:**	17:14
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP95079-BS1	**Injection Date:**	06/27/16
Lab File ID:	6G36636.D	**Injection Time:**	18:36
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.42	3.42	0.17		ug/l	11.1
Aldrin	2	4.50	4.50	0.19		ug/l	
alpha-BHC	1 [a]	2.24	2.24	0.20		ug/l	0.0
alpha-BHC	2	2.99	2.99	0.20		ug/l	
beta-BHC	1 [a]	2.65	2.65	0.19		ug/l	10.0
beta-BHC	2	3.54	3.54	0.21		ug/l	
delta-BHC	1 [a]	2.84	2.84	0.20		ug/l	4.9
delta-BHC	2	3.94	3.94	0.21		ug/l	
gamma-BHC (Lindane)	1 [a]	2.56	2.56	0.20		ug/l	4.9
gamma-BHC (Lindane)	2	3.44	3.44	0.21		ug/l	
alpha-Chlordane	1 [a]	4.50	4.50	0.19		ug/l	10.0
alpha-Chlordane	2	5.92	5.92	0.21		ug/l	
gamma-Chlordane	1	4.33	4.33	0.19		ug/l	10.0
gamma-Chlordane [b]	2 [a]	5.67	5.68	0.21		ug/l	
Dieldrin	1 [a]	5.01	5.01	0.20		ug/l	14.0
Dieldrin	2	6.48	6.48	0.23		ug/l	
4,4'-DDD	1 [a]	5.52	5.52	0.20		ug/l	9.5
4,4'-DDD	2	7.24	7.24	0.22		ug/l	
4,4'-DDE	1 [a]	4.64	4.64	0.19		ug/l	19.0
4,4'-DDE	2	6.22	6.22	0.23		ug/l	
4,4'-DDT	1 [a]	5.95	5.95	0.19		ug/l	14.6
4,4'-DDT	2	7.82	7.82	0.22		ug/l	
Endrin	1 [a]	5.35	5.35	0.22		ug/l	4.4
Endrin	2	7.01	7.01	0.23		ug/l	
Endosulfan sulfate	1 [a]	7.07	7.07	0.20		ug/l	9.5
Endosulfan sulfate	2	8.53	8.54	0.22		ug/l	
Endrin aldehyde	1 [a]	6.34	6.34	0.20		ug/l	14.0
Endrin aldehyde	2	8.02	8.02	0.23		ug/l	
Endrin ketone	1 [a]	7.54	7.53	0.21		ug/l	13.3
Endrin ketone	2	9.57	9.57	0.24		ug/l	
Endosulfan-I	1 [a]	4.68	4.68	0.19		ug/l	10.0
Endosulfan-I	2	6.01	6.01	0.21		ug/l	
Endosulfan-II	1 [a]	5.68	5.69	0.20		ug/l	9.5
Endosulfan-II	2	7.40	7.40	0.22		ug/l	
Heptachlor	1 [a]	3.08	3.08	0.18		ug/l	10.5
Heptachlor	2	4.03	4.03	0.20		ug/l	
Heptachlor epoxide	1 [a]	4.15	4.15	0.20		ug/l	9.5
Heptachlor epoxide	2	5.37	5.37	0.22		ug/l	
Methoxychlor	1 [a]	6.82	6.82	0.20		ug/l	9.5
Methoxychlor	2	9.19	9.20	0.22		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1047-CC1034	**Injection Date:**	06/27/16
Lab File ID:	6G36617.D	**Injection Time:**	17:14
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP95079-BS1	**Injection Date:**	06/27/16
Lab File ID:	6G36636.D	**Injection Time:**	18:36
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc

(b) Reported from 2nd signal. %D of check calibration on 1st signal exceed method criteria (20%) so using for confirmation only.

10.6.1

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GC Identification Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1047-CC1034	**Injection Date:**	06/27/16
Lab File ID:	6G36638.D	**Injection Time:**	22:59
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP95079-MS	**Injection Date:**	06/27/16
Lab File ID:	6G36641.D	**Injection Time:**	23:49
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.42	3.42	0.48		ug/l	11.8
Aldrin	2	4.50	4.50	0.54		ug/l	
alpha-BHC	1 [a]	2.24	2.25	0.51		ug/l	3.8
alpha-BHC	2	2.99	2.99	0.53		ug/l	
beta-BHC	1 [a]	2.65	2.65	0.50		ug/l	3.9
beta-BHC	2	3.54	3.54	0.52		ug/l	
delta-BHC	1 [a]	2.84	2.84	0.49		ug/l	7.8
delta-BHC	2	3.95	3.95	0.53		ug/l	
gamma-BHC (Lindane)	1 [a]	2.56	2.56	0.51		ug/l	5.7
gamma-BHC (Lindane)	2	3.44	3.44	0.54		ug/l	
alpha-Chlordane	1 [a]	4.50	4.50	0.50		ug/l	9.5
alpha-Chlordane	2	5.91	5.92	0.55		ug/l	
gamma-Chlordane	1 [a]	4.33	4.33	0.49		ug/l	13.3
gamma-Chlordane	2	5.67	5.68	0.56		ug/l	
Dieldrin	1 [a]	5.02	5.02	0.52		ug/l	9.2
Dieldrin	2	6.48	6.48	0.57		ug/l	
4,4'-DDD	1 [a]	5.53	5.53	0.50		ug/l	7.7
4,4'-DDD	2	7.25	7.25	0.54		ug/l	
4,4'-DDE	1 [a]	4.65	4.65	0.40		ug/l	38.4
4,4'-DDE	2	6.22	6.22	0.59		ug/l	
4,4'-DDT	1 [a]	5.96	5.96	0.44		ug/l	14.7
4,4'-DDT	2	7.82	7.82	0.51		ug/l	
Endrin	1 [a]	5.35	5.35	0.52		ug/l	10.9
Endrin	2	7.01	7.01	0.58		ug/l	
Endosulfan sulfate	1 [a]	7.07	7.07	0.52		ug/l	9.2
Endosulfan sulfate	2	8.53	8.53	0.57		ug/l	
Endrin aldehyde	1 [a]	6.34	6.35	0.54		ug/l	12.2
Endrin aldehyde	2	8.02	8.02	0.61		ug/l	
Endrin ketone	1 [a]	7.53	7.54	0.57		ug/l	11.6
Endrin ketone	2	9.57	9.57	0.64		ug/l	
Endosulfan-I	1 [a]	4.68	4.68	0.57		ug/l	5.4
Endosulfan-I	2	6.01	6.01	0.54		ug/l	
Endosulfan-II	1 [a]	5.69	5.69	0.52		ug/l	10.9
Endosulfan-II	2	7.40	7.40	0.58		ug/l	
Heptachlor	1 [a]	3.08	3.08	0.47		ug/l	15.7
Heptachlor	2	4.03	4.03	0.55		ug/l	
Heptachlor epoxide	1 [a]	4.15	4.15	0.51		ug/l	9.3
Heptachlor epoxide	2	5.37	5.37	0.56		ug/l	
Methoxychlor	1 [a]	6.82	6.83	0.45		ug/l	6.5
Methoxychlor	2	9.20	9.20	0.48		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1047-CC1034	**Injection Date:**	06/27/16
Lab File ID:	6G36638.D	**Injection Time:**	22:59
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP95079-MSD	**Injection Date:**	06/28/16
Lab File ID:	6G36642.D	**Injection Time:**	00:05
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.42	3.42	0.35		ug/l	0.0
Aldrin	2	4.50	4.50	0.35		ug/l	
alpha-BHC	1 [a]	2.24	2.25	0.37		ug/l	5.3
alpha-BHC	2	2.99	2.99	0.39		ug/l	
beta-BHC	1 [a]	2.65	2.65	0.39		ug/l	2.5
beta-BHC	2	3.54	3.54	0.40		ug/l	
delta-BHC	1 [a]	2.84	2.84	0.39		ug/l	5.0
delta-BHC	2	3.95	3.95	0.41		ug/l	
gamma-BHC (Lindane)	1 [a]	2.56	2.56	0.39		ug/l	2.5
gamma-BHC (Lindane)	2	3.44	3.44	0.40		ug/l	
alpha-Chlordane	1 [a]	4.50	4.50	0.38		ug/l	19.0
alpha-Chlordane	2	5.91	5.92	0.46		ug/l	
gamma-Chlordane	1 [a]	4.33	4.33	0.38		ug/l	10.0
gamma-Chlordane	2	5.67	5.68	0.42		ug/l	
Dieldrin	1 [a]	5.02	5.02	0.39		ug/l	12.0
Dieldrin	2	6.48	6.48	0.44		ug/l	
4,4'-DDD	1 [a]	5.52	5.53	0.39		ug/l	5.0
4,4'-DDD	2	7.25	7.25	0.41		ug/l	
4,4'-DDE	1 [a]	4.65	4.65	0.32		ug/l	31.6
4,4'-DDE	2	6.22	6.22	0.44		ug/l	
4,4'-DDT	1 [a]	5.96	5.96	0.35		ug/l	13.3
4,4'-DDT	2	7.82	7.82	0.40		ug/l	
Endrin	1 [a]	5.35	5.35	0.41		ug/l	7.1
Endrin	2	7.01	7.01	0.44		ug/l	
Endosulfan sulfate	1 [a]	7.07	7.07	0.41		ug/l	9.3
Endosulfan sulfate	2	8.53	8.53	0.45		ug/l	
Endrin aldehyde	1 [a]	6.34	6.35	0.41		ug/l	13.6
Endrin aldehyde	2	8.02	8.02	0.47		ug/l	
Endrin ketone	1 [a]	7.54	7.54	0.45		ug/l	8.5
Endrin ketone	2	9.57	9.57	0.49		ug/l	
Endosulfan-I	1 [a]	4.68	4.68	0.42		ug/l	0.0
Endosulfan-I	2	6.01	6.01	0.42		ug/l	
Endosulfan-II	1 [a]	5.69	5.69	0.41		ug/l	7.1
Endosulfan-II	2	7.40	7.40	0.44		ug/l	
Heptachlor	1 [a]	3.08	3.08	0.35		ug/l	10.8
Heptachlor	2	4.03	4.03	0.39		ug/l	
Heptachlor epoxide	1 [a]	4.15	4.15	0.39		ug/l	7.4
Heptachlor epoxide	2	5.37	5.37	0.42		ug/l	
Methoxychlor	1 [a]	6.82	6.83	0.36		ug/l	13.0
Methoxychlor	2	9.19	9.20	0.41		ug/l	

(a) QC results reported from this column.

Semivolatile Surrogate Recovery Summary

Job Number: JC22613
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]
JC22613-7	6G36640.D	76	77	83	91
JC22613-8	6G36643.D	91	90	88	96
OP95079-BS1	6G36636.D	76	75	45	48
OP95079-MB1	6G36635.D	83	82	55	58
OP95079-MS	6G36641.D	98	98	85	94
OP95079-MSD	6G36642.D	73	72	68	74

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: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1047-CC1034	**Injection Date:**	06/27/16
Lab File ID:	6G36617.D	**Injection Time:**	17:14
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.72	2.28	9.57	11.59

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP94861-MB1	6G36619.D	06/27/16	17:47	1.72	2.28	9.57	11.59
OP94861-BS1	6G36620.D	06/27/16	18:03	1.72	2.28	9.57	11.59
OP95079-MB1	6G36635.D	06/27/16	18:20	1.72	2.28	9.57	11.59
OP95079-BS1	6G36636.D	06/27/16	18:36	1.72	2.28	9.56	11.58
ZZZZZZ	6G36621.D	06/27/16	18:53	1.72	2.28	9.57	11.58
ZZZZZZ	6G36622.D	06/27/16	19:09	1.72	2.28	9.56	11.58
ZZZZZZ	6G36623.D	06/27/16	19:25	1.72	2.28	9.57	11.59
ZZZZZZ	6G36624.D	06/27/16	19:42	1.72	2.28	9.56	11.58
ZZZZZZ	6G36625.D	06/27/16	19:58	1.72	2.28	9.56	11.58
JC22206-9	6G36626.D	06/27/16	20:15	1.72	2.28	9.56	11.58
OP94861-MS	6G36627.D	06/27/16	20:31	1.72	2.28	9.56	11.59
OP94861-MSD	6G36628.D	06/27/16	20:48	1.72	2.28	9.56	11.58
ZZZZZZ	6G36629.D	06/27/16	21:04	1.72	2.28	9.56	11.58
ZZZZZZ	6G36630.D	06/27/16	21:21	1.72	2.28	9.57	11.59
OP94857-MS	6G36631.D	06/27/16	21:37	1.73	2.28	9.57	11.58
OP94857-MSD	6G36632.D	06/27/16	21:54	1.73	2.28	9.56	11.58
ZZZZZZ	6G36633.D	06/27/16	22:10	1.72	2.28	9.57	11.58
ZZZZZZ	6G36634.D	06/27/16	22:26	1.72	2.28	9.56	11.58
ZZZZZZ	6G36637.D	06/27/16	22:43	1.72	2.28	9.56	11.58

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1047-CC1034	**Injection Date:**	06/27/16
Lab File ID:	6G36638.D	**Injection Time:**	22:59
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.73	2.28	9.57	11.58

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
JC22613-7	6G36640.D	06/27/16	23:32	1.72	2.28	9.56	11.58
OP95079-MS	6G36641.D	06/27/16	23:49	1.72	2.28	9.57	11.58
OP95079-MSD	6G36642.D	06/28/16	00:05	1.72	2.28	9.56	11.58
JC22613-8	6G36643.D	06/28/16	00:21	1.72	2.28	9.56	11.58
ZZZZZZ	6G36646.D	06/28/16	01:11	1.72	2.28	9.56	11.58
ZZZZZZ	6G36647.D	06/28/16	01:27	1.72	2.28	9.56	11.58
ZZZZZZ	6G36648.D	06/28/16	01:44	1.73	2.29	9.56	11.58
ZZZZZZ	6G36649.D	06/28/16	02:00	1.72	2.28	9.56	11.58

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: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G6G1034-ICC1034
Lab FileID: 6G36064.D

Response Factor Report HP G1530A

Method : C:\MSDCHEM\1\METHODS\6PST1034.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration

Calibration Files
2 =6g36061.D 5 =6g36062.D 10 =6g36063.D 25 =6g36064.D
50 =6g36065.D 100 =6g36067.D 1 =6g36060.D 75 =6g36066.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.946	0.923	0.914	0.897	0.939	0.978	1.051	0.938	0.948	5.03
3) alpha-BHC	1.109	1.111	1.130	1.205	1.335	1.470	1.256	1.367	1.248	10.71
4) gamma-BHC	1.033	1.065	1.074	1.130	1.226	1.329	1.180	1.249	1.161	8.91
5) Heptachlor	1.117	1.091	1.072	1.095	1.163	1.245	1.239	1.176	1.150	5.84
6) beta-BHC	0.583	0.574	0.563	0.543	0.552	0.565	0.700	0.545	0.578	8.83
7) delta-BHC	1.137	1.034	1.006	1.078	1.201	1.313	1.218	1.216	1.150	9.14
8) Aldrin	1.022	1.006	1.004	1.044	1.126	1.213	1.125	1.140	1.085	7.04
9) Heptachlor E	1.012	1.001	0.981	0.992	1.040	1.097	1.208	1.042	1.047	7.15
10) gamma-Chlord	1.053	1.093	1.008	1.004	1.054	1.126	1.370	1.063	1.096	10.74
11) alpha-Chlord	1.044	1.010	0.995	0.993	1.041	1.102	1.236	1.045	1.058	7.57
12) Endosulfan I	1.117	1.099	1.065	1.061	1.109	1.154	1.323	1.088	1.127	7.52
13) 4,4'-DDE	0.677	0.681	0.683	0.740	0.816	0.927	0.846	0.865	0.779	12.43
14) Dieldrin	0.947	0.945	0.936	0.968	1.038	1.119	1.107	1.057	1.015	7.41
15) Endrin	0.902	0.893	0.877	0.888	0.946	1.009	0.950	0.955	0.928	4.86
16) 4,4'-DDD	0.656	0.660	0.696	0.708	0.752	0.804	0.864	0.764	0.738	9.79
17) Endosulfan I	0.909	0.891	0.905	0.907	0.941	0.993	1.092	0.954	0.949	7.04
18) 4,4'-DDT	0.647	0.648	0.653	0.679	0.739	0.834	0.755	0.775	0.716	9.74
19) Endrin Aldeh	0.739	0.742	0.713	0.727	0.743	0.768	0.803	0.739	0.747	3.68
20) Endosulfan S	0.774	0.767	0.753	0.763	0.795	0.838	0.952	0.803	0.806	8.10
21) Methoxychlor	0.403	0.413	0.402	0.394	0.413	0.429	0.518	0.415	0.423	9.35
22) Mirex	0.921	0.906	0.866	0.827	0.806	0.810	1.111	0.792	0.880	11.89
23) Endrin Keton	0.886	0.891	0.873	0.895	0.929	0.980	0.902	0.943	0.912	3.91
24) Decachlorobi	0.994	0.982	0.912	0.874	0.854	0.853	1.136	0.841	0.931	10.95
25) I 1-bromo-2-nitrobenzen	ISTD									
26) Toxaphene{A}					0.015				0.015	0.00
27) Toxaphene{B}					0.040				0.040	0.00
28) Toxaphene{C}					0.045				0.045	0.00
29) Toxaphene{D}					0.041				0.041	0.00
30) Toxaphene{E}					0.029				0.029	0.00
31) I 1-bromo-2-nitrobenzen	ISTD									
32) Chlordane {A					0.035				0.035	0.00
33) Chlordane {B					0.050				0.050	0.00
34) Chlordane {C					0.155				0.155	0.00
35) Chlordane {D					0.227				0.227	0.00
36) Chlordane {E					0.037				0.037	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.947	1.002	0.948	0.969	1.003	1.051	1.177	1.000	1.012	7.41
3) alpha-BHC	1.060	1.025	1.040	1.162	1.335	1.521	1.241	1.394	1.222	14.95
4) gamma-BHC	0.959	0.978	1.012	1.110	1.250	1.398	1.159	1.293	1.145	13.94

Initial Calibration Summary

Job Number: JC22613 **Sample:** G6G1034-ICC1034
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G36064.D
Project: BMSMC, Building 5 Area, PR

5)	Heptachlor	1.111	1.101	1.102	1.167	1.273	1.403	1.156	1.301	1.202	9.27
6)	beta-BHC	0.562	0.559	0.556	0.573	0.598	0.626	0.741	0.595	0.601	10.20
7)	delta-BHC	0.961	0.979	0.935	1.049	1.189	1.340	1.106	1.235	1.099	13.22
8)	Aldrin	1.005	0.999	1.042	1.103	1.210	1.347	1.255	1.244	1.150	11.38
9)	Heptachlor E	1.111	1.020	1.022	1.082	1.152	1.251	1.358	1.171	1.146	10.08
10)	gamma-Chlord	1.170	1.035	1.041	1.096	1.179	1.286	1.267	1.199	1.159	8.19
11)	alpha-Chlord	1.129	1.049	1.057	1.111	1.186	1.281	1.372	1.198	1.173	9.49
12)	Endosulfan I	1.029	1.001	0.978	1.033	1.091	1.176	1.261	1.105	1.084	8.84
13)	4,4'-DDE	1.004	0.906	0.905	0.969	1.051	1.164	0.864	1.085	0.994	10.31
14)	Dieldrin	1.017	0.948	0.969	1.034	1.126	1.248	1.046	1.161	1.069	9.54
15)	Endrin	0.946	0.933	0.881	0.968	1.025	1.120	0.903	1.047	0.978	8.22
16)	4,4'-DDD	0.780	0.747	0.719	0.766	0.808	0.914	1.024	0.854	0.826	12.22
17)	Endosulfan I	0.919	0.921	0.947	0.971	1.011	1.100	1.032	1.047	0.994	6.55
18)	4,4'-DDT	0.649	0.670	0.660	0.726	0.812	0.946	0.766	0.871	0.763	14.11
19)	Endrin Aldeh	0.786	0.773	0.775	0.831	0.854	0.890	0.844	0.853	0.826	5.20
20)	Endosulfan S	0.887	0.865	0.829	0.869	0.907	0.963	0.939	0.921	0.898	4.87
21)	Methoxychlor	0.444	0.429	0.442	0.470	0.483	0.516	0.579	0.494	0.482	10.13
22)	Mirex	1.072	1.014	0.997	1.023	0.982	1.012	1.214	0.992	1.038	7.33
23)	Endrin Keton	0.886	0.909	0.902	0.987	1.039	1.116	0.973	1.066	0.985	8.51
24)	Decachlorobi	1.265	1.231	1.186	1.159	1.143	1.139	1.479	1.131	1.217	9.54

25) I 1-bromo-2-nitrobenzen ----------ISTD----------

26)	Toxaphene{A}	0.023	0.023	0.00
27)	Toxaphene{B}	0.030	0.030	0.00
28)	Toxaphene{C}	0.049	0.049	0.00
29)	Toxaphene{D}	0.030	0.030	0.00
30)	Toxaphene{E}	0.026	0.026	0.00

31) I 1-bromo-2-nitrobenzen ----------ISTD----------

32)	Chlordane {A	0.036	0.036	0.00
33)	Chlordane {B	0.049	0.049	0.00
34)	Chlordane {C	0.160	0.160	0.00
35)	Chlordane {D	0.264	0.264	0.00
36)	Chlordane {E	0.037	0.037	0.00

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

6PST1034.M Mon Jun 13 14:06:25 2016

Initial Calibration Verification

Job Number: JC22613 **Sample:** G6G1034-ICV1034
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G36070.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\1034\6g36070.D\ECD1A.CH    Vial: 13
Signal #2 : C:\msdchem\1\DATA\1034\6g36070.D\ECD2B.CH
Acq On    : 10 Jun 2016   7:38 pm                    Operator: dharas
Sample    : icv1034-25                               Inst    : HP G1530A
Misc      : op94394,g6g1034,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST1034.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Jun 13 12:02:56 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	0.97- 1.03
2	SAB	Tetrachloro-m-xylene	0.948	0.854	9.9	96	0.00	1.69- 1.75
3	A	alpha-BHC	1.248	1.102	11.7	92	0.00	2.22- 2.28
4	MA	gamma-BHC	1.161	1.029	11.4	92	0.00	2.53- 2.59
5	MA	Heptachlor	1.150	1.012	12.0	93	0.00	3.06- 3.12
6	B	beta-BHC	0.578	0.507	12.3	94	0.00	2.62- 2.68
7	B	delta-BHC	1.150	1.050	8.7	98	0.00	2.81- 2.87
8	MB	Aldrin	1.085	0.945	12.9	91	0.00	3.40- 3.47
9	B	Heptachlor Epoxide	1.047	0.893	14.7	91	0.00	4.14- 4.20
10	B	gamma-Chlordane	1.096	0.944	13.9	95	0.00	4.31- 4.37
11	B	alpha-Chlordane	1.058	0.913	13.7	93	0.00	4.49- 4.55
12	A	Endosulfan I	1.127	0.961	14.7	91	0.00	4.66- 4.72
13	B	4,4'-DDE	0.779	0.652	16.3	89	0.00	4.63- 4.69
14	MA	Dieldrin	1.015	0.892	12.1	93	0.00	5.00- 5.06
15	MA	Endrin	0.928	0.835	10.0	95	0.00	5.33- 5.39
16	A	4,4'-DDD	0.738	0.636	13.8	91	0.00	5.50- 5.56
17	B	Endosulfan II	0.949	0.839	11.6	93	0.00	5.67- 5.73
18	MA	4,4'-DDT	0.716	0.642	10.3	95	0.00	5.94- 6.00
19	B	Endrin Aldehyde	0.747	0.648	13.3	90	0.00	6.33- 6.39
20	B	Endosulfan Sulfate	0.806	0.721	10.5	95	0.00	7.06- 7.12
21	A	Methoxychlor	0.423	0.395	6.6	101	0.00	6.81- 6.87
23	B	Endrin Ketone	0.912	0.806	11.6	91	0.00	7.53- 7.59
24	SAB	Decachlorobiphenyl	0.931	0.844	9.3	97	0.00	9.56- 9.62

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.31- 1.37
2	SAB	Tetrachloro-m-xylene	1.012	0.909	10.2	95	0.00	2.26- 2.32
3	A	alpha-BHC	1.222	1.027	16.0	90	0.00	2.97- 3.03
4	MA	gamma-BHC	1.145	0.996	13.0	91	0.00	3.42- 3.48
5	MA	Heptachlor	1.202	1.058	12.0	92	0.00	4.02- 4.08
6	B	beta-BHC	0.601	0.510	15.1	90	0.00	3.52- 3.58
7	B	delta-BHC	1.099	0.974	11.4	94	0.00	3.93- 3.99
8	MB	Aldrin	1.150	0.975	15.2	90	0.00	4.49- 4.55
9	B	Heptachlor Epoxide	1.146	0.983	14.2	92	0.00	5.36- 5.42
10	B	gamma-Chlordane	1.159	1.010	12.9	94	0.00	5.67- 5.73
11	B	alpha-Chlordane	1.173	1.008	14.1	92	0.00	5.91- 5.97
12	A	Endosulfan I	1.084	0.907	16.3	89	0.00	6.00- 6.06

Initial Calibration Verification

Job Number: JC22613 **Sample:** G6G1034-ICV1034
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G36070.D
Project: BMSMC, Building 5 Area, PR

13	B	4,4'-DDE	0.994	0.882	11.3	92	0.00	6.21- 6.27
14	MA	Dieldrin	1.069	0.937	12.3	92	0.00	6.47- 6.53
15	MA	Endrin	0.978	0.893	8.7	94	0.00	7.01- 7.07
16	A	4,4'-DDD	0.826	0.686	16.9	91	0.00	7.24- 7.30
17	B	Endosulfan II	0.994	0.873	12.2	91	0.00	7.39- 7.45
18	MA	4,4'-DDT	0.763	0.693	9.2	97	0.00	7.81- 7.87
19	B	Endrin Aldehyde	0.826	0.728	11.9	89	0.00	8.02- 8.08
20	B	Endosulfan Sulfate	0.898	0.785	12.6	92	0.00	8.53- 8.59
21	A	Methoxychlor	0.482	0.434	10.0	94	0.00	9.19- 9.25
23	B	Endrin Ketone	0.985	0.867	12.0	89	0.00	9.57- 9.63
24	SAB	Decachlorobiphenyl	1.217	1.116	8.3	98	0.00	11.57-11.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g36064.D 6PST1034.M Mon Jun 13 13:44:04 2016

10.9.2 10

Initial Calibration Verification

Job Number: JC22613
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G6G1034-ICV1034
Lab FileID: 6G36071.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\1034\6g36071.D\ECD1A.CH    Vial: 14
Signal #2 : C:\msdchem\1\DATA\1034\6g36071.D\ECD2B.CH
Acq On    : 10 Jun 2016   7:54 pm                    Operator: dharas
Sample    : icv1034-25                               Inst    : HP G1530A
Misc      : op94394,g6g1034,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST1034.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Jun 13 12:02:56 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	0.98- 1.04
22	Mirex	0.880	0.986	-12.0	117	0.00	6.91- 6.97

***** Signal #2 *****

1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.32- 1.38
22	Mirex	1.038	1.221	-17.6	121	0.00	9.48- 9.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g36064.D 6PST1034.M Mon Jun 13 13:44:06 2016

10.9.3 10

Initial Calibration Verification

Job Number: JC22613 **Sample:** G6G1034-ICV1034
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G36072.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\1034\6g36072.D\ECD1A.CH    Vial: 15
Signal #2 : C:\msdchem\1\DATA\1034\6g36072.D\ECD2B.CH
Acq On    : 10 Jun 2016   8:11 pm                    Operator: dharas
Sample    : icv1034-500                              Inst    : HP G1530A
Misc      : op94394,g6g1034,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST1034.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Jun 13 12:02:56 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	97	0.00	0.98- 1.04
2	SAB	Tetrachloro-m-xylene	0.948	0.866	8.6	89	0.00	1.70- 1.76
24	SAB	Decachlorobiphenyl	0.931	0.846	9.1	96	0.00	9.56- 9.62
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	0.98- 1.04
32		Chlordane {A}	0.035	0.037	-5.7	110	0.00	2.89- 3.09
33		Chlordane {B}	0.050	0.046	8.0	96	0.00	3.48- 3.68
34		Chlordane {C}	0.155	0.136	12.3	91	0.00	4.24- 4.44
35		Chlordane {D}	0.227	0.204	10.1	93	0.00	4.41- 4.61
36		Chlordane {E}	0.037	0.034	8.1	95	0.00	5.51- 5.71

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.32- 1.38
2	SAB	Tetrachloro-m-xylene	1.012	0.888	12.3	90	0.00	2.26- 2.32
24	SAB	Decachlorobiphenyl	1.217	1.085	10.8	96	0.00	11.57-11.63
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.25- 1.45
32		Chlordane {A}	0.036	0.038	-5.6	112	0.00	3.74- 3.94
33		Chlordane {B}	0.049	0.045	8.2	99	0.00	4.63- 4.83
34		Chlordane {C}	0.160	0.138	13.7	92	0.00	5.60- 5.80
35		Chlordane {D}	0.264	0.230	12.9	93	0.00	5.84- 6.04
36		Chlordane {E}	0.037	0.034	8.1	99	0.00	7.40- 7.60

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g36065.D 6PST1034.M Mon Jun 13 13:44:25 2016

Initial Calibration Verification

Job Number: JC22613 **Sample:** G6G1034-ICV1034
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G36073.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\1034\6g36073.D\ECD1A.CH    Vial: 16
Signal #2 : C:\msdchem\1\DATA\1034\6g36073.D\ECD2B.CH
Acq On    : 10 Jun 2016   8:27 pm                    Operator: dharas
Sample    : icv1034-500                              Inst    : HP G1530A
Misc      : op94394,g6g1034,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST1034.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Jun 13 12:02:56 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	0.98- 1.04
2 SAB	Tetrachloro-m-xylene	0.948	0.840	11.4	90	0.00	1.70- 1.76
24 SAB	Decachlorobiphenyl	0.931	0.821	11.8	97	0.00	9.56- 9.62
25 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	0.98- 1.04
26 L8	Toxaphene{A}	0.015	0.016	-6.7	117	0.00	4.94- 5.14
27 L8	Toxaphene{B}	0.040	0.043	-7.5	116	0.00	5.32- 5.52
28 L8	Toxaphene{C}	0.045	0.046	-2.2	109	0.00	5.59- 5.79
29 L8	Toxaphene{D}	0.041	0.040	2.4	107	0.00	6.15- 6.35
30 L8	Toxaphene{E}	0.029	0.028	3.4	104	0.00	6.83- 7.03

***** Signal #2 *****

1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.32- 1.38
2 SAB	Tetrachloro-m-xylene	1.012	0.904	10.7	91	0.00	2.26- 2.32
24 SAB	Decachlorobiphenyl	1.217	1.101	9.5	97	0.00	11.57-11.63
25 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.32- 1.38
26 L8	Toxaphene{A}	0.023	0.023	0.0	104	0.00	6.37- 6.57
27 L8	Toxaphene{B}	0.030	0.029	3.3	104	0.00	7.29- 7.49
28 L8	Toxaphene{C}	0.049	0.046	6.1	102	0.00	7.47- 7.67
29 L8	Toxaphene{D}	0.030	0.030	0.0	105	0.00	7.95- 8.15
30 L8	Toxaphene{E}	0.026	0.024	7.7	100	0.00	8.93- 9.13

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g36065.D 6PST1034.M Mon Jun 13 13:44:27 2016

Continuing Calibration Summary

Job Number: JC22613 **Sample:** G6G1047-CC1034
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G36617.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\1047\6g36617.D\ECD1A.CH    Vial: 2
Signal #2 : C:\msdchem\1\DATA\1047\6g36617.D\ECD2B.CH
Acq On    : 27 Jun 2016   5:14 pm                    Operator: dharas
Sample    : cc1034-25                                 Inst    : HP G1530A
Misc      : op95109,g6g1047,15.1,,,10,10             Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST1034.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Jun 27 08:34:56 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	88	-0.01	0.97- 1.03
2	SAB	Tetrachloro-m-xylene	0.948	0.878	7.4	86	0.00	1.69- 1.75
3	A	alpha-BHC	1.248	1.151	7.8	84	0.00	2.21- 2.27
4	MA	gamma-BHC	1.161	1.074	7.5	84	0.00	2.53- 2.59
5	MA	Heptachlor	1.150	1.023	11.0	82	0.00	3.05- 3.11
6	B	beta-BHC	0.578	0.511	11.6	83	0.00	2.62- 2.68
7	B	delta-BHC	1.150	0.984	14.4	80	0.00	2.81- 2.87
8	MB	Aldrin	1.085	0.965	11.1	81	0.00	3.38- 3.45
9	B	Heptachlor Epoxide	1.047	0.927	11.5	82	0.00	4.12- 4.18
10	B	gamma-Chlordane	1.096	0.872	20.4#	76	0.00	4.30- 4.36
11	B	alpha-Chlordane	1.058	0.895	15.4	79	0.00	4.47- 4.53
12	A	Endosulfan I	1.127	0.993	11.9	82	0.00	4.65- 4.71
13	B	4,4'-DDE	0.779	0.683	12.3	81	0.00	4.61- 4.67
14	MA	Dieldrin	1.015	0.902	11.1	82	0.00	4.98- 5.04
15	MA	Endrin	0.928	0.854	8.0	85	0.00	5.32- 5.38
16	A	4,4'-DDD	0.738	0.671	9.1	83	0.00	5.49- 5.55
17	B	Endosulfan II	0.949	0.847	10.7	82	0.00	5.66- 5.72
18	MA	4,4'-DDT	0.716	0.629	12.2	82	0.00	5.92- 5.98
19	B	Endrin Aldehyde	0.747	0.671	10.2	81	0.00	6.31- 6.37
20	B	Endosulfan Sulfate	0.806	0.705	12.5	81	0.00	7.04- 7.10
21	A	Methoxychlor	0.423	0.364	13.9	81	0.00	6.79- 6.85
22		Mirex	0.880	0.724	17.7	77	0.00	6.89- 6.95
23	B	Endrin Ketone	0.912	0.833	8.7	82	0.00	7.50- 7.56
24	SAB	Decachlorobiphenyl	0.931	0.824	11.5	83	0.00	9.54- 9.60
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	-0.01	0.97- 1.03
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#	-0.01	0.97- 1.03
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

10.9.6 10

Continuing Calibration Summary

Job Number: JC22613 **Sample:** G6G1047-CC1034
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G36617.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	93	0.00	1.31- 1.37
2	SAB	Tetrachloro-m-xylene	1.012	0.955	5.6	92	0.00	2.25- 2.31
3	A	alpha-BHC	1.222	1.146	6.2	92	0.00	2.96- 3.02
4	MA	gamma-BHC	1.145	1.108	3.2	93	0.00	3.41- 3.47
5	MA	Heptachlor	1.202	1.216	-1.2	97	0.00	4.00- 4.06
6	B	beta-BHC	0.601	0.564	6.2	92	0.00	3.51- 3.57
7	B	delta-BHC	1.099	1.015	7.6	90	0.00	3.91- 3.97
8	MB	Aldrin	1.150	1.106	3.8	94	0.00	4.47- 4.53
9	B	Heptachlor Epoxide	1.146	1.068	6.8	92	0.00	5.34- 5.40
10	B	gamma-Chlordane	1.159	1.071	7.6	91	0.00	5.65- 5.71
11	B	alpha-Chlordane	1.173	1.081	7.8	91	0.00	5.89- 5.95
12	A	Endosulfan I	1.084	1.004	7.4	91	0.00	5.98- 6.04
13	B	4,4'-DDE	0.994	1.066	-7.2	103	0.00	6.19- 6.25
14	MA	Dieldrin	1.069	1.044	2.3	94	0.00	6.45- 6.51
15	MA	Endrin	0.978	0.971	0.7	94	0.00	6.98- 7.04
16	A	4,4'-DDD	0.826	0.788	4.6	96	0.00	7.21- 7.27
17	B	Endosulfan II	0.994	0.960	3.4	92	0.00	7.37- 7.43
18	MA	4,4'-DDT	0.763	0.753	1.3	97	0.00	7.79- 7.85
19	B	Endrin Aldehyde	0.826	0.793	4.0	89	0.00	7.99- 8.05
20	B	Endosulfan Sulfate	0.898	0.841	6.3	90	0.00	8.51- 8.57
21	A	Methoxychlor	0.482	0.465	3.5	92	0.00	9.17- 9.23
22		Mirex	1.038	0.910	12.3	83	0.00	9.45- 9.51
23	B	Endrin Ketone	0.985	0.965	2.0	91	0.00	9.54- 9.60
24	SAB	Decachlorobiphenyl	1.217	1.147	5.8	92	0.00	11.56-11.62
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.31- 1.37
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	1.24- 1.44
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
6g36064.D 6PST1034.M Tue Jun 28 09:06:08 2016

10.9.6

10

Continuing Calibration Summary

Job Number: JC22613 **Sample:** G6G1047-CC1034
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G36638.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\1047\6g36638.D\ECD1A.CH    Vial: 4
Signal #2 : C:\msdchem\1\DATA\1047\6g36638.D\ECD2B.CH
Acq On    : 27 Jun 2016  10:59 pm                    Operator: dharas
Sample    : cc1034-50                                Inst    : HP G1530A
Misc      : op95079,g6g1047,1000,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST1034.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Jun 27 08:34:56 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	0.98- 1.04
2	SAB	Tetrachloro-m-xylene	0.948	0.912	3.8	89	0.00	1.70- 1.76
3	A	alpha-BHC	1.248	1.249	-0.1	86	0.00	2.22- 2.28
4	MA	gamma-BHC	1.161	1.143	1.6	85	0.00	2.53- 2.59
5	MA	Heptachlor	1.150	1.035	10.0	82	0.00	3.05- 3.11
6	B	beta-BHC	0.578	0.506	12.5	84	0.00	2.62- 2.68
7	B	delta-BHC	1.150	1.048	8.9	80	0.00	2.81- 2.87
8	MB	Aldrin	1.085	1.047	3.5	85	0.00	3.39- 3.46
9	B	Heptachlor Epoxide	1.047	0.968	7.5	85	0.00	4.12- 4.18
10	B	gamma-Chlordane	1.096	0.978	10.8	85	0.00	4.30- 4.36
11	B	alpha-Chlordane	1.058	0.966	8.7	85	0.00	4.47- 4.53
12	A	Endosulfan I	1.127	1.207	-7.1	100	0.00	4.65- 4.71
13	B	4,4'-DDE	0.779	0.587	24.6#	66	0.00	4.62- 4.68
14	MA	Dieldrin	1.015	0.973	4.1	86	0.00	4.99- 5.05
15	MA	Endrin	0.928	0.840	9.5	81	0.00	5.32- 5.38
16	A	4,4'-DDD	0.738	0.676	8.4	82	0.00	5.50- 5.56
17	B	Endosulfan II	0.949	0.894	5.8	87	0.00	5.66- 5.72
18	MA	4,4'-DDT	0.716	0.615	14.1	76	0.00	5.93- 5.99
19	B	Endrin Aldehyde	0.747	0.723	3.2	89	0.00	6.32- 6.38
20	B	Endosulfan Sulfate	0.806	0.730	9.4	84	0.00	7.04- 7.10
21	A	Methoxychlor	0.423	0.310	26.7#	69	0.00	6.80- 6.86
22		Mirex	0.880	0.755	14.2	86	0.00	6.89- 6.95
23	B	Endrin Ketone	0.912	0.937	-2.7	92	0.00	7.51- 7.57
24	SAB	Decachlorobiphenyl	0.931	0.821	11.8	88	0.00	9.54- 9.60
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	0.98- 1.04
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	0.98- 1.04
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

10.9.7 10

Continuing Calibration Summary

Job Number: JC22613 **Sample:** G6G1047-CC1034
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G36638.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.32- 1.38
2	SAB	Tetrachloro-m-xylene	1.012	0.988	2.4	93	0.00	2.25- 2.31
3	A	alpha-BHC	1.222	1.295	-6.0	92	0.00	2.96- 3.02
4	MA	gamma-BHC	1.145	1.213	-5.9	92	0.00	3.41- 3.47
5	MA	Heptachlor	1.202	1.266	-5.3	94	0.00	4.00- 4.06
6	B	beta-BHC	0.601	0.579	3.7	91	0.00	3.51- 3.57
7	B	delta-BHC	1.099	1.093	0.5	87	0.00	3.92- 3.98
8	MB	Aldrin	1.150	1.214	-5.6	95	0.00	4.47- 4.53
9	B	Heptachlor Epoxide	1.146	1.155	-0.8	95	0.00	5.34- 5.40
10	B	gamma-Chlordane	1.159	1.179	-1.7	95	0.00	5.65- 5.71
11	B	alpha-Chlordane	1.173	1.180	-0.6	94	0.00	5.89- 5.95
12	A	Endosulfan I	1.084	1.100	-1.5	95	0.00	5.98- 6.04
13	B	4,4'-DDE	0.994	1.105	-11.2	99	0.00	6.19- 6.25
14	MA	Dieldrin	1.069	1.133	-6.0	95	0.00	6.45- 6.51
15	MA	Endrin	0.978	0.979	-0.1	90	0.00	6.98- 7.04
16	A	4,4'-DDD	0.826	0.824	0.2	96	0.00	7.22- 7.28
17	B	Endosulfan II	0.994	1.045	-5.1	98	0.00	7.37- 7.43
18	MA	4,4'-DDT	0.763	0.743	2.6	86	0.00	7.79- 7.85
19	B	Endrin Aldehyde	0.826	0.885	-7.1	98	0.00	7.99- 8.05
20	B	Endosulfan Sulfate	0.898	0.898	0.0	94	0.00	8.50- 8.56
21	A	Methoxychlor	0.482	0.434	10.0	85	0.00	9.17- 9.23
22		Mirex	1.038	1.015	2.2	98	0.00	9.45- 9.51
23	B	Endrin Ketone	0.985	1.129	-14.6	103	0.00	9.54- 9.60
24	SAB	Decachlorobiphenyl	1.217	1.157	4.9	96	0.00	11.55-11.61
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.32- 1.38
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.25- 1.45
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
6g36065.D 6PST1034.M Tue Jun 28 09:31:33 2016

10.9.7

10

Continuing Calibration Summary

Job Number: JC22613 **Sample:** G6G1048-CC1034
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G36651.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\1048\6g36651.D\ECD1A.CH    Vial: 2
Signal #2 : C:\msdchem\1\DATA\1048\6g36651.D\ECD2B.CH
Acq On    : 28 Jun 2016   9:23 am                    Operator: kristend
Sample    : cc1034-25                                Inst    : HP G1530A
Misc      : op95064,g6g1048,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST1034.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Jun 27 08:34:56 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	0.97- 1.03
2	SAB	Tetrachloro-m-xylene	0.948	0.903	4.7	101	0.00	1.69- 1.75
3	A	alpha-BHC	1.248	1.204	3.5	100	0.00	2.21- 2.27
4	MA	gamma-BHC	1.161	1.116	3.9	99	0.00	2.53- 2.59
5	MA	Heptachlor	1.150	1.040	9.6	95	0.00	3.05- 3.11
6	B	beta-BHC	0.578	0.533	7.8	99	0.00	2.61- 2.67
7	B	delta-BHC	1.150	1.000	13.0	93	0.00	2.81- 2.87
8	MB	Aldrin	1.085	0.984	9.3	95	0.00	3.39- 3.46
9	B	Heptachlor Epoxide	1.047	0.913	12.8	92	0.00	4.12- 4.18
10	B	gamma-Chlordane	1.096	0.863	21.3#	86	0.00	4.29- 4.35
11	B	alpha-Chlordane	1.058	0.885	16.4	90	0.00	4.47- 4.53
12	A	Endosulfan I	1.127	0.971	13.8	92	0.00	4.65- 4.71
13	B	4,4'-DDE	0.779	0.691	11.3	94	0.00	4.61- 4.67
14	MA	Dieldrin	1.015	0.911	10.2	95	0.00	4.98- 5.04
15	MA	Endrin	0.928	0.858	7.5	97	0.00	5.32- 5.38
16	A	4,4'-DDD	0.738	0.669	9.3	95	0.00	5.48- 5.54
17	B	Endosulfan II	0.949	0.863	9.1	96	0.00	5.65- 5.71
18	MA	4,4'-DDT	0.716	0.668	6.7	99	0.00	5.92- 5.98
19	B	Endrin Aldehyde	0.747	0.700	6.3	97	0.00	6.31- 6.37
20	B	Endosulfan Sulfate	0.806	0.766	5.0	101	0.00	7.04- 7.10
21	A	Methoxychlor	0.423	0.394	6.9	100	0.00	6.78- 6.84
22		Mirex	0.880	0.755	14.2	92	0.00	6.89- 6.95
23	B	Endrin Ketone	0.912	0.919	-0.8	103	0.00	7.50- 7.56
24	SAB	Decachlorobiphenyl	0.931	0.845	9.2	97	0.00	9.53- 9.59
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	0.97- 1.03
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	0.97- 1.03
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

10.9.8 10

Continuing Calibration Summary

Job Number: JC22613 **Sample:** G6G1048-CC1034
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G36651.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.31- 1.37
2	SAB	Tetrachloro-m-xylene	1.012	0.972	4.0	107	0.00	2.25- 2.31
3	A	alpha-BHC	1.222	1.207	1.2	111	0.00	2.96- 3.02
4	MA	gamma-BHC	1.145	1.143	0.2	110	0.00	3.41- 3.47
5	MA	Heptachlor	1.202	1.256	-4.5	115	0.00	4.00- 4.06
6	B	beta-BHC	0.601	0.571	5.0	107	0.00	3.50- 3.56
7	B	delta-BHC	1.099	1.062	3.4	108	0.00	3.91- 3.97
8	MB	Aldrin	1.150	1.148	0.2	111	0.00	4.47- 4.53
9	B	Heptachlor Epoxide	1.146	1.128	1.6	112	0.00	5.34- 5.40
10	B	gamma-Chlordane	1.159	1.124	3.0	110	0.00	5.64- 5.70
11	B	alpha-Chlordane	1.173	1.134	3.3	109	0.00	5.88- 5.94
12	A	Endosulfan I	1.084	1.060	2.2	110	0.00	5.98- 6.04
13	B	4,4'-DDE	0.994	1.083	-9.0	120	0.00	6.18- 6.25
14	MA	Dieldrin	1.069	1.072	-0.3	111	0.00	6.45- 6.51
15	MA	Endrin	0.978	0.998	-2.0	110	0.00	6.98- 7.04
16	A	4,4'-DDD	0.826	0.791	4.2	111	0.00	7.21- 7.27
17	B	Endosulfan II	0.994	0.997	-0.3	110	0.00	7.37- 7.43
18	MA	4,4'-DDT	0.763	0.793	-3.9	117	0.00	7.79- 7.85
19	B	Endrin Aldehyde	0.826	0.846	-2.4	109	0.00	7.99- 8.05
20	B	Endosulfan Sulfate	0.898	0.933	-3.9	115	0.00	8.50- 8.56
21	A	Methoxychlor	0.482	0.503	-4.4	115	0.00	9.16- 9.22
22		Mirex	1.038	0.988	4.8	103	0.00	9.45- 9.51
23	B	Endrin Ketone	0.985	1.077	-9.3	117	0.00	9.54- 9.60
24	SAB	Decachlorobiphenyl	1.217	1.130	7.1	104	0.00	11.56-11.62
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.31- 1.37
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	1.24- 1.44
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
6g36064.D 6PST1034.M Tue Jun 28 11:10:49 2016

10.9.8 10

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36640.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 11:32 pm
Operator : dharas
Sample : jc22613-7
Misc : op95079,g6g1047,1000,,,10,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 09:36:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.000	1.337	148.2E6	62331914	50.000	50.000
25) I 1-bromo-2...	1.000	1.337	148.2E6	62331914	50.000	50.000
31) I 1-bromo-2...	1.000	1.337	148.2E6	62331914	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	1.718	2.278	85384672	38708059	30.371	30.681
Spiked Amount 40.000	Range 30 - 150		Recovery =		75.93%	76.70%
24) SAB Decachlor...	9.565f	11.583f	92059175	55118062	33.370	36.335
Spiked Amount 40.000			Recovery =		83.42%	90.84%
Target Compounds						
SemiQuant Compounds - Not Calibrated on this Instrument						

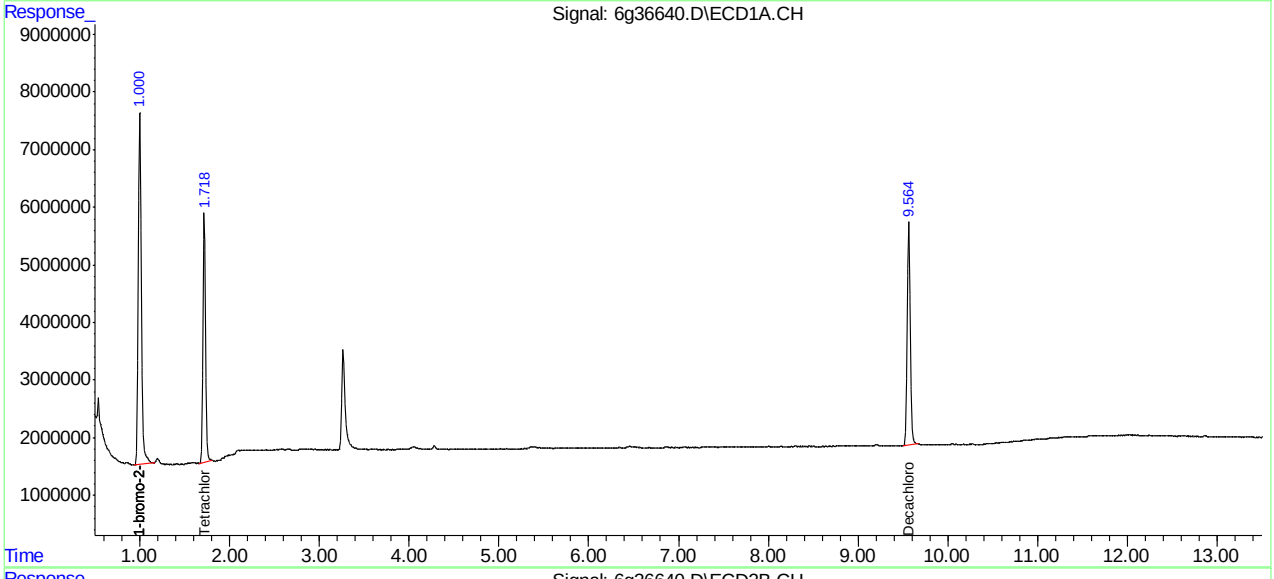
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

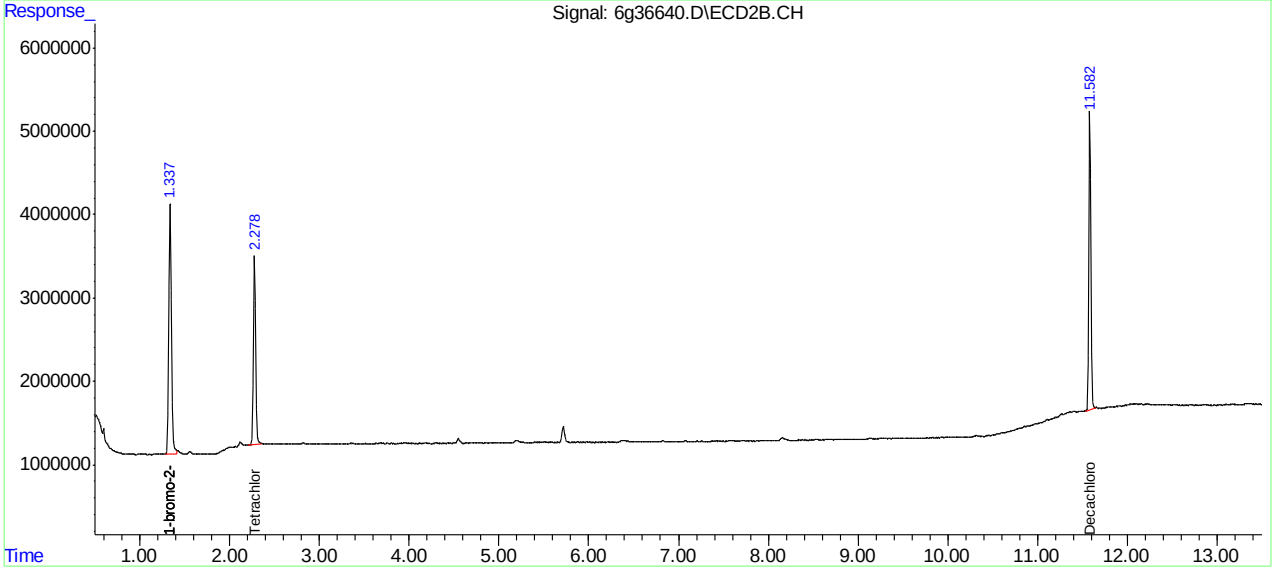
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36640.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 11:32 pm
Operator : dharas
Sample : jc22613-7
Misc : op95079,g6g1047,1000,,,10,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 09:36:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36643.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jun 2016 12:21 am
Operator : dharas
Sample : jc22613-8
Misc : op95079,g6g1047,980,,,10,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 10:31:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.001	1.339	140.4E6	59838325	50.000	50.000
25) I 1-bromo-2...	1.001	1.339	140.4E6	59838325	50.000	50.000
31) I 1-bromo-2...	1.001	1.339	140.4E6	59838325	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	1.719	2.279	97396094	43820947	36.582	36.182
Spiked Amount	40.000	Range	30 - 150	Recovery	= 91.45%	90.46%
24) SAB Decachlor...	9.563	11.584	92451613	56057752	35.387	38.495
Spiked Amount	40.000			Recovery	= 88.47%	96.24%
Target Compounds						
SemiQuant Compounds - Not Calibrated on this Instrument						

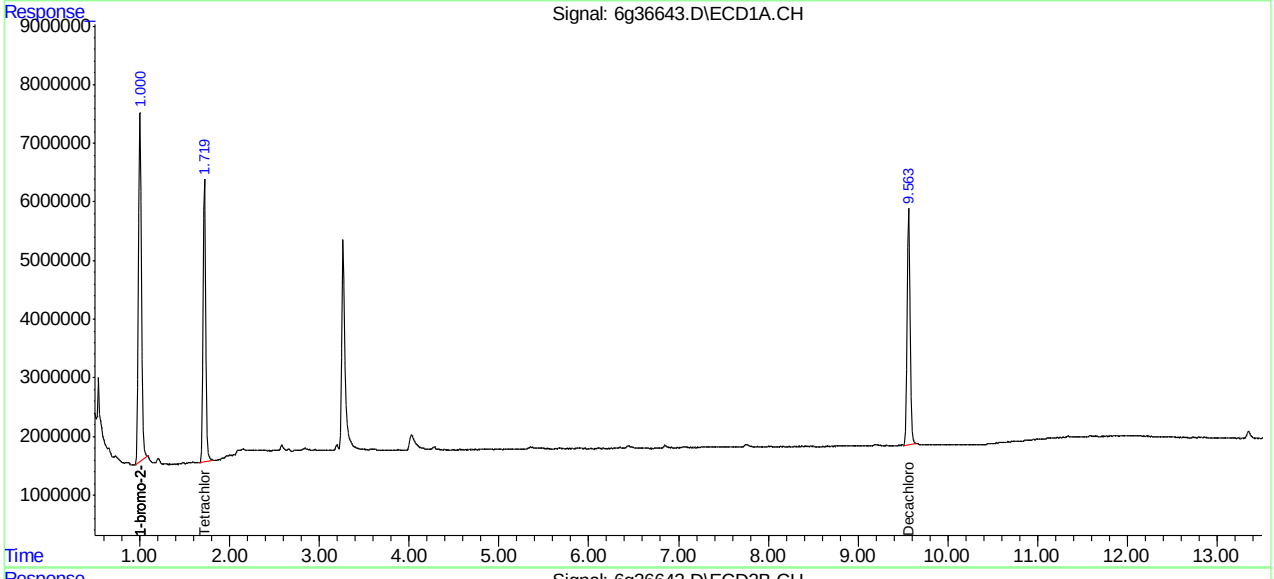
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

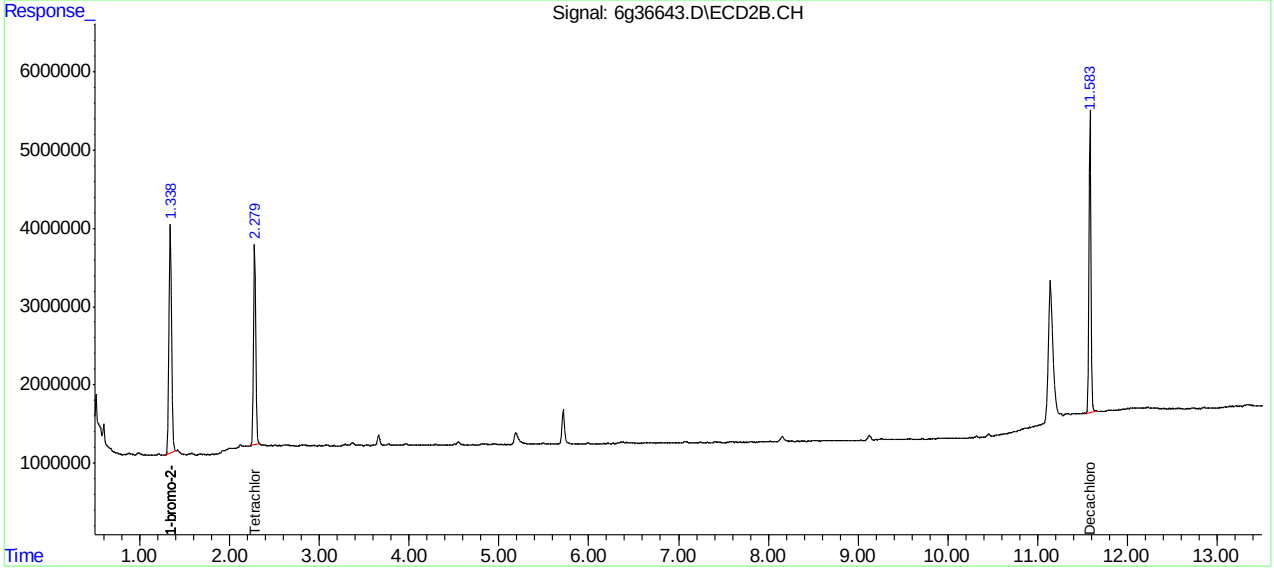
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36643.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jun 2016 12:21 am
Operator : dharas
Sample : jc22613-8
Misc : op95079,g6g1047,980,,,10,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 10:31:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36635.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 6:20 pm
Operator : dharas
Sample : op95079-mb1
Misc : op95079,g6g1047,1000,,,10,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 09:18:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.001	1.340	130.0E6	56258774	50.000	50.000
25) I 1-bromo-2...	1.001	1.340	130.0E6	56258774	50.000	50.000
31) I 1-bromo-2...	1.001	1.340	130.0E6	56258774	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	1.720	2.280	82122570	37442220	33.300	32.882
Spiked Amount	40.000	Range	30 - 150	Recovery	= 83.25%	82.20%
24) SAB Decachlor...	9.567	11.586	53081884	31934732	21.935	23.325
Spiked Amount	40.000			Recovery	= 54.84%	58.31%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

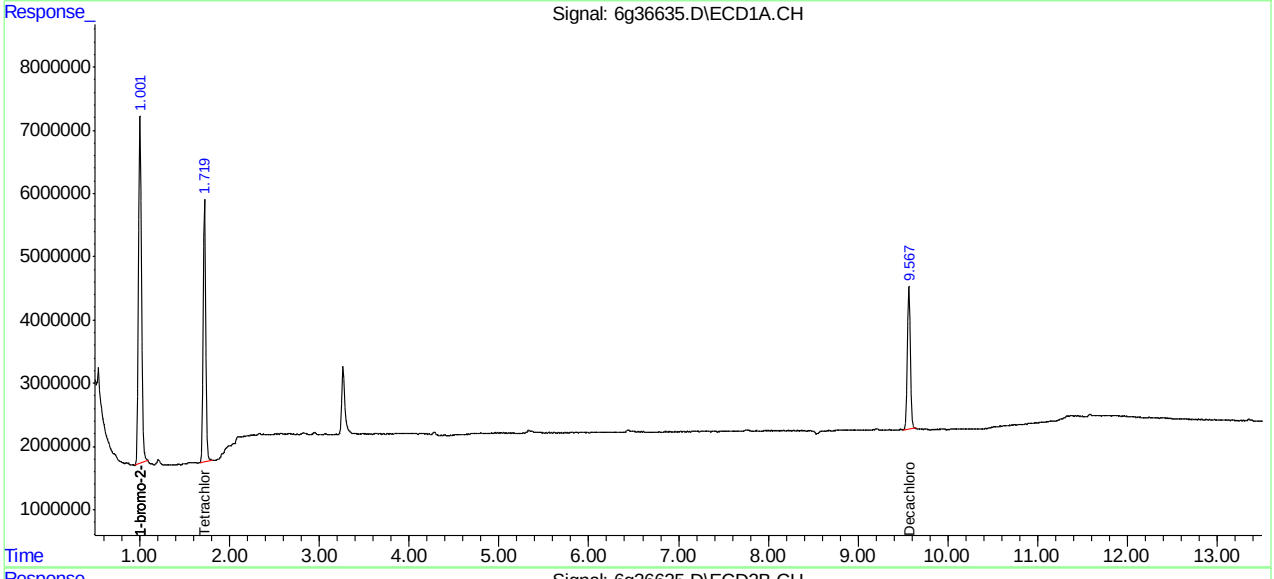
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

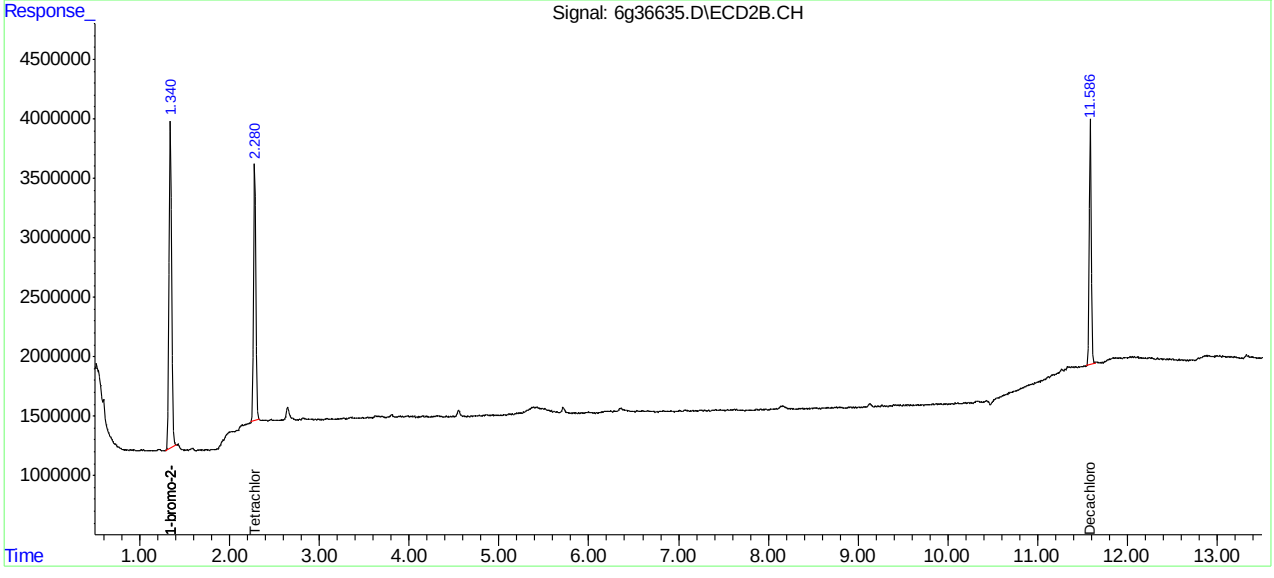
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36635.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 6:20 pm
Operator : dharas
Sample : op95079-mb1
Misc : op95079,g6g1047,1000,,,10,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 09:18:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36636.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 6:36 pm
Operator : dharas
Sample : op95079-bs1
Misc : op95079,g6g1047,1000,,,10,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 09:19:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.001	1.340	135.8E6	58508530	50.000	50.000
25) I	1-bromo-2...	1.001	1.340	135.8E6	58508530	50.000	50.000
31) I	1-bromo-2...	1.001	1.340	135.8E6	58508530	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.718	2.280	78038388	35644358	30.303	30.099
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 75.76%	75.25%
24)	SAB Decachlor...	9.565	11.584	45111736	27512945	17.852	19.322
	Spiked Amount	40.000			Recovery	= 44.63%	48.31%
	Target Compounds						
3) A	alpha-BHC	2.242	2.988	66675082	29265401	19.676	20.461
4) MA	gamma-BHC	2.557	3.437	63359469	28267028	20.099	21.100
5) MA	Heptachlor	3.076	4.033	56480378	28608423	18.094	20.343
6) B	beta-BHC	2.647	3.536	30276179	14668640	19.281	20.851
7) B	delta-BHC	2.838	3.945	61967366	27147907	19.836	21.106
8) MB	Aldrin	3.421	4.501	50712060	25387745	17.212	18.858
9) B	Heptachlo...	4.153	5.372	55921556	30091193	19.674	22.441
10) B	gamma-Chl...	4.326	5.675	56481644	29132818	18.969	21.481
11) B	alpha-Chl...	4.503	5.915	53695983	29043744	18.685	21.163
12) A	Endosulfan I	4.678	6.012	59596736	26735347	19.473	21.075
13) B	4,4'-DDE	4.643	6.216	39506461	26963425	18.667	23.190
14) MA	Dieldrin	5.015	6.476	54916896	28136383	19.933	22.501
15) MA	Endrin	5.348	7.013	54422650	26520744	21.607	23.178
16) A	4,4'-DDD	5.517	7.243	39847284	20935994	19.885	21.647
17) B	Endosulfa...	5.685	7.397	51311067	25912912	19.909	22.289
18) MA	4,4'-DDT	5.954	7.817	37539664	19525575	19.302	21.880
19) B	Endrin Al...	6.344	8.022	40863669	22601062	20.155	23.389
20) B	Endosulfa...	7.069	8.535	44186761	23417922	20.198	22.297
21) A	Methoxychlor	6.817	9.194	22498502	12517112	19.570	22.193
23) B	Endrin Ke...	7.536	9.573	53097416	27244598	21.434	23.640

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

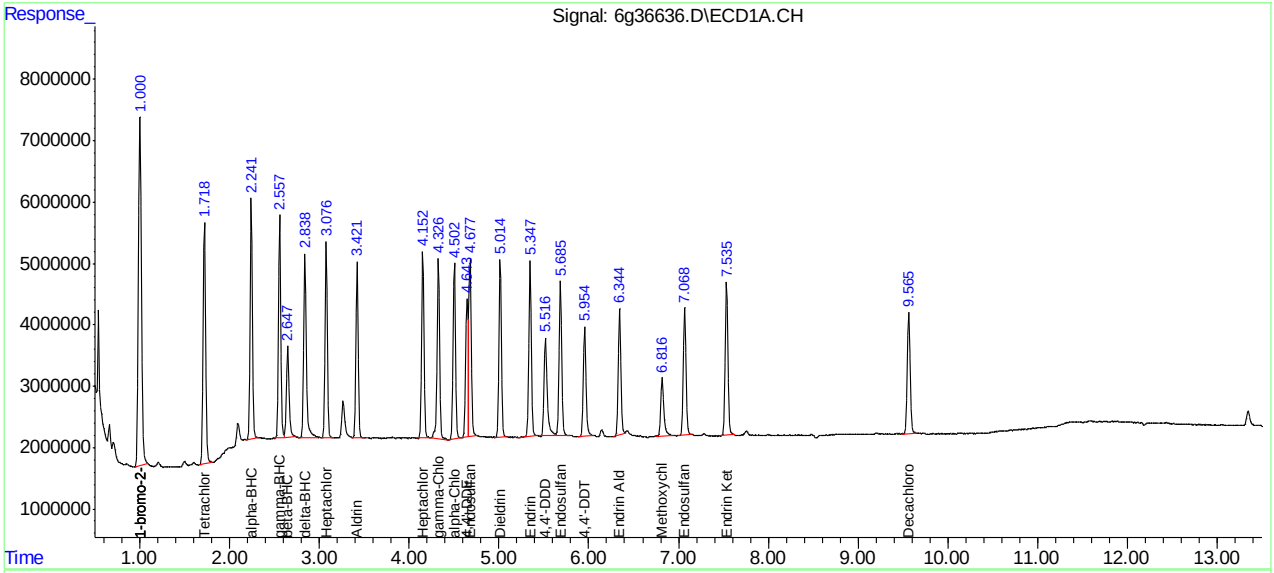
SGS ACCUTEST JC22613

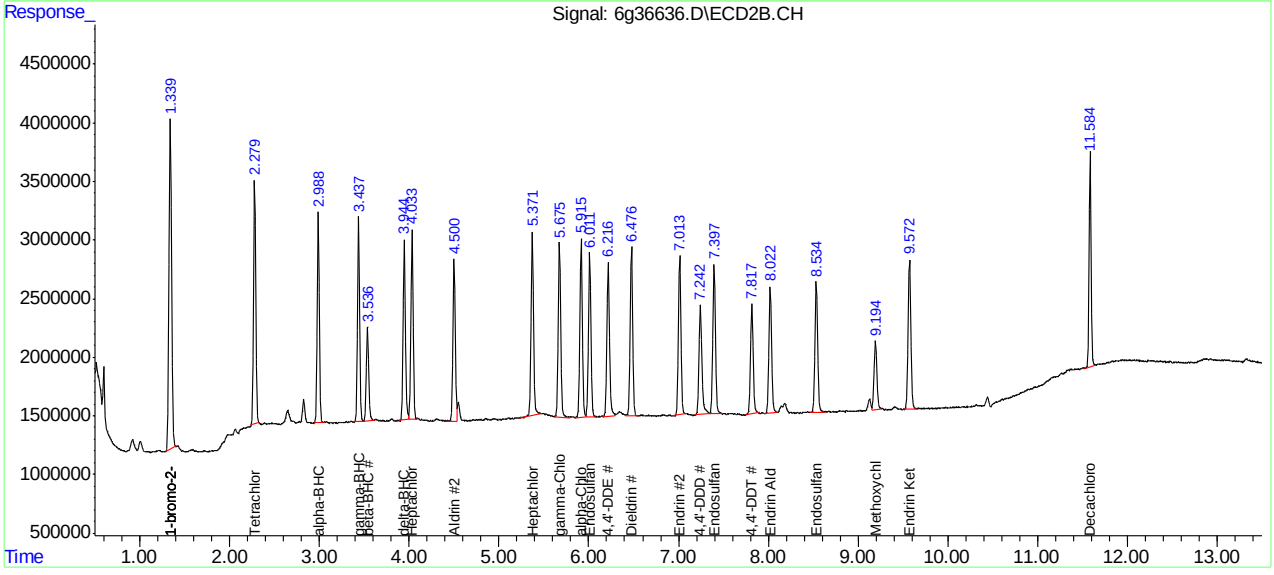
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36636.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 6:36 pm
Operator : dharas
Sample : op95079-bs1
Misc : op95079,g6g1047,1000,,,10,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 09:19:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36641.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 11:49 pm
Operator : dharas
Sample : op95079-ms
Misc : op95079,g6g1047,500,,,10,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 09:37:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	Internal Standards							
1) I	1-bromo-2...	1.008	1.343	121.2E6	50496578	50.000	50.000	
25) I	1-bromo-2...	1.008	1.343	121.2E6	50496578	50.000	50.000	
31) I	1-bromo-2...	1.008	1.343	121.2E6	50496578	50.000	50.000	
	System Monitoring Compounds							
2)	SAB Tetrachlo...	1.722	2.282	90148862	39893110	39.211	39.032	
	Spiked Amount 40.000 Range 30 - 150 Recovery = 98.03% 97.58%							
24)	SAB Decachlor...	9.566	11.583	76277853	46039845	33.811	37.464	
	Spiked Amount 40.000 Recovery = 84.53% 93.66%							
	Target Compounds							
3) A	alpha-BHC	2.244	2.989	76547368	32432394	25.303	26.273	
4) MA	gamma-BHC	2.560	3.438	72251617	31457880	25.674	27.207	
5) MA	Heptachlor	3.078	4.033	64907477	33354472	23.292	27.481	
6) B	beta-BHC	2.650	3.537	35010336	15877603	24.974	26.151	
7) B	delta-BHC	2.841	3.946	68912942	29356650	24.709	26.445	
8) MB	Aldrin	3.422	4.501	63170266	31293986	24.017	26.933	
9) B	Heptachlo...	4.153	5.370	64521739	32241720	25.426	27.860	
10) B	gamma-Chl...	4.327	5.674	65404107	32871872	24.605	28.083	
11) B	alpha-Chl...	4.503	5.915	63890112	32574736	24.903	27.503	
12) A	Endosulfan I	4.678	6.010	77316525	29751370	28.298	27.174	
13) B	4,4'-DDE	4.648	6.218	37887839	29393865	20.053	29.291	#
14) MA	Dieldrin	5.015	6.476	63599674	30843904	25.857	28.580	
15) MA	Endrin	5.348	7.013	58533582	28468796	26.031	28.829	
16) A	4,4'-DDD	5.525	7.247	44291134	22613607	24.758	27.092	
17) B	Endosulfa...	5.685	7.397	59571593	28947459	25.891	28.850	
18) MA	4,4'-DDT	5.957	7.818	38441471	19740291	22.140	25.630	
19) B	Endrin Al...	6.344	8.022	48682348	25379057	26.896	30.431	
20) B	Endosulfa...	7.069	8.534	50549621	25921539	25.883	28.596	
21) A	Methoxychlor	6.825	9.196	23342610	11590469	22.744	23.810	
23) B	Endrin Ke...	7.535	9.573	62731842	31613253	28.365	31.783	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

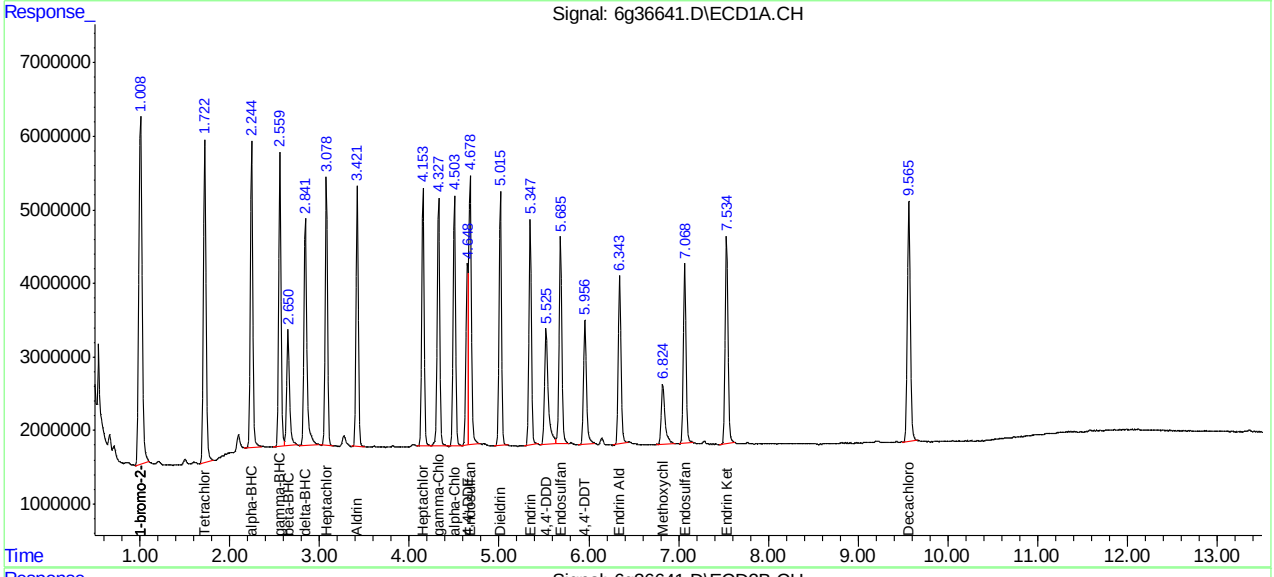
SGS ACCUTEST JC22613

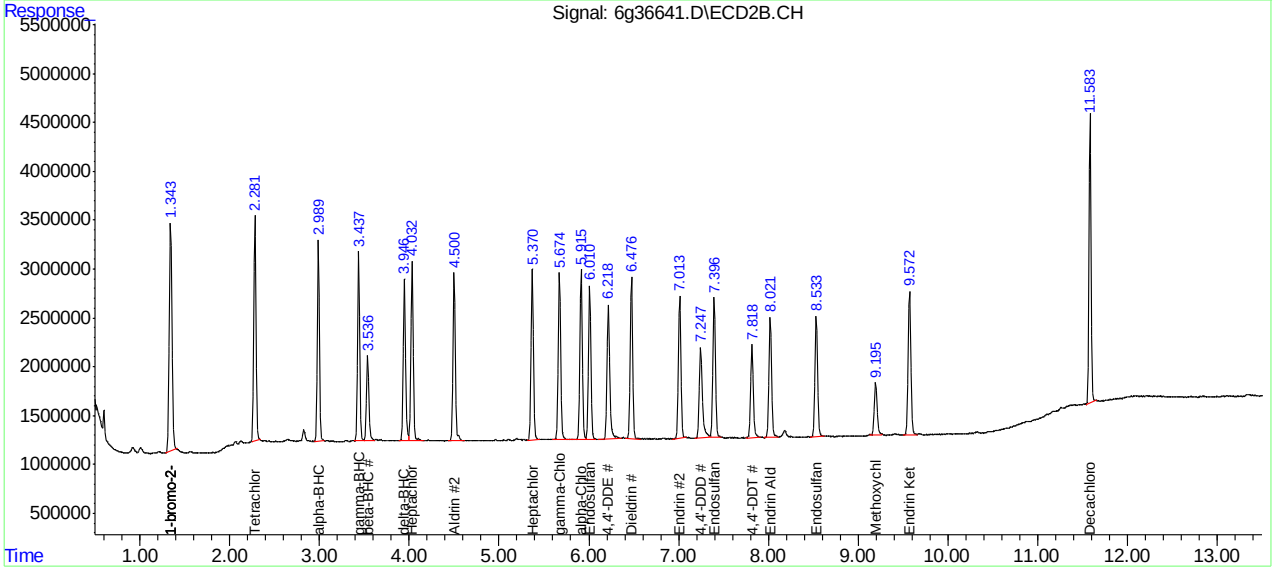
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36641.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 11:49 pm
Operator : dharas
Sample : op95079-ms
Misc : op95079,g6g1047,500,,,10,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 09:37:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36642.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jun 2016 12:05 am
Operator : dharas
Sample : op95079-msd
Misc : op95079,g6g1047,500,,,10,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 09:38:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	Internal Standards							
1) I	1-bromo-2...	1.001	1.338	129.7E6	54566150	50.000	50.000	
25) I	1-bromo-2...	1.001	1.338	129.7E6	54566150	50.000	50.000	
31) I	1-bromo-2...	1.001	1.338	129.7E6	54566150	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	1.719	2.279	71496336	31812807	29.070	28.805	
Spiked Amount		40.000	Range	30 - 150	Recovery	=	72.67%	72.01%
24) SAB	Decachlor...	9.564	11.584	65631600	39202987	27.195	29.522	
Spiked Amount		40.000			Recovery	=	67.99%	73.80%
	Target Compounds							
3) A	alpha-BHC	2.241	2.987	60411604	25690111	18.667	19.259	
4) MA	gamma-BHC	2.558	3.436	58079757	25244668	19.292	20.205	
5) MA	Heptachlor	3.076	4.032	51642096	25760864	17.323	19.641	
6) B	beta-BHC	2.648	3.536	29253753	12979816	19.507	19.784	
7) B	delta-BHC	2.839	3.945	57473150	24389881	19.263	20.332	
8) MB	Aldrin	3.420	4.501	49038829	22019996	17.428	17.538	
9) B	Heptachlo...	4.153	5.371	52411263	26557984	19.307	21.237	
10) B	gamma-Chl...	4.325	5.675	53834392	26805488	18.932	21.192	
11) B	alpha-Chl...	4.502	5.914	52287576	29284400	19.051	22.881	
12) A	Endosulfan I	4.677	6.010	61813487	24929038	21.149	21.071	
13) B	4,4'-DDE	4.648	6.218	32428321	24115367	16.044	22.239	#
14) MA	Dieldrin	5.015	6.476	51285648	25446892	19.491	21.821	
15) MA	Endrin	5.348	7.013	49159349	23479423	20.436	22.003	
16) A	4,4'-DDD	5.522	7.246	37168615	18646184	19.421	20.673	
17) B	Endosulfa...	5.685	7.397	49931133	24008632	20.286	22.143	
18) MA	4,4'-DDT	5.956	7.818	32799402	16627302	17.659	19.978	
19) B	Endrin Al...	6.344	8.022	39972601	21320109	20.644	23.657	
20) B	Endosulfa...	7.069	8.535	43066156	22218561	20.613	22.683	
21) A	Methoxychlor	6.819	9.193	19662058	10815094	17.908	20.560	
23) B	Endrin Ke...	7.536	9.574	53341674	26526497	22.546	24.680	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

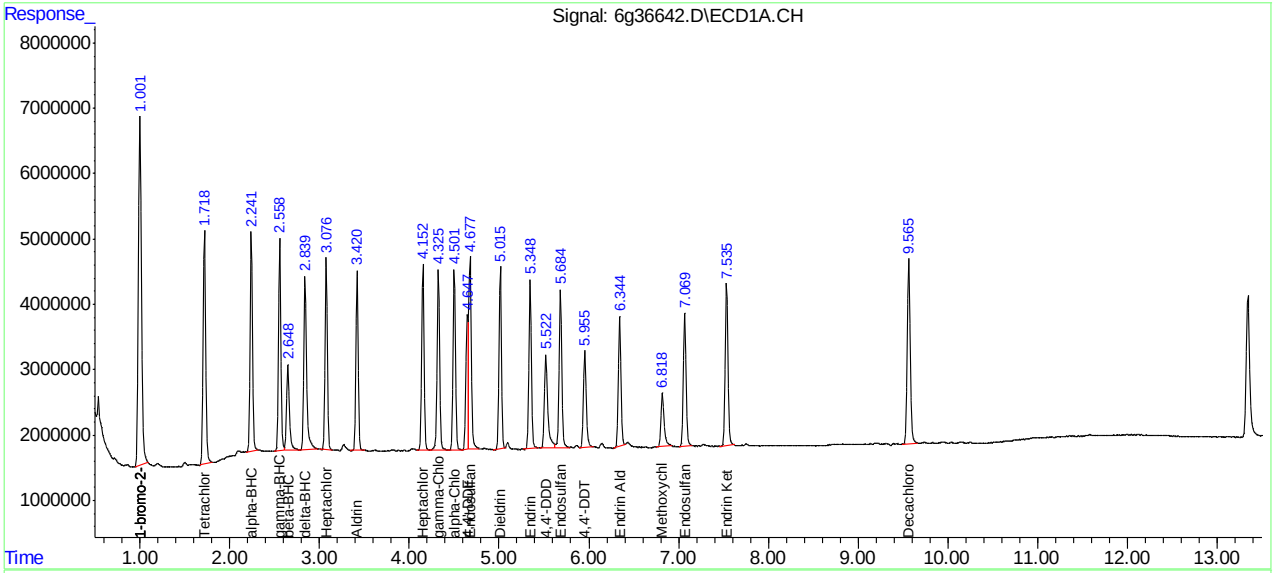
SGS ACCUTEST JC22613

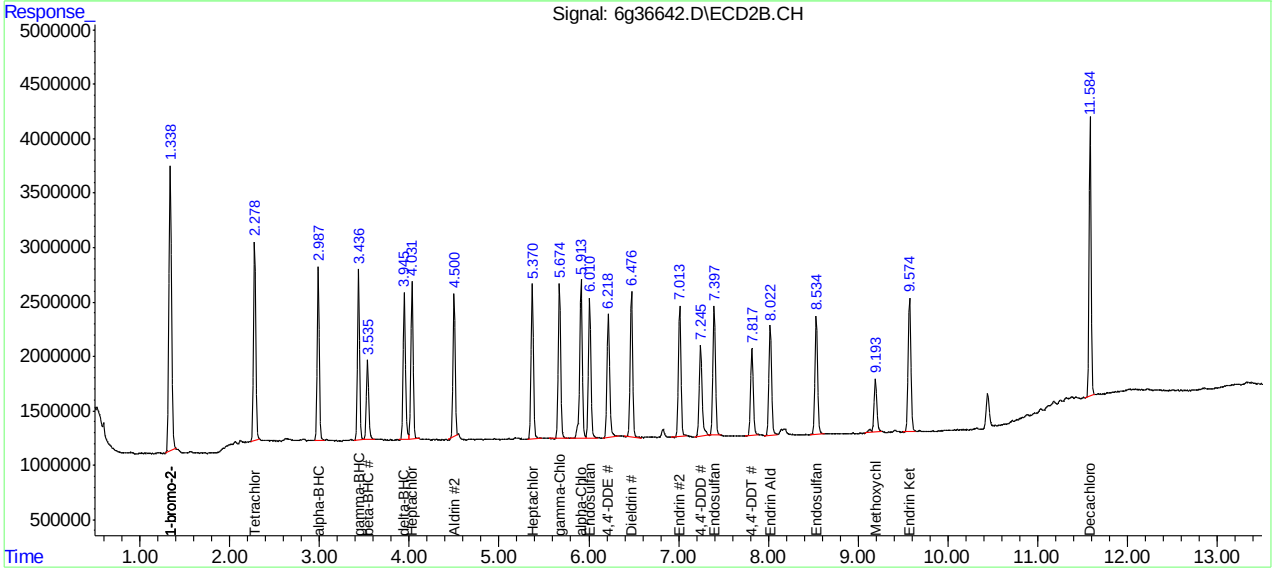
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36642.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jun 2016 12:05 am
Operator : dharas
Sample : op95079-msd
Misc : op95079,g6g1047,500,,,10,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 09:38:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
06/14/16 15:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36058.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 4:21 pm
Operator : dharas
Sample : ddt
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 14:07:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.010	1.344	133.6E6	53211503	50.000	50.000
25) I	1-bromo-2...	1.010	1.344	133.6E6	53211503	50.000	50.000
31) I	1-bromo-2...	1.010	1.344	133.6E6	53211503	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.732	2.289	47792175	20545613	18.858	19.076
Spiked Amount		40.000	Range	30 - 150	Recovery	= 47.15%	47.69%
24) SAB	Decachlor...	9.595	11.619	44393052	24765752	17.851	19.125
Spiked Amount		40.000			Recovery	= 44.63%	47.81%
	Target Compounds						
13) B	4,4'-DDE	4.666	6.242	1219518	542492	0.586	0.513m
15) MA	Endrin	5.377	7.042	116.9E6	52876025	47.181	50.812
16) A	4,4'-DDD	5.535	7.269	2612432	1434360	1.325	1.631
18) MA	4,4'-DDT	5.979	7.844	216.1E6	102.7E6	112.907	126.528
19) B	Endrin Al...	6.374	8.050	1352257	618541	0.678	0.704
23) B	Endrin Ke...	7.565	9.603	5068920	2227285	2.079	2.125

SemiQuant Compounds - Not Calibrated on this Instrument

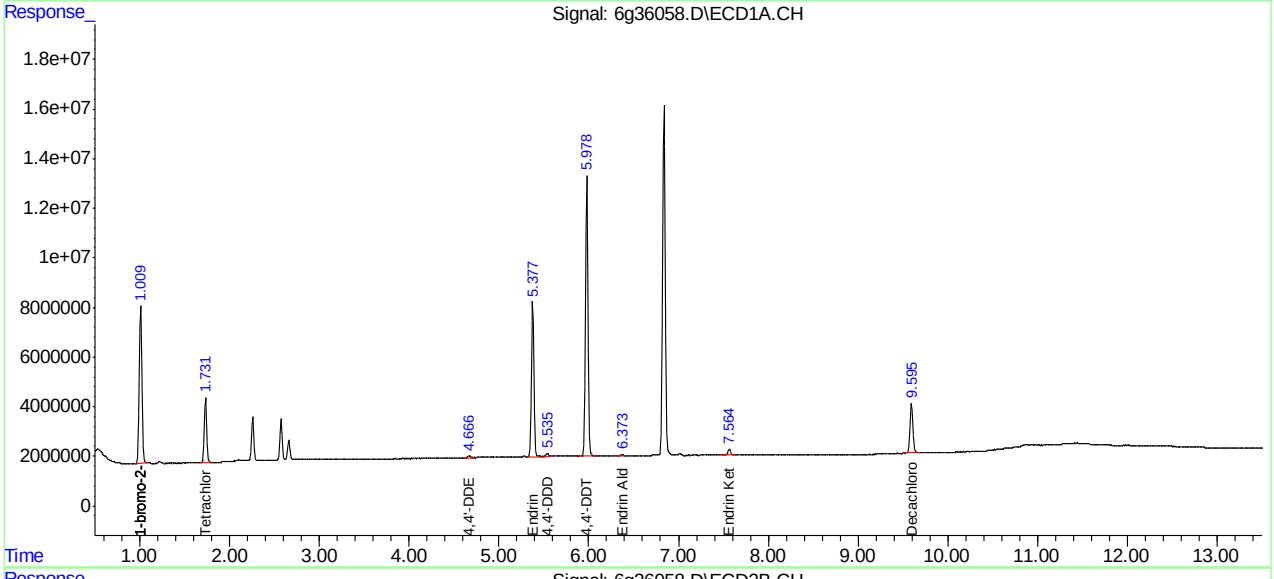
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

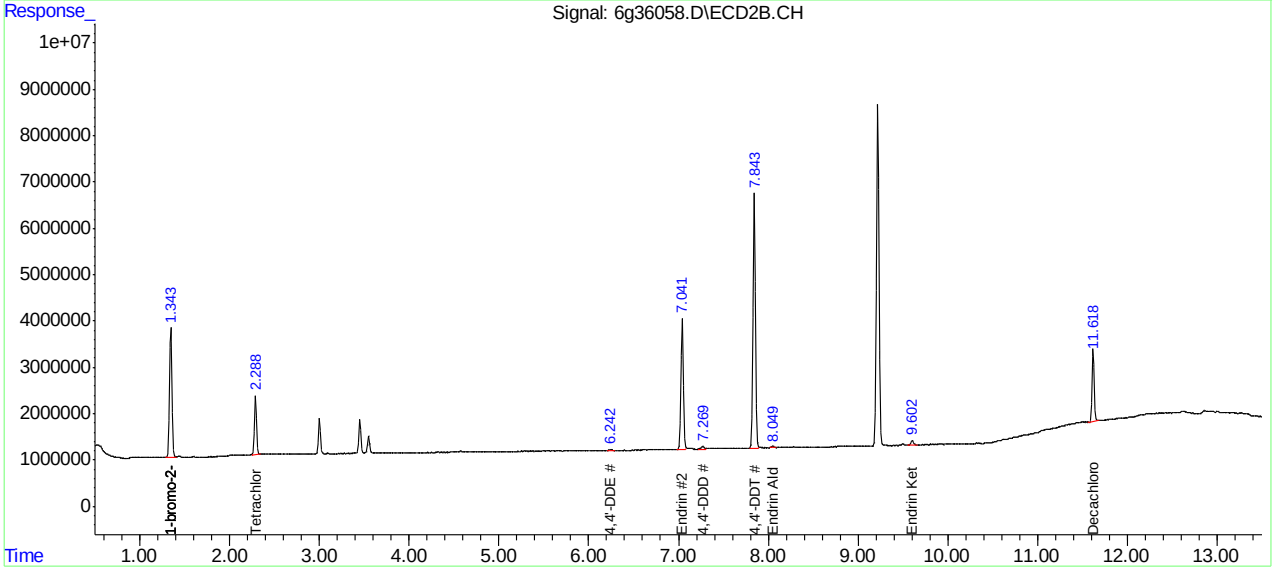
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36058.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 4:21 pm
Operator : dharas
Sample : ddt
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 14:07:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Manual Integration Approval Summary

Sample Number:	G6G1034-DDT	**Method:**	SW846 8081B
Lab FileID:	6G36058.D	**Analyst approved:**	06/13/16 14:08 Rebecca Krug
Injection Time:	06/10/16 16:21	**Supervisor approved:**	06/14/16 15:27 Gwendolyn Burns

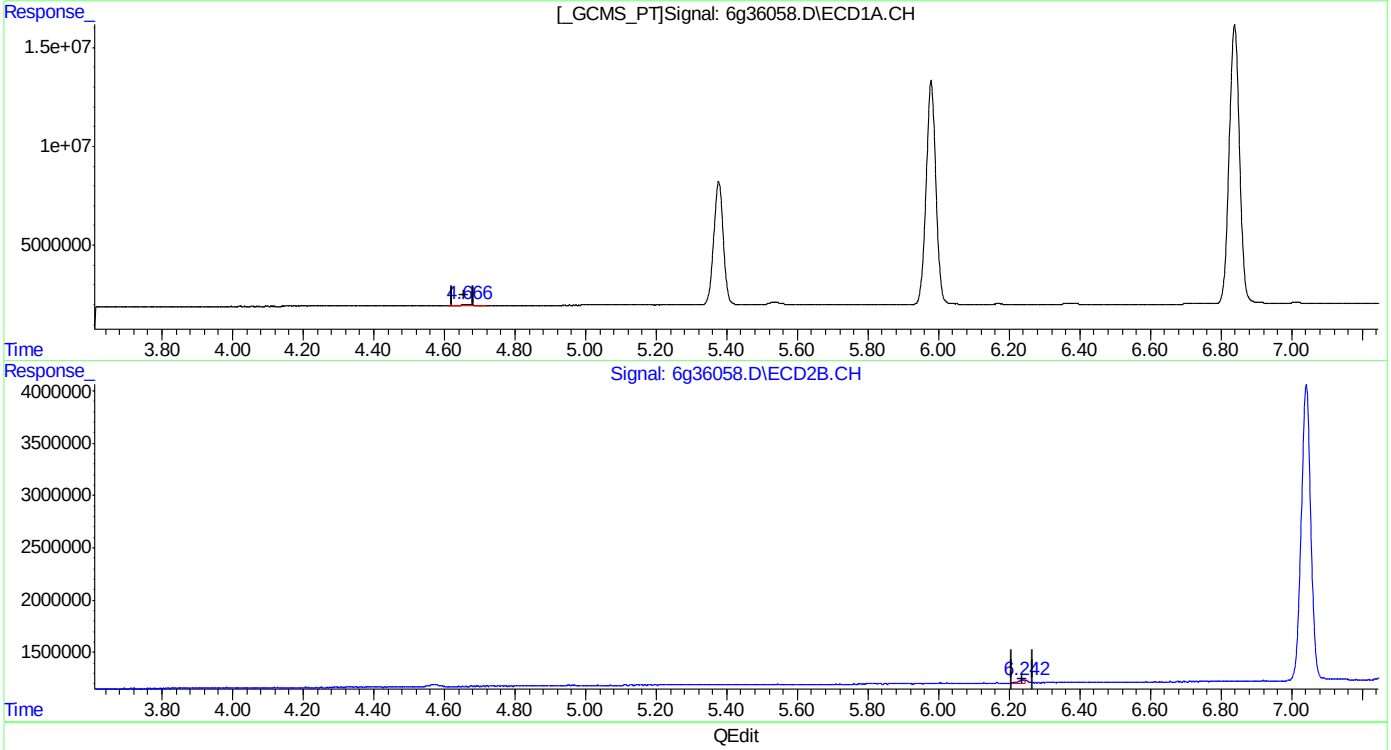
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.24	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36058.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 4:21 pm
Operator : dharas
Sample : ddt
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 14:06:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(13) 4,4'-DDE (B)
4.666min 0.586PPB
response 1219518

(13) 4,4'-DDE #2 (B)
6.242min 0.359PPB
response 379695

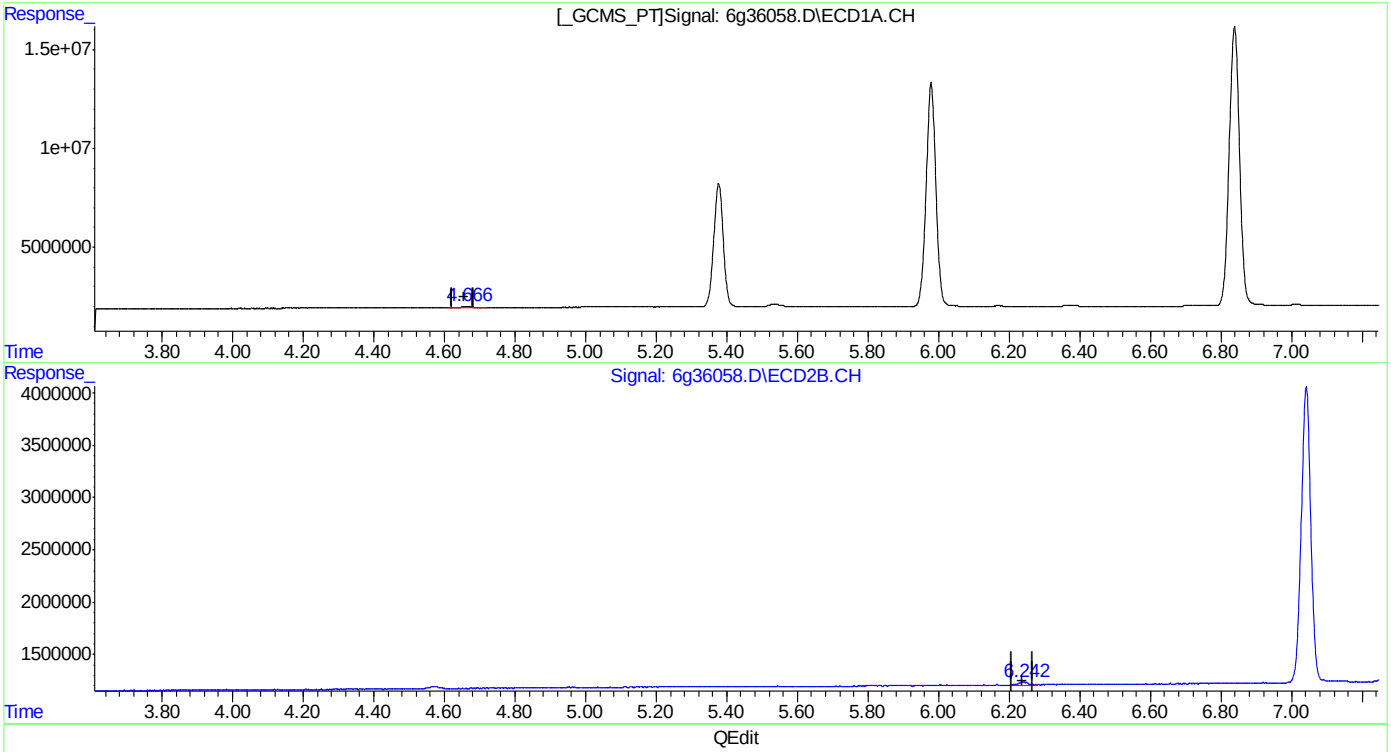
(+) = Expected Retention Time
6PST1034.M Mon Jun 13 14:07:06 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36058.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 4:21 pm
Operator : dharas
Sample : ddt
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 14:06:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(13) 4,4'-DDE (B)
4.666min 0.586PPB
response 1219518

(13) 4,4'-DDE #2 (B)
6.242min 0.513PPB m
response 542492

(+) = Expected Retention Time
6PST1034.M Mon Jun 13 14:07:13 2016

SGS ACCUTEST JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 06/28/16 11:26

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36616.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 4:58 pm
Operator : dharas
Sample : ddt
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:33:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.003	1.337	117.4E6	50677498	50.000	50.000
25) I	1-bromo-2...	1.003	1.337	117.4E6	50677498	50.000	50.000
31) I	1-bromo-2...	1.003	1.337	117.4E6	50677498	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.723	2.278	39733952	18540072	17.841	18.075
Spiked Amount		40.000	Range	30 - 150	Recovery	= 44.60%	45.19%
24) SAB	Decachlor...	9.567	11.591	40055980	23645303	18.329	19.172
Spiked Amount		40.000			Recovery	= 45.82%	47.93%
	Target Compounds						
13) B	4,4'-DDE	4.646	6.215	1132115	639961	0.619m	0.635m
15) MA	Endrin	5.355	7.016	100.3E6	49641022	46.058	50.089
16) A	4,4'-DDD	5.520	7.252	998417	843569	0.576m	1.007m#
18) MA	4,4'-DDT	5.958	7.817	174.3E6	93062768	103.635	120.398
19) B	Endrin Al...	6.354	8.018	988789	754878	0.564m	0.902m#
23) B	Endrin Ke...	7.537	9.572	3628851	1824626	1.694m	1.828m

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

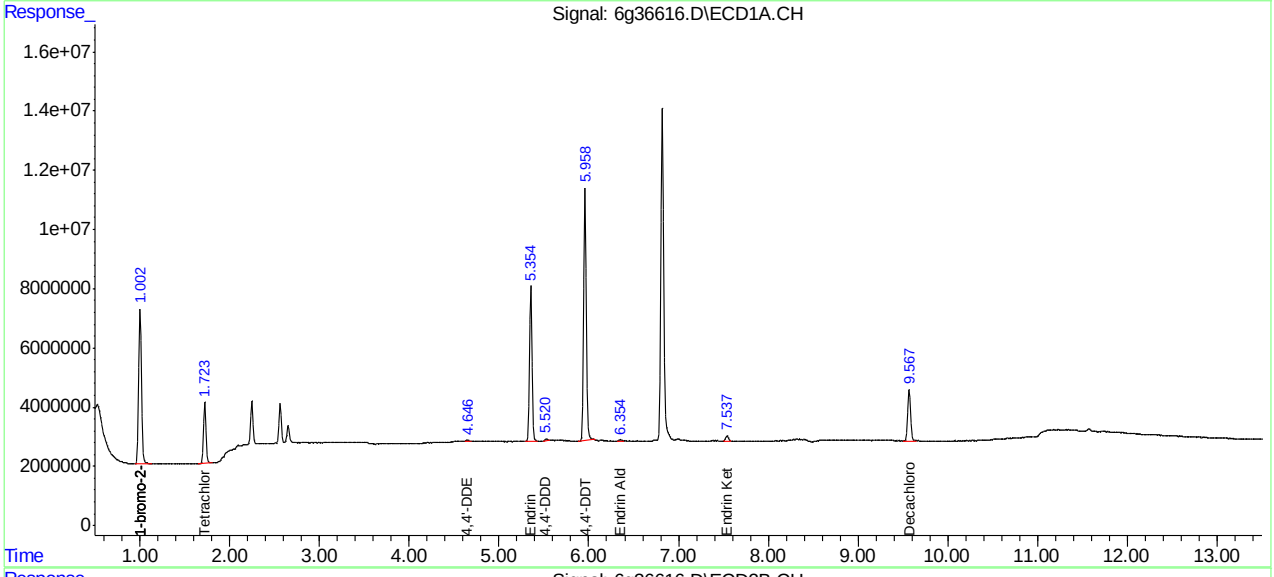
11.5.2 11

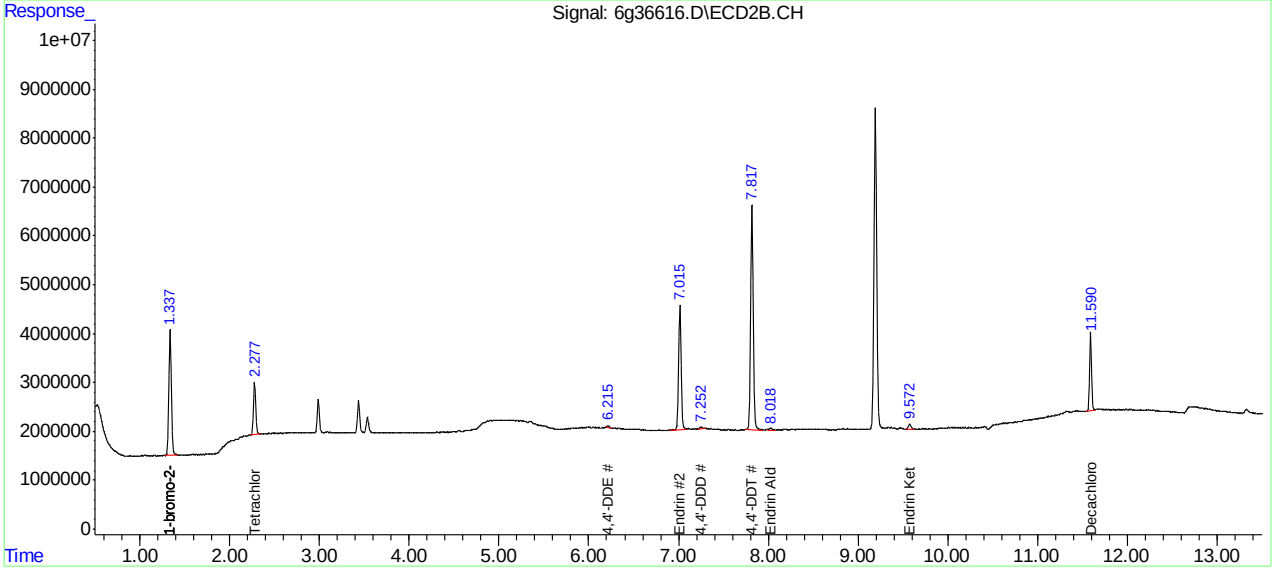
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36616.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 4:58 pm
Operator : dharas
Sample : ddt
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:33:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Manual Integration Approval Summary

Sample Number:	G6G1047-DDT	**Method:**	SW846 8081B
Lab FileID:	6G36616.D	**Analyst approved:**	06/28/16 09:00 Kristen Drake
Injection Time:	06/27/16 16:58	**Supervisor approved:**	06/28/16 11:26 Gwendolyn Burns

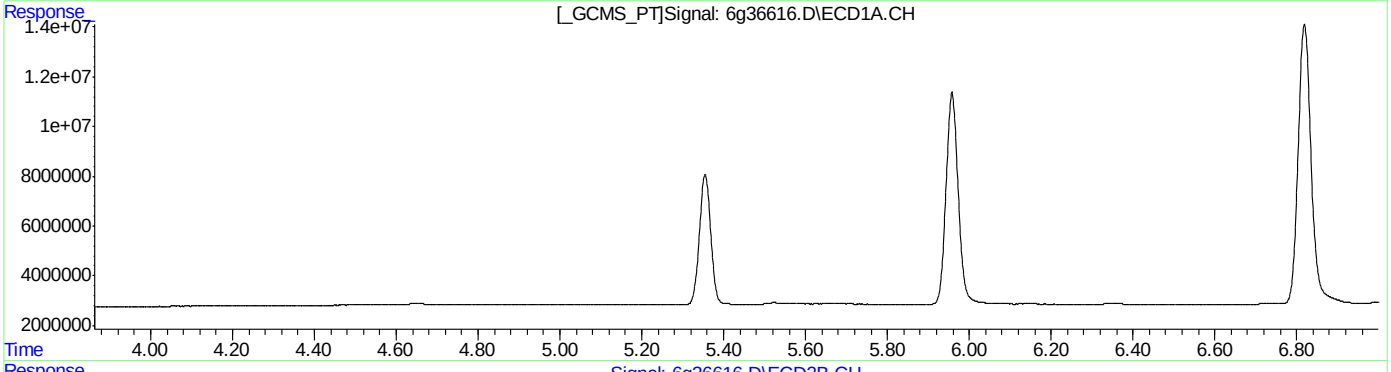
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.65	Poor instrument integration
4,4'-DDD	72-54-8	1	5.52	Poor instrument integration
4,4'-DDE	72-55-9	2	6.22	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.35	Poor instrument integration
4,4'-DDD	72-54-8	2	7.25	Poor instrument integration
Endrin ketone	53494-70-5	1	7.54	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.02	Poor instrument integration
Endrin ketone	53494-70-5	2	9.57	Poor instrument integration

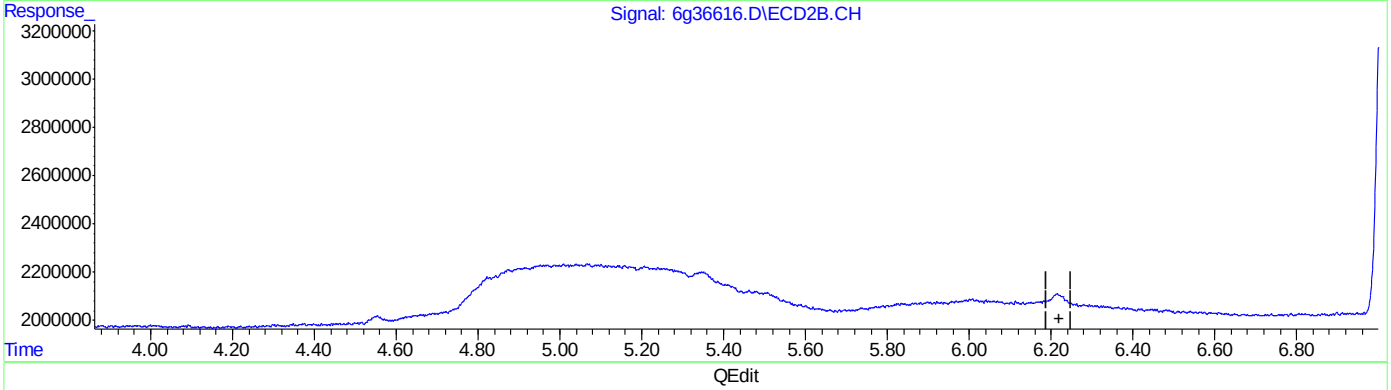
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36616.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 4:58 pm
Operator : dharas
Sample : ddt
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:31:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) 4,4'-DDE (B)
0.000min 0.000PPB
response 0

(13) 4,4'-DDE #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

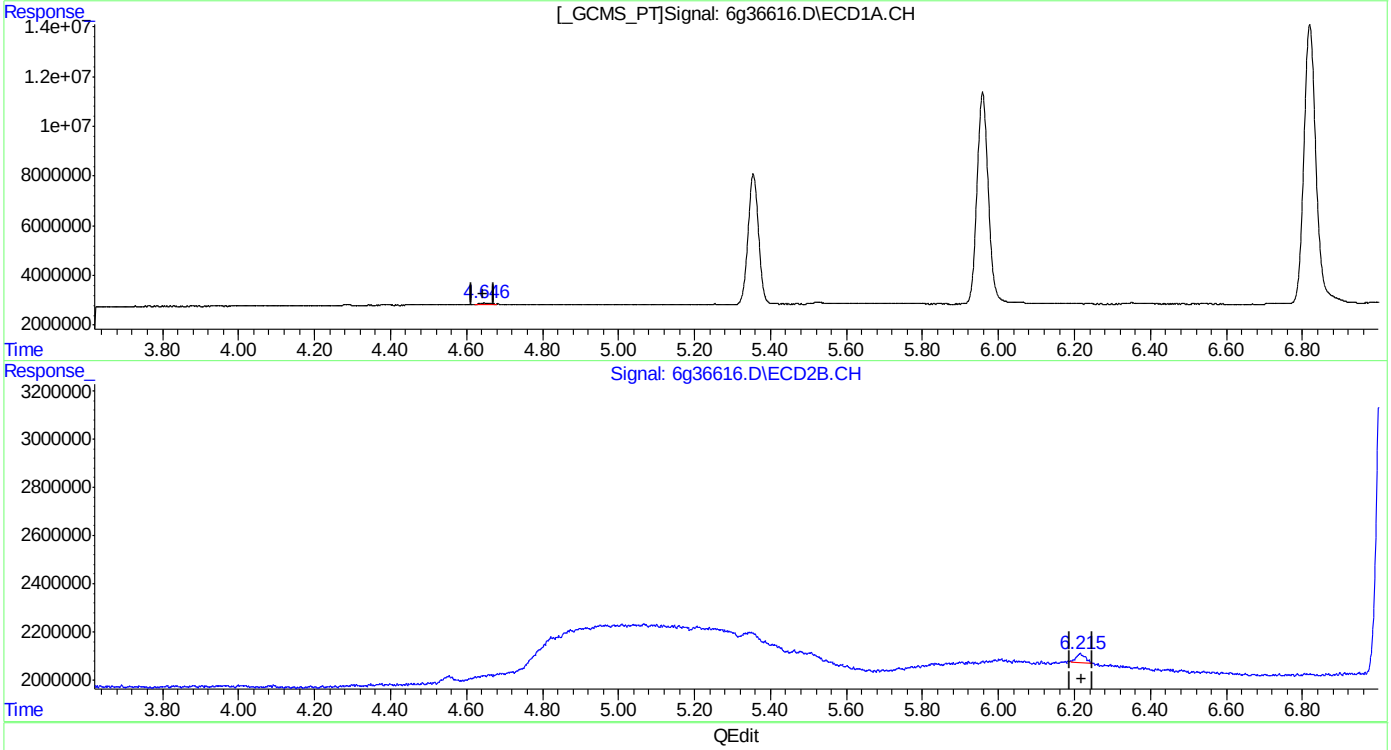
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36616.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 4:58 pm
Operator : dharas
Sample : ddt
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:31:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(13) 4,4'-DDE (B)
4.646min 0.619PPB m
response 1132115

(13) 4,4'-DDE #2 (B)
6.215min 0.635PPB m
response 639961

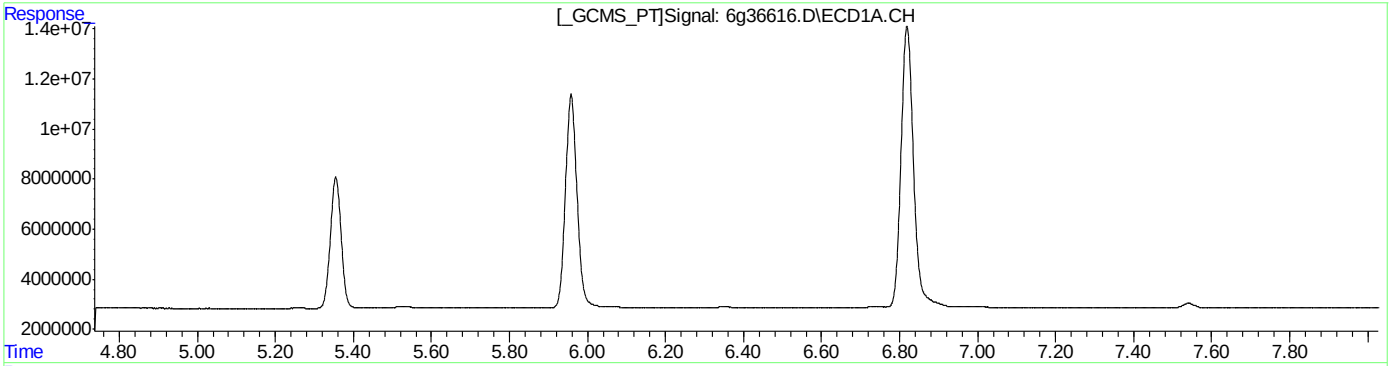
(+) = Expected Retention Time
6PST1034.M Tue Jun 28 08:32:03 2016

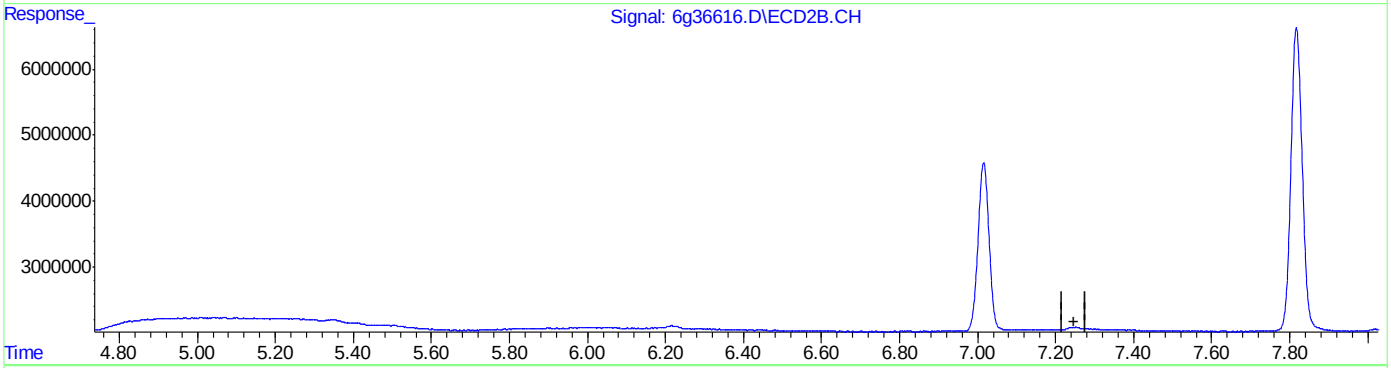
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36616.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 4:58 pm
Operator : dharas
Sample : ddt
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:31:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
0.000min 0.000PPB
response 0

(16) 4,4'-DDD #2 (A)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

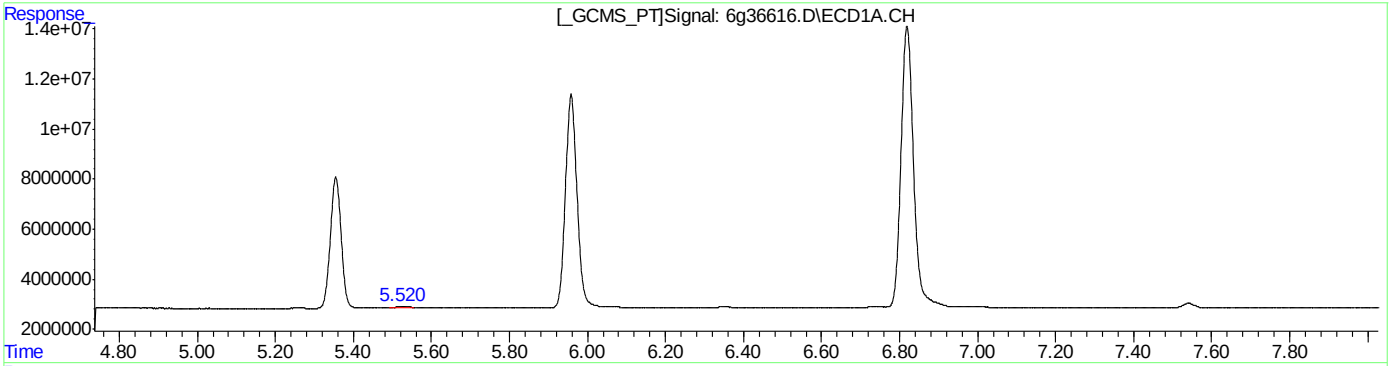
SGS ACCUTEST JC22613

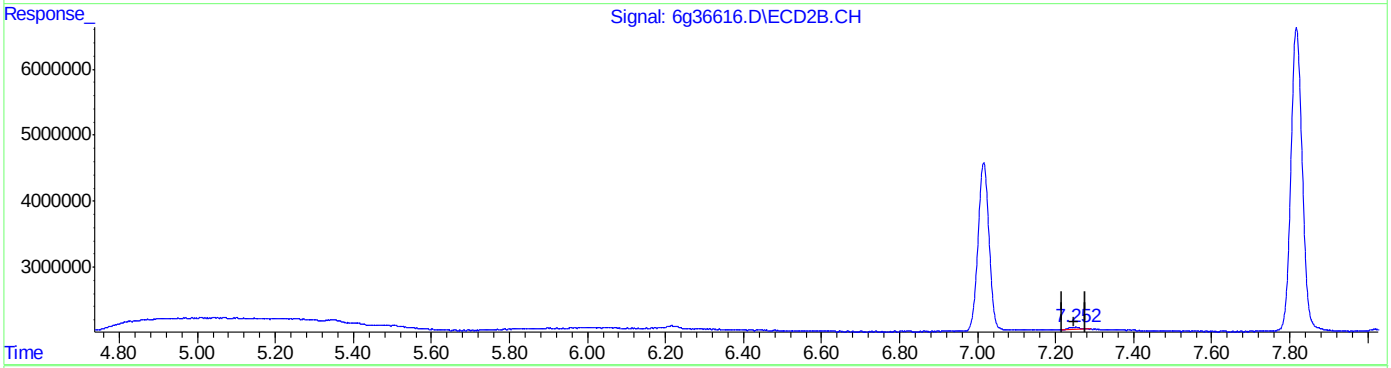
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36616.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 4:58 pm
Operator : dharas
Sample : ddt
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:31:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
5.520min 0.576PPB m
response 998417

(16) 4,4'-DDD #2 (A)
7.252min 1.007PPB m
response 843569

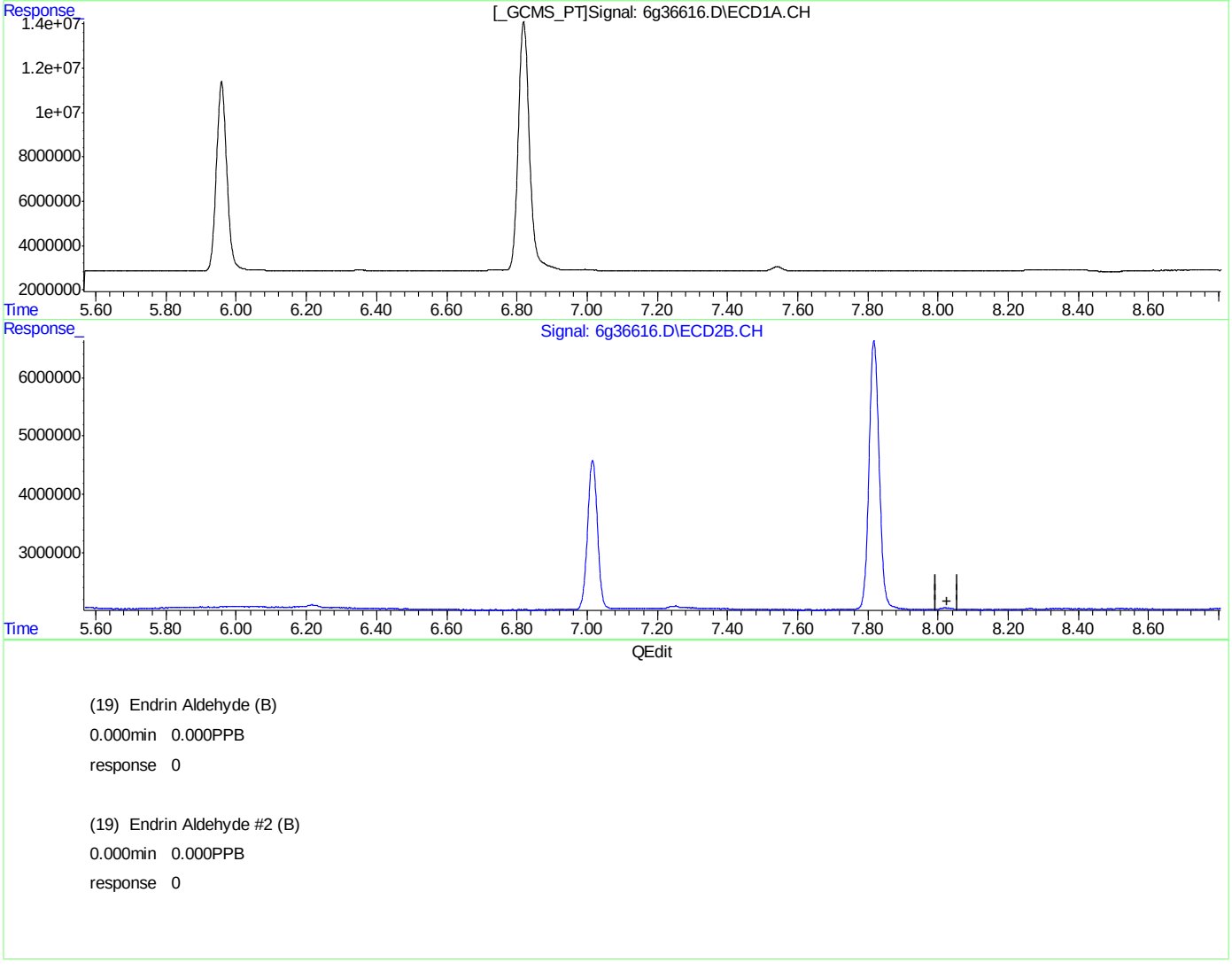
(+) = Expected Retention Time
6PST1034.M Tue Jun 28 08:32:33 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36616.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 4:58 pm
Operator : dharas
Sample : ddt
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:31:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(+) = Expected Retention Time

6PST1034.M Tue Jun 28 08:32:42 2016

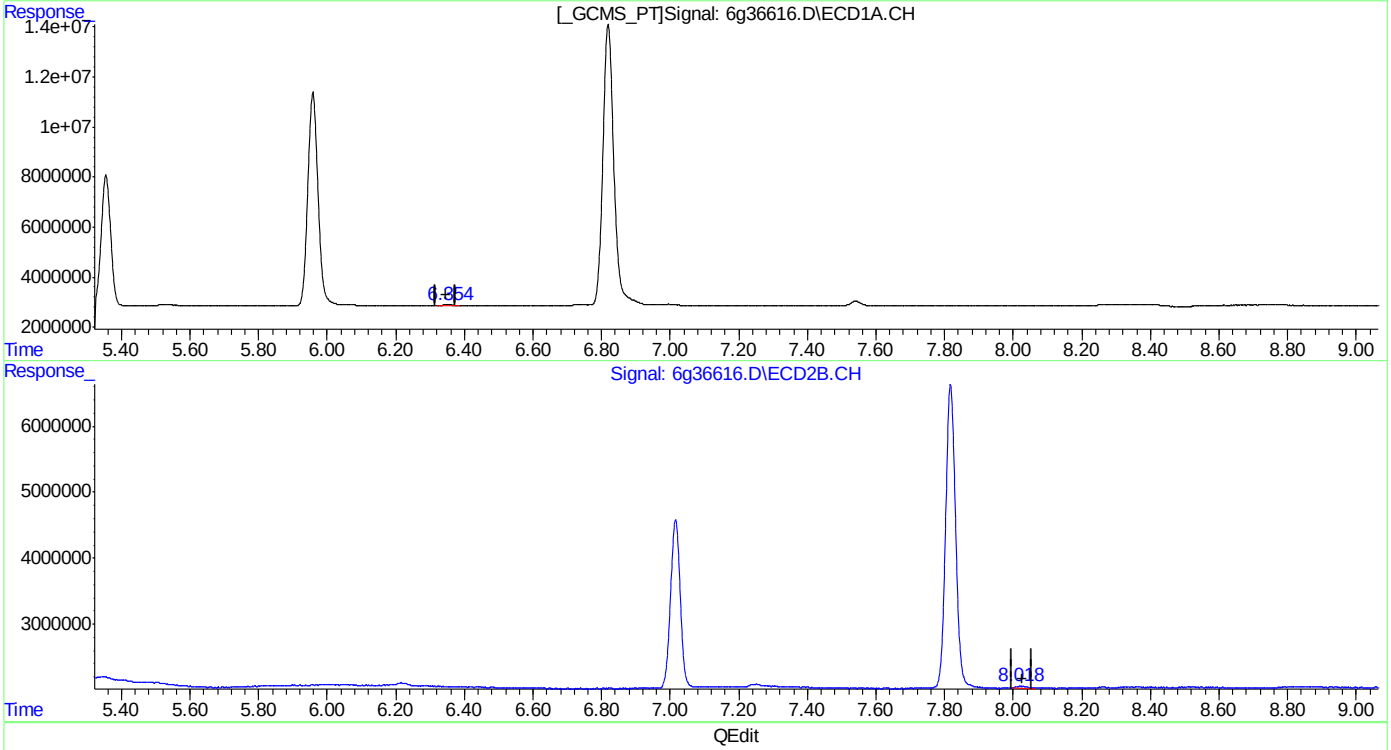
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36616.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 4:58 pm
Operator : dharas
Sample : ddt
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:31:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(19) Endrin Aldehyde (B)
6.354min 0.564PPB m
response 988789

(19) Endrin Aldehyde #2 (B)
8.018min 0.902PPB m
response 754878

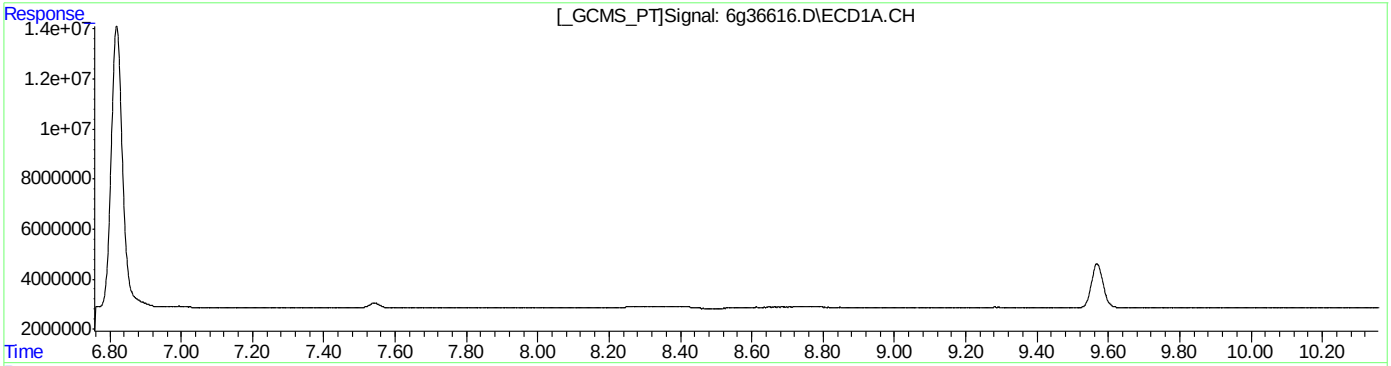
(+) = Expected Retention Time
6PST1034.M Tue Jun 28 08:33:09 2016

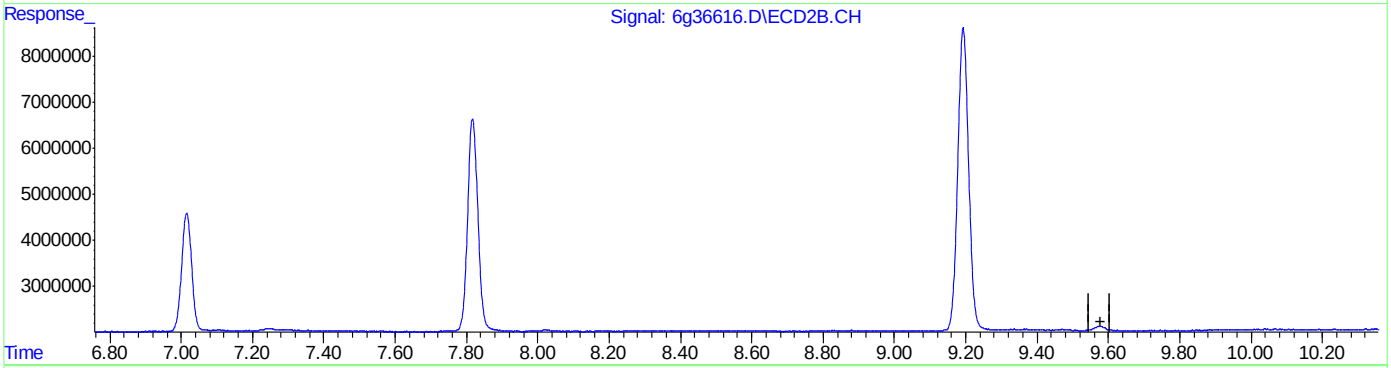
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36616.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 4:58 pm
Operator : dharas
Sample : ddt
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:31:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(23) Endrin Ketone (B)
0.000min 0.000PPB
response 0

(23) Endrin Ketone #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST1034.M Tue Jun 28 08:33:20 2016

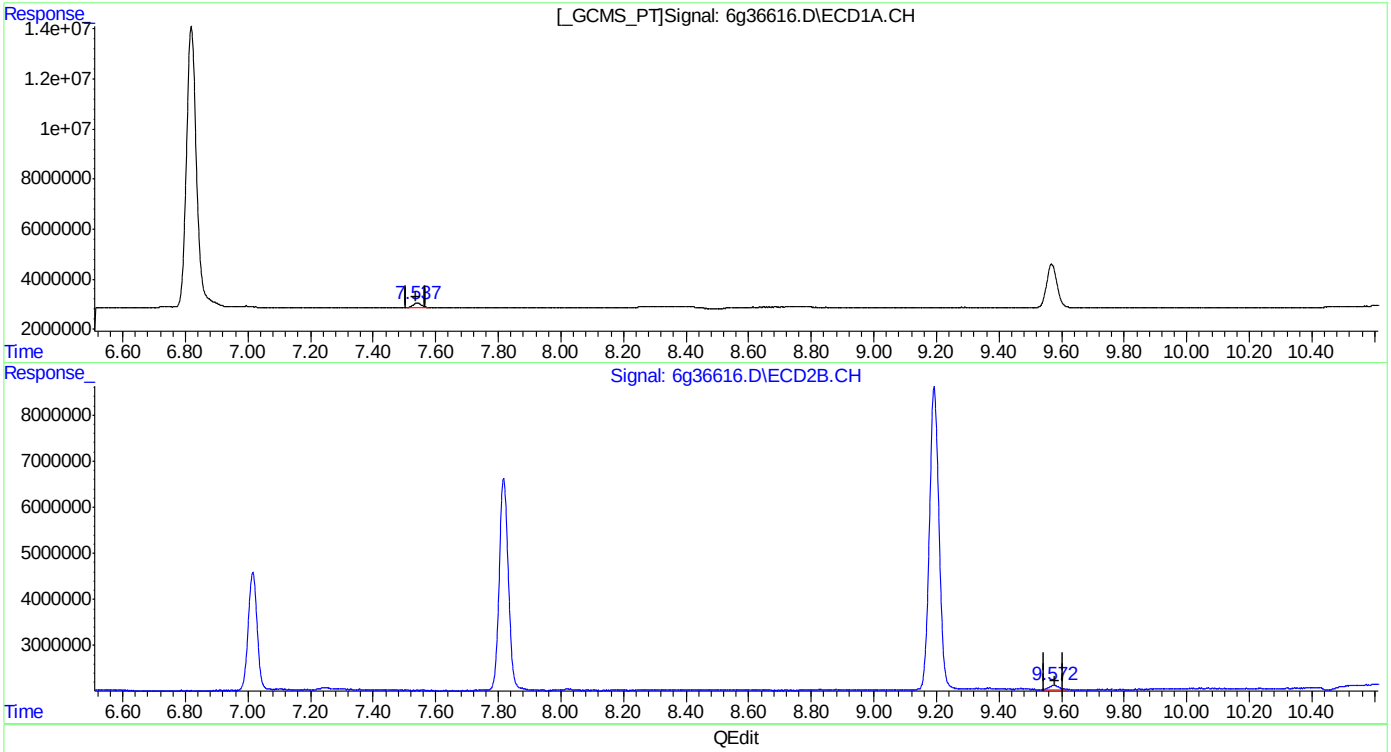
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36616.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 4:58 pm
Operator : dharas
Sample : ddt
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:31:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(23) Endrin Ketone (B)
7.537min 1.694PPB m
response 3628851

(23) Endrin Ketone #2 (B)
9.572min 1.828PPB m
response 1824626

(+) = Expected Retention Time
6PST1034.M Tue Jun 28 08:33:42 2016

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 06/14/16 15:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36060.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 4:54 pm
Operator : dharas
Sample : ic1034-1
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:56:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.006	1.345	120.5E6	50663797	50.000	50.000
25) I	1-bromo-2...	1.006	1.345	120.5E6	50663797	50.000	50.000
31) I	1-bromo-2...	1.006	1.345	120.5E6	50663797	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.727	2.285	2531003	1192957	1.219m	1.353m
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 3.05%#	3.38%#
24)	SAB Decachlor...	9.588	11.609	2737749	1498849	1.380	1.726m#
	Spiked Amount	40.000			Recovery	= 3.45%	4.32%
	Target Compounds						
3) A	alpha-BHC	2.249	2.999	3027104	1257528	1.089m	1.142
4) MA	gamma-BHC	2.564	3.449	2843395	1174758	1.063	1.128
5) MA	Heptachlor	3.085	4.048	2984410	1171425	1.199	1.160
6) B	beta-BHC	2.650	3.547	1686151	750459	1.288	1.446
7) B	delta-BHC	2.842	3.956	2934300	1120775	1.225	1.120
8) MB	Aldrin	3.431	4.518	2709740	1271527	1.191	1.346
9) B	Heptachlo...	4.166	5.388	2910336	1376324	1.376	1.483
10) B	gamma-Chl...	4.338	5.697	3301698	1283545	1.573	1.453
11) B	alpha-Chl...	4.516	5.933	2978696	1390038	1.376	1.560
12) A	Endosulfan I	4.692	6.031	3188460	1277728	1.461	1.500
13) B	4,4'-DDE	4.655	6.237	2037469	875907	1.131	1.073
14) MA	Dieldrin	5.030	6.496	2666481	1059609	1.247	1.218m
15) MA	Endrin	5.364	7.035	2288320	914763	1.128	1.113
16) A	4,4'-DDD	5.533	7.264	2081039	1037227	1.293	1.568
17) B	Endosulfa...	5.704	7.420	2631764	1045706	1.319	1.304
18) MA	4,4'-DDT	5.970	7.841	1818284	776214	1.048	1.123
19) B	Endrin Al...	6.362	8.046	1933536	855354	1.162	1.245
20) B	Endosulfa...	7.089	8.560	2294095	951143	1.244	1.281
21) A	Methoxychlor	6.839	9.219	1247825	586516	1.246	1.405
22)	Mirex	6.938	9.508	2675729	1229980	1.474	1.669
23) B	Endrin Ke...	7.557	9.598	2172956	986288	1.004	1.107

SemiQuant Compounds - Not Calibrated on this Instrument

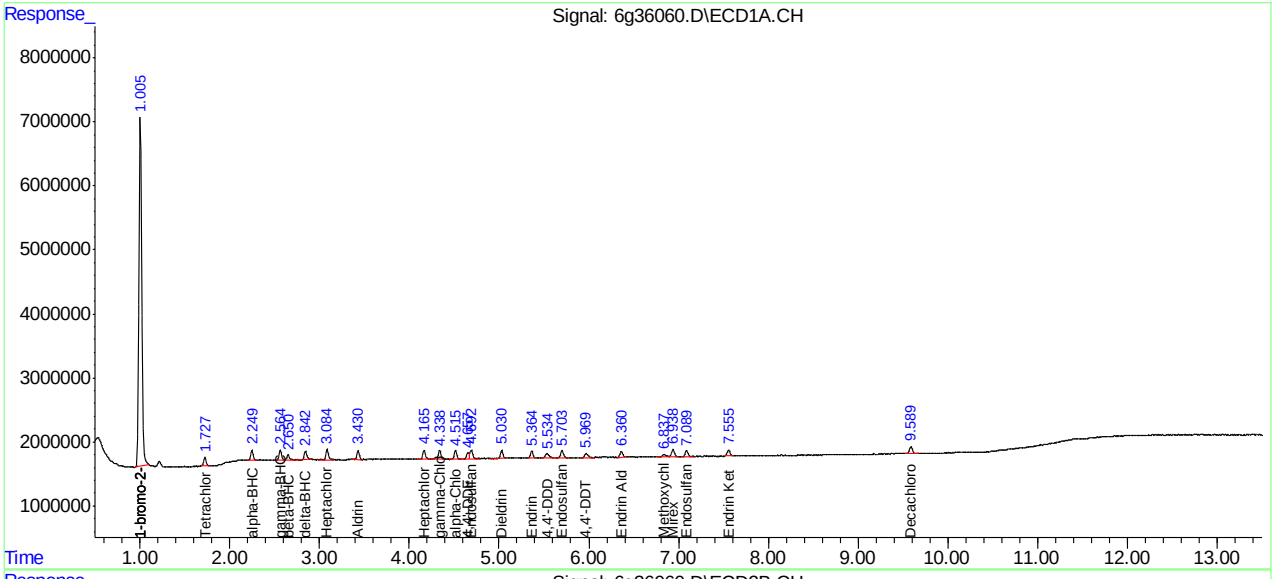
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

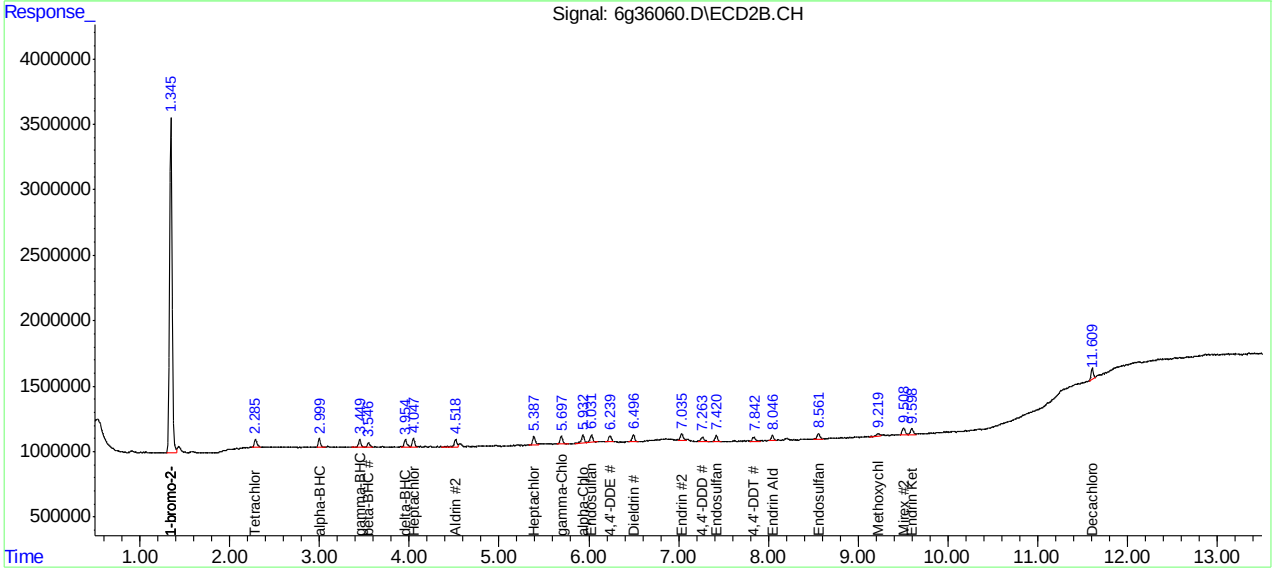
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36060.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 4:54 pm
Operator : dharas
Sample : ic1034-1
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:56:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Manual Integration Approval Summary

Sample Number:	G6G1034-IC1034	**Method:**	SW846 8081B
Lab FileID:	6G36060.D	**Analyst approved:**	06/13/16 13:38 Rebecca Krug
Injection Time:	06/10/16 16:54	**Supervisor approved:**	06/14/16 15:27 Gwendolyn Burns

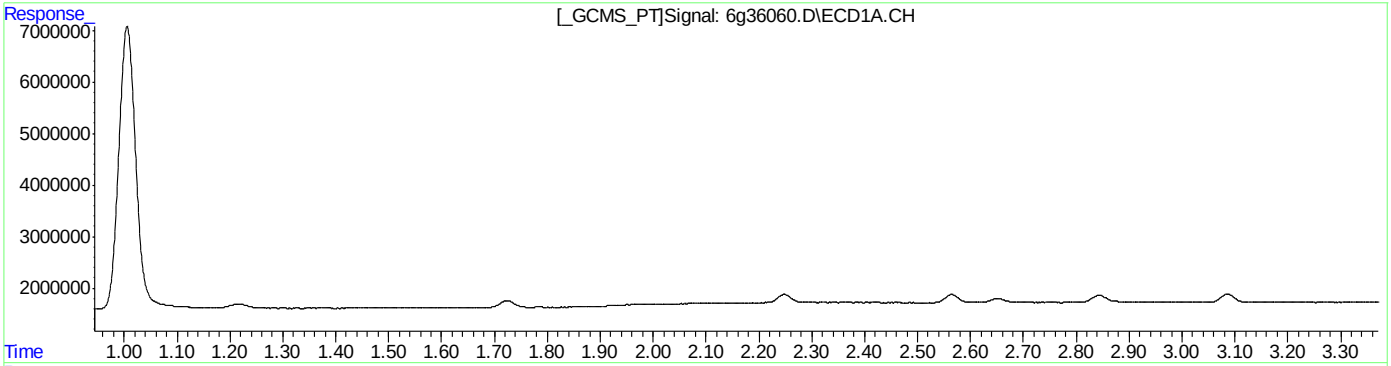
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.73	Poorly defined baseline
alpha-BHC	319-84-6	1	2.25	Poorly defined baseline
Tetrachloro-m-xylene	877-09-8	2	2.29	Poorly defined baseline
Dieldrin	60-57-1	2	6.50	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.61	Poorly defined baseline

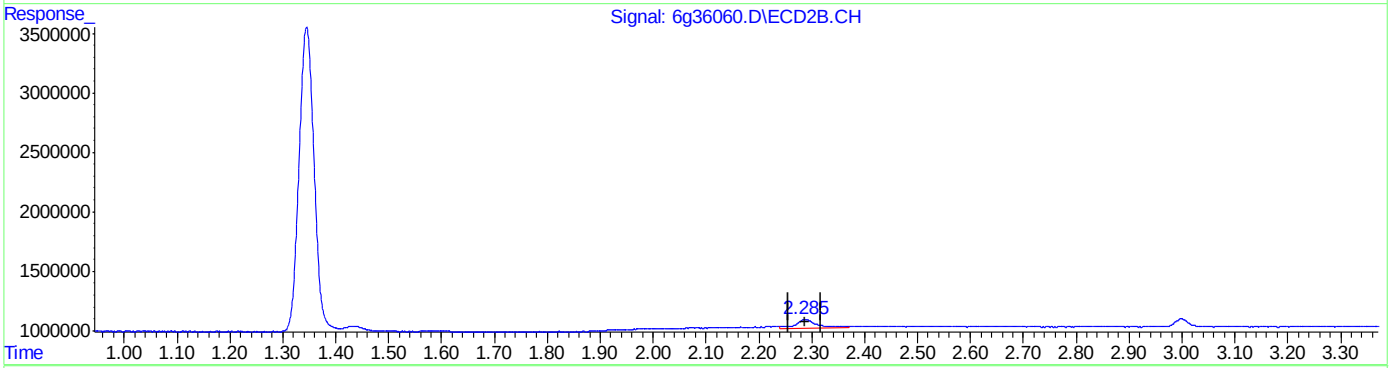
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36060.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 4:54 pm
Operator : dharas
Sample : ic1034-1
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:54:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
0.000min 0.000PPB
response 0

(2) Tetrachloro-m-xylene #2 (SAB)
2.287min 2.317PPB
response 2043350

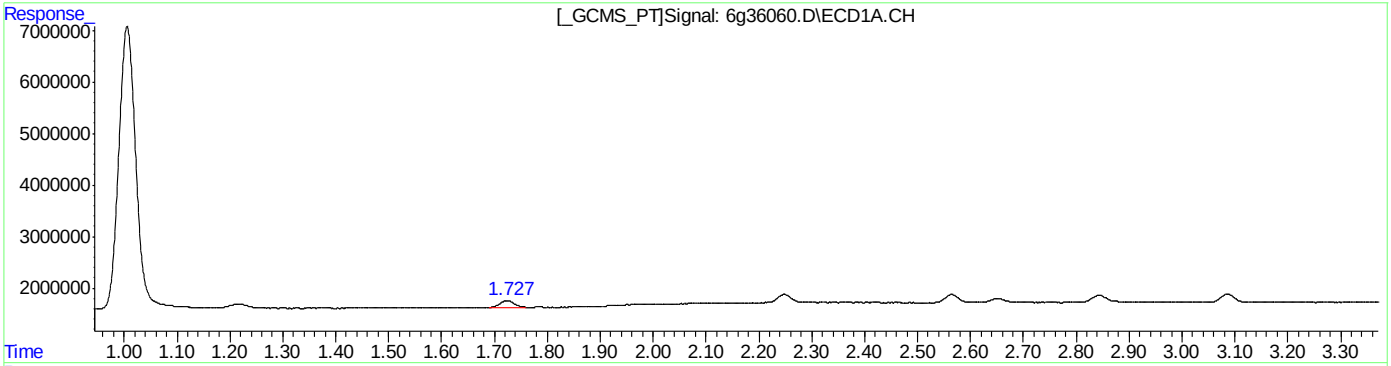
(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:55:01 2016

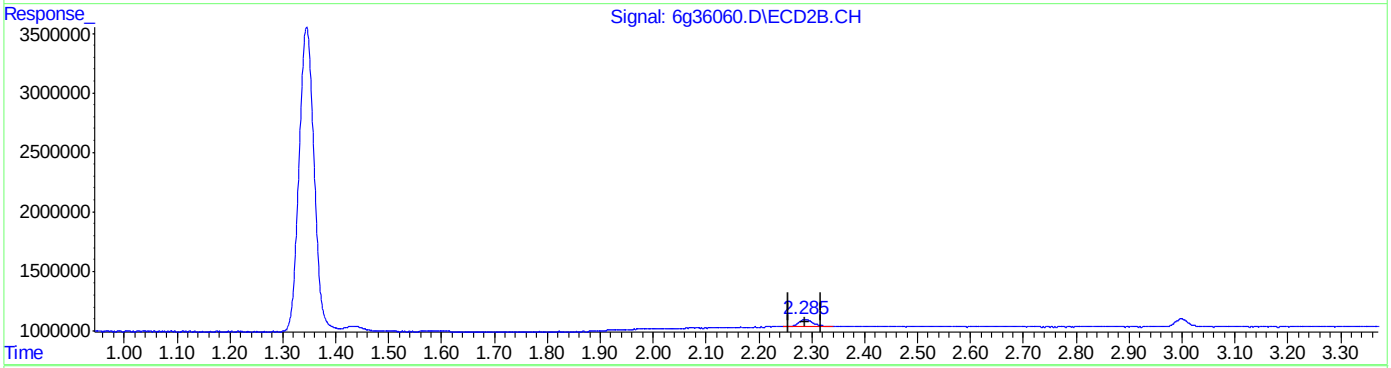
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36060.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 4:54 pm
Operator : dharas
Sample : ic1034-1
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:54:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
1.727min 1.219PPB m
response 2531003

(2) Tetrachloro-m-xylene #2 (SAB)
2.285min 1.353PPB m
response 1192957

(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:55:11 2016

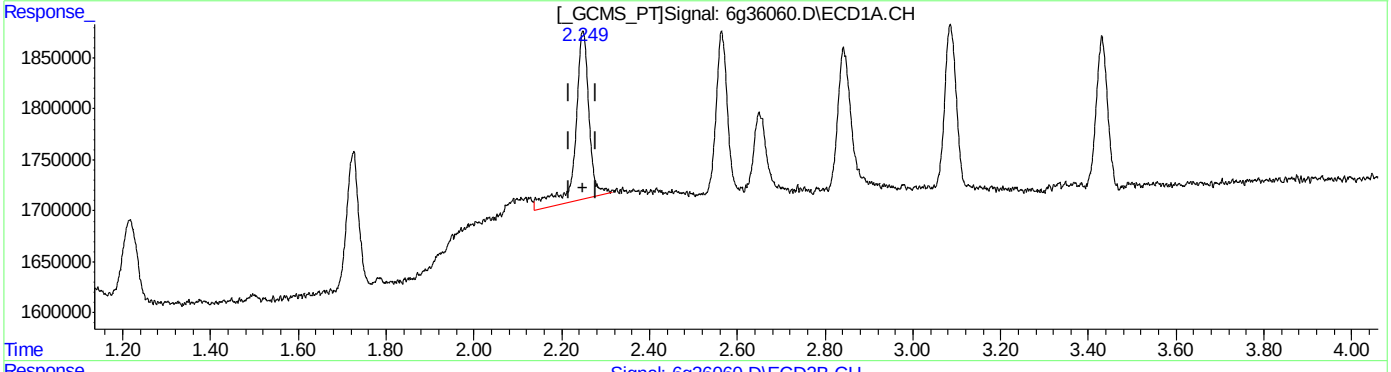
SGS ACCUTEST JC22613

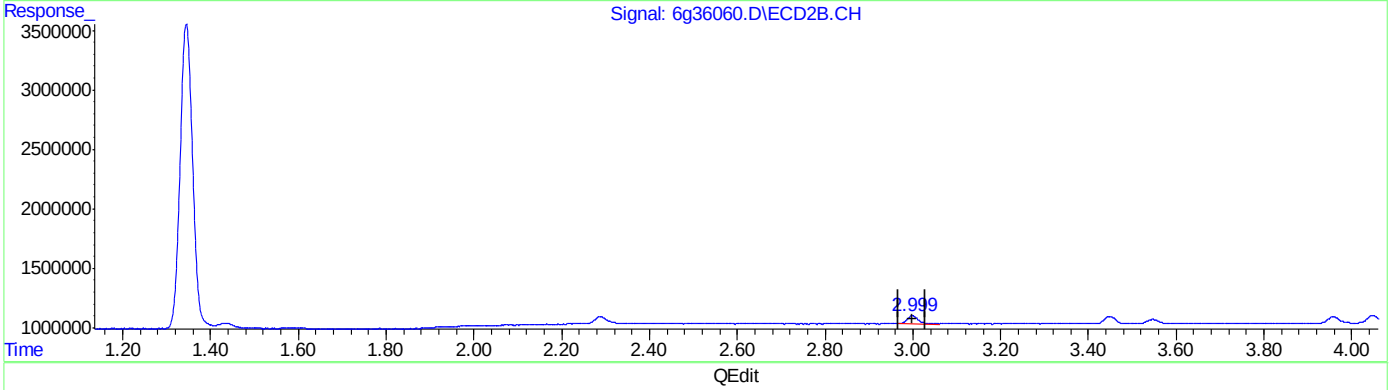
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36060.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 4:54 pm
Operator : dharas
Sample : ic1034-1
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:54:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(3) alpha-BHC (A)
2.249min 1.299PPB
response 3611065

(3) alpha-BHC #2 (A)
2.999min 1.142PPB
response 1257528

(+) = Expected Retention Time

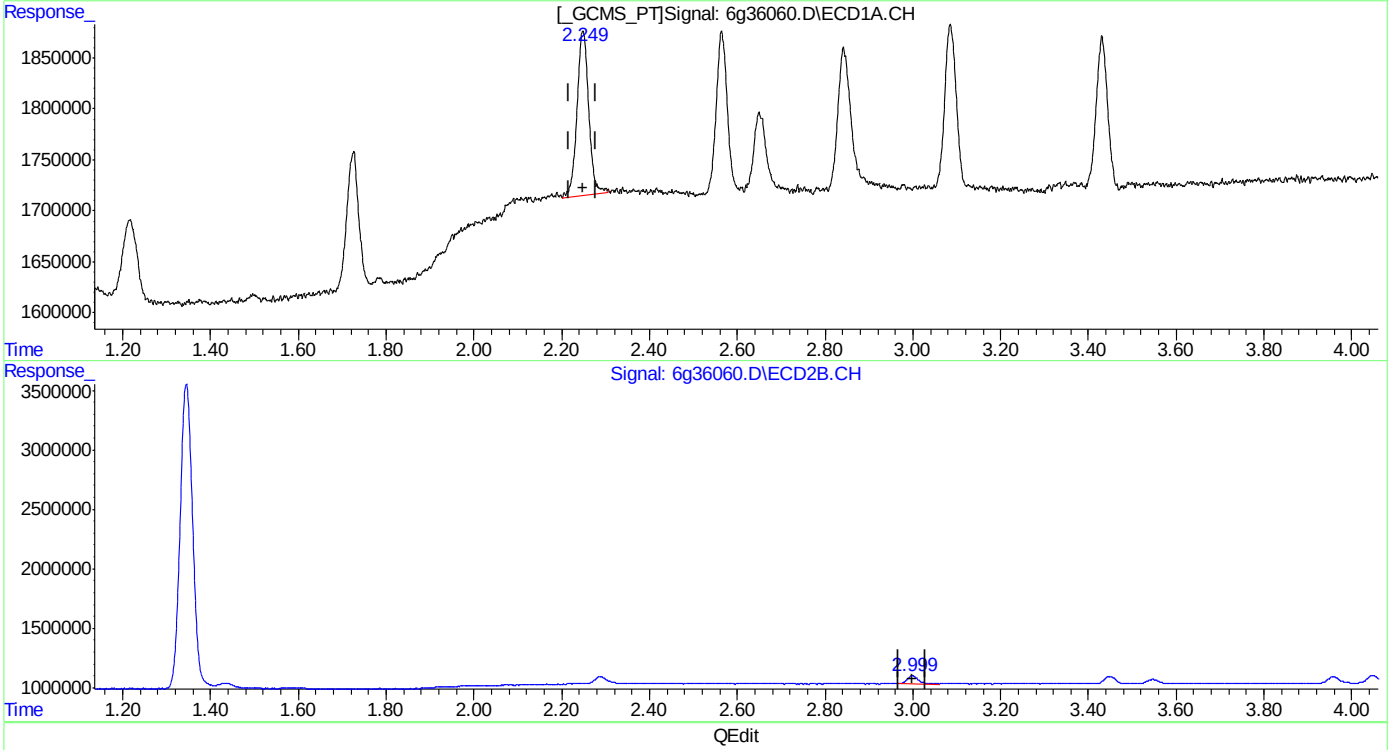
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36060.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 4:54 pm
Operator : dharas
Sample : ic1034-1
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:54:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(3) alpha-BHC (A)
2.249min 1.089PPB m
response 3027104

(3) alpha-BHC #2 (A)
2.999min 1.142PPB
response 1257528

(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:55:19 2016

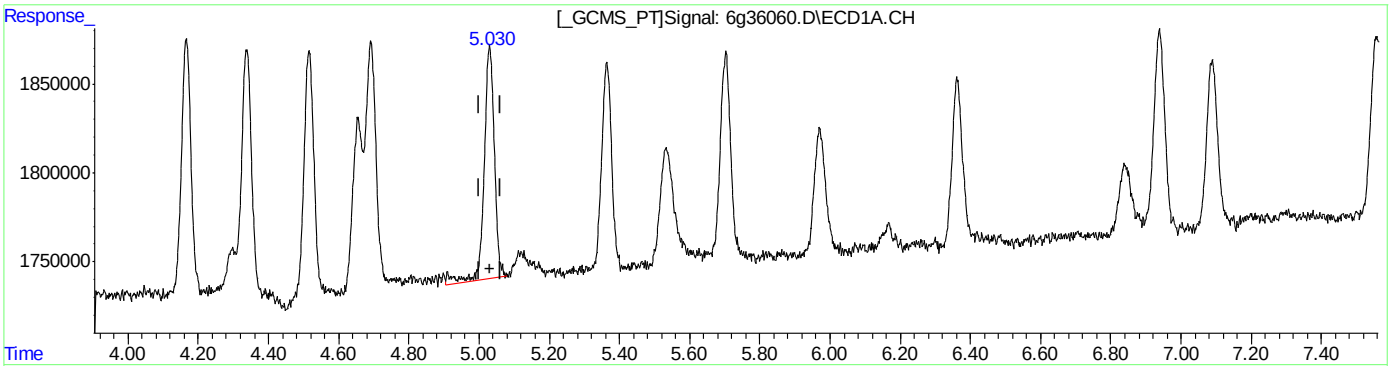
SGS ACCUTEST JC22613

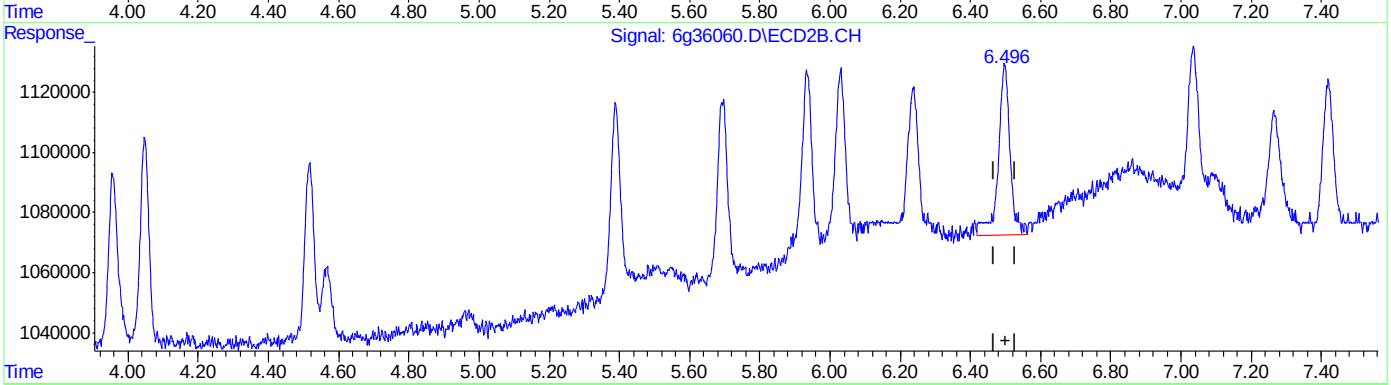
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36060.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 4:54 pm
Operator : dharas
Sample : ic1034-1
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:54:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(14) Dieldrin (MA)
5.030min 1.247PPB
response 2666481

(14) Dieldrin #2 (MA)
6.497min 1.529PPB
response 1331057

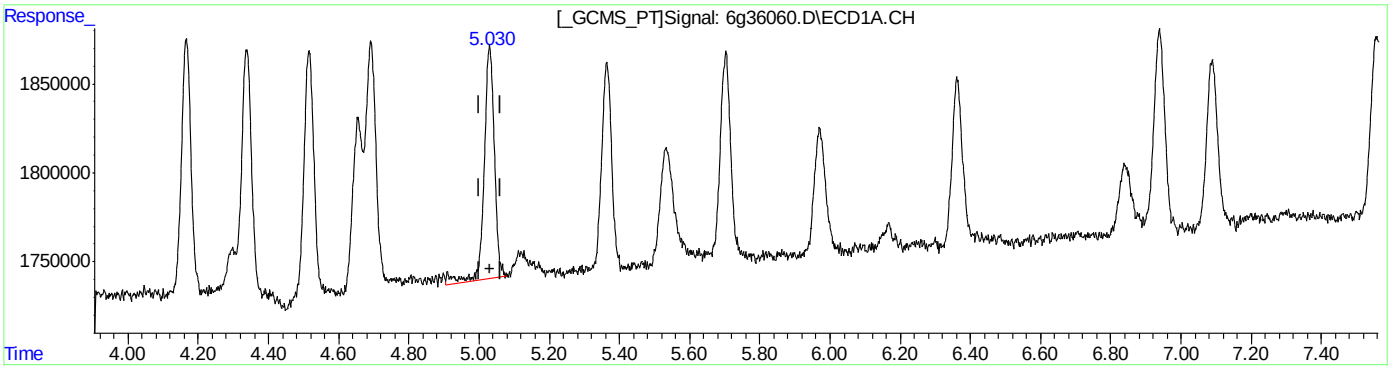
(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:55:36 2016

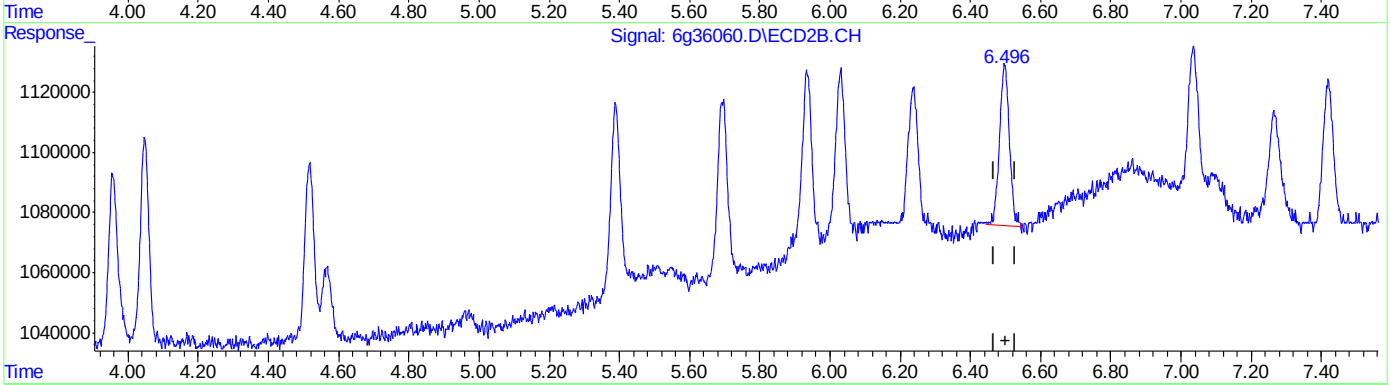
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36060.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 4:54 pm
Operator : dharas
Sample : ic1034-1
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:54:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(14) Dieldrin (MA)
5.030min 1.247PPB
response 2666481

(14) Dieldrin #2 (MA)
6.496min 1.218PPB m
response 1059609

(+) = Expected Retention Time

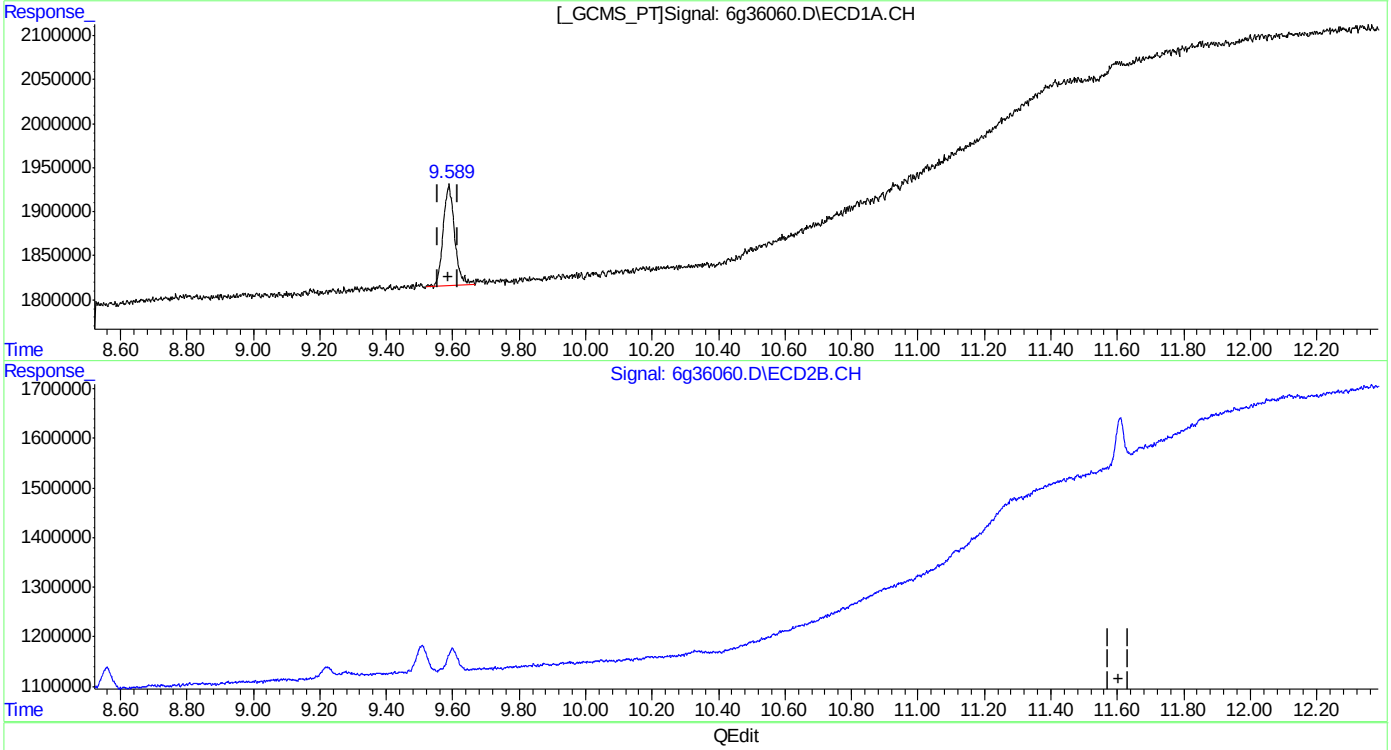
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36060.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 4:54 pm
Operator : dharas
Sample : ic1034-1
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:54:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(24) Decachlorobiphenyl (SAB)
9.588min 1.380PPB
response 2737749

(24) Decachlorobiphenyl #2 (SAB)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:56:01 2016

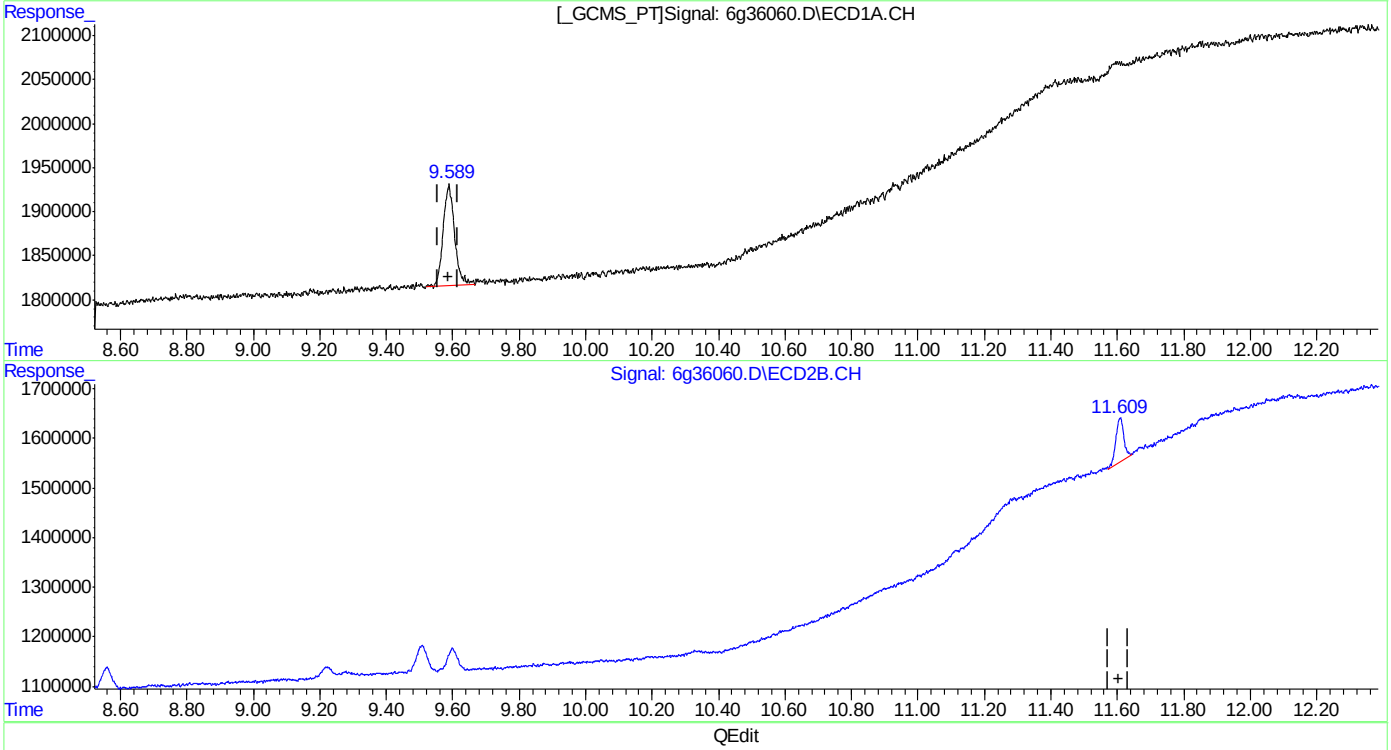
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36060.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 4:54 pm
Operator : dharas
Sample : ic1034-1
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:54:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(24) Decachlorobiphenyl (SAB)
9.588min 1.380PPB
response 2737749

(24) Decachlorobiphenyl #2 (SAB)
11.609min 1.726PPB m
response 1498849

(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:56:07 2016

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 06/14/16 15:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36061.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:10 pm
Operator : dharas
Sample : ic1034-2
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:54:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.005	1.345	134.1E6	56036073	50.000	50.000
25) I	1-bromo-2...	1.005	1.345	134.1E6	56036073	50.000	50.000
31) I	1-bromo-2...	1.005	1.345	134.1E6	56036073	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.724	2.290	5073858	2123247	2.195	2.177m
Spiked Amount		40.000 Range	30 - 150	Recovery	=	5.49%#	5.44%#
24) SAB	Decachlor...	9.590	11.608	5331280	2835503	2.413	2.952m
Spiked Amount		40.000		Recovery	=	6.03%	7.38%
	Target Compounds						
3) A	alpha-BHC	2.248	3.000	5949207	2375657	1.922m	1.950
4) MA	gamma-BHC	2.566	3.450	5542893	2149544	1.861	1.866
5) MA	Heptachlor	3.087	4.048	5991372	2491017	2.161	2.230
6) B	beta-BHC	2.653	3.547	3130654	1260040	2.147	2.195
7) B	delta-BHC	2.845	3.958	6101267	2155043	2.288	1.946
8) MB	Aldrin	3.433	4.519	5483646	2252395	2.164	2.156
9) B	Heptachlo...	4.167	5.393	5430991	2490748	2.306	2.426
10) B	gamma-Chl...	4.340	5.697	5650913	2621663	2.417	2.684
11) B	alpha-Chl...	4.517	5.938	5603648	2530577	2.324m	2.567
12) A	Endosulfan I	4.693	6.032	5994721	2305523	2.466	2.447
13) B	4,4'-DDE	4.655	6.237	3631823	2251409	1.810	2.494 #
14) MA	Dieldrin	5.032	6.499	5083797	2280365	2.135	2.369
15) MA	Endrin	5.365	7.038	4841571	2121386	2.143	2.334
16) A	4,4'-DDD	5.534	7.268	3522280	1748776	1.966	2.390m
17) B	Endosulfa...	5.704	7.421	4878884	2060771	2.196	2.324
18) MA	4,4'-DDT	5.972	7.839	3470893	1455600	1.797	1.903
19) B	Endrin Al...	6.362	8.047	3964540	1761184	2.140	2.317
20) B	Endosulfa...	7.090	8.559	4152035	1988544	2.022	2.421
21) A	Methoxychlor	6.838	9.222	2164085	994714	1.940	2.155m
22)	Mirex	6.940	9.512	4942814	2403734	2.445	2.948
23) B	Endrin Ke...	7.558	9.601	4752674	1986056	1.973	2.015

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

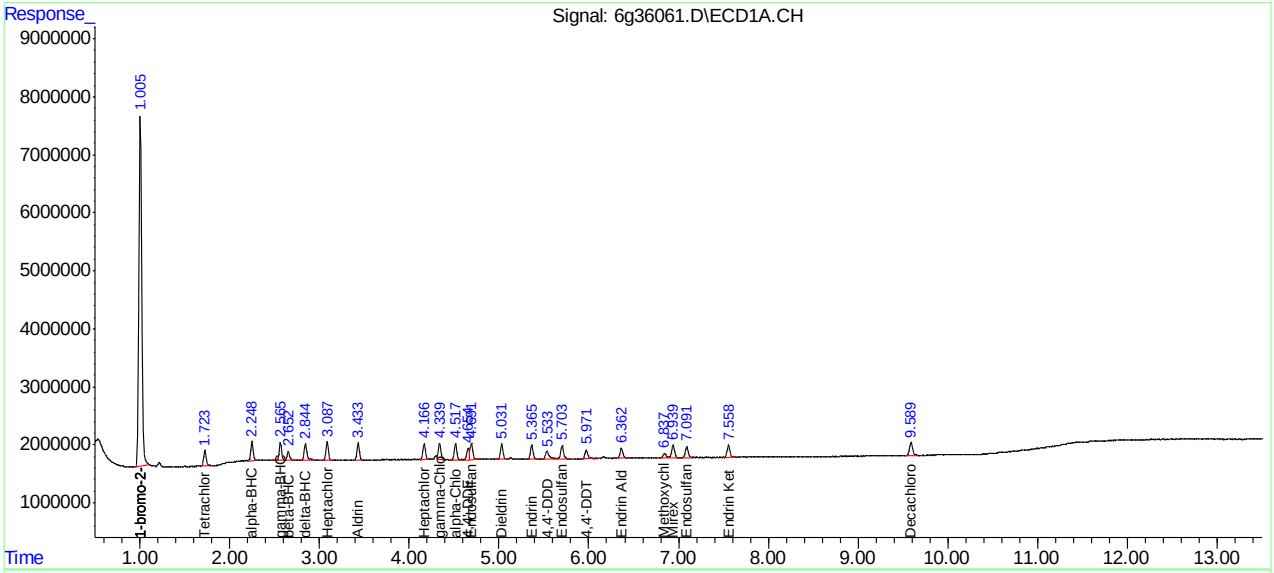
11.6.2 11

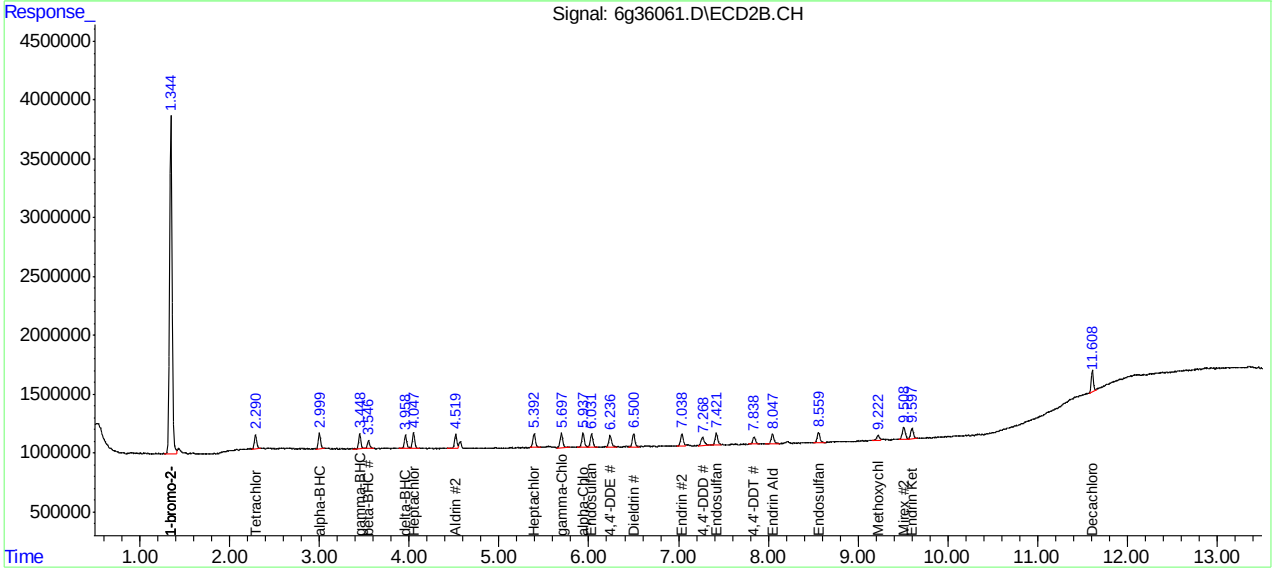
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36061.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:10 pm
Operator : dharas
Sample : ic1034-2
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:54:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Manual Integration Approval Summary

Sample Number:	G6G1034-IC1034	**Method:**	SW846 8081B
Lab FileID:	6G36061.D	**Analyst approved:**	06/13/16 13:38 Rebecca Krug
Injection Time:	06/10/16 17:10	**Supervisor approved:**	06/14/16 15:27 Gwendolyn Burns

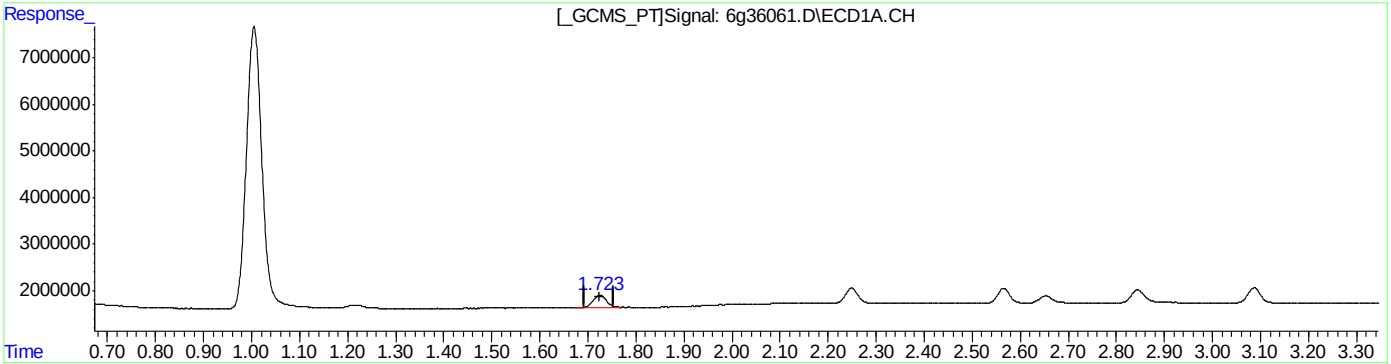
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.25	Poorly defined baseline
Tetrachloro-m-xylene	877-09-8	2	2.29	Poorly defined baseline
alpha-Chlordane	5103-71-9	1	4.52	Poorly defined baseline
4,4'-DDD	72-54-8	2	7.27	Poorly defined baseline
Methoxychlor	72-43-5	2	9.22	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.61	Poorly defined baseline

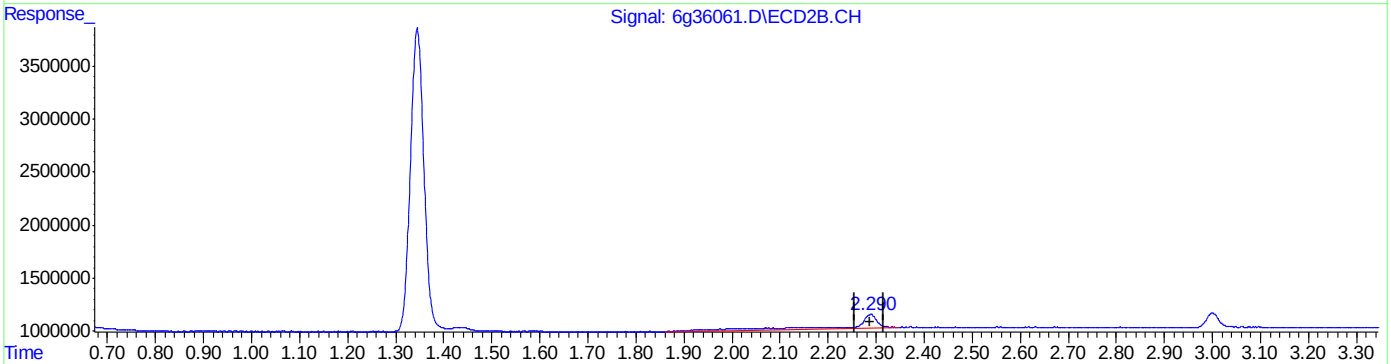
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36061.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:10 pm
Operator : dharas
Sample : ic1034-2
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:52:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
1.724min 2.195PPB
response 5073858

(2) Tetrachloro-m-xylene #2 (SAB)
2.289min 5.604PPB
response 5466555

(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:52:54 2016

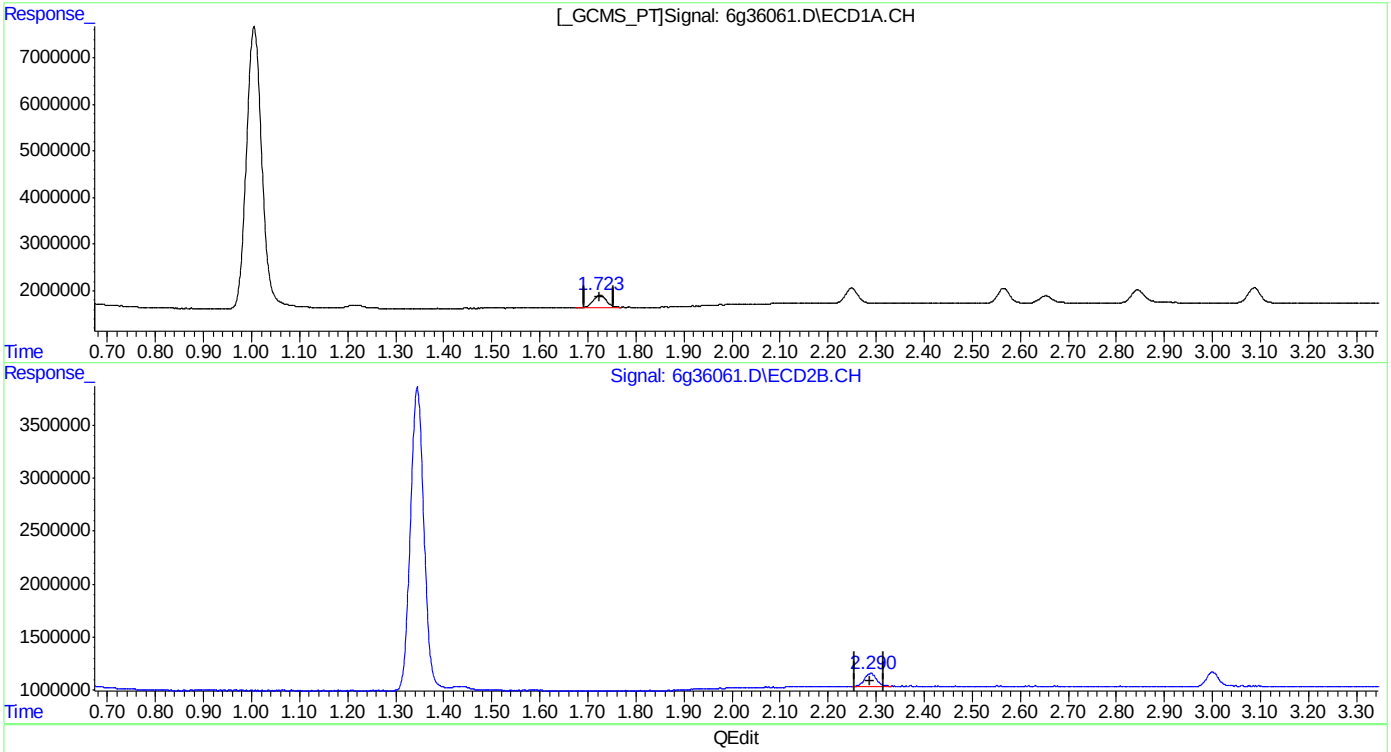
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36061.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:10 pm
Operator : dharas
Sample : ic1034-2
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:52:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(2) Tetrachloro-m-xylene (SAB)
1.724min 2.195PPB
response 5073858

(2) Tetrachloro-m-xylene #2 (SAB)
2.290min 2.177PPB m
response 2123247

(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:53:04 2016

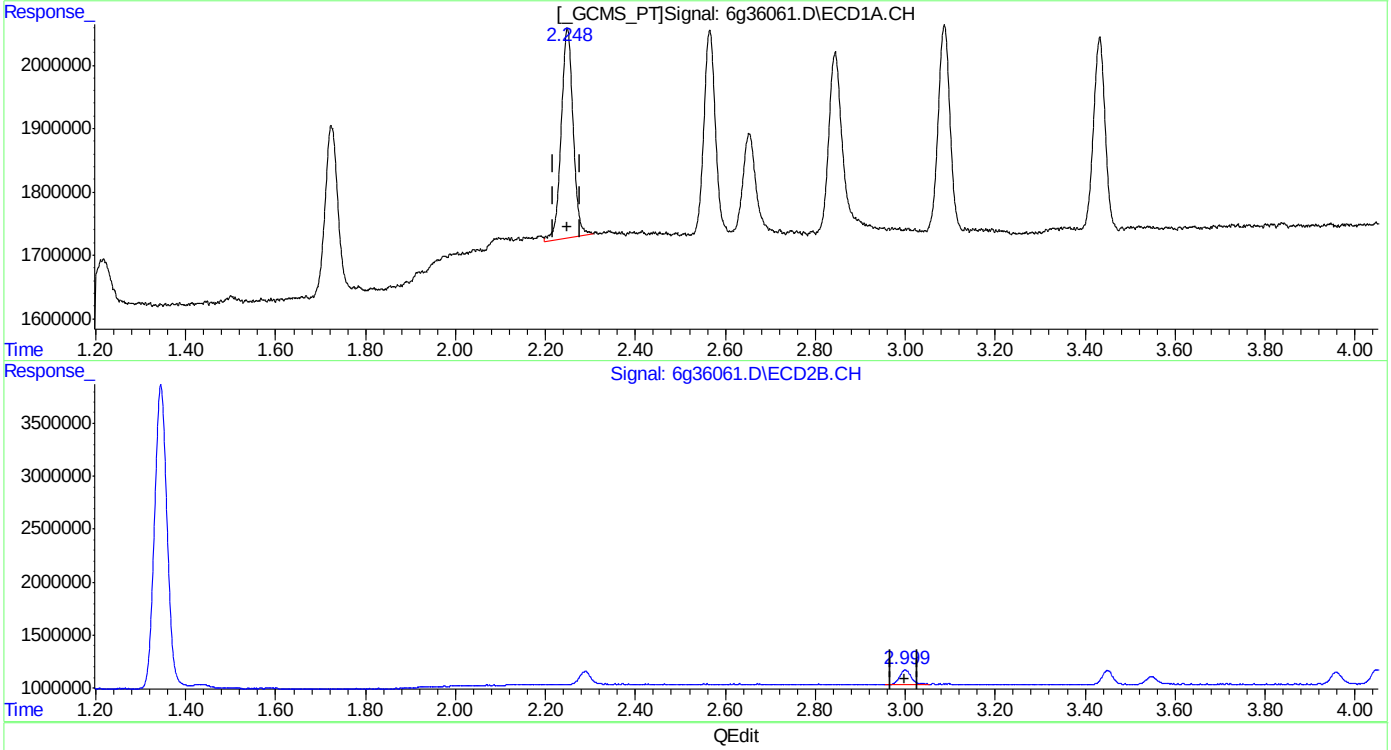
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36061.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:10 pm
Operator : dharas
Sample : ic1034-2
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:52:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(3) alpha-BHC (A)
2.249min 1.969PPB
response 6092567

(3) alpha-BHC #2 (A)
3.000min 1.950PPB
response 2375657

(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:53:07 2016

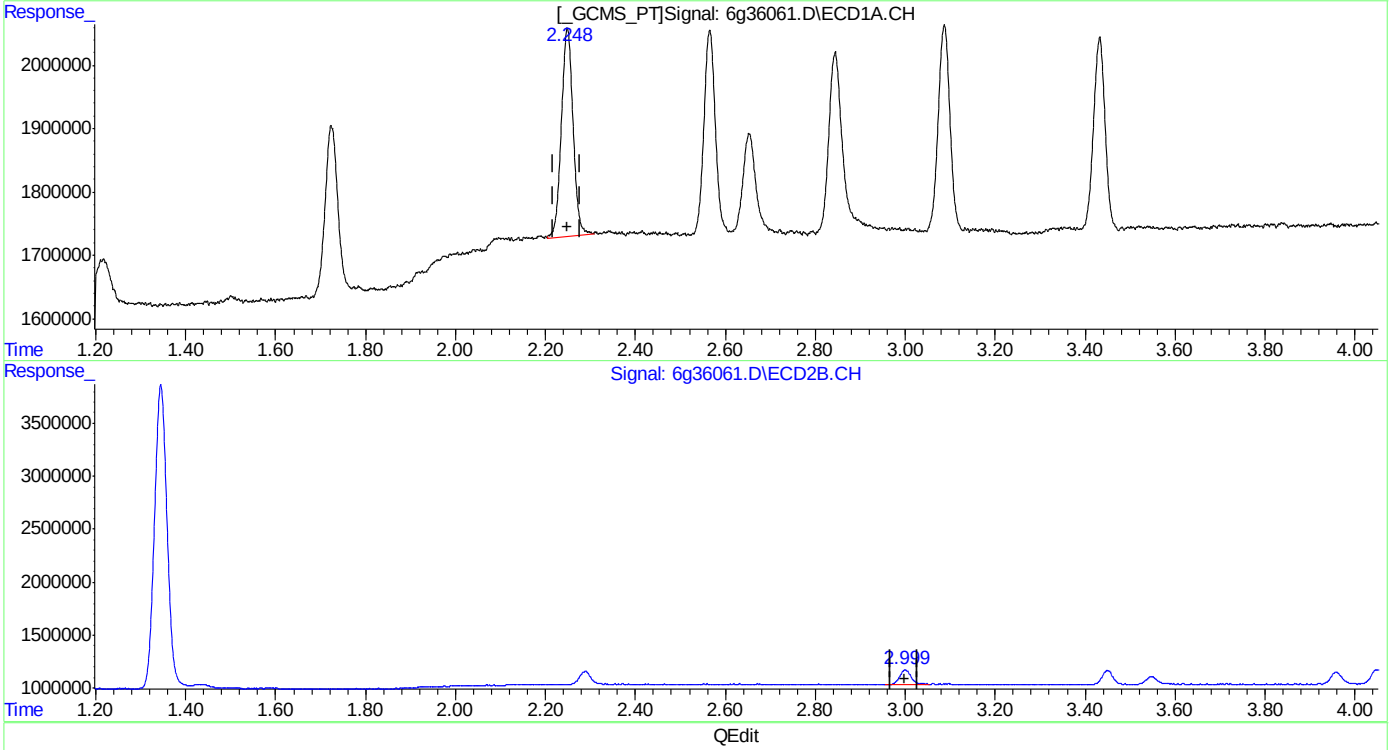
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36061.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:10 pm
Operator : dharas
Sample : ic1034-2
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:52:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(3) alpha-BHC (A)
2.248min 1.922PPB m
response 5949207

(3) alpha-BHC #2 (A)
3.000min 1.950PPB
response 2375657

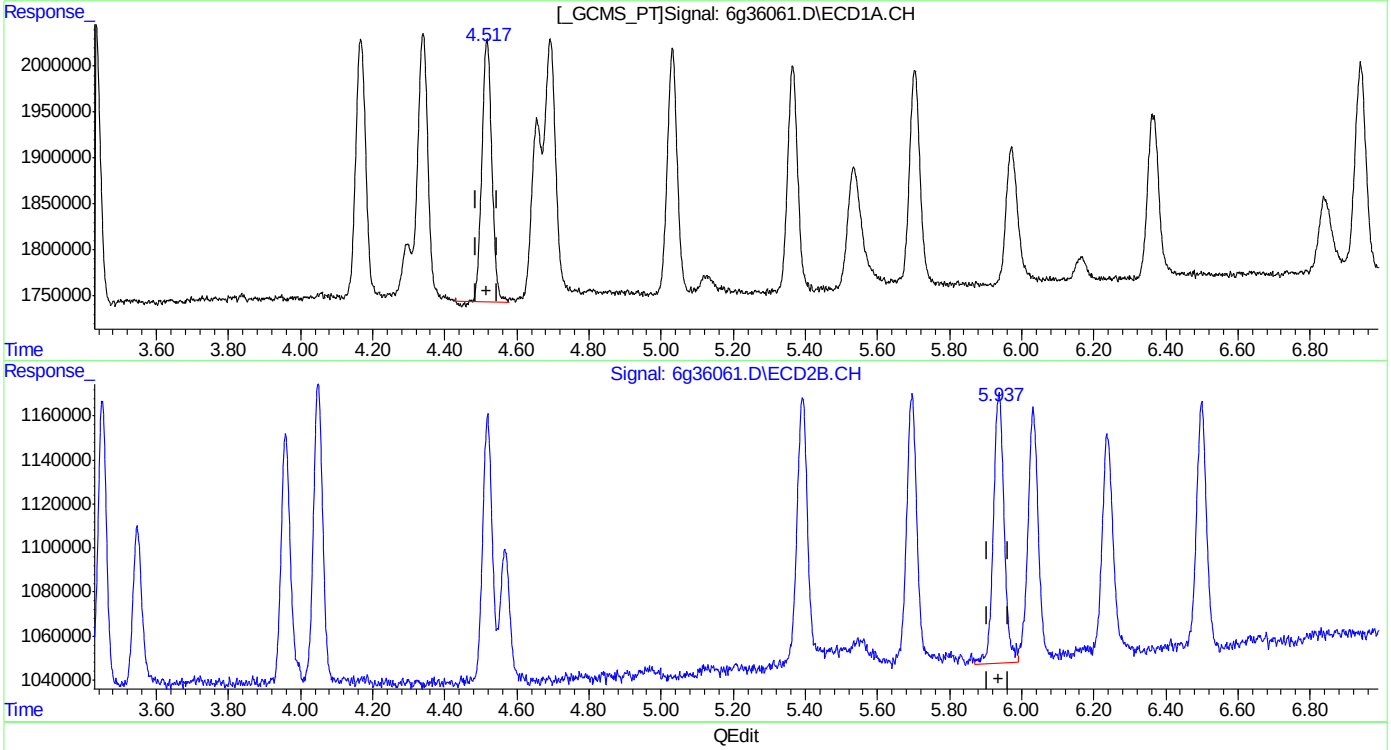
(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:53:13 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36061.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:10 pm
Operator : dharas
Sample : ic1034-2
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:52:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(11) alpha-Chlordane (B)
4.517min 2.249PPB
response 5422417

(11) alpha-Chlordane #2 (B)
5.938min 2.567PPB
response 2530577

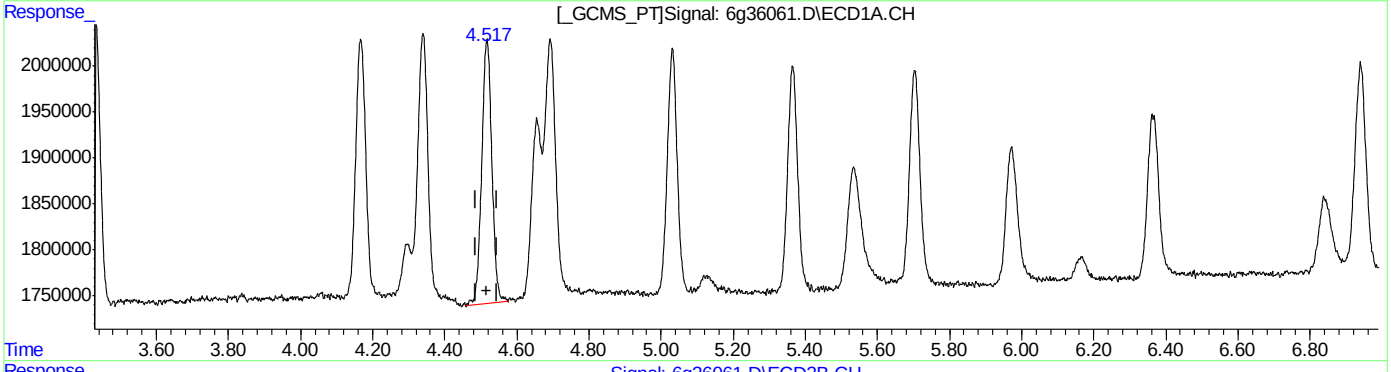
(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:53:25 2016

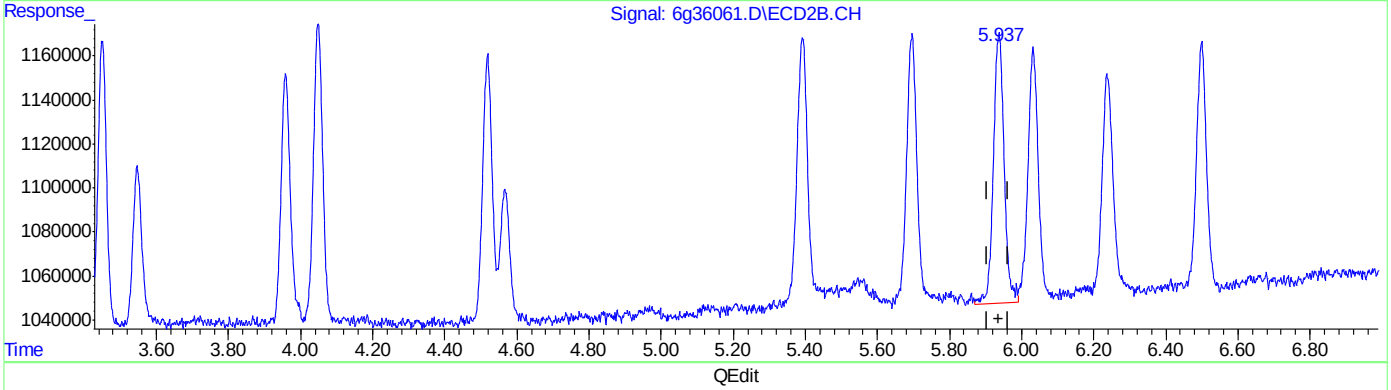
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36061.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:10 pm
Operator : dharas
Sample : ic1034-2
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:52:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(11) alpha-Chlordane (B)
4.517min 2.324PPB m
response 5603648

(11) alpha-Chlordane #2 (B)
5.938min 2.567PPB
response 2530577

(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:53:31 2016

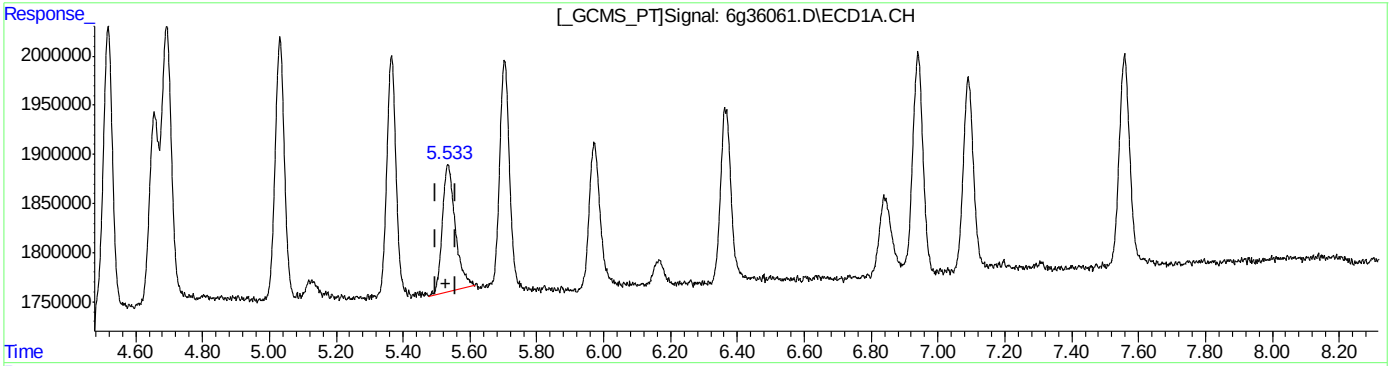
SGS ACCUTEST JC22613

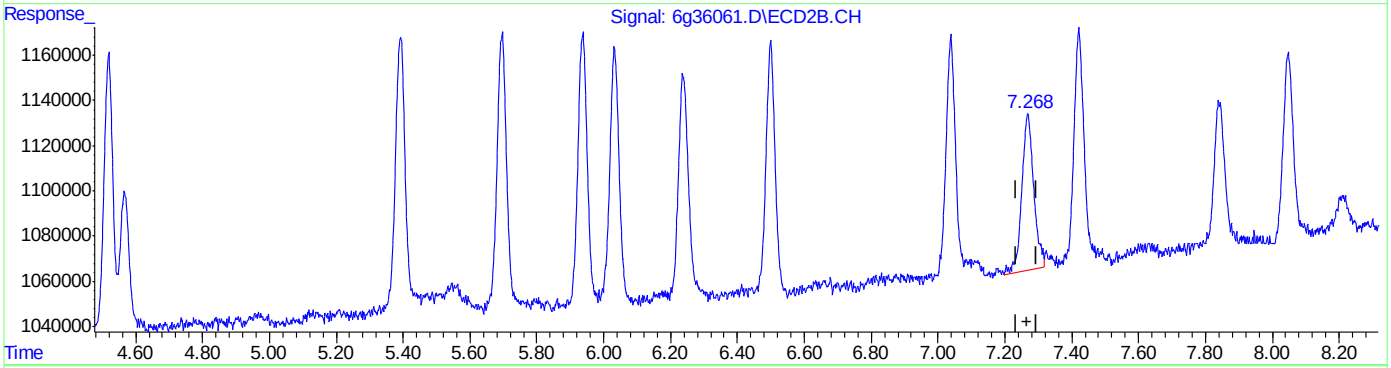
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36061.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:10 pm
Operator : dharas
Sample : ic1034-2
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:52:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
5.534min 1.966PPB
response 3522280

(16) 4,4'-DDD #2 (A)
7.269min 2.325PPB
response 1701498

(+) = Expected Retention Time

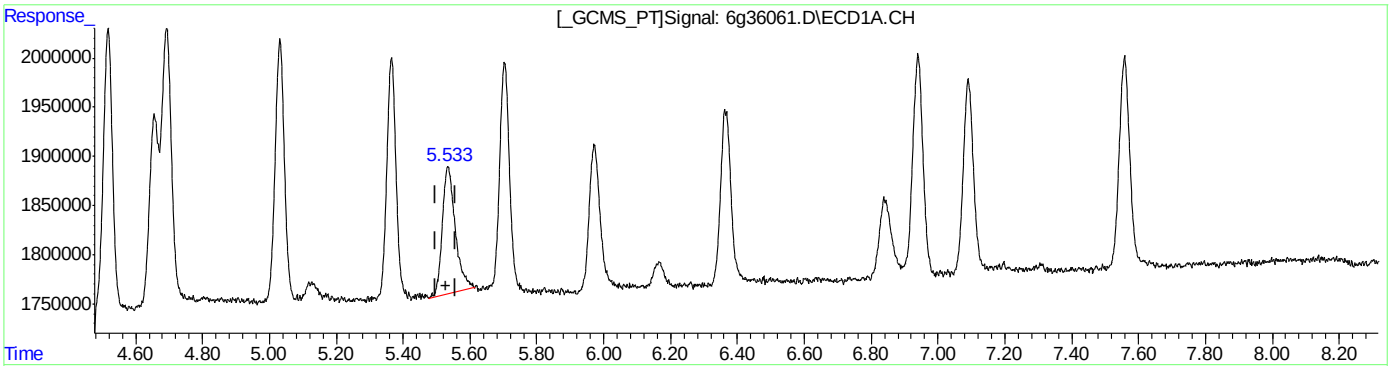
SGS ACCUTEST JC22613

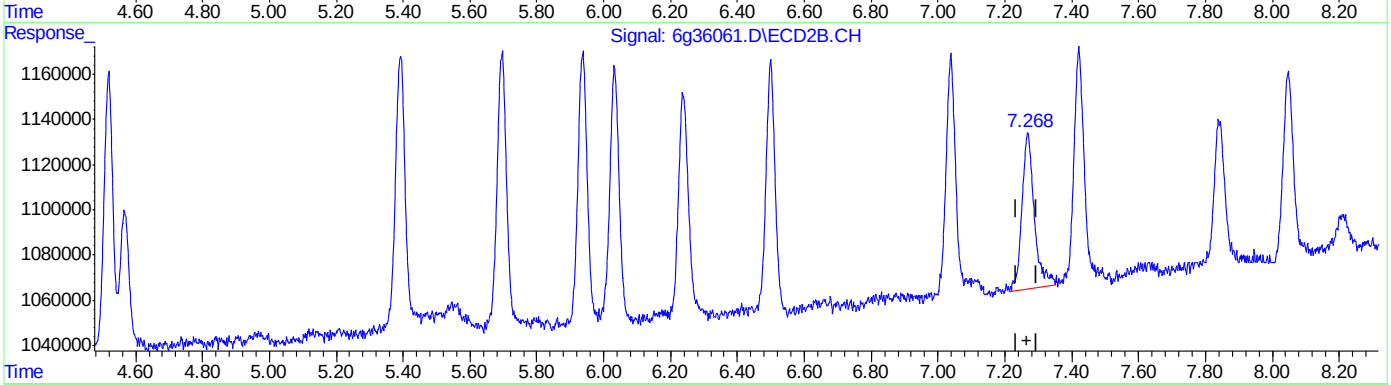
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36061.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:10 pm
Operator : dharas
Sample : ic1034-2
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:52:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
5.534min 1.966PPB
response 3522280

(16) 4,4'-DDD #2 (A)
7.268min 2.390PPB m
response 1748776

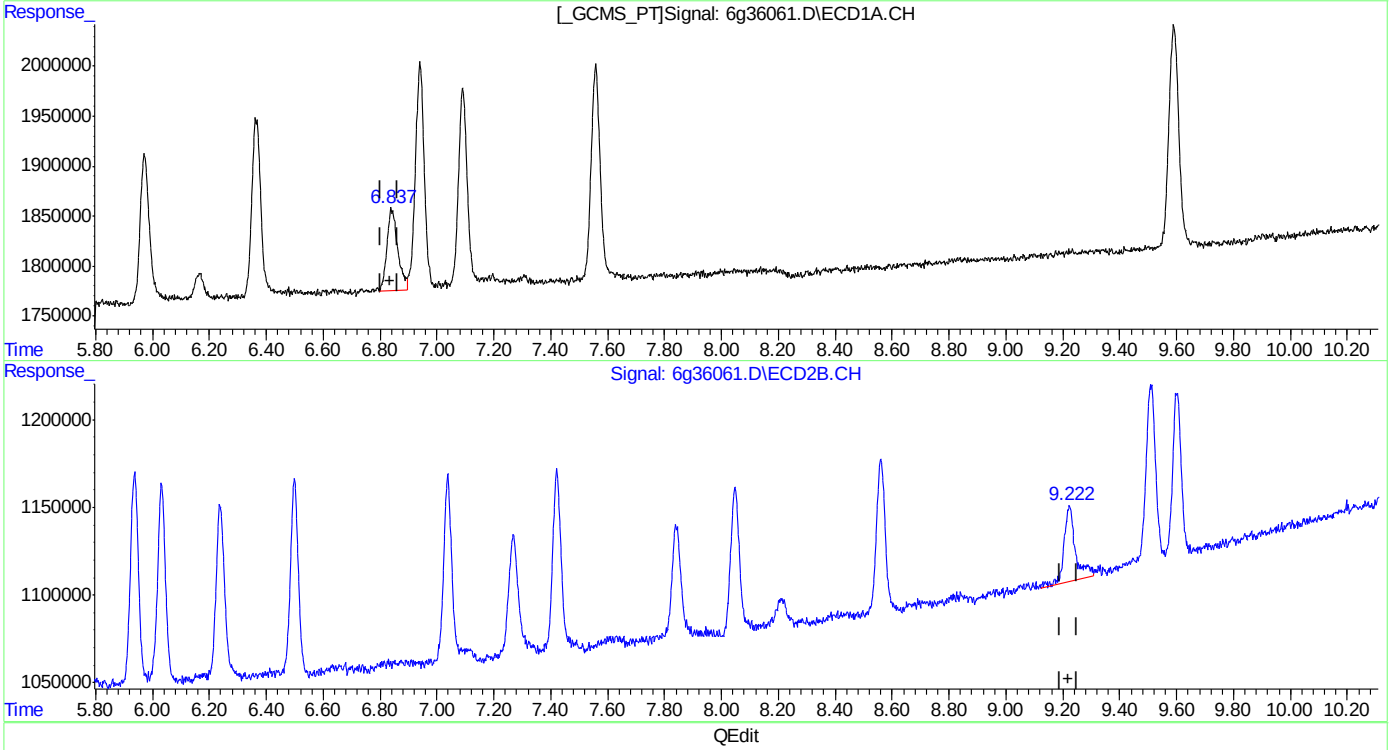
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36061.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:10 pm
Operator : dharas
Sample : ic1034-2
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:52:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
6.838min 1.940PPB
response 2164085

(21) Methoxychlor #2 (A)
9.223min 2.588PPB
response 1195020

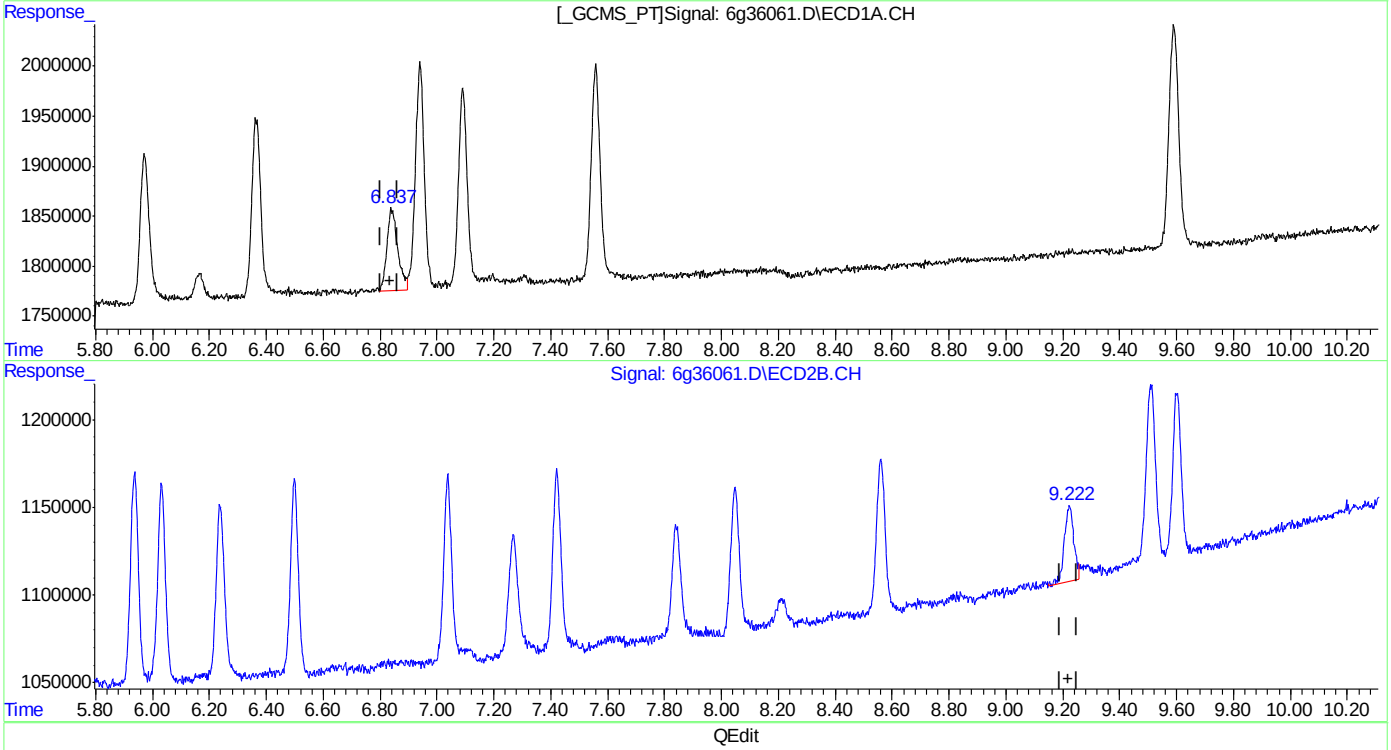
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36061.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:10 pm
Operator : dharas
Sample : ic1034-2
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:52:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
6.838min 1.940PPB
response 2164085

(21) Methoxychlor #2 (A)
9.222min 2.155PPB m
response 994714

(+) = Expected Retention Time

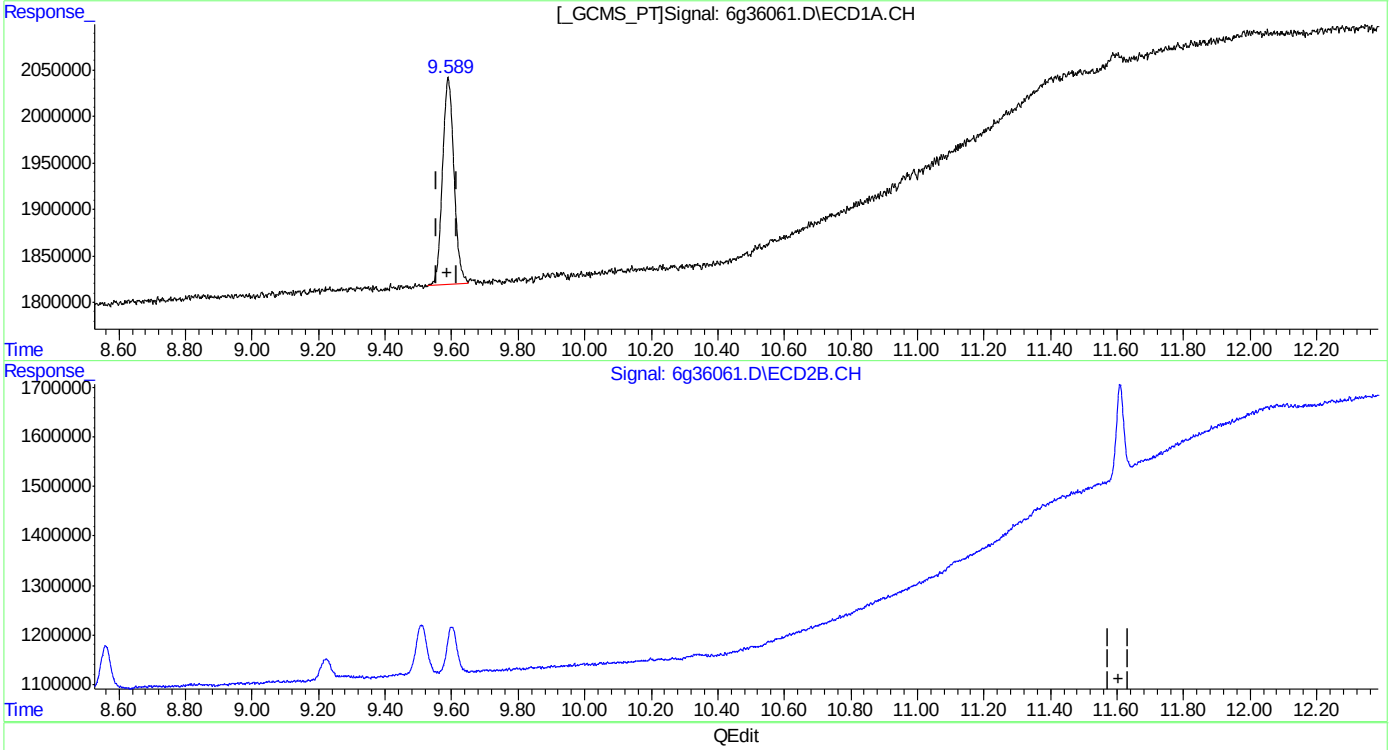
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36061.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:10 pm
Operator : dharas
Sample : ic1034-2
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:52:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(24) Decachlorobiphenyl (SAB)
9.590min 2.413PPB
response 5331280

(24) Decachlorobiphenyl #2 (SAB)
0.000min 0.000PPB
response 0

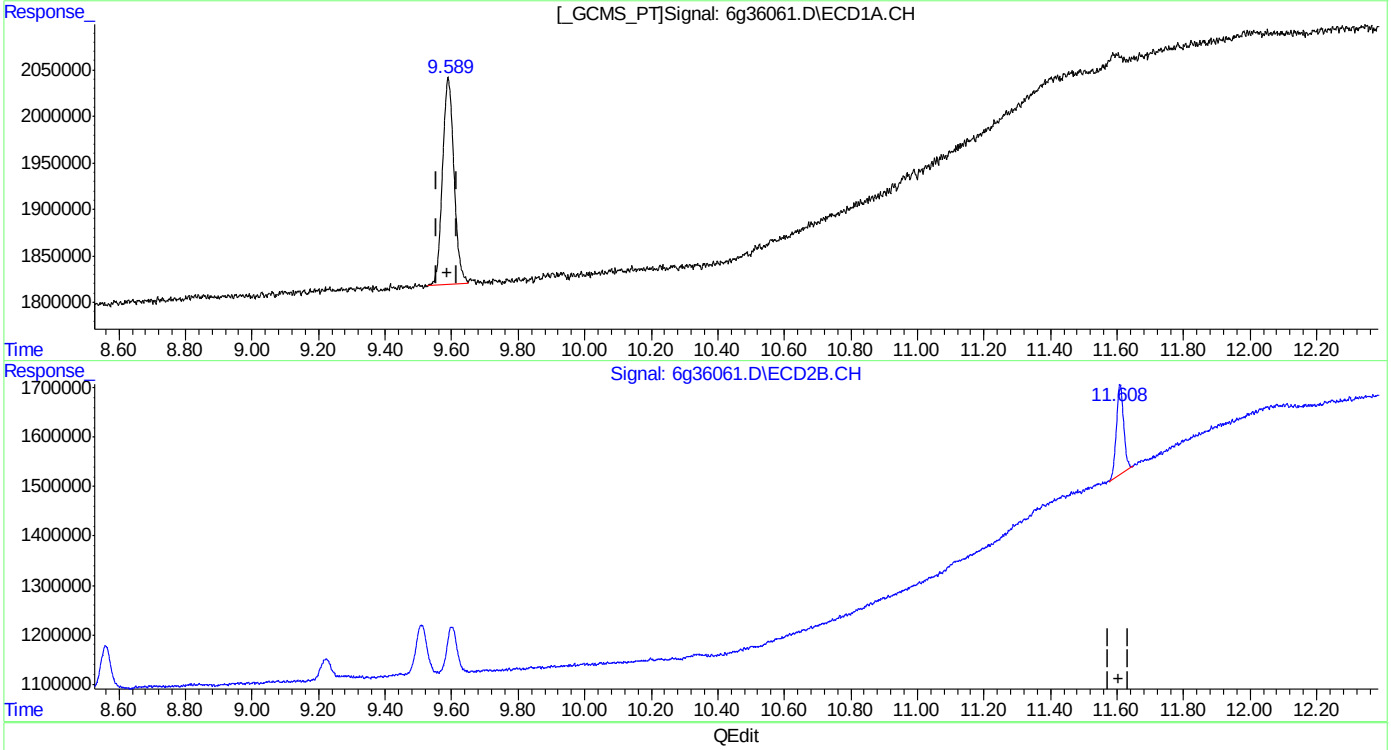
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36061.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:10 pm
Operator : dharas
Sample : ic1034-2
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:52:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(24) Decachlorobiphenyl (SAB)
9.590min 2.413PPB
response 5331280

(24) Decachlorobiphenyl #2 (SAB)
11.608min 2.952PPB m
response 2835503

(+) = Expected Retention Time

SGS ACCUTEST JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 06/14/16 15:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36062.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:27 pm
Operator : dharas
Sample : ic1034-5
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:52:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.006	1.345	132.0E6	54993814	50.000	50.000
25) I	1-bromo-2...	1.006	1.345	132.0E6	54993814	50.000	50.000
31) I	1-bromo-2...	1.006	1.345	132.0E6	54993814	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.724	2.287	12188337	5509519	5.358	5.756
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 13.39%#	14.39%#
24)	SAB Decachlor...	9.586	11.607	12967859	6771441	5.964m	7.182
	Spiked Amount	40.000			Recovery	= 14.91%	17.96%
	Target Compounds						
3) A	alpha-BHC	2.248	2.998	14672229	5636282	4.817	4.714
4) MA	gamma-BHC	2.565	3.449	14060303	5379054	4.797	4.757
5) MA	Heptachlor	3.086	4.047	14398985	6056548	5.277	5.524
6) B	beta-BHC	2.652	3.546	7584265	3072331	5.286	5.453
7) B	delta-BHC	2.843	3.957	13656937	5383072	5.203	4.954
8) MB	Aldrin	3.431	4.516	13286452	5491443	5.327	5.355
9) B	Heptachlo...	4.165	5.390	13221440	5608843	5.705	5.567
10) B	gamma-Chl...	4.337	5.693	14428961	5690310	6.271	5.935
11) B	alpha-Chl...	4.516	5.935	13330266	5768691	5.618	5.963
12) A	Endosulfan I	4.691	6.031	14513314	5503487	6.067	5.953
13) B	4,4'-DDE	4.654	6.235	8993694	4984696	4.555	5.627m
14) MA	Dieldrin	5.029	6.497	12477284	5214757	5.323	5.520
15) MA	Endrin	5.363	7.035	11793804	5132316	5.305	5.754
16) A	4,4'-DDD	5.532	7.267	8709008	4106560	4.939	5.718
17) B	Endosulfa...	5.702	7.418	11766144	5062696	5.381	5.817
18) MA	4,4'-DDT	5.970	7.839	8557543	3685446	4.503	4.910
19) B	Endrin Al...	6.362	8.044	9795426	4253041	5.374	5.701
20) B	Endosulfa...	7.088	8.557	10120819	4756886	5.009	5.902
21) A	Methoxychlor	6.838	9.219	5456182	2358927	4.970	5.206
22)	Mirex	6.938	9.507	11963947	5578850	6.014	6.973
23) B	Endrin Ke...	7.554	9.598	11766317	5000620	4.963	5.169

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

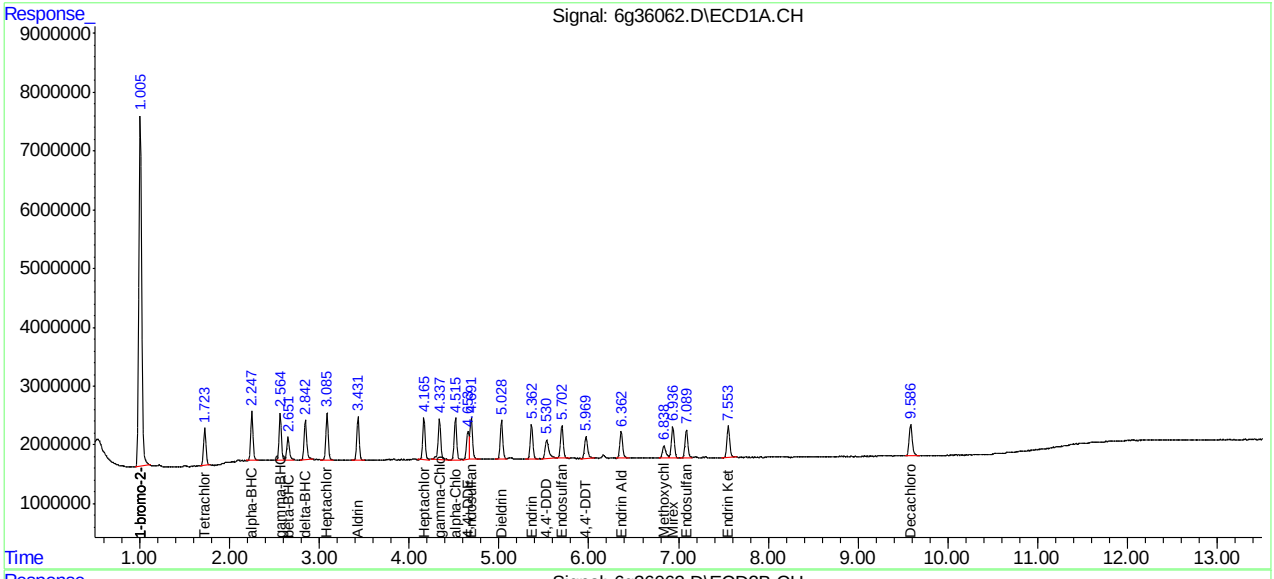
SGS ACCUTEST JC22613

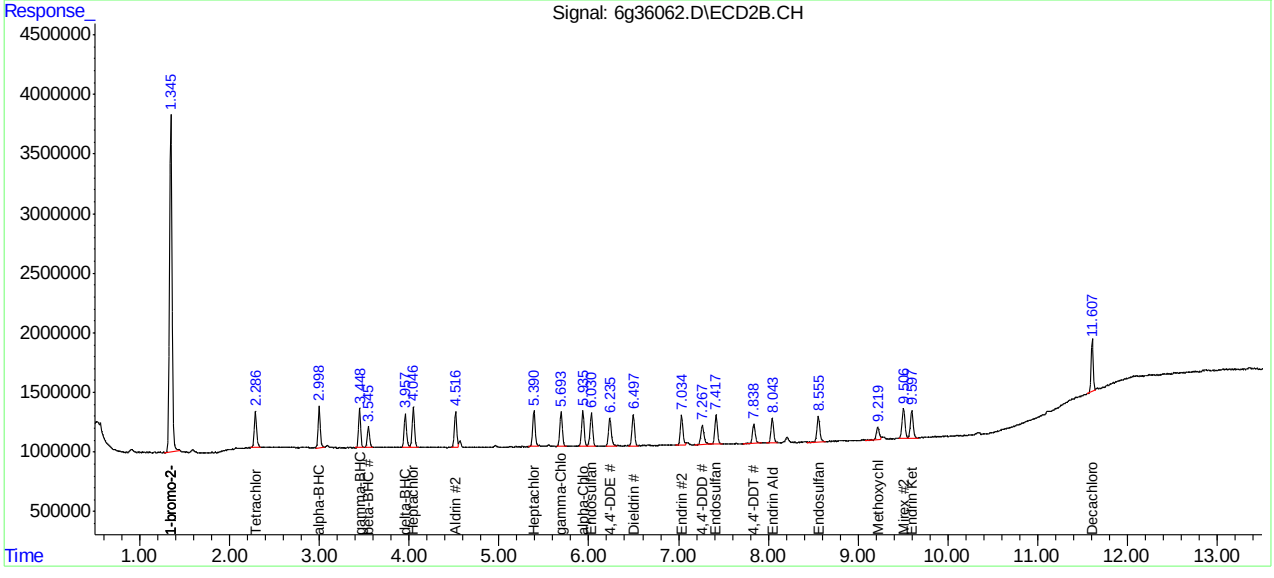
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36062.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:27 pm
Operator : dharas
Sample : ic1034-5
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:52:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Manual Integration Approval Summary

Sample Number:	G6G1034-IC1034	**Method:**	SW846 8081B
Lab FileID:	6G36062.D	**Analyst approved:**	06/13/16 13:38 Rebecca Krug
Injection Time:	06/10/16 17:27	**Supervisor approved:**	06/14/16 15:27 Gwendolyn Burns

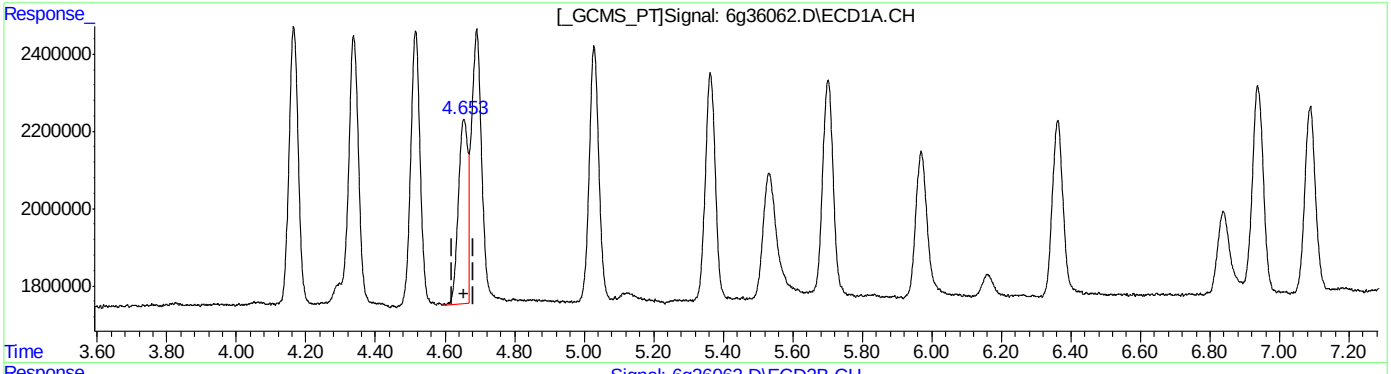
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.24	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	9.59	Poorly defined baseline

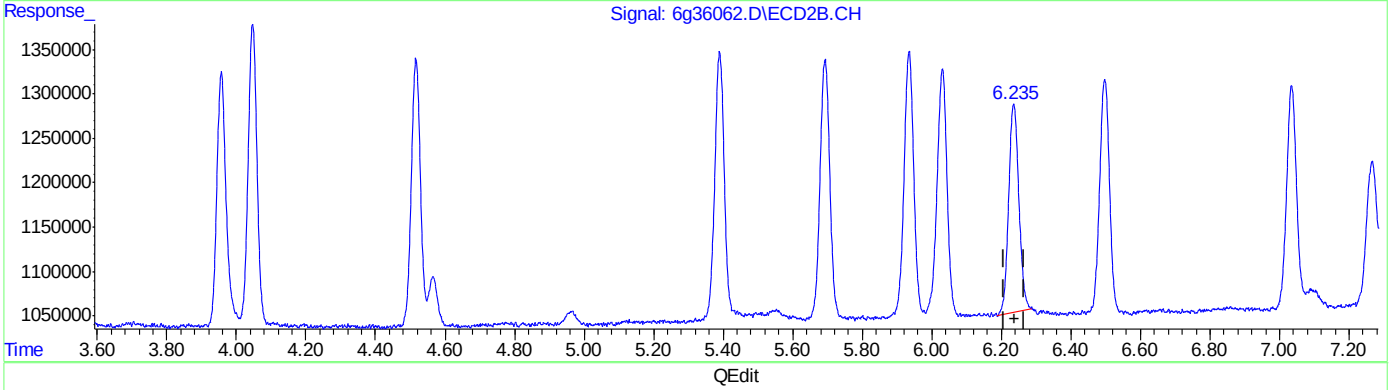
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36062.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:27 pm
Operator : dharas
Sample : ic1034-5
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:51:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) 4,4'-DDE (B)
4.654min 4.555PPB
response 8993694

(13) 4,4'-DDE #2 (B)
6.236min 5.397PPB
response 4780606

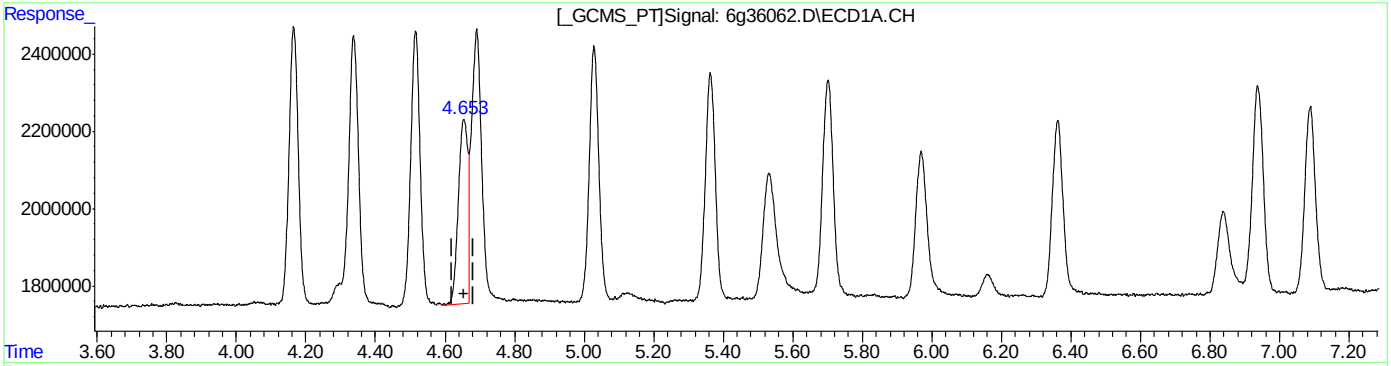
(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:51:37 2016

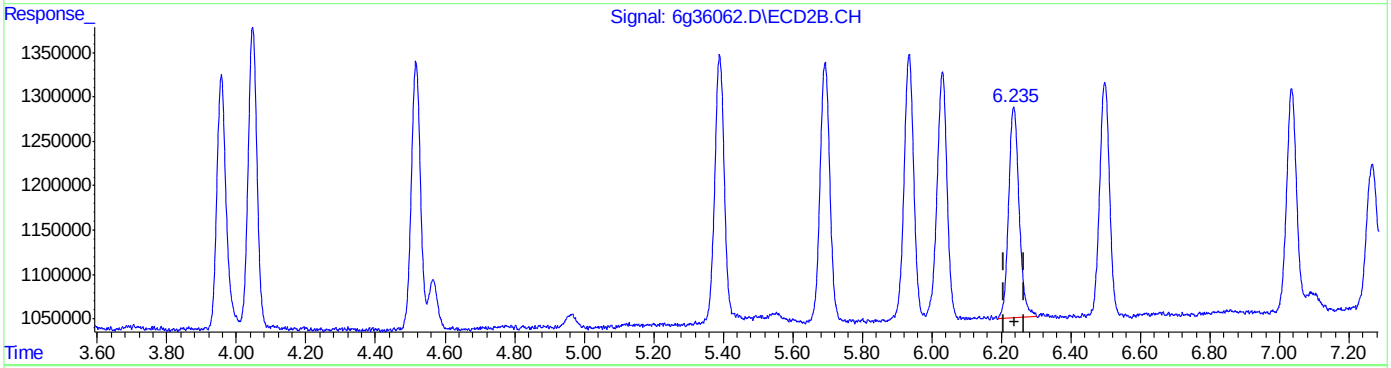
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36062.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:27 pm
Operator : dharas
Sample : ic1034-5
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:51:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) 4,4'-DDE (B)
4.654min 4.555PPB
response 8993694

(13) 4,4'-DDE #2 (B)
6.235min 5.627PPB m
response 4984696

(+) = Expected Retention Time

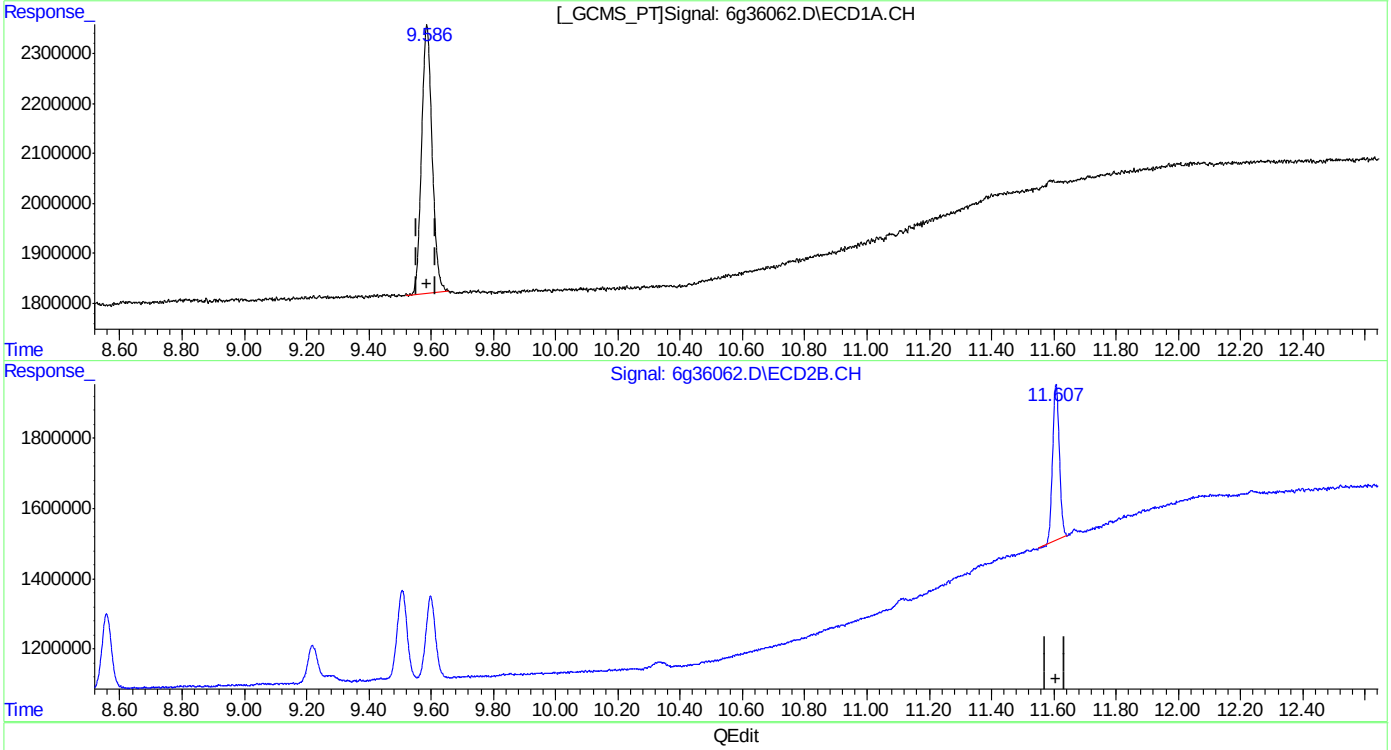
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36062.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:27 pm
Operator : dharas
Sample : ic1034-5
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:51:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(24) Decachlorobiphenyl (SAB)
9.586min 5.770PPB
response 12545555

(24) Decachlorobiphenyl #2 (SAB)
11.607min 7.182PPB
response 6771441

(+) = Expected Retention Time

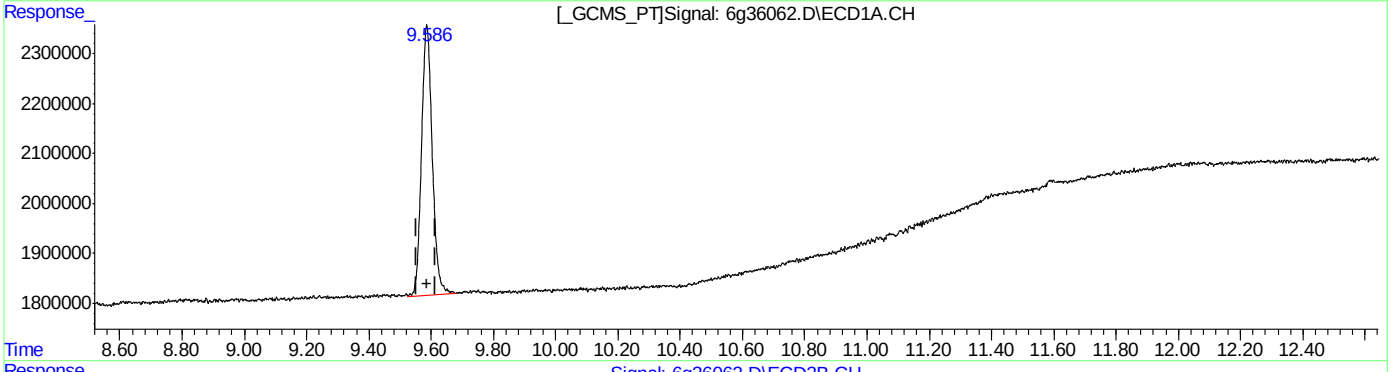
SGS ACCUTEST JC22613

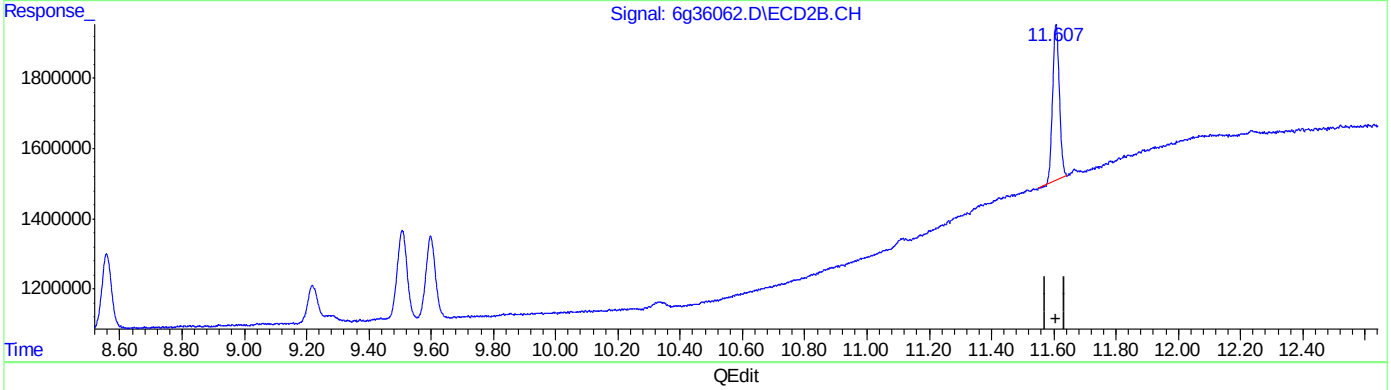
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36062.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:27 pm
Operator : dharas
Sample : ic1034-5
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:51:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(24) Decachlorobiphenyl (SAB)
9.586min 5.964PPB m
response 12967859

(24) Decachlorobiphenyl #2 (SAB)
11.607min 7.182PPB
response 6771441

(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:52:03 2016

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36063.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:43 pm
Operator : dharas
Sample : ic1034-10
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:50:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.007	1.346	131.5E6	54714865	50.000	50.000
25) I	1-bromo-2...	1.007	1.346	131.5E6	54714865	50.000	50.000
31) I	1-bromo-2...	1.007	1.346	131.5E6	54714865	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.726	2.289	24054563	10369008	10.614	10.887
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	26.54%#	27.22%#
24)	SAB Decachlor...	9.587	11.608	23980222	12978439	11.070	13.836
	Spiked Amount 40.000			Recovery	=	27.68%	34.59%
	Target Compounds						
3) A	alpha-BHC	2.250	3.000	29712224	11383570	9.792	9.569
4) MA	gamma-BHC	2.566	3.450	28256563	11076832	9.678	9.846
5) MA	Heptachlor	3.087	4.049	28197359	12062801	10.373	11.057
6) B	beta-BHC	2.652	3.547	14796971	6083728	10.351	10.854
7) B	delta-BHC	2.845	3.959	26467881	10227213	10.122	9.459
8) MB	Aldrin	3.432	4.518	26417440	11403348	10.631	11.178
9) B	Heptachlo...	4.168	5.392	25809556	11180899	11.178	11.154
10) B	gamma-Chl...	4.340	5.695	26507174	11394051	11.564	11.945
11) B	alpha-Chl...	4.518	5.938	26177408	11562857	11.073	12.014
12) A	Endosulfan I	4.693	6.033	28027254	10696840	11.761	11.630
13) B	4,4'-DDE	4.656	6.238	17976878	9901664	9.139	11.234
14) MA	Dieldrin	5.032	6.499	24615296	10598612	10.541	11.277
15) MA	Endrin	5.365	7.037	23057464	9640564	10.410	10.863
16) A	4,4'-DDD	5.534	7.267	18310997	7867309	10.423	11.010
17) B	Endosulfa...	5.703	7.421	23806761	10359506	10.929	11.964
18) MA	4,4'-DDT	5.972	7.843	17185927	7224976	9.077	9.675
19) B	Endrin Al...	6.363	8.047	18742582	8485376	10.321	11.432
20) B	Endosulfa...	7.090	8.560	19811368	9070062	9.842	11.311
21) A	Methoxychlor	6.841	9.222	10579095	4834755	9.672	10.725
22)	Mirex	6.940	9.509	22786425	10905916	11.498	13.700
23) B	Endrin Ke...	7.556	9.600	22956073	9874139	9.719	10.258

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

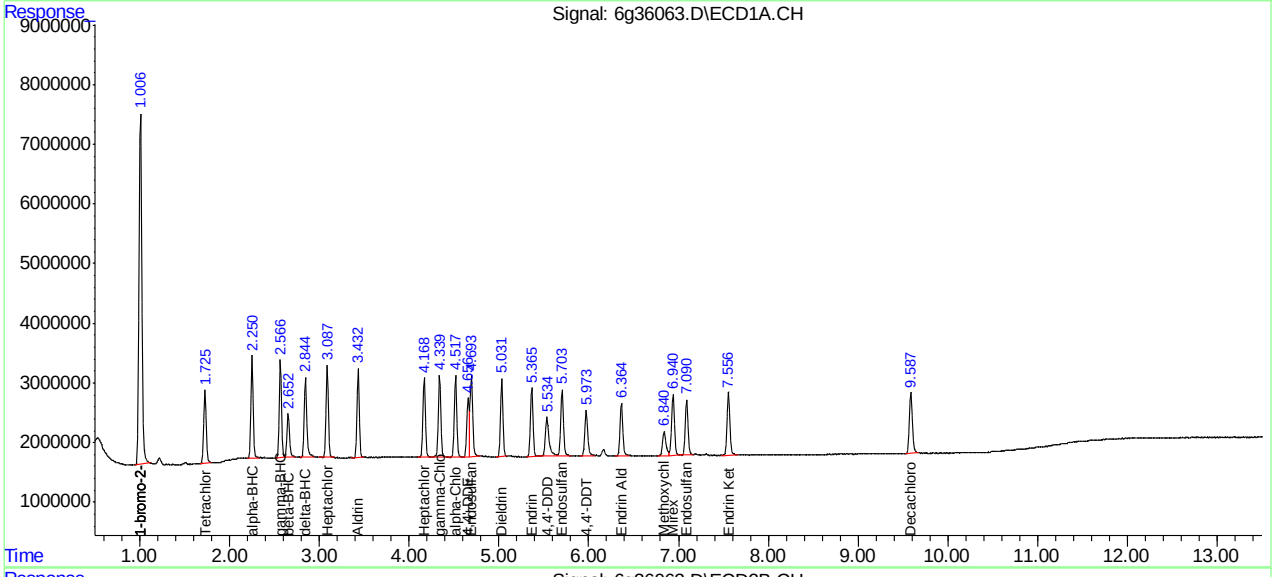
SGS ACCUTEST JC22613

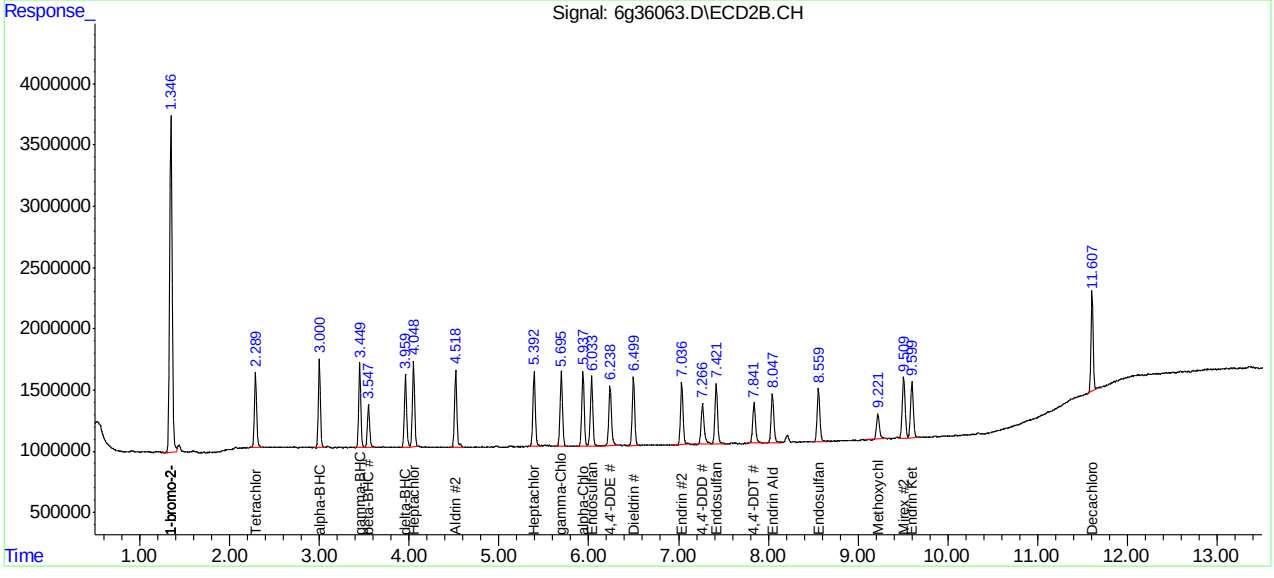
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36063.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:43 pm
Operator : dharas
Sample : ic1034-10
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:50:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36064.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:59 pm
Operator : dharas
Sample : icc1034-25
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:46:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	Internal Standards							
1) I	1-bromo-2...	1.006	1.346	135.2E6	55250352	50.000	50.000	
25) I	1-bromo-2...	1.006	1.346	135.2E6	55250352	50.000	50.000	
31) I	1-bromo-2...	1.006	1.346	135.2E6	55250352	50.000	50.000	
	System Monitoring Compounds							
2)	SAB Tetrachlo...	1.725	2.288	60648721	26773159	26.038	27.839	
	Spiked Amount	40.000	Range	30 - 150	Recovery	=	65.09%	69.60%
24)	SAB Decachlor...	9.586	11.606	59072012	32015962	26.533	33.800	#
	Spiked Amount	40.000			Recovery	=	66.33%	84.50%
	Target Compounds							
3) A	alpha-BHC	2.249	2.999	81441069	32106941	26.113	26.728	
4) MA	gamma-BHC	2.566	3.450	76364743	30661751	25.447	26.991	
5) MA	Heptachlor	3.087	4.048	73983200	32228682	26.479	29.256	
6) B	beta-BHC	2.652	3.547	36707842	15820080	24.985	27.950	
7) B	delta-BHC	2.843	3.958	72861802	28967676	27.111	26.533	
8) MB	Aldrin	3.433	4.519	70574960	30478150	27.633	29.585	
9) B	Heptachlo...	4.167	5.391	67048068	29883028	28.254	29.523	
10) B	gamma-Chl...	4.339	5.695	67891075	30283358	28.818	31.441	
11) B	alpha-Chl...	4.517	5.937	67113880	30692395	27.622	31.581	
12) A	Endosulfan I	4.693	6.032	71691069	28528866	29.270	30.716	
13) B	4,4'-DDE	4.656	6.237	49999759	26775803	24.731	30.085	
14) MA	Dieldrin	5.031	6.499	65401338	28563625	27.251	30.097	
15) MA	Endrin	5.364	7.037	60014692	26730916	26.364	29.830	
16) A	4,4'-DDD	5.531	7.265	47824007	21156248	26.487	29.320	
17) B	Endosulfa...	5.702	7.420	61311504	26815521	27.386	30.670	
18) MA	4,4'-DDT	5.971	7.841	45864776	20049409	23.568	26.587	
19) B	Endrin Al...	6.363	8.047	49134949	22948059	26.325	30.618	
20) B	Endosulfa...	7.089	8.559	51564754	24000900	24.923	29.641	
21) A	Methoxychlor	6.837	9.221	26643861	12982952	23.701	28.521	
22)	Mirex	6.939	9.508	55880843	28256910	27.435	35.153	#
23) B	Endrin Ke...	7.556	9.600	60477688	27255364	24.912	28.040	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

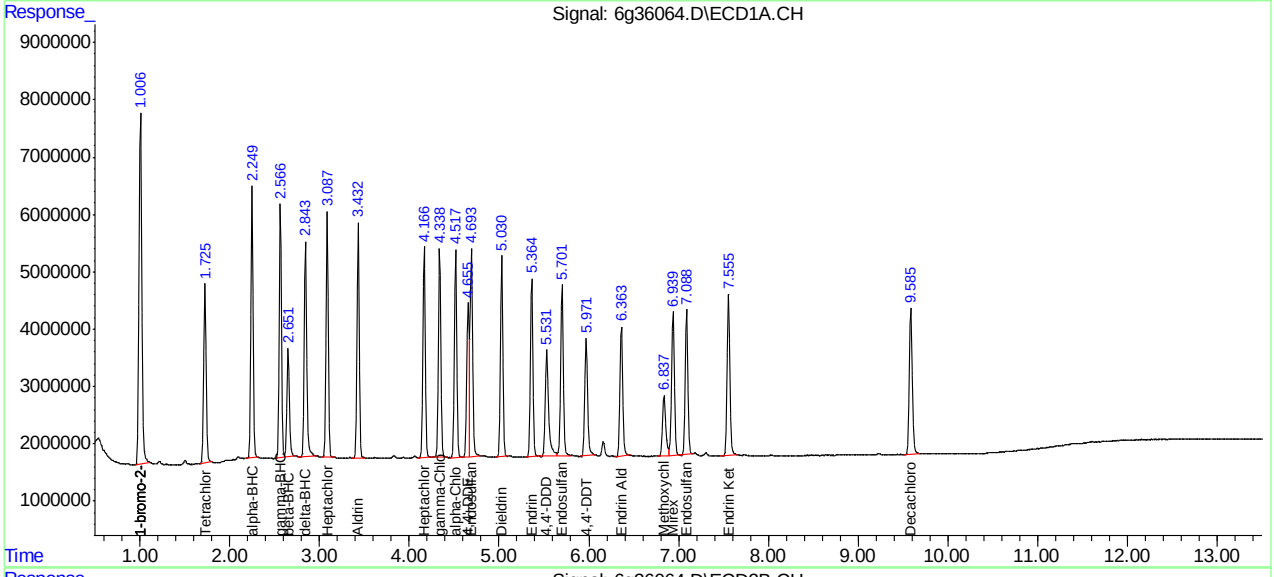
SGS ACCUTEST JC22613

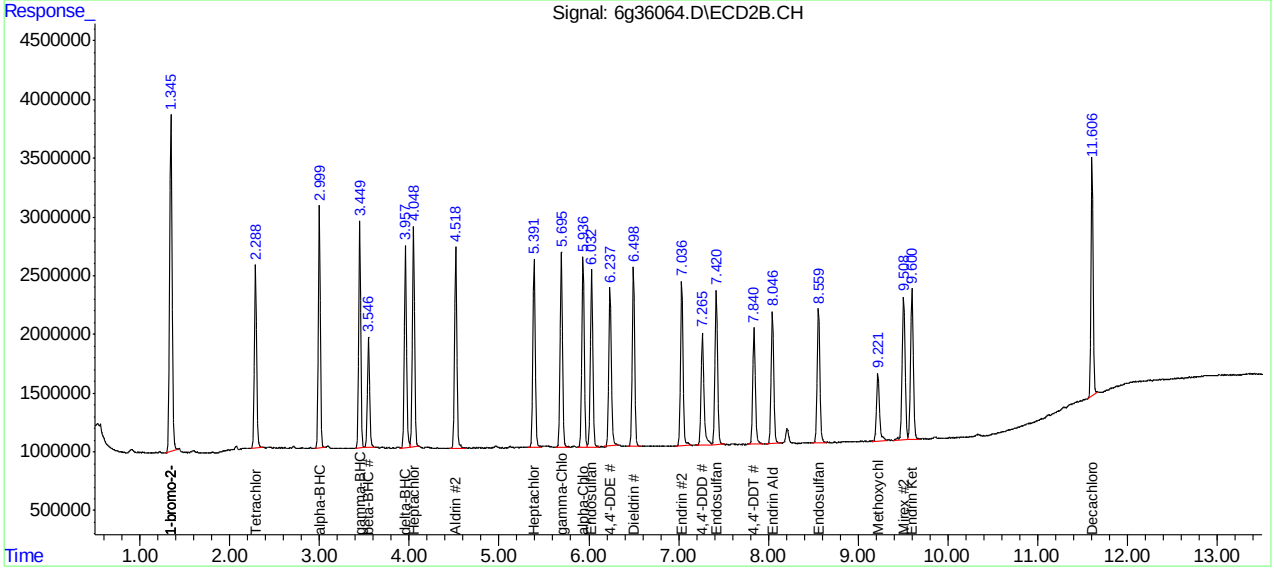
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36064.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 5:59 pm
Operator : dharas
Sample : icc1034-25
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:46:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36065.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 6:16 pm
Operator : dharas
Sample : ic1034-50
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:44:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	Internal Standards							
1) I	1-bromo-2...	1.007	1.345	135.4E6	55346645	50.000	50.000	
25) I	1-bromo-2...	1.007	1.345	135.4E6	55346645	50.000	50.000	
31) I	1-bromo-2...	1.007	1.345	135.4E6	55346645	50.000	50.000	
	System Monitoring Compounds							
2)	SAB Tetrachlo...	1.726	2.289	127.1E6	55486784	54.476	57.595	
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 136.19%	143.99%	
24)	SAB Decachlor...	9.588	11.606	115.6E6	63280118	51.838	66.689	#
	Spiked Amount	40.000			Recovery	= 129.60%	166.72%	
	Target Compounds							
3) A	alpha-BHC	2.250	3.001	180.7E6	73910192	57.865	61.421	
4) MA	gamma-BHC	2.566	3.451	165.9E6	69166180	55.211	60.780	
5) MA	Heptachlor	3.087	4.049	157.4E6	70446066	56.249	63.837	
6) B	beta-BHC	2.652	3.547	74758170	33109649	50.809	58.395	
7) B	delta-BHC	2.844	3.959	162.6E6	65790492	60.422	60.156	
8) MB	Aldrin	3.433	4.519	152.4E6	66947696	59.573	64.873	
9) B	Heptachlo...	4.167	5.391	140.8E6	63775590	59.248	62.898	
10) B	gamma-Chl...	4.340	5.696	142.6E6	65238188	60.449	67.614	
11) B	alpha-Chl...	4.518	5.938	140.9E6	65650052	57.890	67.434	
12) A	Endosulfan I	4.694	6.034	150.1E6	60378549	61.181	64.894	
13) B	4,4'-DDE	4.655	6.238	110.5E6	58144337	54.587	65.217	
14) MA	Dieldrin	5.032	6.501	140.5E6	62342277	58.458	65.574	
15) MA	Endrin	5.364	7.038	128.1E6	56711864	56.199	63.176	
16) A	4,4'-DDD	5.531	7.267	101.8E6	44721606	56.317	61.871	
17) B	Endosulfa...	5.704	7.421	127.3E6	55962201	56.791	63.894	
18) MA	4,4'-DDT	5.970	7.841	100.1E6	44959589	51.366	59.517	
19) B	Endrin Al...	6.363	8.047	100.6E6	47265570	53.817	62.953	
20) B	Endosulfa...	7.089	8.560	107.6E6	50216321	51.924	61.908	
21) A	Methoxychlor	6.837	9.220	55847557	26730758	49.606	58.619	
22)	Mirex	6.940	9.509	109.1E6	54352622	53.484	67.499	#
23) B	Endrin Ke...	7.556	9.601	125.7E6	57530390	51.710	59.084	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

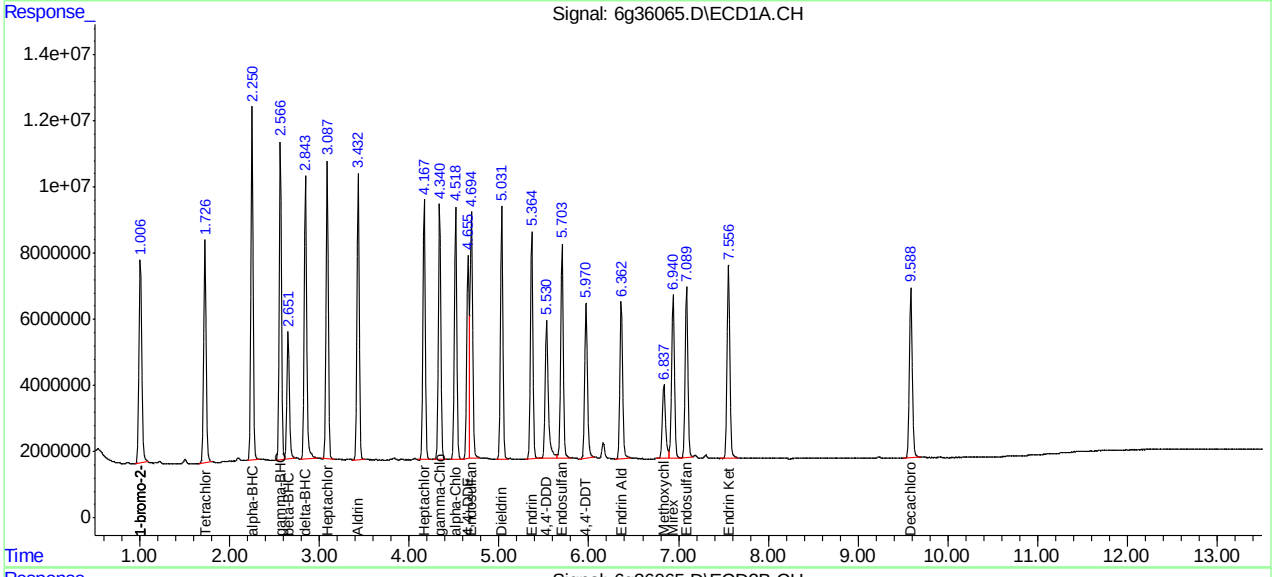
SGS ACCUTEST JC22613

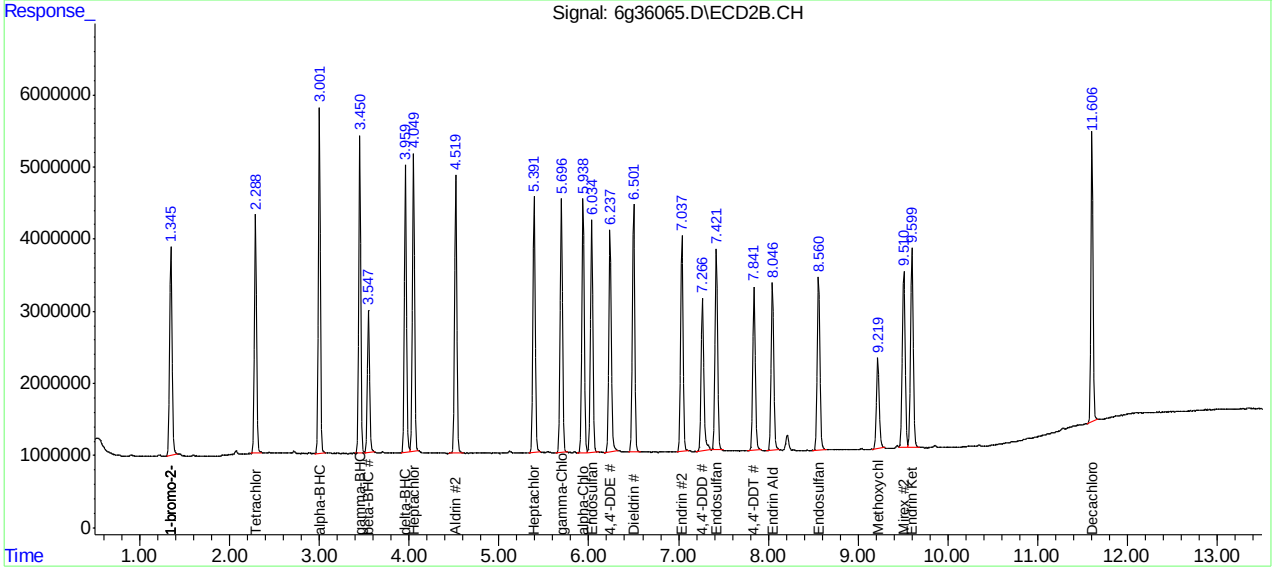
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36065.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 6:16 pm
Operator : dharas
Sample : ic1034-50
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:44:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36066.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 6:32 pm
Operator : dharas
Sample : ic1034-75
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:43:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	Internal Standards							
1) I	1-bromo-2...	1.004	1.344	133.4E6	54197675	50.000	50.000	
25) I	1-bromo-2...	1.004	1.344	133.4E6	54197675	50.000	50.000	
31) I	1-bromo-2...	1.004	1.344	133.4E6	54197675	50.000	50.000	
	System Monitoring Compounds							
2)	SAB Tetrachlo...	1.724	2.288	187.8E6	81257992	81.686	86.134	
	Spiked Amount 40.000 Range 30 - 150 Recovery = 204.22%# 215.34%#							
24)	SAB Decachlor...	9.586	11.605	168.2E6	91961938	76.559	98.971	#
	Spiked Amount 40.000 Recovery = 191.40% 247.43%							
	Target Compounds							
3) A	alpha-BHC	2.249	2.999	273.6E6	113.3E6	88.859	96.180	
4) MA	gamma-BHC	2.565	3.450	250.1E6	105.1E6	84.423	94.318	
5) MA	Heptachlor	3.087	4.049	235.3E6	105.8E6	85.334	97.867	
6) B	beta-BHC	2.651	3.546	109.1E6	48382579	75.250	87.141	
7) B	delta-BHC	2.843	3.958	243.3E6	100.4E6	91.715	93.740	
8) MB	Aldrin	3.432	4.519	228.1E6	101.1E6	90.494	100.039	
9) B	Heptachlo...	4.166	5.391	208.5E6	95221720	88.996	95.902	
10) B	gamma-Chl...	4.339	5.695	212.8E6	97441255	91.517	103.131	
11) B	alpha-Chl...	4.516	5.936	209.1E6	97359540	87.191	102.126	
12) A	Endosulfan I	4.693	6.032	217.7E6	89834796	90.034	98.600	
13) B	4,4'-DDE	4.654	6.237	173.1E6	88234720	86.731	101.066	
14) MA	Dieldrin	5.032	6.499	211.5E6	94362957	89.271	101.359	
15) MA	Endrin	5.365	7.036	191.1E6	85098349	85.051	96.808	
16) A	4,4'-DDD	5.528	7.265	152.8E6	69443245	85.756	98.110	
17) B	Endosulfa...	5.703	7.421	190.9E6	85146018	86.372	99.275	
18) MA	4,4'-DDT	5.968	7.840	155.0E6	70839163	80.704	95.764	
19) B	Endrin Al...	6.362	8.046	148.0E6	69348487	80.323	94.324	
20) B	Endosulfa...	7.089	8.559	160.7E6	74908697	78.708	94.308	
21) A	Methoxychlor	6.834	9.220	82979351	40158686	74.779	89.933	
22)	Mirex	6.939	9.508	158.6E6	80662196	78.869	102.295	#
23) B	Endrin Ke...	7.555	9.600	188.7E6	86668294	78.760	90.896	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

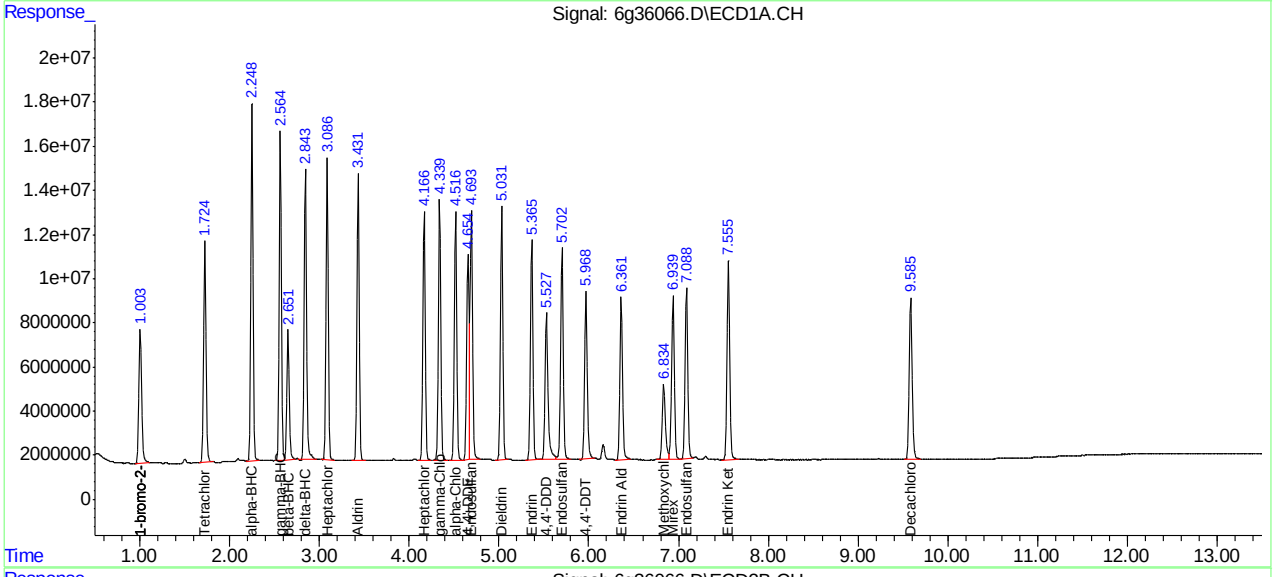
SGS ACCUTEST JC22613

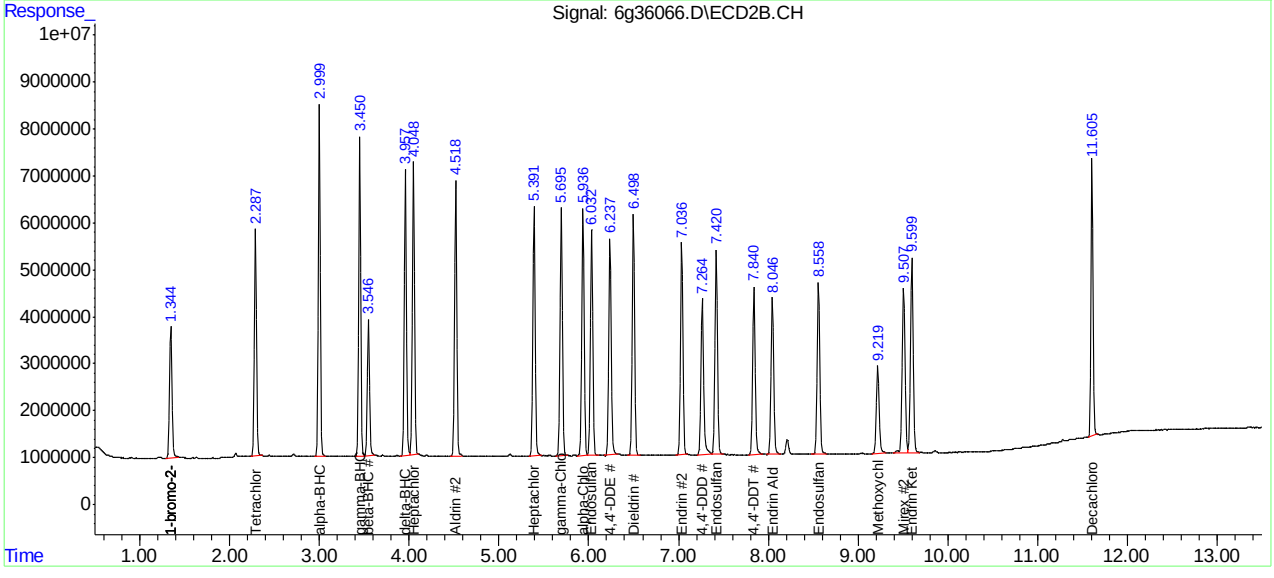
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36066.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 6:32 pm
Operator : dharas
Sample : ic1034-75
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:43:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36067.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 6:49 pm
Operator : dharas
Sample : ic1034-100
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:44:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.006	1.345	130.6E6	53293530	50.000	50.000
25) I	1-bromo-2...	1.006	1.345	130.6E6	53293530	50.000	50.000
31) I	1-bromo-2...	1.006	1.345	130.6E6	53293530	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.725	2.289	255.6E6	112.0E6	113.571	120.747
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	283.93%#	301.87%#
24)	SAB Decachlor...	9.586	11.605	222.7E6	121.5E6	103.523	132.929 #
	Spiked Amount 40.000			Recovery	=	258.81%	332.32%
	Target Compounds						
3) A	alpha-BHC	2.249	3.000	384.1E6	162.1E6	127.452	139.879
4) MA	gamma-BHC	2.565	3.451	347.3E6	149.0E6	119.769	135.953
5) MA	Heptachlor	3.087	4.050	325.2E6	149.6E6	120.465	140.742
6) B	beta-BHC	2.651	3.547	147.7E6	66724089	104.007	122.215
7) B	delta-BHC	2.843	3.958	343.0E6	142.9E6	132.062	135.664
8) MB	Aldrin	3.432	4.519	316.8E6	143.6E6	128.371	144.495
9) B	Heptachlo...	4.167	5.391	286.7E6	133.3E6	125.032	136.553
10) B	gamma-Chl...	4.339	5.695	294.2E6	137.1E6	129.254	147.568
11) B	alpha-Chl...	4.518	5.937	288.0E6	136.5E6	122.656	145.655
12) A	Endosulfan I	4.693	6.033	301.4E6	125.4E6	127.351	139.947
13) B	4,4'-DDE	4.654	6.238	242.1E6	124.0E6	123.946	144.497
14) MA	Dieldrin	5.031	6.500	292.4E6	133.0E6	126.100	145.274
15) MA	Endrin	5.365	7.037	263.6E6	119.4E6	119.849	138.106
16) A	4,4'-DDD	5.529	7.265	210.1E6	97459731	120.395	140.028
17) B	Endosulfa...	5.702	7.420	259.5E6	117.3E6	119.950	139.069
18) MA	4,4'-DDT	5.970	7.841	217.8E6	100.8E6	115.845	138.576
19) B	Endrin Al...	6.363	8.047	200.6E6	94859842	111.210	131.212
20) B	Endosulfa...	7.089	8.559	219.0E6	102.7E6	109.554	131.436
21) A	Methoxychlor	6.835	9.220	112.0E6	54968854	103.121	125.188
22)	Mirex	6.939	9.509	211.7E6	107.9E6	107.541	139.155 #
23) B	Endrin Ke...	7.556	9.601	256.0E6	118.9E6	109.145	126.850

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

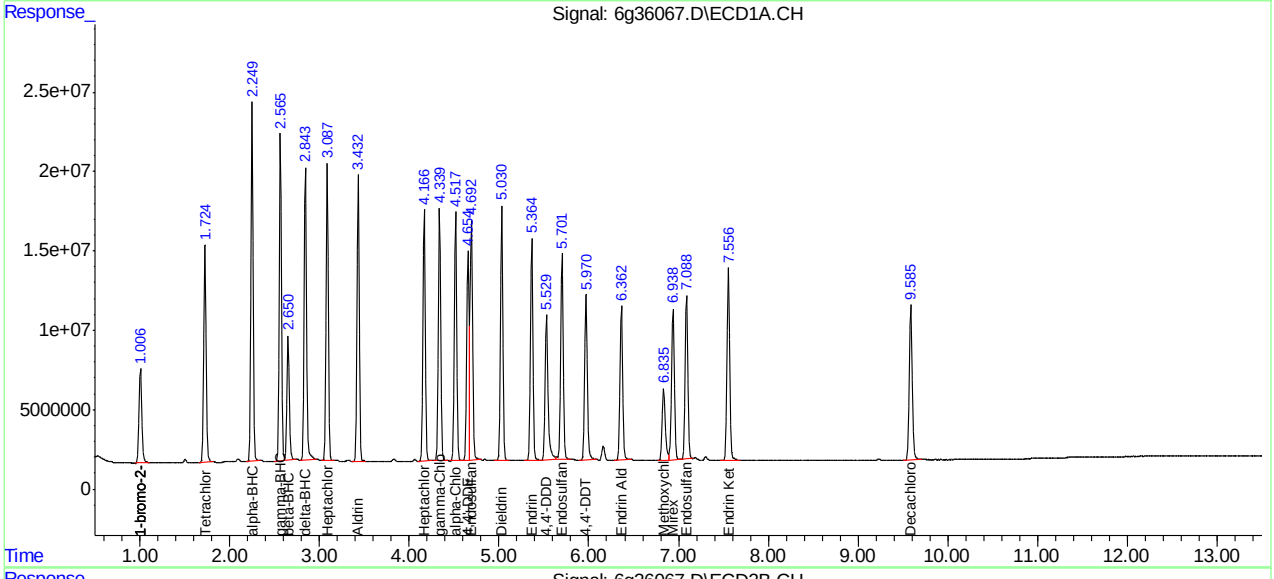
SGS ACCUTEST JC22613

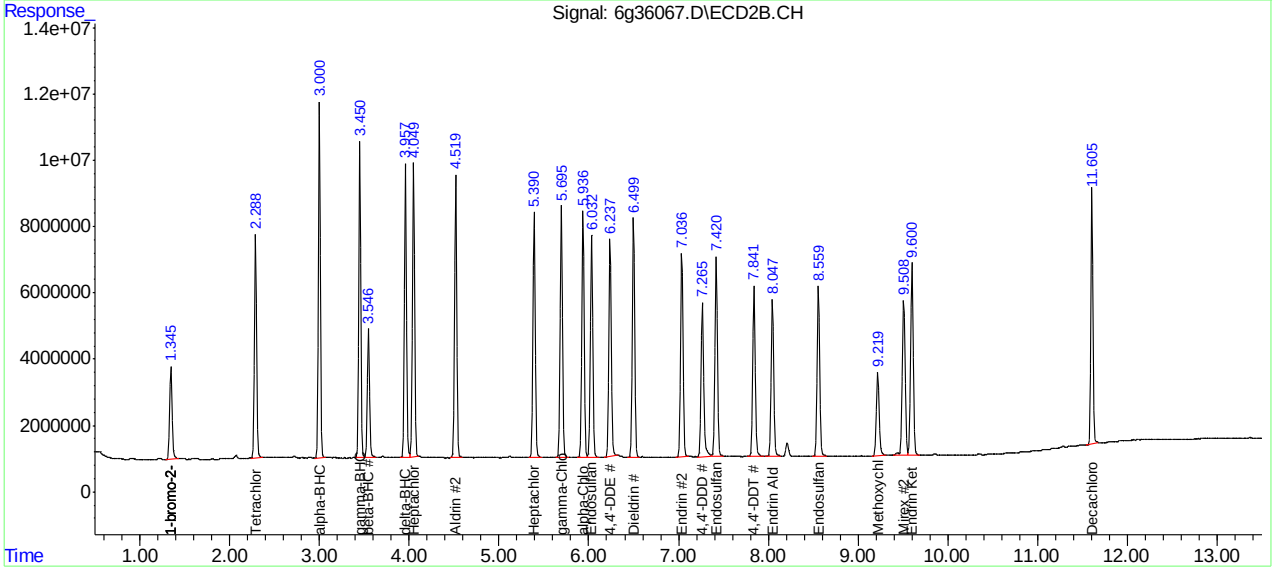
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36067.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 6:49 pm
Operator : dharas
Sample : ic1034-100
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:44:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:43:41 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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
06/14/16 15:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36068.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 7:05 pm
Operator : dharas
Sample : ic1034-500
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:58:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:57:31 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.005	1.345	126.2E6	52373229	50.000	50.000
25) I	1-bromo-2...	1.005	1.345	126.2E6	52373229	50.000	50.000
31) I	1-bromo-2...	1.005	1.345	126.2E6	52373229	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.725	2.288	132.9E6	57723645	61.092	63.319
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 152.73%#	158.30%#
24)	SAB Decachlor...	9.586	11.604	119.6E6	65181261	57.516	72.593 #
	Spiked Amount	40.000			Recovery	= 143.79%	181.48%
	Target Compounds						
32)	Chlordane...	2.992	3.843	44264757	19096864	580.135	621.330
33)	Chlordane...	3.583	4.732	62590289	25516613	591.521	665.738
34)	Chlordane...	4.339	5.694	195.6E6	83891320	557.120	676.471
35)	Chlordane...	4.509	5.935	286.6E6	138.4E6	515.065	678.220m#
36)	Chlordane...	5.609	7.503	47079391	19251577	547.998	593.776

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

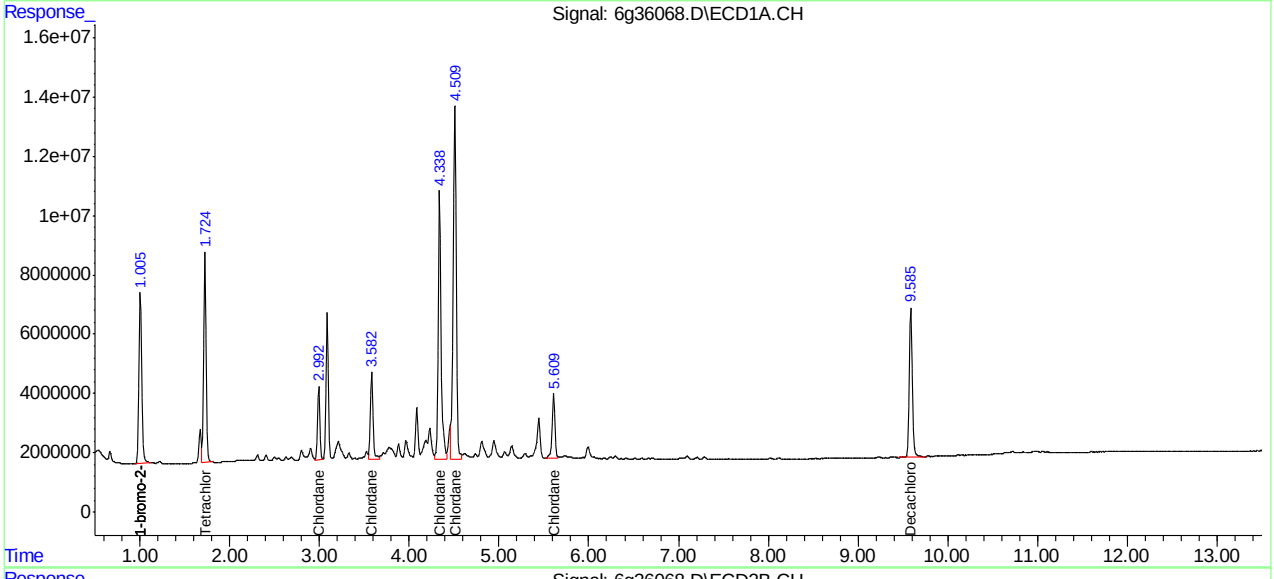
11.6.9 11

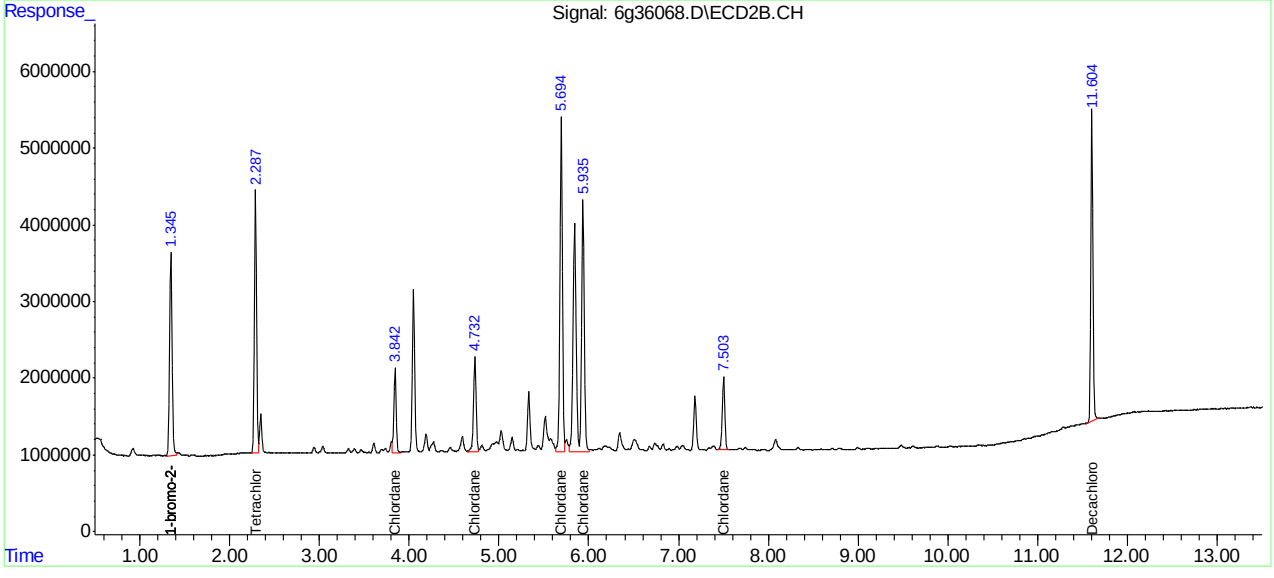
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36068.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 7:05 pm
Operator : dharas
Sample : ic1034-500
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:58:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:57:31 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Manual Integration Approval Summary

Sample Number:	G6G1034-IC1034	**Method:**	SW846 8081B
Lab FileID:	6G36068.D	**Analyst approved:**	06/13/16 13:38 Rebecca Krug
Injection Time:	06/10/16 19:05	**Supervisor approved:**	06/14/16 15:27 Gwendolyn Burns

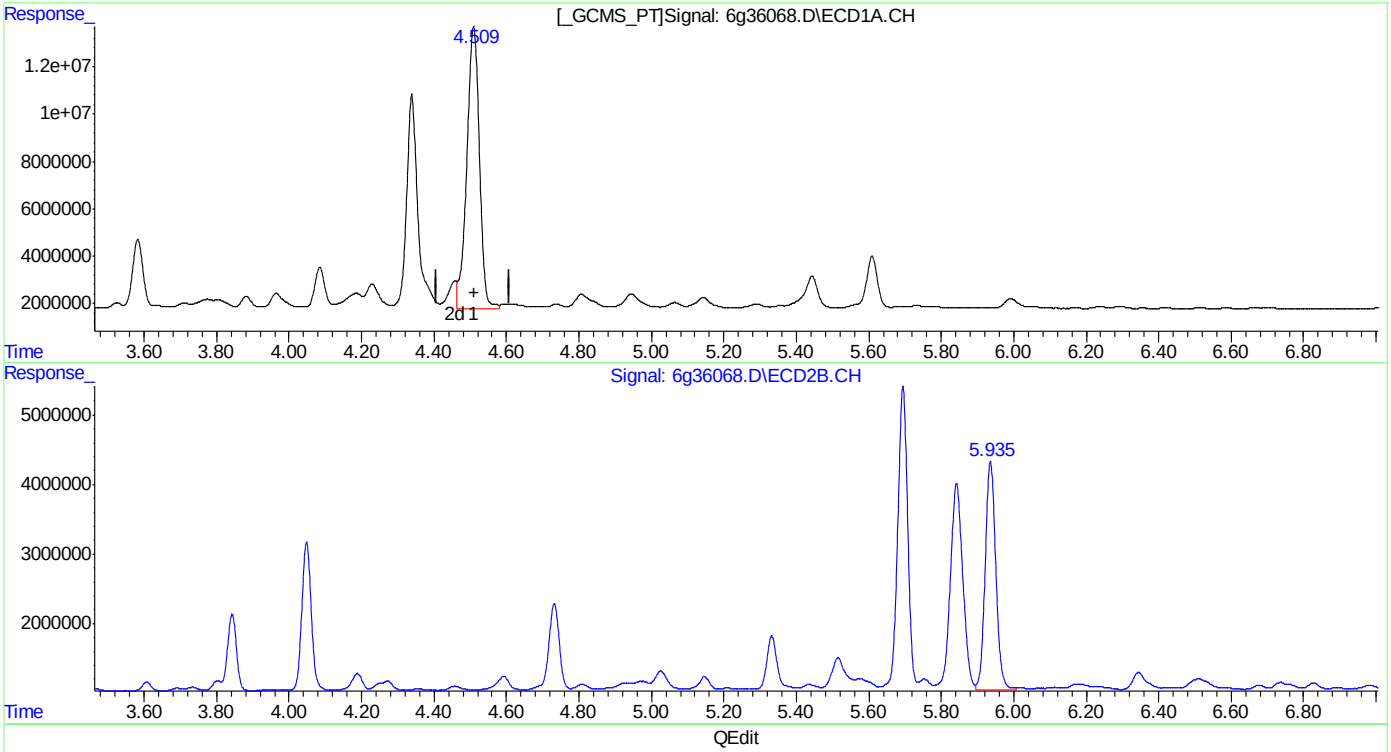
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	5.93	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36068.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 7:05 pm
Operator : dharas
Sample : ic1034-500
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:57:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:57:31 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(35) Chlordane {D}
4.509min 515.065PPB
response 286600387

(35) Chlordane {D} #2
5.935min 327.592PPB
response 66852112

(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:57:52 2016

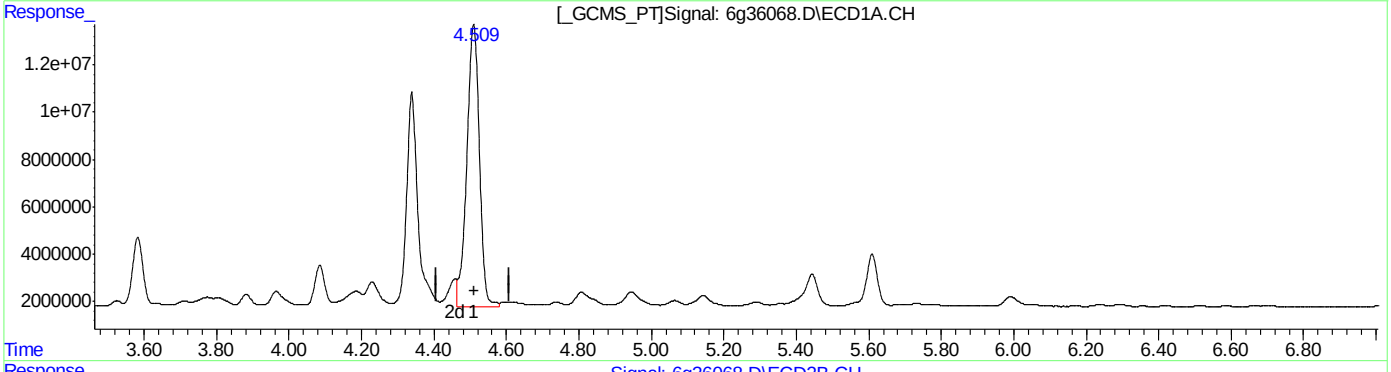
SGS ACCUTEST JC22613

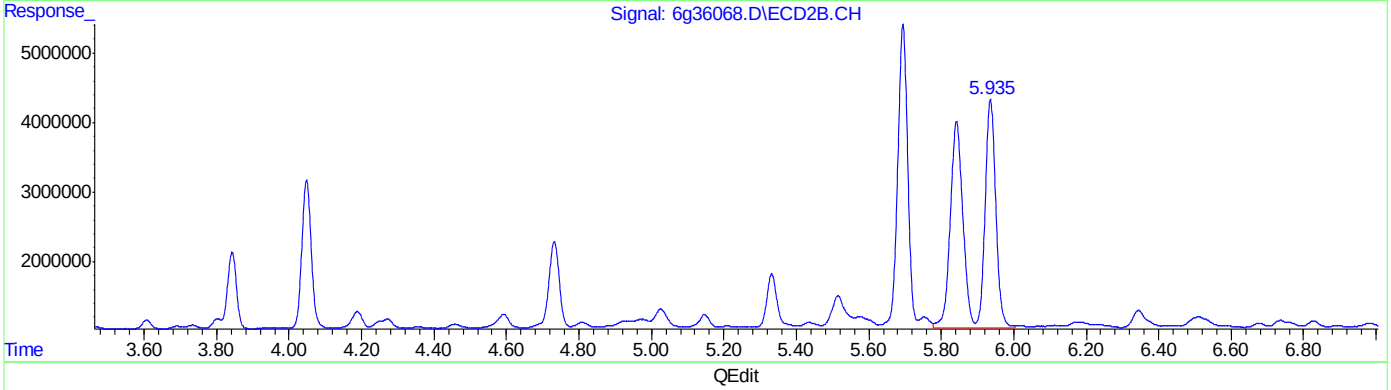
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36068.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 7:05 pm
Operator : dharas
Sample : ic1034-500
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:57:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:57:31 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(35) Chlordane {D}
4.509min 515.065PPB
response 286600387

(35) Chlordane {D} #2
5.935min 678.220PPB m
response 138405206

(+) = Expected Retention Time
6PST1034.M Mon Jun 13 11:58:04 2016

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36069.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 7:22 pm
Operator : dharas
Sample : ic1034-500
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:59:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:59:40 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	Internal Standards							
1) I	1-bromo-2...	1.006	1.345	126.2E6	51635762	50.000	50.000	
25) I	1-bromo-2...	1.006	1.345	126.2E6	51635762	50.000	50.000	
31) I	1-bromo-2...	1.006	1.345	126.2E6	51635762	50.000	50.000	
	System Monitoring Compounds							
2)	SAB Tetrachlo...	1.724	2.288	127.4E6	55885643	58.588	62.178	
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 146.47%	155.44%#	
24)	SAB Decachlor...	9.586	11.604	117.8E6	63306681	56.681	71.512	#
	Spiked Amount	40.000			Recovery	= 141.70%	178.78%	
	Target Compounds							
26) L8	Toxaphene{A}	5.040	6.463	18478393	12101451	503.536	587.559	
27) L8	Toxaphene{B}	5.424	7.388	50282105	15656441	709.842	579.900	
28) L8	Toxaphene{C}	5.690	7.567	57174492	25105923	515.156	629.542	
29) L8	Toxaphene{D}	6.246	8.048	51202700	15629135	851.108	500.339	#
30) L8	Toxaphene{E}	6.927	9.024	36943922	13170894	550.151	593.403	
	SemiQuant Compounds - Not Calibrated on this Instrument							

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

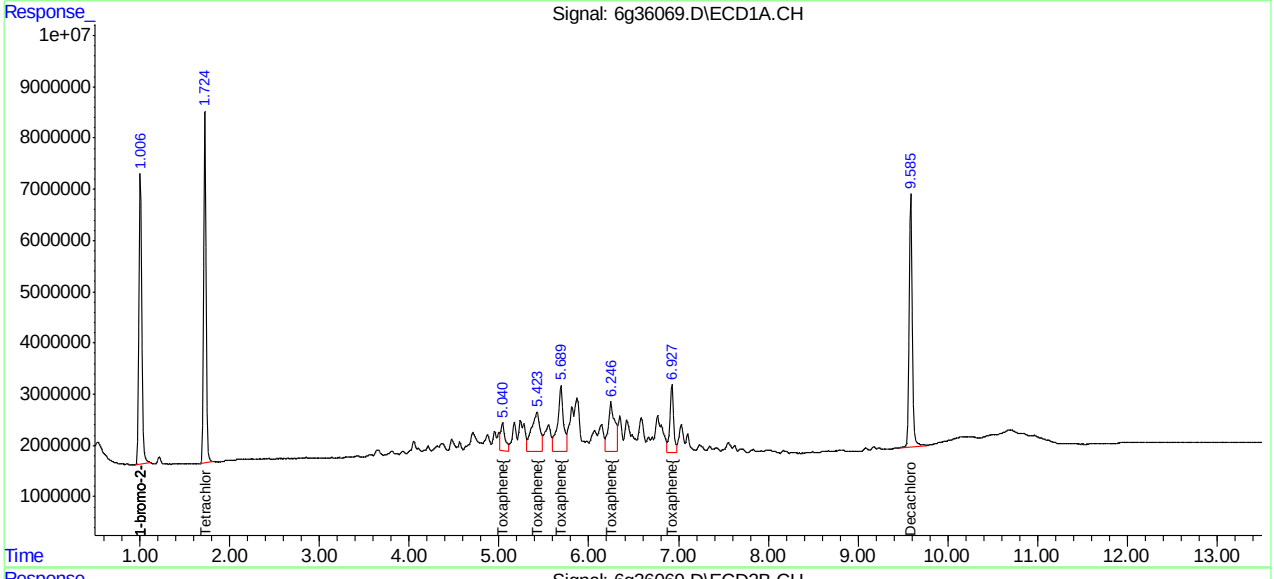
SGS ACCUTEST JC22613

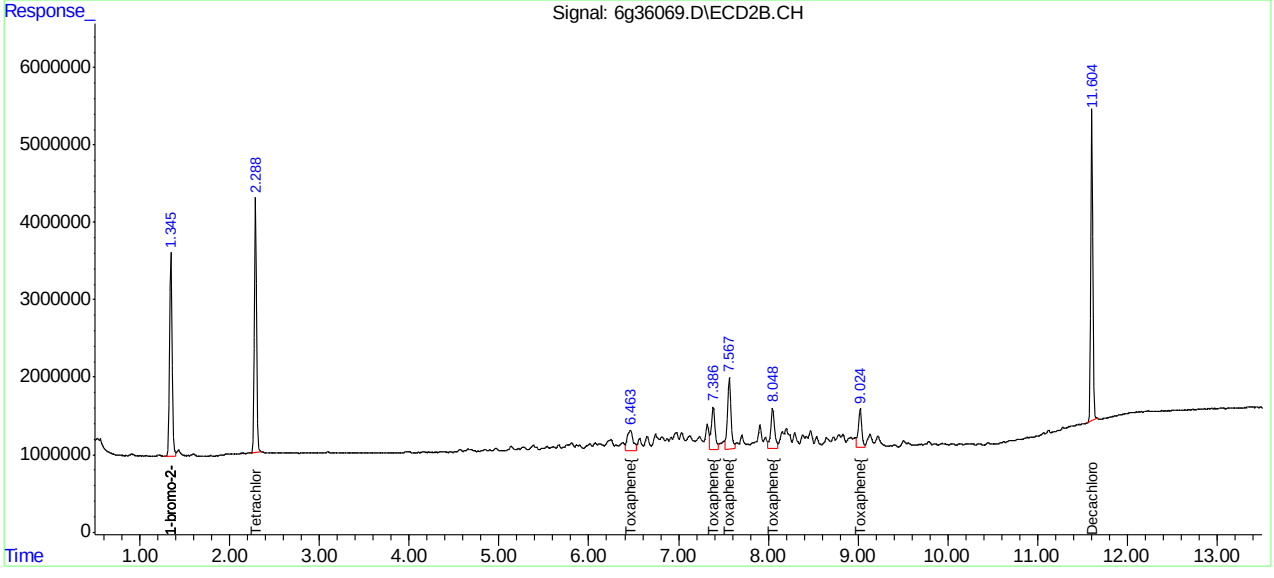
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36069.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 7:22 pm
Operator : dharas
Sample : ic1034-500
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 11:59:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 11:59:40 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36070.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 7:38 pm
Operator : dharas
Sample : icv1034-25
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 13:39:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.004	1.344	136.2E6	56098689	50.000	50.000
25) I	1-bromo-2...	1.004	1.344	136.2E6	56098689	50.000	50.000
31) I	1-bromo-2...	1.004	1.344	136.2E6	56098689	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.724	2.287	58163612	25510328	22.514	22.467
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	56.28%	56.17%
24)	SAB Decachlor...	9.590	11.604	57510206	31303018	22.686	22.929
	Spiked Amount 40.000			Recovery	=	56.72%	57.32%
	Target Compounds						
3) A	alpha-BHC	2.248	2.999	75035923	28814099	22.073	21.011
4) MA	gamma-BHC	2.565	3.450	70083133	27942504	22.162	21.754
5) MA	Heptachlor	3.087	4.048	68925899	29671731	22.011	22.005
6) B	beta-BHC	2.652	3.547	34537004	14296756	21.924	21.196
7) B	delta-BHC	2.844	3.959	71529033	27322841	22.824	22.155
8) MB	Aldrin	3.432	4.519	64368656	27339991	21.778	21.180
9) B	Heptachlo...	4.166	5.392	60799832	27580122	21.322	21.452
10) B	gamma-Chl...	4.339	5.695	64302089	28319475	21.528	21.778
11) B	alpha-Chl...	4.517	5.936	62157192	28285381	21.561	21.496
12) A	Endosulfan I	4.692	6.032	65477493	25454079	21.327	20.927
13) B	4,4'-DDE	4.656	6.237	44434691	24752812	20.929	22.203
14) MA	Dieldrin	5.030	6.500	60717410	26290684	21.968	21.929
15) MA	Endrin	5.364	7.037	56899848	25041504	22.519	22.826
16) A	4,4'-DDD	5.533	7.267	43318298	19246174	21.549	20.755
17) B	Endosulfa...	5.702	7.420	57110174	24474625	22.089	21.956
18) MA	4,4'-DDT	5.970	7.841	43709030	19435062	22.403	22.714
19) B	Endrin Al...	6.361	8.046	44117346	20410858	21.691	22.030
20) B	Endosulfa...	7.089	8.559	49086200	22021262	22.367	21.868
21) A	Methoxychlor	6.839	9.221	26924253	12163884	23.346	22.493
23) B	Endrin Ke...	7.557	9.600	54870441	24332220	22.080	22.020

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.11

11

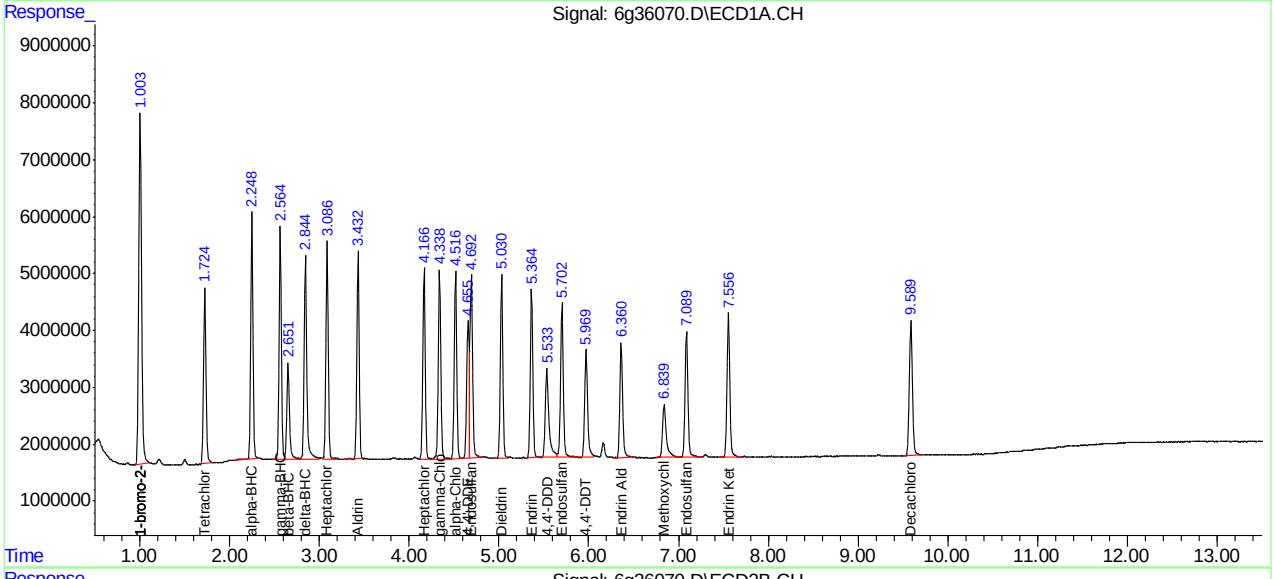
SGS ACCUTEST JC22613

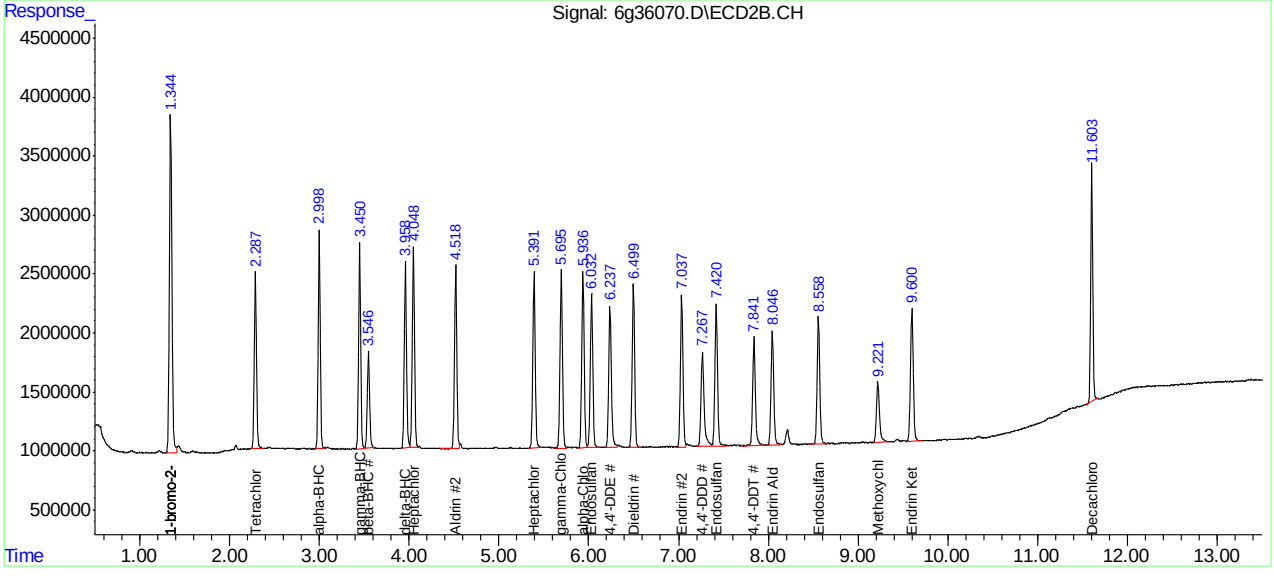
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36070.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 7:38 pm
Operator : dharas
Sample : icv1034-25
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 13:39:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36071.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 7:54 pm
Operator : dharas
Sample : icv1034-25
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 13:40:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.006	1.346	132.8E6	56189626	50.000	50.000
25) I	1-bromo-2...	1.006	1.346	132.8E6	56189626	50.000	50.000
31) I	1-bromo-2...	1.006	1.346	132.8E6	56189626	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
22)	Mirex	6.939	9.509	65481386	34301722	28.011	29.396
	SemiQuant Compounds - Not Calibrated on this Instrument						

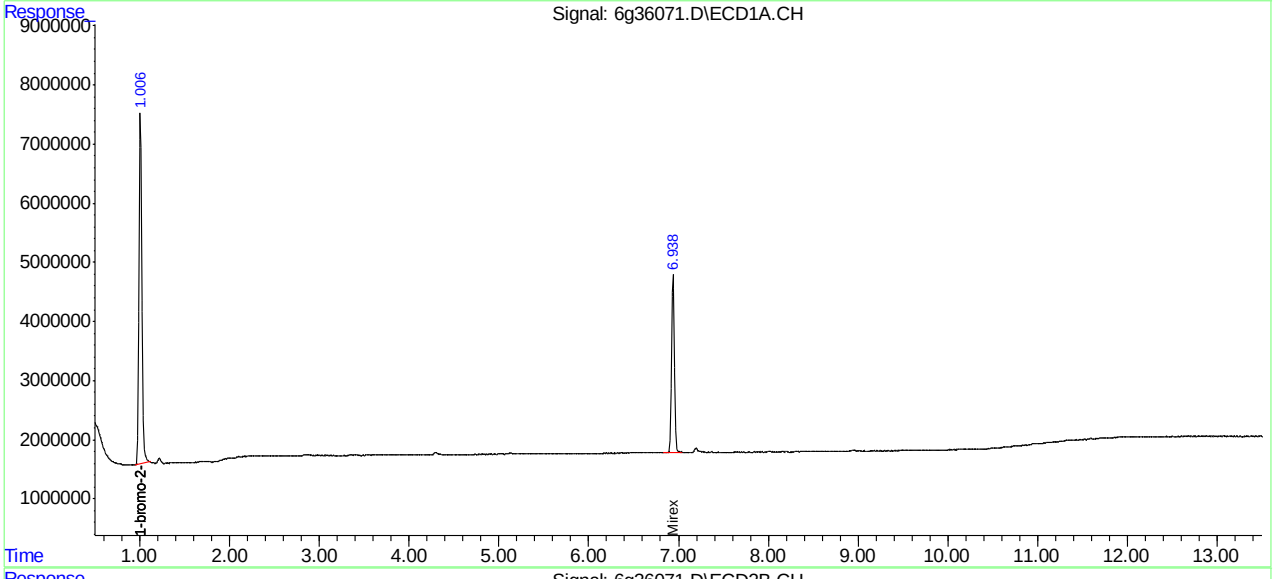
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

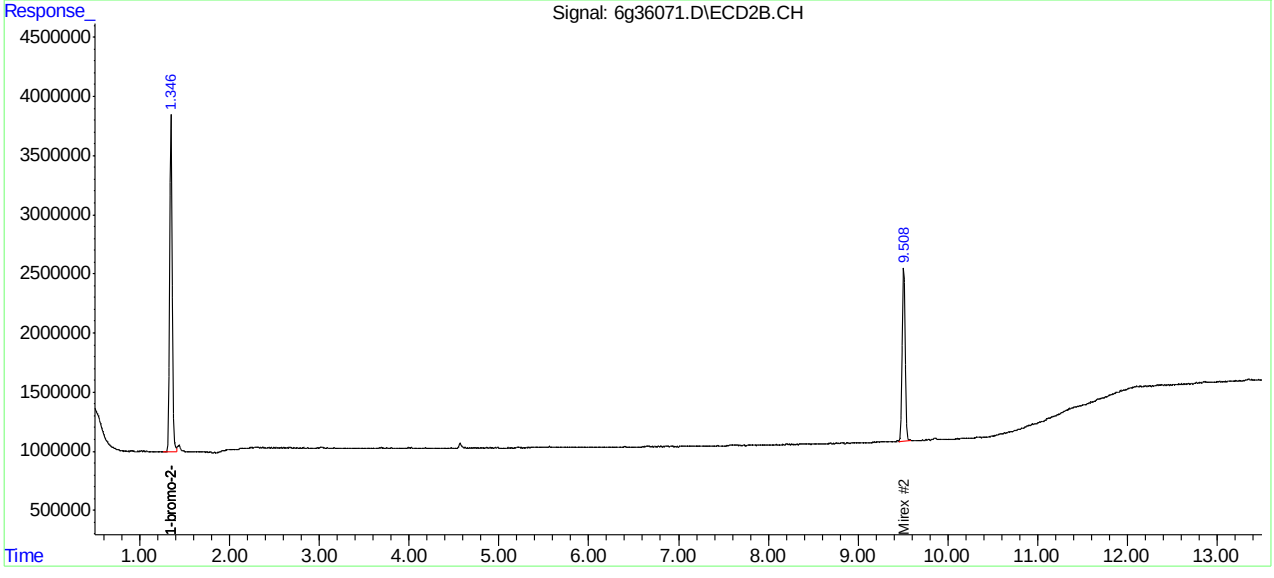
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36071.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 7:54 pm
Operator : dharas
Sample : icv1034-25
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 13:40:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
06/14/16 15:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36072.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 8:11 pm
Operator : dharas
Sample : icv1034-500
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 13:41:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.007	1.346	131.0E6	56157791	50.000	50.000
25) I	1-bromo-2...	1.007	1.346	131.0E6	56157791	50.000	50.000
31) I	1-bromo-2...	1.007	1.346	131.0E6	56157791	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.726	2.289	113.4E6	49876940	45.636	43.881
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 114.09%	109.70%
24)	SAB Decachlor...	9.588	11.604	110.9E6	60930757	45.479	44.583
	Spiked Amount	40.000			Recovery	= 113.70%	111.46%
	Target Compounds						
32)	Chlordane...	2.993	3.843	48605106	21444742	528.939	523.634
33)	Chlordane...	3.584	4.732	59883020	25190876	460.870	460.352
34)	Chlordane...	4.340	5.695	178.5E6	77326694	439.564	429.815
35)	Chlordane...	4.511	5.937	267.5E6	129.0E6	449.676	434.499m
36)	Chlordane...	5.610	7.504	44630643	18964205	456.650	459.344

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

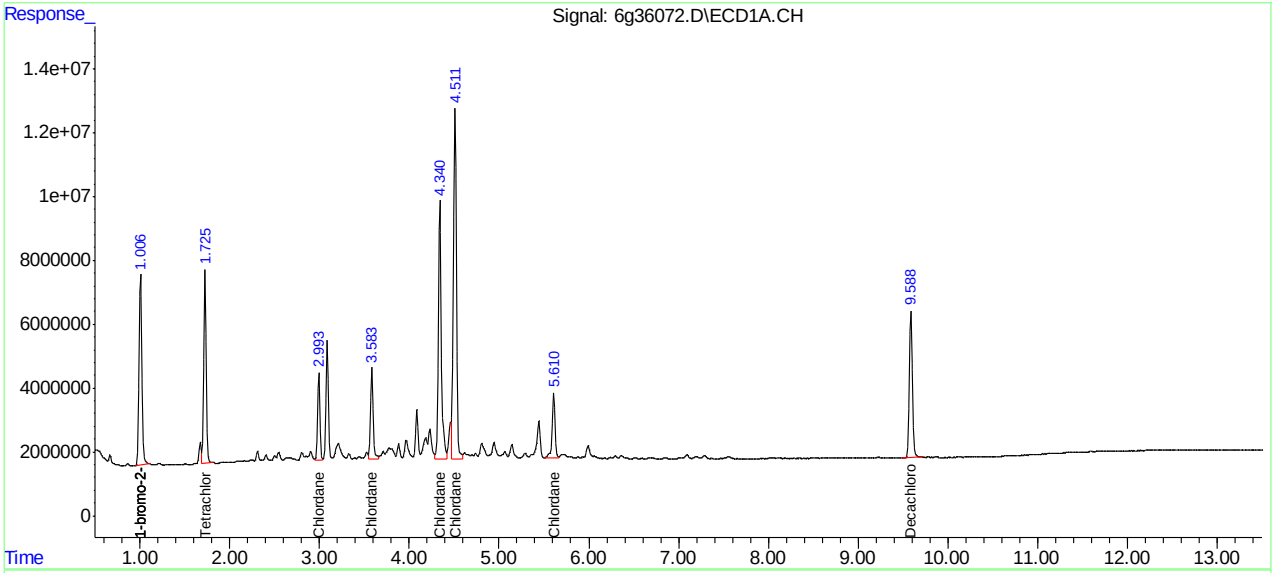
11.6.13 11

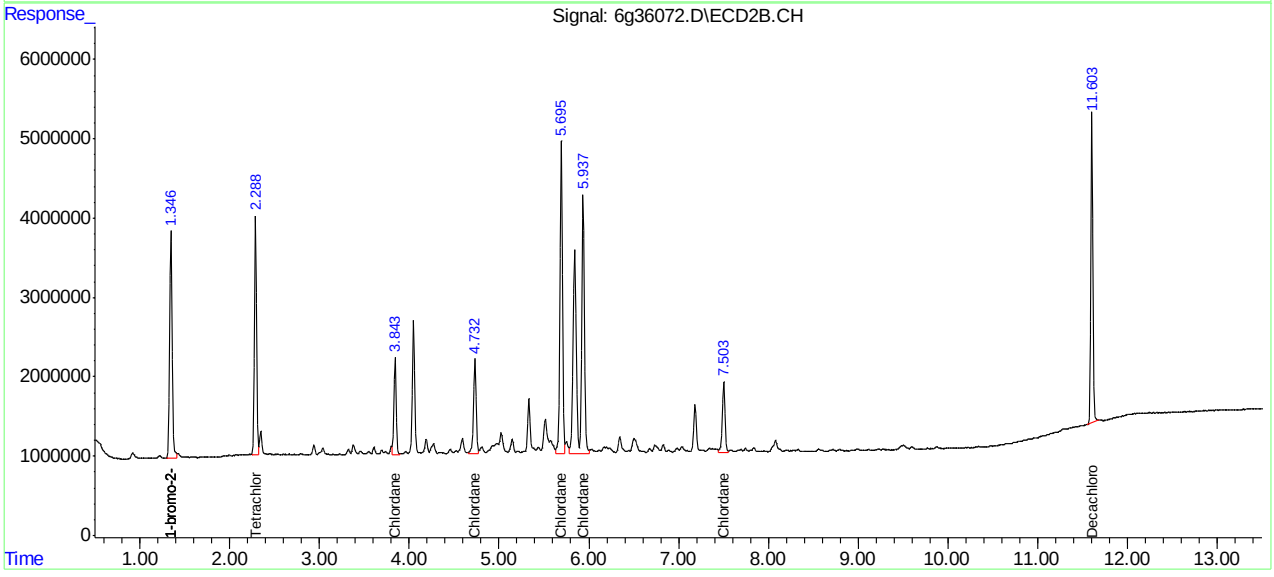
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36072.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 8:11 pm
Operator : dharas
Sample : icv1034-500
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 13:41:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Manual Integration Approval Summary

Sample Number:	G6G1034-ICV1034	**Method:**	SW846 8081B
Lab FileID:	6G36072.D	**Analyst approved:**	06/13/16 14:06 Rebecca Krug
Injection Time:	06/10/16 20:11	**Supervisor approved:**	06/14/16 15:27 Gwendolyn Burns

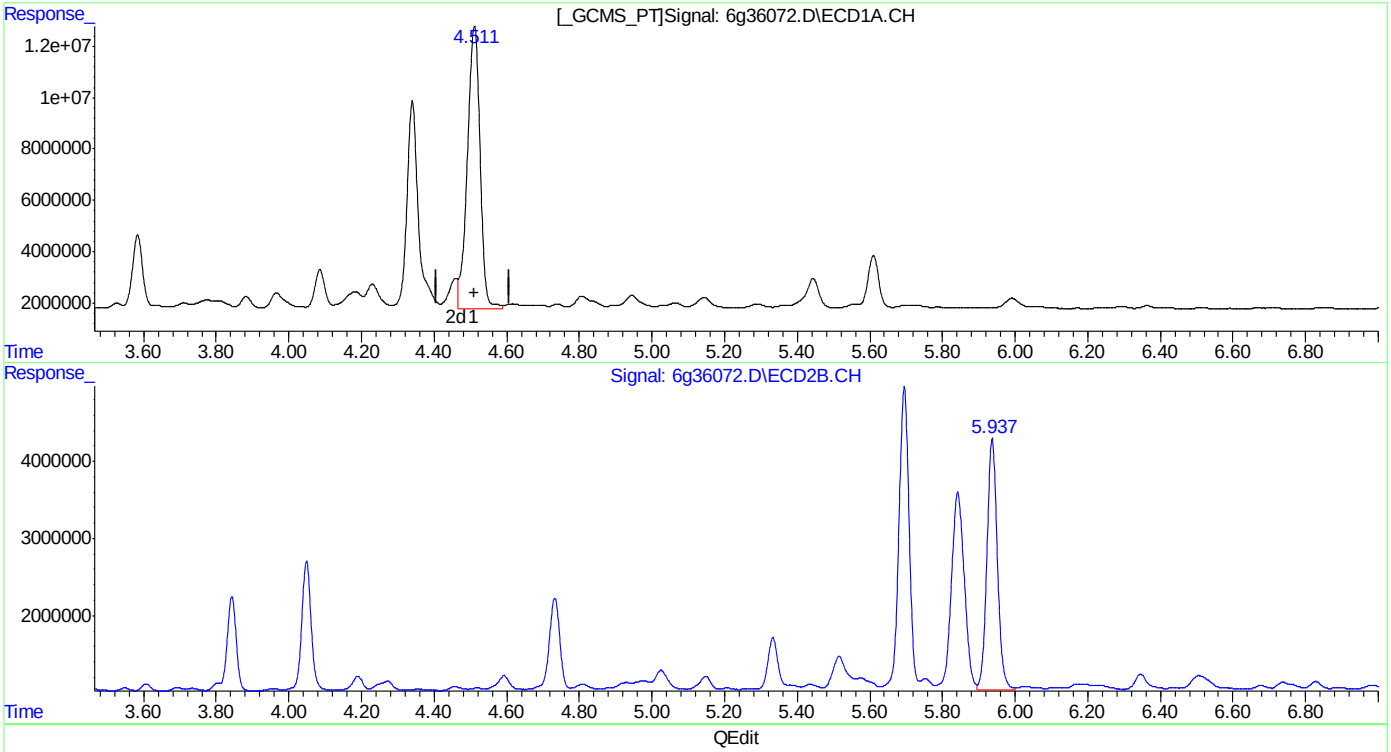
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	5.94	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36072.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 8:11 pm
Operator : dharas
Sample : icv1034-500
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 13:40:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(35) Chlordane {D}
4.511min 449.676PPB
response 267544045

(35) Chlordane {D} #2
5.937min 219.422PPB
response 65127399

(+) = Expected Retention Time
6PST1034.M Mon Jun 13 13:41:07 2016

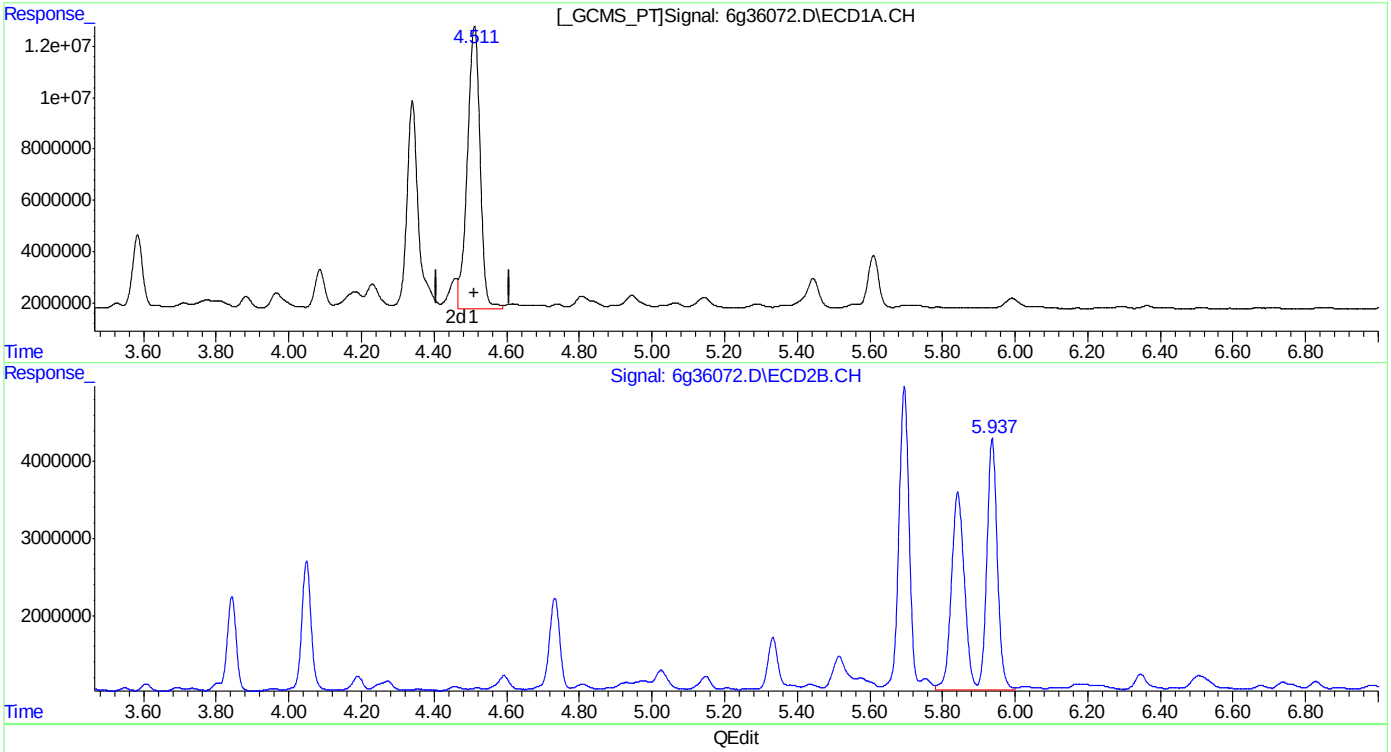
SGS ACCUTEST JC22613

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36072.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 8:11 pm
Operator : dharas
Sample : icv1034-500
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 13:40:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(35) Chlordane {D}
4.511min 449.676PPB
response 267544045

(35) Chlordane {D} #2
5.937min 434.499PPB m
response 128964868

(+) = Expected Retention Time
6PST1034.M Mon Jun 13 13:41:29 2016

SGS ACCUTEST JC22613

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
06/14/16 15:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36073.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 8:27 pm
Operator : dharas
Sample : icv1034-500
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 13:43:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.007	1.346	136.2E6	55718255	50.000	50.000
25) I	1-bromo-2...	1.007	1.346	136.2E6	55718255	50.000	50.000
31) I	1-bromo-2...	1.007	1.346	136.2E6	55718255	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.725	2.289	114.4E6	50362111	44.290	44.657
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	110.73%	111.64%
24) SAB	Decachlor...	9.586	11.602	111.8E6	61351917	44.092	45.246
	Spiked Amount 40.000			Recovery	=	110.23%	113.12%
	Target Compounds						
26) L8	Toxaphene{A}	5.040	6.468	21692047	12551746	543.789m	480.607
27) L8	Toxaphene{B}	5.424	7.388	58403878	16273401	538.050	481.624
28) L8	Toxaphene{C}	5.692	7.566	62517703	25522532	506.518	471.054
29) L8	Toxaphene{D}	6.246	8.048	54996909	16440202	497.554	487.411
30) L8	Toxaphene{E}	6.928	9.025	38542739	13158440	483.275	462.927
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

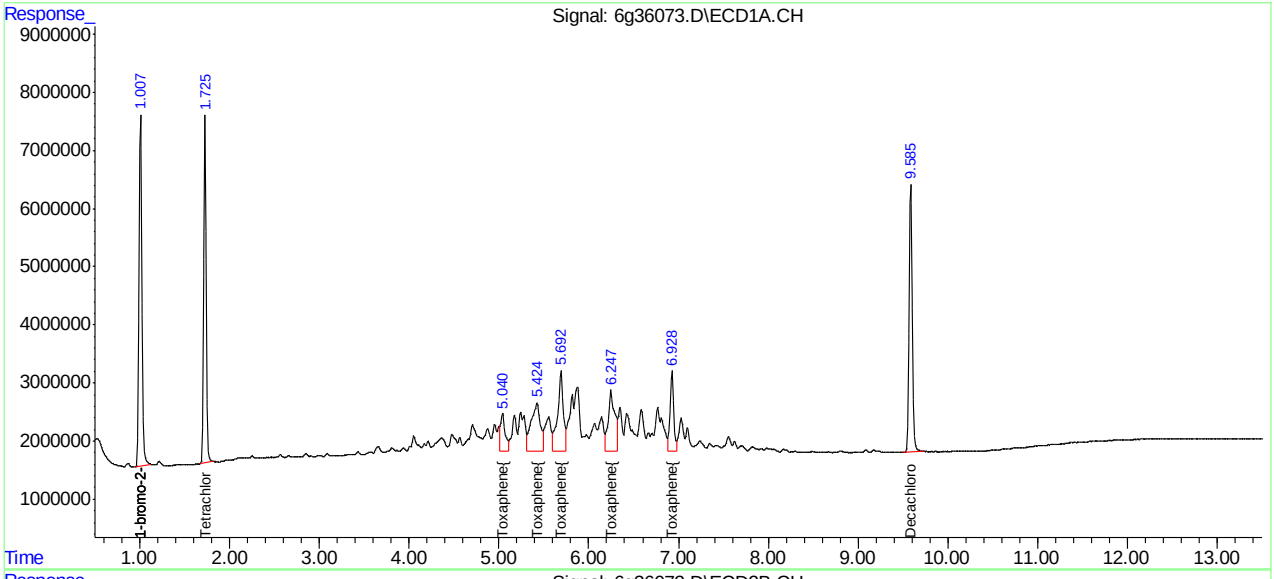
11.6.14 11

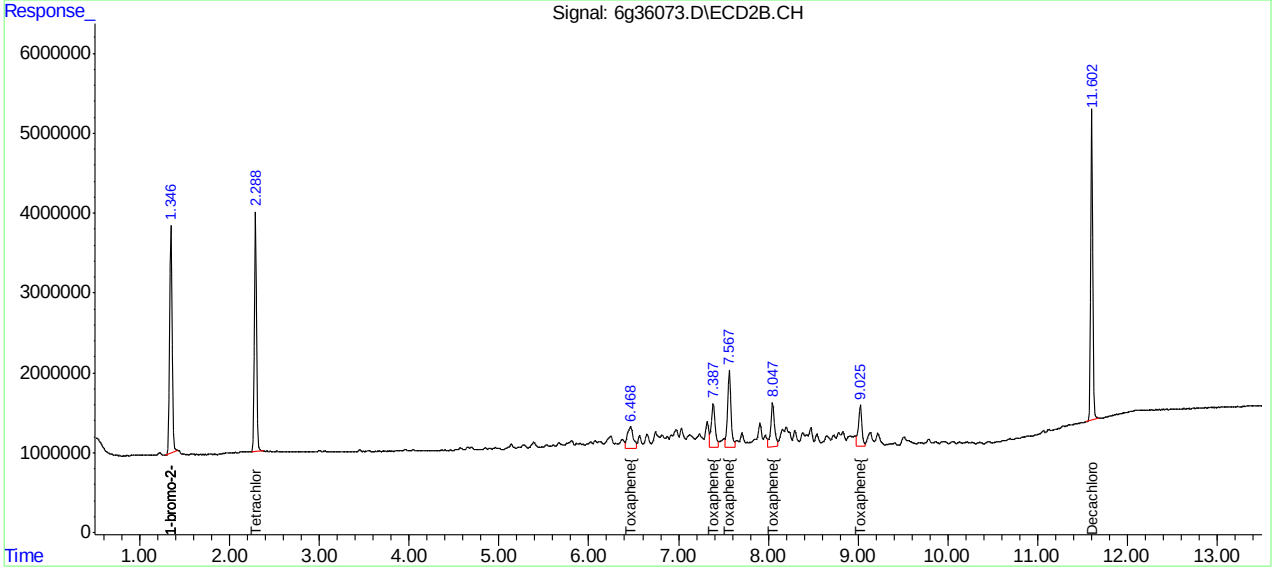
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36073.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 8:27 pm
Operator : dharas
Sample : icv1034-500
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 13:43:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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:	G6G1034-ICV1034	**Method:**	SW846 8081B
Lab FileID:	6G36073.D	**Analyst approved:**	06/13/16 14:06 Rebecca Krug
Injection Time:	06/10/16 20:27	**Supervisor approved:**	06/14/16 15:27 Gwendolyn Burns

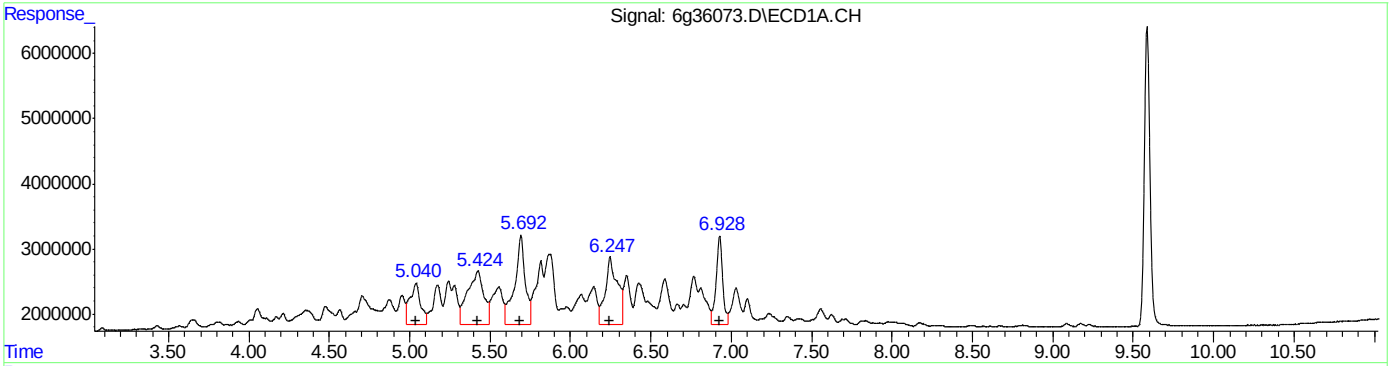
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-A		1	5.04	Poorly defined baseline

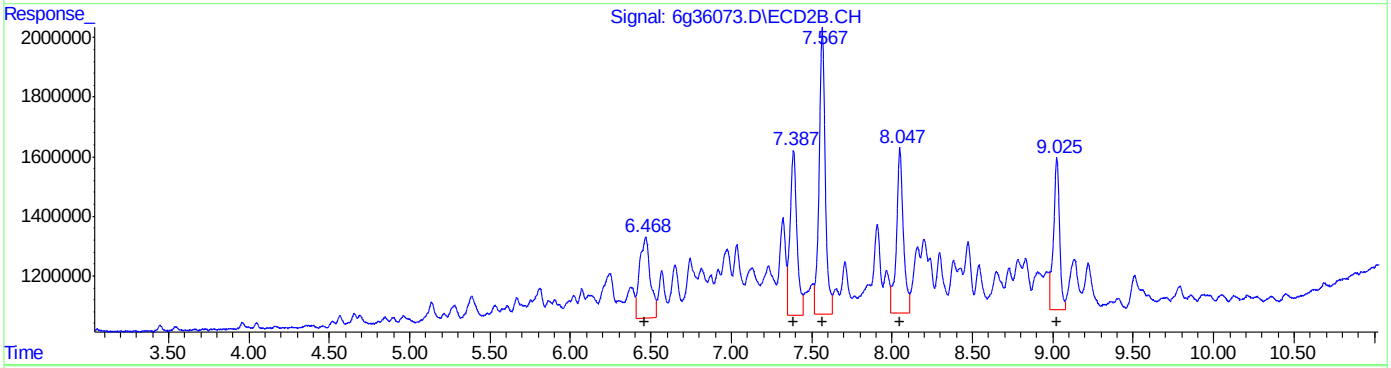
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36073.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 8:27 pm
Operator : dharas
Sample : icv1034-500
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 13:42:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
5.04	30241672	758.12
5.42	58403878	538.05
5.69	62517703	506.52
6.25	54996909	497.55
6.93	38542739	483.27

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.47	12551746	480.61
7.39	16273401	481.62
7.57	25522532	471.05
8.05	16440202	487.41
9.03	13158440	462.93

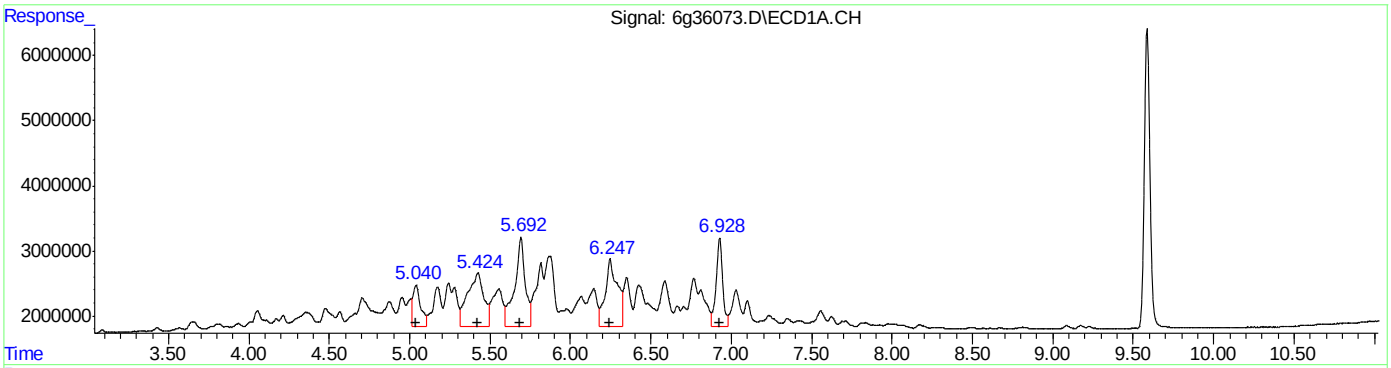
(+) = Expected Retention Time

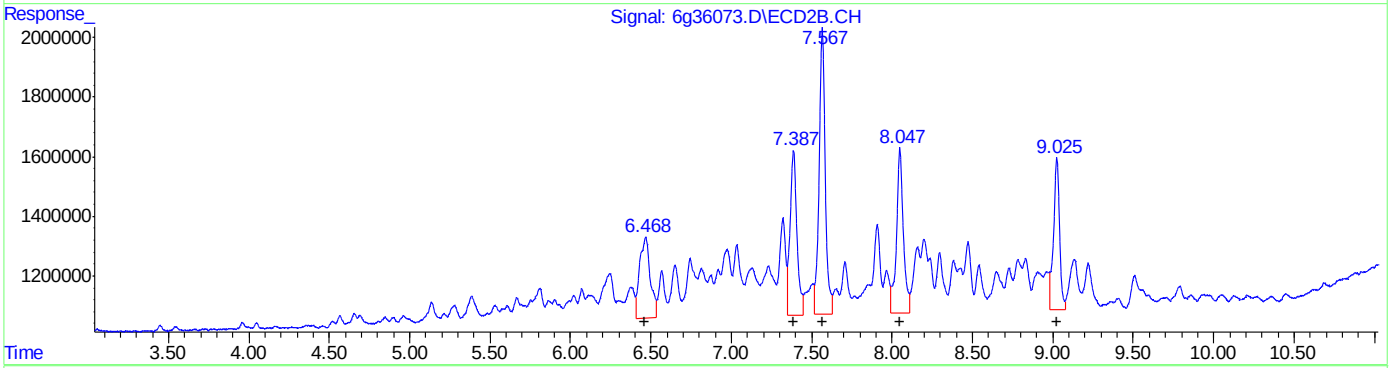
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1034\
Data File : 6g36073.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 Jun 2016 8:27 pm
Operator : dharas
Sample : icv1034-500
Misc : op94394,g6g1034,300,,,2,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 13 13:42:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
5.04	21692047	543.79
5.42	58403878	538.05
5.69	62517703	506.52
6.25	54996909	497.55
6.93	38542739	483.27

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.47	12551746	480.61
7.39	16273401	481.62
7.57	25522532	471.05
8.05	16440202	487.41
9.03	13158440	462.93

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 06/28/16 11:26

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36617.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 5:14 pm
Operator : dharas
Sample : c1034-25
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:19:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	0.999	1.337	119.0E6	51614446	50.000	50.000
25) I	1-bromo-2...	0.999	1.337	119.0E6	51614446	50.000	50.000
31) I	1-bromo-2...	0.999	1.337	119.0E6	51614446	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.718	2.278	52208976	24641800	23.134	23.588
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 57.84%	58.97%
24)	SAB Decachlor...	9.566	11.591	49020026	29591471	22.136	23.558
	Spiked Amount	40.000			Recovery	= 55.34%	58.89%
	Target Compounds						
3) A	alpha-BHC	2.240	2.988	68492833	29585112	23.064m	23.447
4) MA	gamma-BHC	2.556	3.436	63902138	28584126	23.132	24.187
5) MA	Heptachlor	3.075	4.033	60878433	31384303	22.255	25.297
6) B	beta-BHC	2.645	3.536	30406050	14560299	22.096	23.462
7) B	delta-BHC	2.837	3.944	58564066	26190021	21.392	23.081
8) MB	Aldrin	3.420	4.501	57387949	28539319	22.227	24.030
9) B	Heptachlo...	4.153	5.371	55139409	27563684	22.136	23.301m
10) B	gamma-Chl...	4.326	5.675	51877678	27640436	19.882	23.102
11) B	alpha-Chl...	4.503	5.916	53238637	27889218	21.140	23.037
12) A	Endosulfan I	4.676	6.012	59085537	25899935	22.031	23.143
13) B	4,4'-DDE	4.642	6.217	40660775	27517570	21.923	26.828
14) MA	Dieldrin	5.014	6.476	53676792	26945127	22.232	24.427
15) MA	Endrin	5.348	7.014	50808431	25070132	23.019	24.837
16) A	4,4'-DDD	5.518	7.245	39901271	20342830	22.721	23.844
17) B	Endosulfa...	5.686	7.396	50386728	24786504	22.309	24.168
18) MA	4,4'-DDT	5.954	7.818	37398197	19427810	21.943	24.678
19) B	Endrin Al...	6.344	8.024	39941225	20459814	22.480	24.001
20) B	Endosulfa...	7.069	8.536	41971570	21704267	21.893	23.425
21) A	Methoxychlor	6.821	9.195	21685012	11998789	21.524	24.115
22)	Mirex	6.920	9.481	43094693	23471965	20.580	21.898
23) B	Endrin Ke...	7.535	9.575	49543591	24908763	22.821	24.500

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

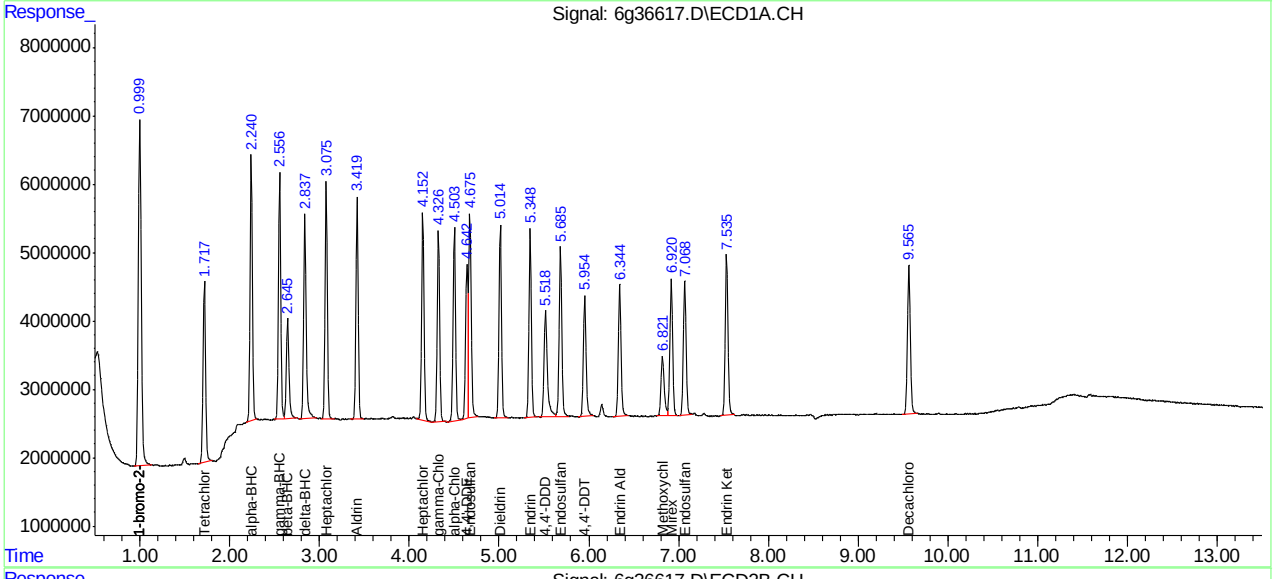
11.6.15 11

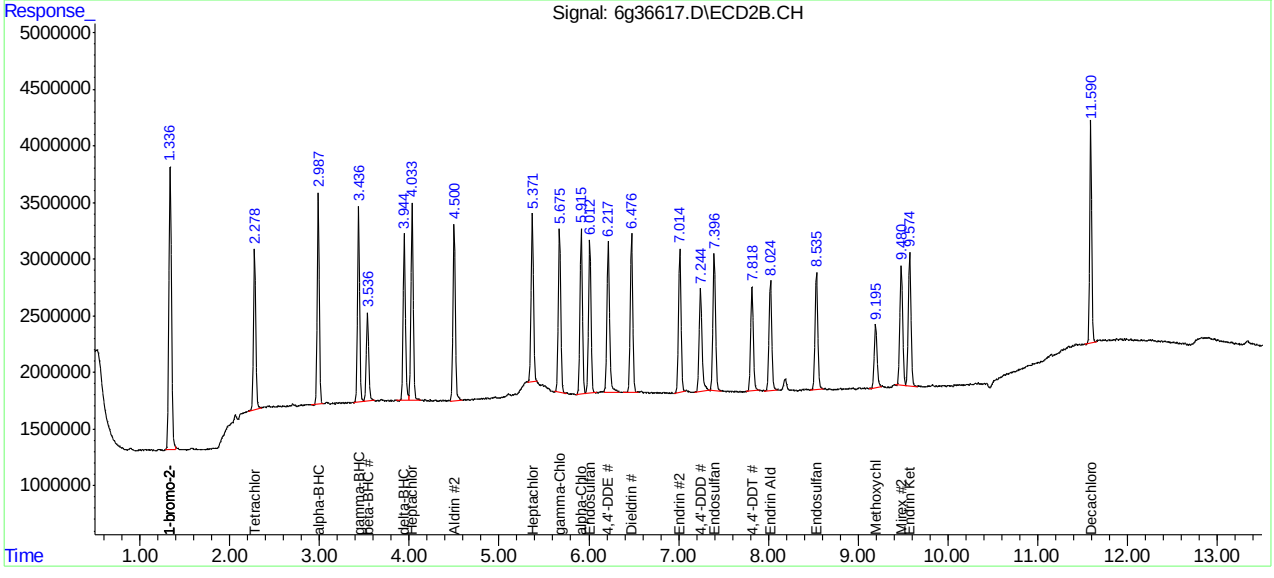
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36617.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 5:14 pm
Operator : dharas
Sample : c1034-25
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:19:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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:	G6G1047-CC1034	**Method:**	SW846 8081B
Lab FileID:	6G36617.D	**Analyst approved:**	06/28/16 09:06 Kristen Drake
Injection Time:	06/27/16 17:14	**Supervisor approved:**	06/28/16 11:26 Gwendolyn Burns

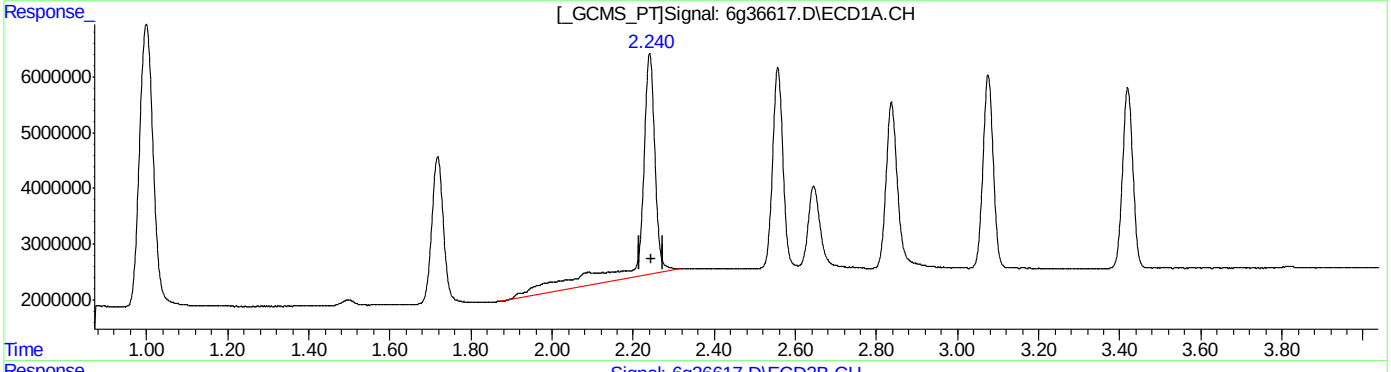
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.24	Poorly defined baseline
Heptachlor epoxide	1024-57-3	2	5.37	Poorly defined baseline

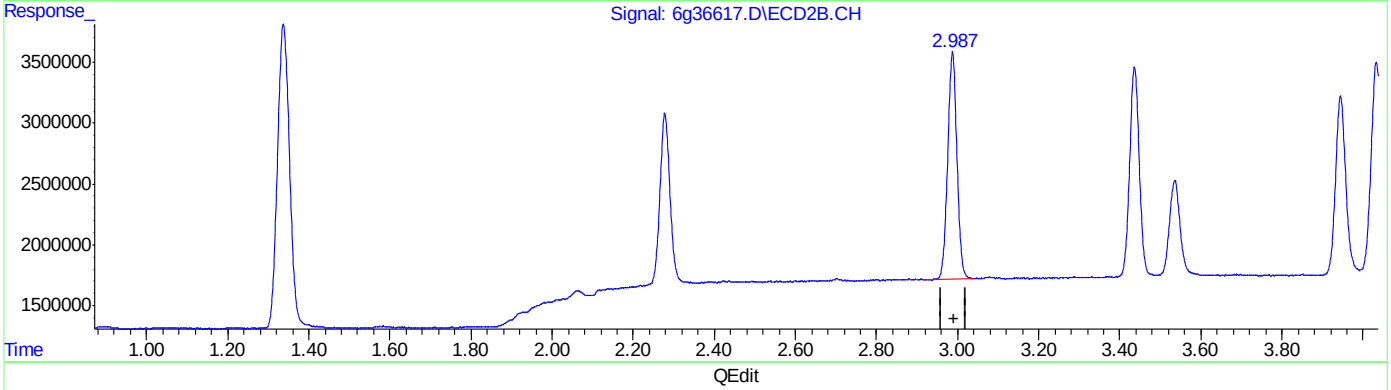
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36617.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 5:14 pm
Operator : dharas
Sample : c1034-25
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:17:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(3) alpha-BHC (A)
2.241min 33.943PPB
response 100797448

(3) alpha-BHC #2 (A)
2.988min 23.447PPB
response 29585112

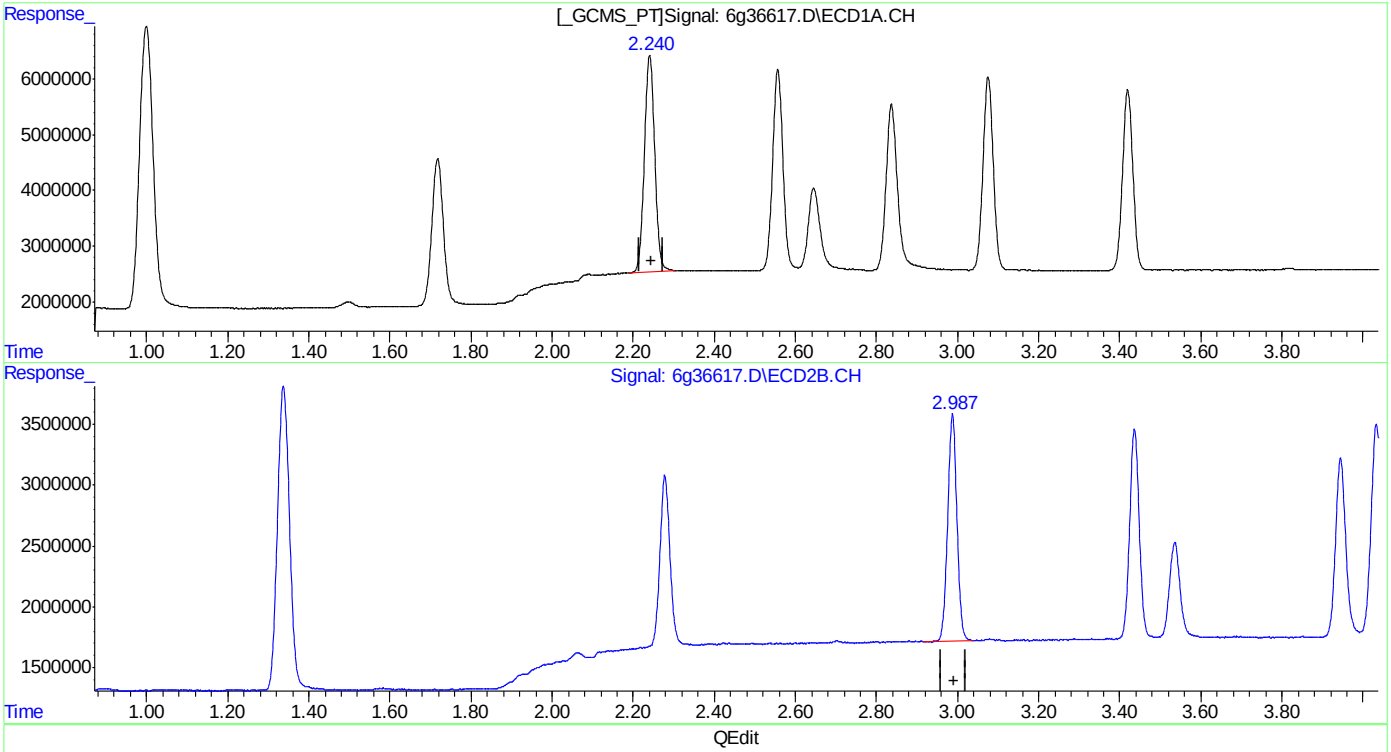
(+) = Expected Retention Time
6PST1034.M Tue Jun 28 08:19:28 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36617.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 5:14 pm
Operator : dharas
Sample : c1034-25
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:17:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(3) alpha-BHC (A)
2.240min 23.064PPB m
response 68492833

(3) alpha-BHC #2 (A)
2.988min 23.447PPB
response 29585112

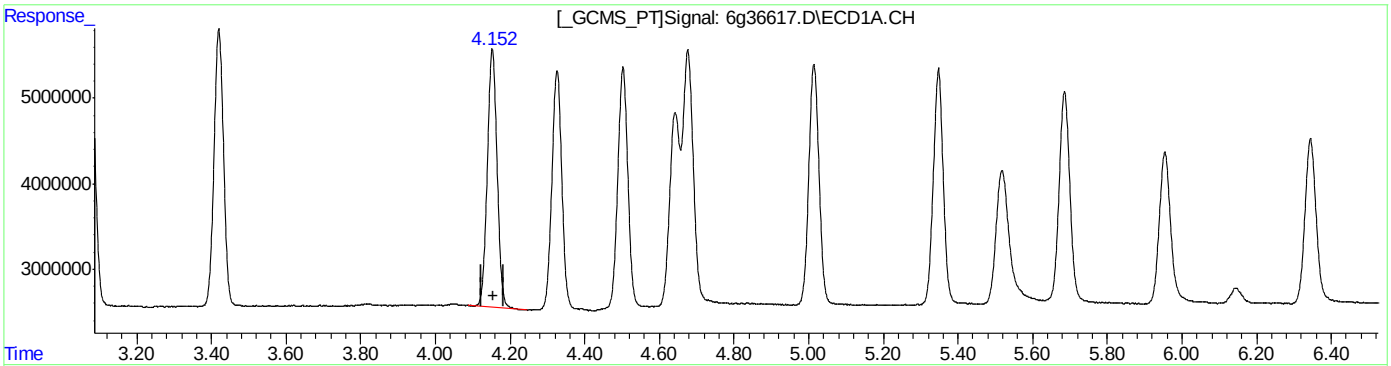
(+) = Expected Retention Time
6PST1034.M Tue Jun 28 08:19:36 2016

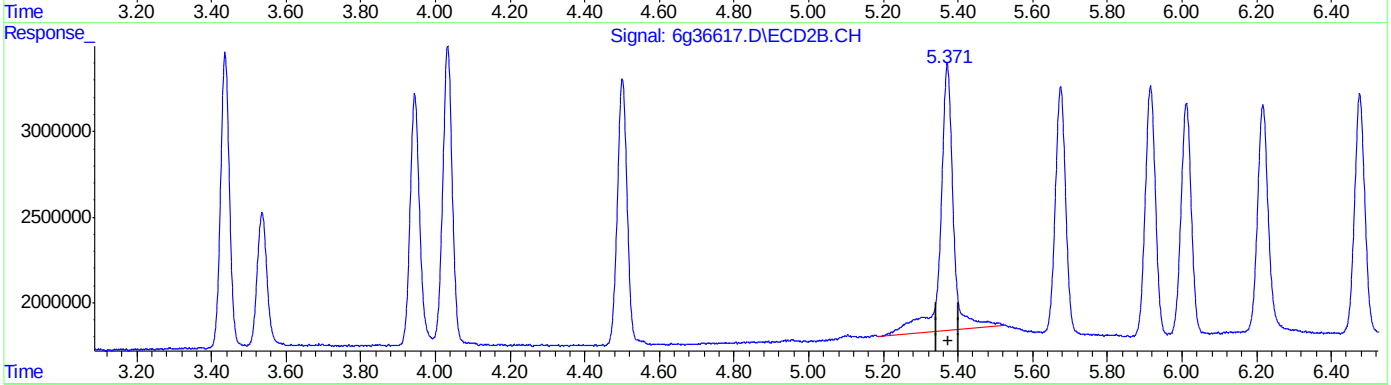
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36617.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 5:14 pm
Operator : dharas
Sample : c1034-25
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:17:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(9) Heptachlor Epoxide (B)
4.153min 22.136PPB
response 55139409

(9) Heptachlor Epoxide #2 (B)
5.371min 32.254PPB
response 38154072

(+) = Expected Retention Time

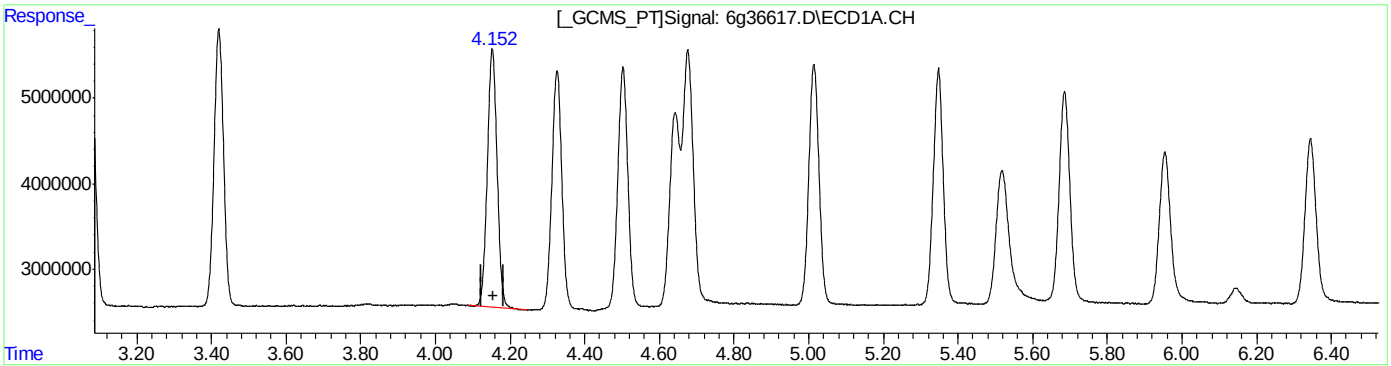
SGS ACCUTEST JC22613

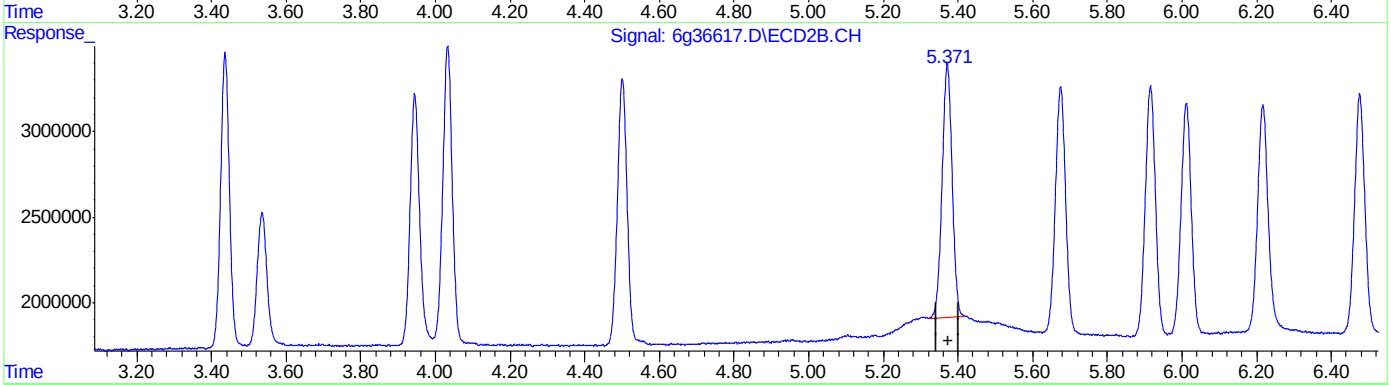
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36617.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 5:14 pm
Operator : dharas
Sample : c1034-25
Misc : op95109,g6g1047,15.1,,,10,10
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:17:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(9) Heptachlor Epoxide (B)
4.153min 22.136PPB
response 55139409

(9) Heptachlor Epoxide #2 (B)
5.371min 23.301PPB m
response 27563684

(+) = Expected Retention Time
6PST1034.M Tue Jun 28 08:19:51 2016

SGS ACCUTEST JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36638.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 10:59 pm
Operator : dharas
Sample : cc1034-50
Misc : op95079,g6g1047,1000,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:24:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	Internal Standards							
1) I	1-bromo-2...	1.012	1.348	124.1E6	52305569	50.000	50.000	
25) I	1-bromo-2...	1.012	1.348	124.1E6	52305569	50.000	50.000	
31) I	1-bromo-2...	1.012	1.348	124.1E6	52305569	50.000	50.000	
	System Monitoring Compounds							
2)	SAB Tetrachlo...	1.725	2.284	113.1E6	51653073	48.080	48.790	
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 120.20%	121.97%	
24)	SAB Decachlor...	9.566	11.585	101.9E6	60512122	44.136	47.538	
	Spiked Amount	40.000			Recovery	= 110.34%	118.85%	
	Target Compounds							
3) A	alpha-BHC	2.246	2.991	155.0E6	67736274	50.048	52.974	
4) MA	gamma-BHC	2.561	3.439	141.9E6	63421620	49.245	52.955	
5) MA	Heptachlor	3.080	4.034	128.5E6	66229429	45.037	52.679	
6) B	beta-BHC	2.650	3.538	62797020	30288663	43.765	48.161	
7) B	delta-BHC	2.842	3.947	130.0E6	57156029	45.540	49.706	
8) MB	Aldrin	3.423	4.503	130.0E6	63491160	48.269	52.754	
9) B	Heptachlo...	4.155	5.373	120.0E6	60412688	46.218	50.396	
10) B	gamma-Chl...	4.327	5.676	121.3E6	61665437	44.597	50.860	
11) B	alpha-Chl...	4.504	5.916	119.8E6	61717297	45.626	50.305	
12) A	Endosulfan I	4.678	6.012	149.7E6	57541191	53.527	50.738	
13) B	4,4'-DDE	4.649	6.219	72870206	57785042	37.680	55.592	#
14) MA	Dieldrin	5.016	6.477	120.7E6	59237846	47.934	52.992	
15) MA	Endrin	5.348	7.013	104.3E6	51219976	45.308	50.073	
16) A	4,4'-DDD	5.526	7.247	83826214	43123349	45.779	49.877	
17) B	Endosulfa...	5.687	7.398	111.0E6	54669420	47.119	52.600	
18) MA	4,4'-DDT	5.957	7.819	76287646	38874893	42.927	48.728	
19) B	Endrin Al...	6.345	8.022	89743248	46312342	48.440	53.610	
20) B	Endosulfa...	7.069	8.534	90624808	46970101	45.335	50.025	
21) A	Methoxychlor	6.827	9.196	38456137	22707595	36.608	45.035	
22)	Mirex	6.920	9.481	93630601	53088322	42.883	48.874	
23) B	Endrin Ke...	7.537	9.574	116.2E6	59063320	51.349	57.327	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

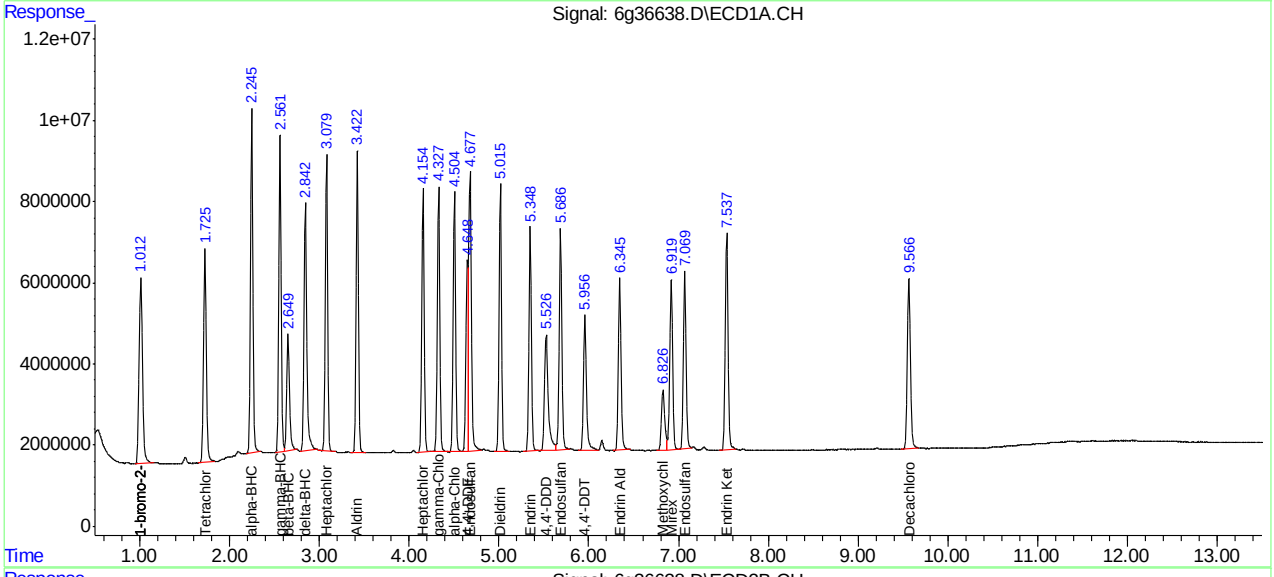
SGS ACCUTEST JC22613

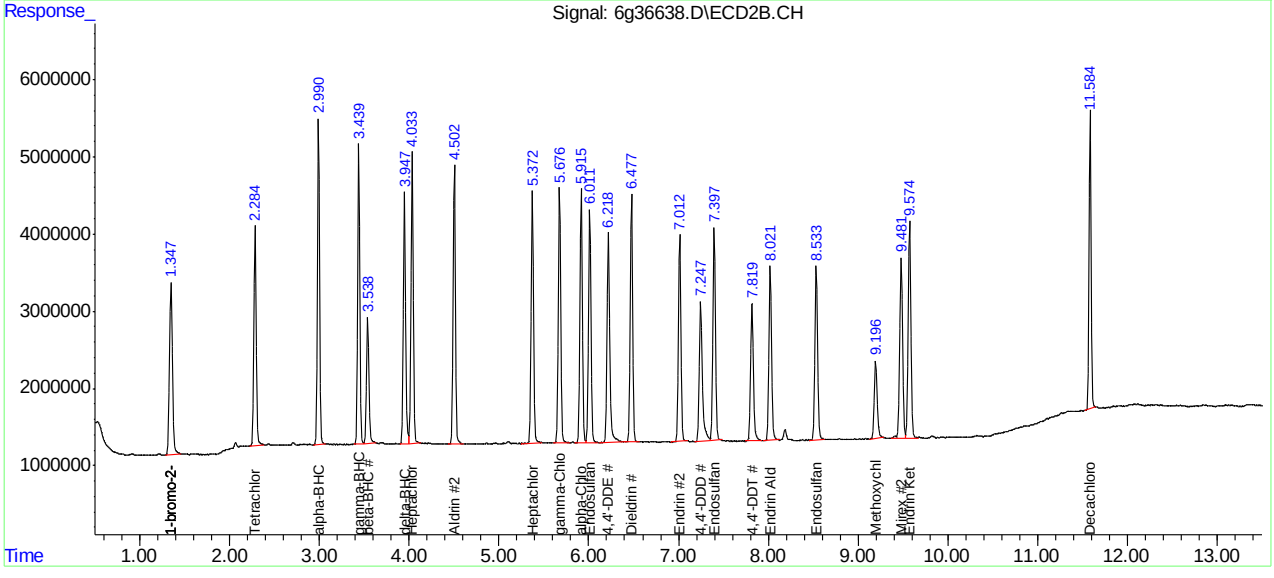
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1047\
Data File : 6g36638.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Jun 2016 10:59 pm
Operator : dharas
Sample : cc1034-50
Misc : op95079,g6g1047,1000,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 08:24:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC22613

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1048\
Data File : 6g36651.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jun 2016 9:23 am
Operator : kristend
Sample : cc1034-25
Misc : op95064,g6g1048,15.0,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 09:39:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.003	1.341	135.9E6	59162394	50.000	50.000
25) I	1-bromo-2...	1.003	1.341	135.9E6	59162394	50.000	50.000
31) I	1-bromo-2...	1.003	1.341	135.9E6	59162394	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.719	2.280	61349483	28754492	23.802	24.013
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 59.50%	60.03%
24)	SAB Decachlor...	9.561	11.589	57385966	33433835	22.689	23.221
	Spiked Amount	40.000			Recovery	= 56.72%	58.05%
	Target Compounds						
3) A	alpha-BHC	2.242	2.988	81800372	35698732	24.118	24.683
4) MA	gamma-BHC	2.557	3.437	75827265	33813617	24.033	24.961
5) MA	Heptachlor	3.076	4.033	70642384	37159080	22.611	26.131
6) B	beta-BHC	2.645	3.535	36220747	16905170	23.046	23.765
7) B	delta-BHC	2.836	3.944	67970344	31404340	21.738	24.146
8) MB	Aldrin	3.421	4.501	66892469	33968638	22.684	24.953
9) B	Heptachlo...	4.151	5.371	62012354	33363254	21.797	24.606
10) B	gamma-Chl...	4.325	5.674	58609123	33259835	19.667	24.252
11) B	alpha-Chl...	4.502	5.915	60109293	33556461	20.898	24.182
12) A	Endosulfan I	4.677	6.010	65961029	31350427	21.534	24.440
13) B	4,4'-DDE	4.639	6.215	46923323	32044609	22.152	27.255
14) MA	Dieldrin	5.013	6.476	61923153	31701540	22.456	25.072
15) MA	Endrin	5.346	7.013	58280490	29530664	23.118	25.524
16) A	4,4'-DDD	5.512	7.242	45435887	23388456	22.654	23.916
17) B	Endosulfa...	5.682	7.395	58670798	29478824	22.745	25.076
18) MA	4,4'-DDT	5.951	7.815	45396051	23458996	23.321	25.997
19) B	Endrin Al...	6.341	8.020	47543175	25014892	23.429	25.601
20) B	Endosulfa...	7.066	8.533	52018699	27610829	23.757	25.998
21) A	Methoxychlor	6.814	9.191	26764413	14881391	23.261	26.093
22)	Mirex	6.918	9.480	51318198	29218300	21.458	23.782
23) B	Endrin Ke...	7.532	9.571	62436139	31848223	25.182	27.329

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.17 11

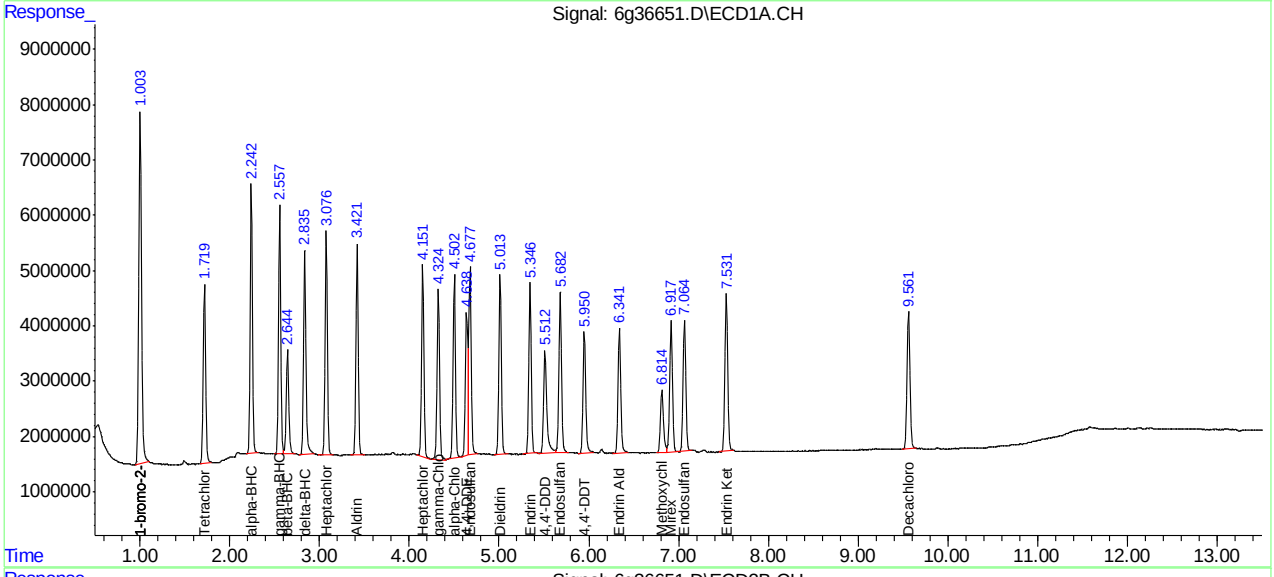
SGS ACCUTEST JC22613

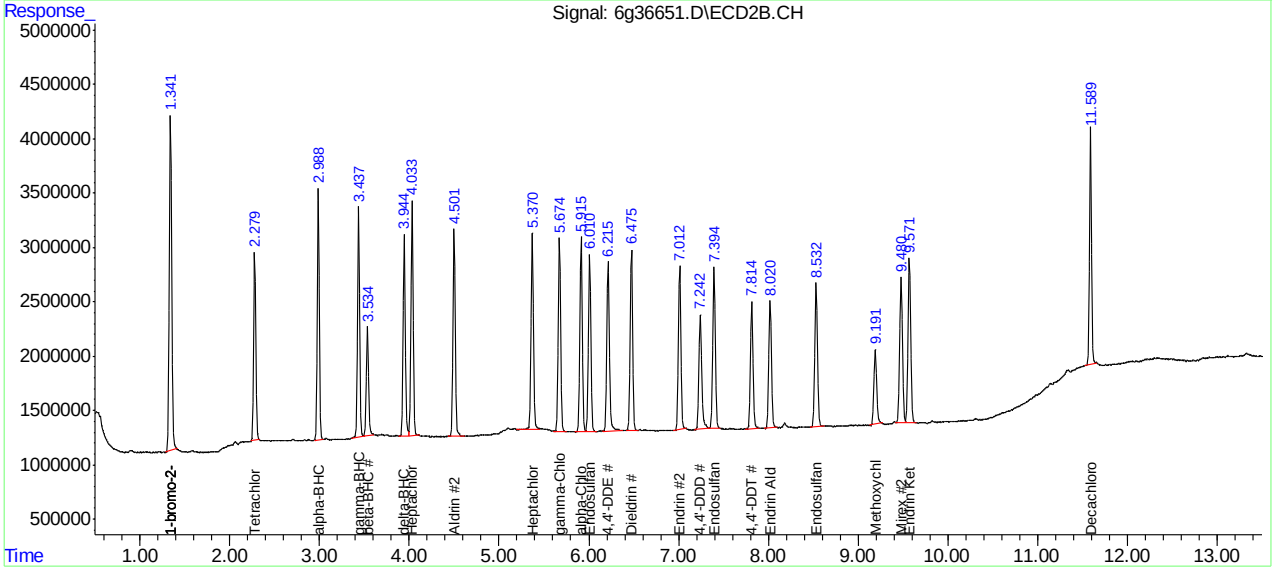
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1048\
Data File : 6g36651.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Jun 2016 9:23 am
Operator : kristend
Sample : cc1034-25
Misc : op95064,g6g1048,15.0,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Jun 28 09:39:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST1034.M
Quant Title : PEST/PCB
QLast Update : Mon Jun 27 08:34:56 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G-GC 1034

Print Analyst Name: Dharm Saparia

Analyst Signature:

Date: 6/10/16

Standard Data

	Lot #	Description	Conc.
SV	161933-47A	pest mix	25 ppb
	-47B		50
SV	161874-47C		1
	-47D		2
	-47E		5
	-47F		10
	-47G		25
	-47H		100
CC	161299	mirex 2nd source	250 ppb

Standard Data

	Lot #	Description	Conc.
SV	161933-35	pest BSTD	5 ppm
	-51	PCM	10-250 ppb
	-09	IB	20 ppb
SV	161874-20	chlordane 1st	10 ppm
	-21	Toxaphene 1st	10 ppm
	-96	Chlordane 2nd	500 ppb
	-97	Toxaphene 2nd	500 ppb
	160453	Hexane (filler)	—
SV	161874-95	pest mix 2nd	250 ppb

Columns: ZB CLP I / ZB CLP II

Method 8081 / 608

Initial Cal. Method GPST 1034

Injection Volume: 1.0 uL

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature:

Date: 6/15/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6296057	ddt				1			/	OK	
	059	IB				2			/	OK	
	060	IC1034-1	1st source	pest mix		3			/	OK	
	061	-2				4			/	OK	
	062	-5				5			/	OK	
	063	-10				6			/	OK	
	064	IC1034-25				7			/	OK	
	065	IC1034-50				8			/	OK	
	066	-75				9			/	OK	
	067	-100				10			/	OK	
	068	-500		CHL		11	20		/	OK	
	069	-500		Tox		12	20		/	OK	
	070	IC1034-25	2nd source	pest		13	10		/	OK	
	071	-25		mirex		14	10		/	OK	
	072	-500		CHL		15			/	OK	
	073	-500		Tox		16			/	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

11.7.1 11

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GC6G
Method: SW846 8081B

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	6G36064.D	06/10/16 17:59	G6G1034-ICC1034	DHARAS
Std#2	6G36074.D	06/10/16 20:44	G6G1035-CC1034	DHARAS
Std#3	6G36096.D	06/13/16 09:27	G6G1036-CC1034	DHARAS

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+ /- 3*StdDev)
1-Bromo-2-nitrobenzene	1	ISTD	1.01	1.01	1.00	1.01	0.006	+/- 0.030 [a]
1-Bromo-2-nitrobenzene	2	ISTD	1.35	1.35	1.34	1.35	0.006	+/- 0.030 [a]
Tetrachloro-m-xylene	1	SURR	1.73	1.73	1.72	1.73	0.006	+/- 0.030 [a]
Decachlorobiphenyl	1	SURR	9.59	9.59	9.58	9.59	0.006	+/- 0.030 [a]
Tetrachloro-m-xylene	2	SURR	2.29	2.29	2.29	2.29	0.000	+/- 0.030 [a]
Decachlorobiphenyl	2	SURR	11.61	11.60	11.61	11.61	0.006	+/- 0.030 [a]
alpha-BHC	1	REG	2.25	2.25	2.25	2.25	0.000	+/- 0.030 [a]
gamma-BHC (Lindane)	1	REG	2.57	2.57	2.56	2.57	0.006	+/- 0.030 [a]
beta-BHC	1	REG	2.65	2.65	2.65	2.65	0.000	+/- 0.030 [a]
delta-BHC	1	REG	2.84	2.84	2.84	2.84	0.000	+/- 0.030 [a]
Heptachlor	1	REG	3.09	3.09	3.08	3.09	0.006	+/- 0.030 [a]
Aldrin	1	REG	3.43	3.43	3.43	3.43	0.000	+/- 0.030 [a]
Heptachlor epoxide	1	REG	4.17	4.17	4.16	4.17	0.006	+/- 0.030 [a]
gamma-Chlordane	1	REG	4.34	4.34	4.34	4.34	0.000	+/- 0.030 [a]
alpha-Chlordane	1	REG	4.52	4.52	4.51	4.52	0.006	+/- 0.030 [a]
4,4'-DDE	1	REG	4.66	4.66	4.65	4.66	0.006	+/- 0.030 [a]
Endosulfan-I	1	REG	4.69	4.69	4.69	4.69	0.000	+/- 0.030 [a]
Dieldrin	1	REG	5.03	5.03	5.03	5.03	0.000	+/- 0.030 [a]
Endrin	1	REG	5.36	5.36	5.36	5.36	0.000	+/- 0.030 [a]
4,4'-DDD	1	REG	5.53	5.53	5.52	5.53	0.006	+/- 0.030 [a]
Endosulfan-II	1	REG	5.70	5.70	5.70	5.70	0.000	+/- 0.030 [a]
4,4'-DDT	1	REG	5.97	5.97	5.96	5.97	0.006	+/- 0.030 [a]
Endrin aldehyde	1	REG	6.36	6.36	6.36	6.36	0.000	+/- 0.030 [a]
Methoxychlor	1	REG	6.84	6.84	6.83	6.84	0.006	+/- 0.030 [a]
Mirex	1	REG	6.94	6.94	6.94	6.94	0.000	+/- 0.030 [a]
Endosulfan sulfate	1	REG	7.09	7.09	7.08	7.09	0.006	+/- 0.030 [a]
Endrin ketone	1	REG	7.56	7.56	7.55	7.56	0.006	+/- 0.030 [a]
alpha-BHC	2	REG	3.00	3.00	3.00	3.00	0.000	+/- 0.030 [a]
gamma-BHC (Lindane)	2	REG	3.45	3.45	3.45	3.45	0.000	+/- 0.030 [a]
beta-BHC	2	REG	3.55	3.55	3.54	3.55	0.006	+/- 0.030 [a]
delta-BHC	2	REG	3.96	3.96	3.95	3.96	0.006	+/- 0.030 [a]
Heptachlor	2	REG	4.05	4.05	4.05	4.05	0.000	+/- 0.030 [a]
Aldrin	2	REG	4.52	4.52	4.52	4.52	0.000	+/- 0.030 [a]
Heptachlor epoxide	2	REG	5.39	5.39	5.39	5.39	0.000	+/- 0.030 [a]
gamma-Chlordane	2	REG	5.70	5.69	5.69	5.69	0.006	+/- 0.030 [a]
alpha-Chlordane	2	REG	5.94	5.94	5.93	5.94	0.006	+/- 0.030 [a]
Endosulfan-I	2	REG	6.03	6.03	6.03	6.03	0.000	+/- 0.030 [a]
4,4'-DDE	2	REG	6.24	6.24	6.23	6.24	0.006	+/- 0.030 [a]
Dieldrin	2	REG	6.50	6.50	6.50	6.50	0.000	+/- 0.030 [a]
Endrin	2	REG	7.04	7.04	7.03	7.04	0.006	+/- 0.030 [a]

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GC6G
Method: SW846 8081B

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	6G36064.D	06/10/16 17:59	G6G1034-ICC1034	DHARAS
Std#2	6G36074.D	06/10/16 20:44	G6G1035-CC1034	DHARAS
Std#3	6G36096.D	06/13/16 09:27	G6G1036-CC1034	DHARAS

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+ /- 3*StdDev)
4,4'-DDD	2	REG	7.27	7.27	7.26	7.27	0.006	+/- 0.030 [a]
Endosulfan-II	2	REG	7.42	7.42	7.42	7.42	0.000	+/- 0.030 [a]
4,4'-DDT	2	REG	7.84	7.84	7.84	7.84	0.000	+/- 0.030 [a]
Endrin aldehyde	2	REG	8.05	8.05	8.04	8.05	0.006	+/- 0.030 [a]
Endosulfan sulfate	2	REG	8.56	8.56	8.56	8.56	0.000	+/- 0.030 [a]
Methoxychlor	2	REG	9.22	9.22	9.21	9.22	0.006	+/- 0.030 [a]
Mirex	2	REG	9.51	9.51	9.51	9.51	0.000	+/- 0.030 [a]
Endrin ketone	2	REG	9.60	9.60	9.60	9.60	0.000	+/- 0.030 [a]

(a) Default minimum StdDev of .01 minutes employed.

Initial Calibration Summary

Laboratory DRAFT - Not for Release

Sample: G6G1034-ICC1034
Lab FileID: 6G36064.D

Response Factor Report HP G1530A

Method : C:\MSDCHEM\1\METHODS\6PST1034.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Mon Jun 13 12:02:56 2016
Response via : Initial Calibration

Calibration Files
2 =6g36061.D 5 =6g36062.D 10 =6g36063.D 25 =6g36064.D
50 =6g36065.D 100 =6g36067.D 1 =6g36060.D 75 =6g36066.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	----------ISTD----------									
2) Tetrachloro-	0.946	0.923	0.914	0.897	0.939	0.978	1.051	0.938	0.948	5.03
3) alpha-BHC	1.109	1.111	1.130	1.205	1.335	1.470	1.256	1.367	1.248	10.71
4) gamma-BHC	1.033	1.065	1.074	1.130	1.226	1.329	1.180	1.249	1.161	8.91
5) Heptachlor	1.117	1.091	1.072	1.095	1.163	1.245	1.239	1.176	1.150	5.84
6) beta-BHC	0.583	0.574	0.563	0.543	0.552	0.565	0.700	0.545	0.578	8.83
7) delta-BHC	1.137	1.034	1.006	1.078	1.201	1.313	1.218	1.216	1.150	9.14
8) Aldrin	1.022	1.006	1.004	1.044	1.126	1.213	1.125	1.140	1.085	7.04
9) Heptachlor E	1.012	1.001	0.981	0.992	1.040	1.097	1.208	1.042	1.047	7.15
10) gamma-Chlord	1.053	1.093	1.008	1.004	1.054	1.126	1.370	1.063	1.096	10.74
11) alpha-Chlord	1.044	1.010	0.995	0.993	1.041	1.102	1.236	1.045	1.058	7.57
12) Endosulfan I	1.117	1.099	1.065	1.061	1.109	1.154	1.323	1.088	1.127	7.52
13) 4,4'-DDE	0.677	0.681	0.683	0.740	0.816	0.927	0.846	0.865	0.779	12.43
14) Dieldrin	0.947	0.945	0.936	0.968	1.038	1.119	1.107	1.057	1.015	7.41
15) Endrin	0.902	0.893	0.877	0.888	0.946	1.009	0.950	0.955	0.928	4.86
16) 4,4'-DDD	0.656	0.660	0.696	0.708	0.752	0.804	0.864	0.764	0.738	9.79
17) Endosulfan I	0.909	0.891	0.905	0.907	0.941	0.993	1.092	0.954	0.949	7.04
18) 4,4'-DDT	0.647	0.648	0.653	0.679	0.739	0.834	0.755	0.775	0.716	9.74
19) Endrin Aldeh	0.739	0.742	0.713	0.727	0.743	0.768	0.803	0.739	0.747	3.68
20) Endosulfan S	0.774	0.767	0.753	0.763	0.795	0.838	0.952	0.803	0.806	8.10
21) Methoxychlor	0.403	0.413	0.402	0.394	0.413	0.429	0.518	0.415	0.423	9.35
22) Mirex	0.921	0.906	0.866	0.827	0.806	0.810	1.111	0.792	0.880	11.89
23) Endrin Keton	0.886	0.891	0.873	0.895	0.929	0.980	0.902	0.943	0.912	3.91
24) Decachlorobi	0.994	0.982	0.912	0.874	0.854	0.853	1.136	0.841	0.931	10.95
25) I 1-bromo-2-nitrobenzen	----------ISTD----------									
26) Toxaphene{A}					0.015				0.015	0.00
27) Toxaphene{B}					0.040				0.040	0.00
28) Toxaphene{C}					0.045				0.045	0.00
29) Toxaphene{D}					0.041				0.041	0.00
30) Toxaphene{E}					0.029				0.029	0.00
31) I 1-bromo-2-nitrobenzen	----------ISTD----------									
32) Chlordane {A					0.035				0.035	0.00
33) Chlordane {B					0.050				0.050	0.00
34) Chlordane {C					0.155				0.155	0.00
35) Chlordane {D					0.227				0.227	0.00
36) Chlordane {E					0.037				0.037	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen	----------ISTD----------									
2) Tetrachloro-	0.947	1.002	0.948	0.969	1.003	1.051	1.177	1.000	1.012	7.41
3) alpha-BHC	1.060	1.025	1.040	1.162	1.335	1.521	1.241	1.394	1.222	14.95
4) gamma-BHC	0.959	0.978	1.012	1.110	1.250	1.398	1.159	1.293	1.145	13.94

11.7.1 11

SGS ACCUTEST JC22613

Initial Calibration Summary

Laboratory DRAFT - Not for Release

Sample: G6G1034-ICC1034
Lab FileID: 6G36064.D

5)	Heptachlor	1.111	1.101	1.102	1.167	1.273	1.403	1.156	1.301	1.202	9.27
6)	beta-BHC	0.562	0.559	0.556	0.573	0.598	0.626	0.741	0.595	0.601	10.20
7)	delta-BHC	0.961	0.979	0.935	1.049	1.189	1.340	1.106	1.235	1.099	13.22
8)	Aldrin	1.005	0.999	1.042	1.103	1.210	1.347	1.255	1.244	1.150	11.38
9)	Heptachlor E	1.111	1.020	1.022	1.082	1.152	1.251	1.358	1.171	1.146	10.08
10)	gamma-Chlord	1.170	1.035	1.041	1.096	1.179	1.286	1.267	1.199	1.159	8.19
11)	alpha-Chlord	1.129	1.049	1.057	1.111	1.186	1.281	1.372	1.198	1.173	9.49
12)	Endosulfan I	1.029	1.001	0.978	1.033	1.091	1.176	1.261	1.105	1.084	8.84
13)	4,4'-DDE	1.004	0.906	0.905	0.969	1.051	1.164	0.864	1.085	0.994	10.31
14)	Dieldrin	1.017	0.948	0.969	1.034	1.126	1.248	1.046	1.161	1.069	9.54
15)	Endrin	0.946	0.933	0.881	0.968	1.025	1.120	0.903	1.047	0.978	8.22
16)	4,4'-DDD	0.780	0.747	0.719	0.766	0.808	0.914	1.024	0.854	0.826	12.22
17)	Endosulfan I	0.919	0.921	0.947	0.971	1.011	1.100	1.032	1.047	0.994	6.55
18)	4,4'-DDT	0.649	0.670	0.660	0.726	0.812	0.946	0.766	0.871	0.763	14.11
19)	Endrin Aldeh	0.786	0.773	0.775	0.831	0.854	0.890	0.844	0.853	0.826	5.20
20)	Endosulfan S	0.887	0.865	0.829	0.869	0.907	0.963	0.939	0.921	0.898	4.87
21)	Methoxychlor	0.444	0.429	0.442	0.470	0.483	0.516	0.579	0.494	0.482	10.13
22)	Mirex	1.072	1.014	0.997	1.023	0.982	1.012	1.214	0.992	1.038	7.33
23)	Endrin Keton	0.886	0.909	0.902	0.987	1.039	1.116	0.973	1.066	0.985	8.51
24)	Decachlorobi	1.265	1.231	1.186	1.159	1.143	1.139	1.479	1.131	1.217	9.54

25) I 1-bromo-2-nitrobenzen ----------ISTD----------

26)	Toxaphene{A}	0.023	0.023	0.00
27)	Toxaphene{B}	0.030	0.030	0.00
28)	Toxaphene{C}	0.049	0.049	0.00
29)	Toxaphene{D}	0.030	0.030	0.00
30)	Toxaphene{E}	0.026	0.026	0.00

31) I 1-bromo-2-nitrobenzen ----------ISTD----------

32)	Chlordane {A	0.036	0.036	0.00
33)	Chlordane {B	0.049	0.049	0.00
34)	Chlordane {C	0.160	0.160	0.00
35)	Chlordane {D	0.264	0.264	0.00
36)	Chlordane {E	0.037	0.037	0.00

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

6PST1034.M Mon Jun 13 14:06:25 2016

11.7.1

11

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G1047

Print Analyst Name: Dhara Suparia

Date: 6/27/16

Analyst Signature:

Columns: ZBCLP I / ZBCLP II

Method: 8081

Initial Cal. Method: G8M1034

Injection Volume: 1.0 ul

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
161932-80	DB	20 PPB
-5	REM	10-250 PPB
-91	Pest mix	25 PPB
-91	Pest mix	50 PPB
-84	Pest ISTD	5 PPM
162790	Hexane Chem	-

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: JR

Date: 6/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6236590	ddt				1		/	/	OK	
	591	CC1034-50				4		/	/	OK	
	592	DB				3		/	/	OK	
	593	OP94557-MS1	94557	8081 TCL	W	5		/	/	OK	
	594	-MS1				6		/	/	OK	
	595	JC22243-1				7		/	/	OK	
	596	OP94557-MS				8				Not Run	cut from sequence
	597	-MSD				9				Not Run	
	598	JC22243-2				10				Not Run	
	599	-3				11				Not Run	cut from sequence
	600	JC22320-21	95064	8081 CHL		12	5	/	/	OK	Run before 6236595
	601	OP95109-MS1	95109	8081 SCO	S	13		/	/	OK	Run before seq 6236596
	602	-MS1				14		/	/	OK	
	603	JC22039-1				15		/	/	OK	
	604	-2				16		/	/	OK	
	605	-3				17		/	/	OK	
	606	-4				18		/	/	OK	
	607	OP95109-MS				19		/	/	OK	
	608	-MSD				20		/	/	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

11.7.2 11

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G1047

Print Analyst Name: Dhara Saporiy

Date: 6/27/16

Analyst Signature:

Columns: 2ACCPT / 2ACCPT

Method 8081

Initial Cal. Method G6IT1034

Injection Volume: 1.0ul

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
161433-80	IB	20 ppb
-84	Pest ISTD	5 ppm
-51	PEM	10-250 ppb
-91A	Pest mix	25 ppb
-91B	Pest mix	50 ppb
162790	Hexane (Hism)	–

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: 6/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6236609	JC22034-5	95109	8081 CCO	S	21		/	/	ok	run before 6236596
	610	-6				22		/	/	ok	
	611	-7				23		/	/	ok	
	612	-8				24		/	/	ok	
	613	JC21958-1		TCL		25		/	/	OK	
	614	-11				26		/	/	OK	
	615	-11				27	10	/	/	OK	
	616	ddt				21		/	/	OK	
	617	cc1034-25				2		/	/	OK	2CHL 1 ISA
	618	ib				3		/	/	OK	
	619	OP94861-MS1	94861	8081 TCL	W	5		/	/	OK	
	620	-MSD1				6		/	/	OK	
	621	JC22206-4				7		/	/	OK	
	622	-5				8		/	/	OK	
	623	-6				9		/	/	OK	
	624	-7				10		/	/	OK	
	625	-8				11		1st / 2nd	/	OK	SR 1:5
	626	-9				12		/	/	OK	
	629	OP94861-MS				13		/	/	OK	

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Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

11.7.2 11

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G 1047

Print Analyst Name: Dhara Saluria

Date: 6/27/16

Analyst Signature:

Columns: 2ACCPD / 2ACCPP

Method 8081

Initial Cal. Method G8S71034

Injection Volume: 1.0 ul

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV161533-80	IB	2ppb
-89	Pest ISTD	5ppm
-51	PEM	10-250ppb
-91A	Pest mix	25ppb
-91B	Pest mix	50ppb
162740	hexac (hole)	—
SV161533-99	TBA	—

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: JL **Date:** 6/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	G236628	OP94861-MSD	94861	8081 TCL	W	14				OK	
	629	JC22206-10				15				OK	
	630	-11				16				OK	
	631	OP94857-MS	94857	8081 TCL	W	17				OK	
	632	-MSD				18				OK	
	633	JC22243-2				19				OK	
	634	-3				20				OK	
	635	OP95079-MS	95079	8081 TCL	W	21				OK	run before see G236621
	636	-MSD				22				OK	
	637	JC22458-1				23				OK	
	638	CC10348-50				24				OK	DDE, methoxy ↓ 1st
	639	IB				3				OK	
	640	JC22613-7	95079	8081 TCL	W	24				OK	
	641	OP95079-MS				25				OK	
	642	-MSD				26				OK	
	643	JC22613-8				27				OK	
	644	OP95064-MS	95064	8081 TCL	S	28				OK	MAD TMA
	645	-MSD				29				OK	↓
	646	JC22815-1				30				OK	MAD TMA

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

11.7.2 11

SGS ACCUTEST JC22613

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G 1047

Print Analyst Name: Dhara suporia

Analyst Signature: [signature]

Date: 6/27/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV6W3350	IS	2000ppb
-85	Pest ISTD	5ppm
-51	PCM	10-250ppb
-91A	Pest mix	25ppb
-91B	Pest mix	50ppb
162790	hexane (fisher)	—

Columns: 20 CLP I 20 CLP II

Method 8081

Initial Cal. Method GPST 1034

Injection Volume: 1.0 ul

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: JP Date: 6/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6236047	JC22515-2	95064	8081 TCL	S	31				OK	
	6u8	-3				32				OK	
	649	-4				35				OK	

JK 6/28/16

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

11.7.2 11

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G1048

Print Analyst Name: Kristen Drake

Analyst Signature: KD

Date: 6/28/16

Columns: ZBCLP I / ZBCLP II

Method 8081

Initial Cal. Method 6PST1034

Injection Volume: 1.0 µL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SU16433-80	IB	20 ppb
-89	Pest ISTD	5 ppm
-51	PEM	10-250 ppb
-91A	Pest Mix	25 ppb
-91B	Pest Mix	50 ppb
162790	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: 7/5/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	log86650	ddt				1				OK	
	651	cc1634-25				2				OK	gchl ↓ 1st
	652	ib				3				OK	
	653	op95099-mbl	95099	8081 tcl	S	5				NG	↑ Rx Batch
	654	op95099-bsl				6				NG	Rx Batch EK, g BHC ↑
	655	op95134-mbl	95134	8081 tcl	S	7				OK	
	656	op95134-bsl				8				OK	
	657	jc22937-1				9				OK	missing % solids sample
	658	op95134-ms				10				OK	↓
	659	op95134-msd				11				OK	
	660	jc22941-8				12				OK	
	661	jc22941-11				13				OK	
	662	jc22829-8	95099	8081 tcl	S	14				Not Run	Rx MB, BS
	663	op95099-ms				15				Not Run	
	664	op95099-msd				16				Not Run	
	665	jc22836-8				17				Not Run	
	666	jc22831-9				18				Not Run	
	667	jc22644-1				19				Not Run	
	668	jc22760-1				20				Not Run	

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: G6G1048

Print Analyst Name: Kristen Drake

Analyst Signature: KD

Date: 6/28/16

Columns: ZBCLPI / ZBCLPII

Method 8081

Initial Cal. Method 6PST1034

Injection Volume: 1.0 µL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV16F33-80	IB	20 ppb
-89	Pest ISTD	5 ppm
-51	PCM	10-250 ppb
-91A	Pest Mix	25 ppb
-91B	Pest Mix	50 ppb
162196	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: 7/5/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6g36669	JC 22914-1	95099	8081 tcl	S	21				Not Run	Rx MB, BS
	670	JC 22914-2				22				not using	cut from sequence
	671	JC 22914-3				23				not using	cut from sequence
	672	JC 22206-8	94861	8081 tcl	W	~~22~~ 23	5	/	/	OK	run before 6g36655
	673	JC 22175-3	94807			~~22~~ 23	10	/	/	OK	run after 6g36672, before 6g36655
	674	ddt				1		/	/	OK	
	675	CC1034-50				4		/	/	OK	
	676	ib				3		/	/	OK	
	677	op94760-mbl	94760	8081	S	5		/	/	ok	Test
	678	op95027-mbl	95027	8081	S	6		/	/	ok	↓
	679	op94976-mbl	94976	8081	W	7		/	/	ok	
	680	op94930-mbl	94930	8081	S	8		/	/	ok	
	681	op94930-bsl				9		/	/	ok	
	682	op94936-mbl	94936	8081	S	10		/	/	ok	
	683	op94936-bsl				11		/	/	ok	
	684	op94935-mbl	94935	8081	S	12		/	/	ok	
	685	op94935-bsl				13		/	/	ok	
		mb1K	91203		W	14		/	/	ok	
		bs1K				15		/	/	ok	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST JC22613

11.7.3 11

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G1048

Print Analyst Name: Kristen Drake

Analyst Signature: KD

Date: 6/28/16

Columns: ZBCL.PI/ZBCL.PII

Method 8081

Initial Cal. Method 6PST1034

Injection Volume: 1.0 µL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV1648350	IB	20 ppb
-89	Pest ISTD	5 ppm
-51	PCM	10-25 ppb
-91A	Pest mix	75 ppb
-91B	Pest mix	50 ppb
162790	Mexcore (fishes)	—

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: 7/5/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6g36686	bs2K	81203		W	16		/	/	ok	
	687	bs3K				17		/	/	ok	
	688	bs4K				18		/	/	ok	
	680 ~~689~~	JC22175-3	94807			19	10	/	/	ok	Run Before 6g 36681
		JK 6/28/16									

JK 6/29/16

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

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6-1766

LOGBOOK ID:

Pest/PCB Extraction Log - Aqueous

Date Started: 6/27/16 Time Started: 11:00 AM.
Date Finished: 6/27/16 Time Finished: 1545

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other_____
Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH # GC 95079	RACK# Pest 23
Extracted by:	VP MA MP
Concentrated by:	MP KP
Vialed by:	VP MP
Relinquished by:	
Accepted by:	
Supervisor Review:	6/27/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	pH	Sample Description	Sample Volume (mL)	Final Extract Color	Final Extract Vol(mL)	GPC	Copper	H2SO4	Florisil	Comments
MB1	Pest			DI H2O	1000	Clear	10		√			
BS1				DI H2O	1000	Clear	10		√			
JC22613-7 MS		1		clear	500	Clear	10		√			
+ MSD		1		clear	500	Clear	10		√			
BS												
MS												
MSD												
1 JC22613-7	Pest	2		Clear	1000	Clear	10		√			
2 -8		3		Tan	980	Tan	10		√			
3 JC22454-1	Rx	12		Yellow	1000	Yellow	10		√			
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

Comments: okay to split MS/MSD, not enough bottles

HT 6/27 Rx due 6/27

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason: Rx-Low Surrogate

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other: HT 6/27

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	B2	65	–	–	OK
Buchi Chiller	B2	1	–	–	OK
Waterbath (70-80°C)	607	75, 75	0.8, 0.1	74, 75	NA
Waterbath Chiller (GPM)	P2	3	–	–	2
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	1617704	400 ppb	1

WITNESS SIGN: Boy SPIKE SIGN: VP

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	161770166	250 ppb	1
PCB			

WITNESS SIGN: Boy SPIKE SIGN: VP

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	163534	Fisher	2,160
HEXANE	163237	Fisher	1,150

REAGENT	LOT #	BRAND
Sodium Sulfate	158459	Fisher
Glass Wool	02912-2	Lab
Filter Paper		
Copper	161712106	Aldrich
Florisil		
1:1 Sulfuric Acid		
Chlorine Strips		

SGS ACCUTEST INC.
Form: OP021A-06
Rev Date: 1/13/16

Prep Log OP95079 page 1 of 1
SGS ACCUTEST JC22613
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11.8.1